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).

4,800,000 European Style Cash Settled Long Certificates
relating to the ordinary shares of Hong Kong Exchanges and Clearing Limited
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\$1.20 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 19 June 2020 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.

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 19 June 2020 (the "Guarantee") and entered into by the Guarantor constitutes direct unconditional unsecured senior preferred 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 4 March 2021.

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.

3 March 2021

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.

Table of Contents

	Page
Risk Factors	6
Terms and Conditions of the Certificates	16
Terms and Conditions of the European Style Cash Settled Long/Short Certificates on Single Equities	25
Summary of the Issue	39
Information relating to the European Style Cash Settled Long Certificates on Single Equities	41
Information relating to the Company	56
Information relating to the Designated Market Maker	57
Supplemental Information relating to the Guarantor	59
Supplemental General Information	60
Placing and Sale	62
Appendix I	
Appendix II	

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 direct unconditional unsecured senior preferred 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;
- (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;
- 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 30 to 34 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;

- 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);
- (I) 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 sideway trend, where market movements are not clear in direction, whereby investors may sustain substantial losses;
- (o) the Air Bag Mechanism (as defined below) is triggered only when the Underlying Stock is calculated or traded, which may not be during the trading hours of the Relevant Stock Exchange for the Certificates (as defined below);
- (p) investors should note that 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;
- (q) 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: (1) if air bag has not been previously triggered on the same day, the previous closing price of the Underlying Stock, or (2) if one or more air bag have been previously triggered on the same day, the latest New Observed Price. Investors may refer to pages 49 to 50 of this document for more information;

- (r) 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 36 to 38 of this document for more information;
- (s) 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;
- (t) 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 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;
- (u) 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;

(v) 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;

- (w) 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;
- (x) 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;
- (y) 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;
- (z) 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;
- (aa) 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;
- (bb) the reform of HIBOR may adversely affect the value of the Certificates

The Hong Kong Inter-bank Offered Rate ("HIBOR") benchmark is referenced in the Leverage Strategy.

It is not possible to predict with certainty whether, and to what extent, HIBOR will continue to be supported going forwards. This may cause HIBOR to perform differently than they have done in the past, and may have other consequences which cannot be predicted. Such factors may have (without limitation) the following effects: (i) discouraging market participants from continuing to administer or contribute to a benchmark; (ii) triggering changes in the rules or methodologies used in the benchmark and/or (iii) leading to the disappearance of the benchmark. Any of the above changes or any other consequential changes as a result of international or national reforms or other initiatives or investigations, could have a material adverse effect on the value of and return on the Certificates.

In addition, the occurrence of a modification or cessation of HIBOR may cause adjustment of the Certificates which may include selecting one or more successor benchmarks and making related adjustments to the Certificates, including if applicable to reflect increased costs.

The Calculation Agent may make adjustments as it may determine appropriate if any of the following circumstances occurs or may occur: (1) HIBOR is materially changed or cancelled or (2)(i) the relevant authorisation, registration, recognition, endorsement, equivalence decision or approval in respect of the benchmark or the administrator or sponsor of the benchmark is not obtained, (ii) an application for authorisation, registration, recognition, endorsement, equivalence decision, approval or inclusion in any official register is rejected or approval is suspended or inclusion in any official register is withdrawn.

Investors should consult their own independent advisers and make their own assessment about the potential risks imposed by any of the international or national reforms in making any investment decision with respect to any Certificate;

(cc) 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;

(dd) 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

(ee) risk factors relating to the BRRD

French and Luxembourg 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. The BRRD has been implemented into Luxembourg law by, among others, the Luxembourg act dated 18 December 2015 on the failure of credit institutions and certain investment firms, as amended (the "BRR Act 2015"). Under the BRR Act 2015, the competent authority is the Luxembourg financial sector supervisory authority (*Commission de surveillance du secteur financier*, the CSSF) and the resolution authority is the CSSF acting as resolution council (*conseil de résolution*).

Moreover, 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 ("SRM") and a Single Resolution Fund (the "SRM Regulation") has established a centralised power of resolution entrusted to a Single Resolution Board (the "SRB") in cooperation with the national resolution authorities.

Since 2014, the European Central Bank ("ECB") has taken over the prudential supervision of significant credit institutions in the member states of the Eurozone under the Single Supervisory Mechanism ("SSM"). In addition, the SRM has been put in place to ensure that the resolution of credit institutions and certain investment firms across the Eurozone is harmonised. As mentioned above, the SRM is managed by the SRB. Under Article 5(1) of the SRM Regulation, the SRM has been granted those responsibilities and powers granted to the EU Member States' resolution authorities under the BRRD for those credit institutions and certain investment firms subject to direct supervision by the ECB. The ability of the SRB to exercise these powers came into force at the beginning of 2016.

Societe Generale has been designated as a significant supervised entity for the purposes of Article 49(1) of Regulation (EU) No 468/2014 of the ECB of 16 April 2014 establishing the framework for cooperation within the SSM between the ECB and national competent authorities and with national designated authorities (the "SSM Regulation") and is consequently subject to the direct supervision of the ECB in the context of the SSM. This means that Societe Generale and SG Issuer (being covered by the consolidated prudential

supervision of Societe Generale) are also subject to the SRM which came into force in 2015. The SRM Regulation mirrors the BRRD and, to a large part, refers to the BRRD so that the SRB is able to apply the same powers that would otherwise be available to the relevant national resolution authority.

The stated aim of the BRRD and the SRM Regulation is to provide for the establishment of an EU-wide framework for the recovery and resolution of credit institutions and certain investment firms. The regime provided for by the BRRD is, among other things, stated to be needed to provide the resolution 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 minimising the impact of an institution's failure on the economy and financial system (including taxpayers' exposure to losses).

Under the SRM Regulation, a centralised power of resolution is established and entrusted to the SRB acting in cooperation with the national resolution authorities. 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 institutions' resolution plans have applied since 1 January 2015 and the SRM has been fully operational since 1 January 2016.

The SRB is the Resolution Authority for the Issuer and the Guarantor.

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 SRM Regulation are deemed to be met when: (i) the Resolution 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 Article 10 of the SRM Regulation). The terms and conditions of the Certificates contain provisions giving effect to the Bail-in Power in the context of resolution and write-down or conversion of capital instruments at the point of non-viability.

The Bail-in Power could result in the full (i.e., to zero) or partial write-down or conversion of the Certificates into ordinary shares or other instruments of ownership, 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 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.

The application of any measure under the BRRD and the SRM Regulation 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 Issuer, the Guarantor or the 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.

Since 1 January 2016, EU credit institutions (such as Societe Generale) and certain investment firms have to meet, at all times, a minimum requirement for own funds and eligible liabilities ("MREL") pursuant to Article 12 of the SRM Regulation. 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.

The current regime will evolve as a result of the changes adopted by the EU legislators. On 7 June 2019, as part of the contemplated amendments to the so-called "EU Banking Package", the following legislative texts have been published in the Official Journal of the EU 14 May 2019:

- 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 (the "BRRD II"); and
- Regulation (EU) 2019/877 of the European Parliament and of the Council of 20 May
 2019 amending the SRM Regulation as regards the loss-absorbing and

recapitalisation capacity ("TLAC") of credit institutions and investment firms (the "SRM II Regulation" and, together with the BRRD II, the "EU Banking Package Reforms").

The EU Banking Package Reforms will introduce, among other things, the TLAC standard as implemented by the Financial Stability Board's TLAC Term Sheet ("FSB TLAC Term Sheet"), by adapting, among others, the existing regime relating to the specific MREL with aim of reducing risks in the banking sector and further reinforcing institutions' ability to withstand potential shocks will strengthen the banking union and reduce risks in the financial system.

The TLAC will be implemented in accordance with the FSB TLAC Term Sheet, which impose a level of "Minimum TLAC" that will be determined individually for each global systemically important bank ("**G-SIB**"), such as Societe Generale, 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).

According to Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms (the "CRR"), as amended by Regulation (EU) 2019/876 of the European Parliament and of the Council of 20 May 2019 amending the CRR as regards the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, counterparty credit risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, reporting and disclosure requirements (the "CRR II"), EU G-SIBs, such as Societe Generale, will have to comply with TLAC requirements, on top of the MREL requirements, as from the entry into force of the CRR II. As such, G-SIBs, such as Societe Generale will have to comply at the same time with TLAC and MREL requirements.

Consequently, criteria for MREL-eligible liabilities will be closely aligned with those laid down in the CRR, as amended by the CRR II for the TLAC-eligible liabilities, but subject to the complementary adjustments and requirements introduced in the BRRD II. In particular, certain debt instruments with an embedded derivative component, such as certain structured notes, will be eligible, subject to certain conditions, to meet the MREL requirements to the extent that they have a fixed or increasing principal amount repayable at maturity that is known in advance while only an additional return is linked to that derivative component and depends on the performance of a reference asset.

The level of capital and eligible liabilities required under MREL will be set by the SRB for Societe Generale on an individual and/or consolidated basis based on certain criteria including systemic importance any may also be set for SG Issuer. Eligible liabilities may be senior or subordinated, provided, among other requirements, that they have a remaining maturity of at least one year and, if governed by non-EU law, they must be able to be written down or converted under that law (including through contractual provisions).

The scope of liabilities used to meet the MREL will include, in principle, all liabilities resulting from claims arising from ordinary unsecured creditors (non-subordinated liabilities) unless they do not meet specific eligibility criteria set out in the BRRD, as amended by the BRRD II. To enhance the resolvability of institutions and entities through an effective use of the bail-in tool, the SRB should be able to require that the MREL be met with own funds and other subordinated liabilities, in particular where there are clear indications that bailed-in creditors are likely to bear losses in resolution that would exceed the losses that they would incur under normal insolvency proceedings. Moreover the SRB should assess the need to require

institutions and entities to meet the MREL with own funds and other subordinated liabilities where the amount of liabilities excluded from the application of the bail- in tool reaches a certain threshold within a class of liabilities that includes MREL-eligible liabilities. Any subordination of debt instruments requested by the SRB for the MREL shall be without prejudice to the possibility to partly meet the TLAC requirements with non-subordinated debt instruments in accordance with the CRR, as amended by the CRR II, as permitted by the TLAC standard. Specific requirements will apply to resolution groups with assets above EUR 100 billion (top-tier banks).

If the SRB finds that there could exist any obstacles to resolvability by the Issuer or the Guarantor and/or the Group, a higher MREL requirement could be imposed. Any failure by the Issuer or the Guarantor, as applicable, and/or the Group to comply with its MREL may have a material adverse effect on the Issuer's business, financial conditions and results of operations.

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: 4,800,000 European Style Cash Settled Long Certificates relating to

the ordinary shares of Hong Kong Exchanges and Clearing Limited

(the "Underlying Stock")

ISIN: LU2184319098

Company: Hong Kong Exchanges and Clearing Limited (RIC: 0388.HK)

Underlying Price³ and Source: HK\$498.00 (Reuters)

Calculation Agent: Société Générale

Strike Level: Zero

Daily Leverage: 5x (within the Leverage Strategy as described below)

Notional Amount per Certificate: SGD 1.20

Management Fee (p.a.)⁴: 0.40%

Gap Premium (p.a.)⁵: 4.60%, is a hedging cost against extreme market movements

overnight.

Funding Cost⁶: The annualised costs of funding, referencing a publicly published

interbank offered rate plus spread.

Rebalancing Cost⁶: The transaction costs (if applicable), computed as a function of

leverage and daily performance of the Underlying Stock.

Launch Date: 25 February 2021

Closing Date: 3 March 2021

Expected Listing Date: 4 March 2021

³ These figures are calculated as at, and based on information available to the Issuer on or about 3 March 2021. 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 3 March 2021.

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.

Last Trading Date:

The date falling 5 Business Days immediately preceding the Expiry Date, currently being 23 February 2022

Expiry Date:

2 March 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:

1 March 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 41 to 55 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 2 to Valuation Date) of (1 – Management Fee x (ACT (t-1;t) \div 360)) x (1 – Gap Premium (t-1) x (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 the Expected Listing Date 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 41 to 55 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:

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\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}
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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 20 to 24 below.

Initial Exchange Rate³:

0.1715

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 intraday. 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 22 to 24 below and the "Description of Air Bag Mechanism" section on pages 47 to 48 of this document for further information of the Air Bag Mechanism.

Adjustments and Extraordinary Events:

The Issuer has the right to make adjustments to the terms of the Certificates if certain events, including any capitalisation issue, rights issue, extraordinary distributions, merger, delisting, insolvency (as more specifically set out in the terms and conditions of the Certificates) occur in respect of the Underlying Stock. For the avoidance of doubt, no notice will be given if the Issuer determines that adjustments will not be made.

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 (the "SGX-ST")

Relevant Stock Exchange for HKEX the Underlying Stock:

Business Day and Exchange

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

Business Day: 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):

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

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

$$LR_{t-1,t} = Leverage \times \left(\frac{s_t}{\overline{s_{t-1}} \times Rfactor_t} - 1\right)$$

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

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

 $RC_{t-1,t}$ means the Rebalancing Cost of the Leverage Strategy on Observation Date (t), calculated as follows:

$$RC_{t-1,t} = \text{Leverage} \times (\text{Leverage} - 1) \times \left(\left| \frac{s_t}{s_{t-1} \times \textit{Rfactor}_t} - 1 \right| \right) \times TC$$

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:

$$Rate_t = CashRate_t + %SpreadLevel_t$$

Rfactort 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 :

$$Rfactor_{t} = 1 - \frac{Div_{t}}{\mathbf{S_{t-1}}}$$

where

 ${\it Div}_t$ 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 HIHKDOND= 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. Upon the occurrence or likely occurrence, as determined by the Calculation Agent, of modification, the permanent or indefinite cancellation or cessation in the provision of HIBOR, or a regulator or other official sector entity prohibits the use of HIBOR, the Calculation Agent may make adjustments as it may determine appropriate to account for the relevant event or circumstance, including but not limited to using any alternative rates from such date, with or without retroactive effect as the Calculation Agent may in its sole and absolute discretion determine.

%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 HIHKD1YD= and (2) Overnight HKD Hong Kong Interbank Offered Rate (HIBOR) Fixing, as published on Reuters RIC HIHKDOND= 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. Upon the occurrence or likely occurrence, as determined by the Calculation Agent, of modification, the permanent or indefinite cancellation or cessation in the provision of HIBOR. or a regulator or other official sector entity prohibits the use of HIBOR, the Calculation Agent may make adjustments as it may determine appropriate to account for the relevant event or circumstance, including but not limited to using any alternative rates from such date, with or without retroactive effect as the Calculation Agent may in its sole and absolute discretion determine.

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 If the Calculation Agent determines that an Intraday Restrike Event has

Adjustment for Performance Reasons

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:

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

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

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

ILSL_{IR(k)}

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

(1) for k = 1:

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

(2) for k > 1:

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

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

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

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

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

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

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

 $IS_{IR(k)}$

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 kth 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 $\mathbf{IS}_{\mathbf{IR}(0)}$ 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 $\mathbf{IS}_{\mathbf{IR}(k)}$ 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:-
 - a master instrument by way of deed poll (the "Master Instrument") dated 19
 June 2020, 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) on the Issuer's liabilities under the Certificates, 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 the Guarantor 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 the Guarantor 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

that 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,

(the "Statutory Bail-In");

- (ii) if the Relevant Resolution Authority exercises its Bail-In Power on liabilities of the Guarantor, pursuant to Article L.613-30-3-I-3 of the French Monetary and Financial Code (the "**M&F Code**"):
 - (A) ranking:
 - junior to liabilities of the Guarantor benefitting from statutorily preferred exceptions pursuant to Article L.613-30-3-I 1° and 2 of the M&F Code;
 - (2) *pari passu* with liabilities of the Guarantor as defined in Article L.613-30-3-I-3 of the M&F Code; and
 - (3) senior to liabilities of the Guarantor as defined in Article L.613-30-3-I-4 of the M&F Code; and
 - (B) which are not titres non structurés as defined under Article R.613-28 of the M&F Code, and
 - (C) which are not or are no longer eligible to be taken into account for the purposes of the MREL (as defined below) ratio of the Guarantor

and such exercise of the Bail-In Power results in the write-down or cancellation of all, or a portion of, the principal amount of, or the outstanding amount payable in respect of, and/or interest on, such liabilities, and/or the conversion of all, or a portion, of the principal amount of, or the outstanding amount payable in respect of, or interest on, such liabilities into shares or other securities or other obligations of the Guarantor or another person, including by means of variation to their terms and conditions in order to give effect to such exercise of Bail-In Power, then the Issuer's obligations under the Certificates will be limited to (i) payment of the amount as reduced or cancelled that would be recoverable by the Certificate Holders and/or (ii) the delivery or the payment of value of the shares or other securities or other obligations of the Guarantor or another person that would be paid or delivered to the Certificate Holders as if, in either case, the Certificates had been directly issued by the Guarantor itself, and as if any Amount Due under the Certificates had accordingly been directly subject to the exercise of the Bail-In Power (the "Contractual Bail-in").

No repayment or payment of the Amounts Due will become due and payable or be paid after the exercise of the Statutory Bail-In with respect to the Issuer or the Guarantor 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 or the Guarantor under the applicable laws and regulations in effect in France or Luxembourg and the European Union applicable to the Issuer or the Guarantor or other members of its group.

No repayment or payment of the Amounts Due will become due and payable or be paid under the Certificates issued by SG Issuer after implementation of the Contractual Bail-in.

Upon the exercise of the Statutory Bail-in or upon implementation of the Contractual Bail-in with respect to the Certificates, the Issuer or the Guarantor will provide a written notice to the Certificate Holders in accordance with Condition 9 as soon as practicable regarding such exercise of the Statutory Bail-in or implementation of the Contractual Bail-in. Any delay or failure by the Issuer or the Guarantor to give notice shall not affect the validity and enforceability of the Statutory Bail-in or Contractual Bail-in 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 the Guarantor or another person, as a result of the exercise of the Statutory Bail-in or the implementation of the Contractual Bail-in 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.

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, the Guarantor and each Certificate Holder. No expenses necessary for the procedures under this Condition, including, but not limited to, those incurred by the Issuer and the Guarantor, shall be borne by any Certificate Holder.

For the purposes of this Condition:

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

"Bail-In Power" means any statutory cancellation, write-down and/or conversion power existing from time to time under any laws, regulations, rules or requirements relating to the resolution of banks, banking group companies, credit institutions and/or investment firms, including but not limited to any such laws, regulations, rules or requirements that are implemented, adopted or enacted within the context of a European Union directive or regulation of the European Parliament and of the Council establishing a framework for the recovery and resolution of credit institutions and investment firms, or any other applicable laws or regulations, as amended, or otherwise, pursuant to which obligations of a bank, banking group company, credit institution or investment firm or any of its affiliates can be reduced, cancelled and/or converted into shares or other securities or obligations of the obligor or any other person.

"MREL" means the Minimum Requirement for own funds and Eligible Liabilities as defined in 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).

"Relevant Resolution Authority" means any authority with the ability to exercise the Bail-in Power on Societe Generale or SG Issuer as the case may be.

"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.

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 or any Observation Date a Market Disruption Event has occurred, then that Valuation Date or Observation Date shall be postponed until the first succeeding Exchange Business Day or Underlying Stock Business Day, as the case may be, on which there is no Market Disruption Event, unless there is a Market Disruption Event on each of the five Exchange Business Days or Underlying Stock Business Days, as the case may be, immediately following the original date that, but for the Market Disruption Event, would have been a Valuation Date or an Observation Date. In that case:-

- that fifth Exchange Business Day or Underlying Stock Business Day, as the case may be, shall be deemed to be the Valuation Date or the Observation Date notwithstanding the Market Disruption Event; and
- (ii) the Issuer shall determine the Final Reference Level or the relevant closing level on the basis of its good faith estimate of the Final Reference Level or the relevant closing level that would have prevailed on that fifth Exchange Business Day or Underlying Stock Business Day, as the case may be, but for the Market Disruption Event.

"Market Disruption Event" means the occurrence or existence 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:
 - 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. For the avoidance of doubt, no notice will be given if the Issuer determines that adjustments will not be made.

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(d).

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 Holding Limit Event. The Issuer may in its discretion and without obligation terminate the Certificates early in accordance with Condition 13(d) where a Holding Limit Event (as defined below) occurs.

For the purposes of this Condition:

"Holding Limit Event" means, assuming the investor is the Issuer and/or any of its affiliates, the Issuer together with its affiliates, in aggregate hold, an interest in the Underlying Stock, constituting or likely to constitute (directly or indirectly) ownership, control or the power to vote a percentage of any class of voting securities of the Underlying Stock, of the Underlying Stock in excess of a percentage permitted or advisable, as determined by the Issuer, for the purpose of its compliance with the Bank Holding Company Act of 1956 as amended by Section 619 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the Volcker Rule), including any requests, regulations, rules, guidelines or directives made by the relevant governmental authority under, or issued by the relevant governmental authority in connection with, such statutes.

(c) Early Termination for other reasons. The Issuer reserves the right (such right to be exercised in the Issuer's sole and unfettered discretion and without any obligation whatsoever) to terminate the Certificates in accordance with Condition 13(d) 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.

(d) 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, impracticality or the relevant event 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: Hong Kong Exchanges and Clearing Limited

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

Stock

Number: 4,800,000 Certificates

Form: The Certificates will be issued subject to, and with the benefit of, a

master instrument by way of deed poll dated 19 June 2020 (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 4 March 2021.

Governing Law: The laws of Singapore

Warrant Agent: The Central Depository (Pte) Limited

11 North Buona Vista Drive

#06-07 The Metropolis Tower 2

Singapore 138589

Further Issues: Further issues which will form a single series with the Certificates will be

permitted, subject to the approval of the SGX-ST.

The above summary is a 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

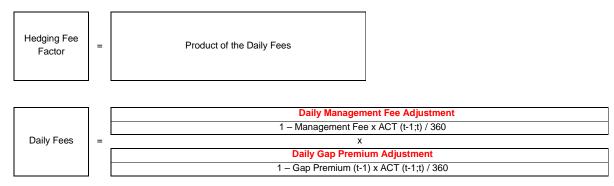


Illustration of the Calculation of Cash Settlement Amount

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

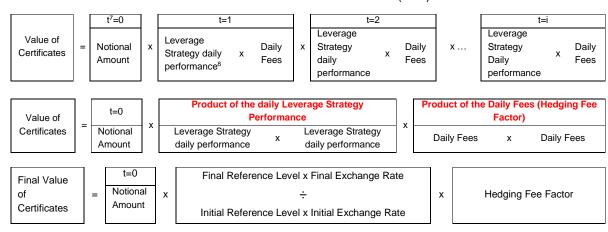


Illustration of the applicable fees and charges for an intraday trading scenario

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.

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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 Hong Kong Exchanges and

Clearing Limited

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: 1.20 SGD

Notional Amount per Certificate: 1.20 SGD

Management Fee (p.a.): 0.40%

Gap Premium (p.a.): 4.60%

Strike Level: Zero

Hedging Fee Factor

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

HFF(0) = 100%

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

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

HFF (1) = 100% ×
$$\left(1 - 0.40\% \times \frac{1}{360}\right) \times \left(1 - 4.60\% \times \frac{1}{360}\right)$$

HFF (1) =
$$100\% \times 99.9989\% \times 99.9872\% \approx 99.9861\%$$

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

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

HFF (2) = 99.9861% × $\left(1 - 0.40\% \times \frac{3}{360}\right) \times \left(1 - 4.60\% \times \frac{3}{360}\right)$
HFF (2) = 99.9861% × 99.9967% × 99.9617% ≈ 99.9445%

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

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

In this example, the Hedging Fee Factor as of the Valuation Date would be equal to 99.7919% as illustrated below:

Date	HFF
3/7/2018	100.0000%
4/7/2018	99.9861%
5/7/2018	99.9722%
6/7/2018	99.9583%
9/7/2018	99.9167%
10/7/2018	99.9028%
11/7/2018	99.8889%
12/7/2018	99.8751%
13/7/2018	99.8612%
16/7/2018	99.8196%
17/7/2018	99.8057%
18/7/2018	99.7919%

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

$$= [(1200 \times 1) / (1000 \times 1) - 0] \times 99.7919\%$$
$$= 119.75\%$$

Cash Settlement Amount = Closing Level x Notional Amount per Certificate = 119.75% x 1.20 SGD

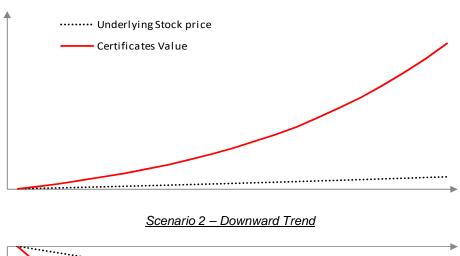
= 1.437 SGD

Illustration on how returns and losses can occur under different scenarios

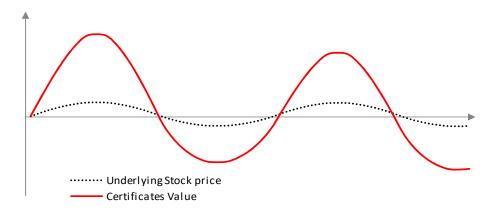
The examples are purely hypothetical and do not take fees and charges payable by investors into consideration. The examples highlight the effect of the Underlying Stock performance on the value of the Certificates and do not take into account the possible influence of fees, exchange rates, dividends,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

1. Illustrative examples

Scenario 1 – Upward Trend



Scenario 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	1.2	1.32	1.45	1.60	1.76	1.93
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						Day 5
Daily return		-10.0%	-10.0%	-10.0%	-10.0%	-10.0%
Price at end of day	1.2	1.08	0.97	0.87	0.79	0.71
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	1.2	1.32	1.19	1.31	1.18	1.29
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

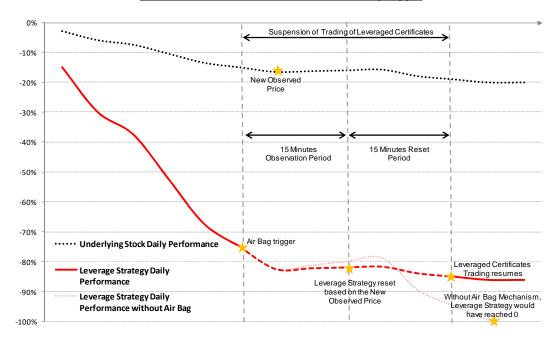
Air Bag Trigger	Observation Period	Resumption of Trading
More than 45 minutes before Market Close		Trading resumes the same day between 30 and 45 minutes after Air Bag Trigger
45 minutes before Market Close	et First 15 minutes after Air Bag Trigger se et From Air Bag Trigger to Market	
30 to 45 minutes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

With Market Close defined as:

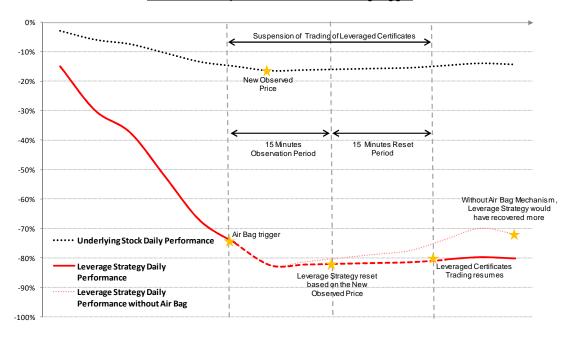
- Underlying Stock closing time with respect to the Observation Period
- The sooner between Underlying Stock closing time and SGX closing time with respect to the Resumption of Trading

Illustrative examples of the Air Bag Mechanism9

Scenario 1 – Downward Trend after Air Bag trigger



Scenario 2 - Upward Trend after Air Bag trigger



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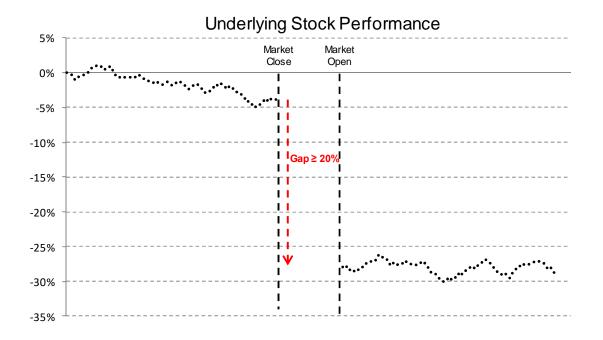
⁹ The illustrative examples are not exhaustive.

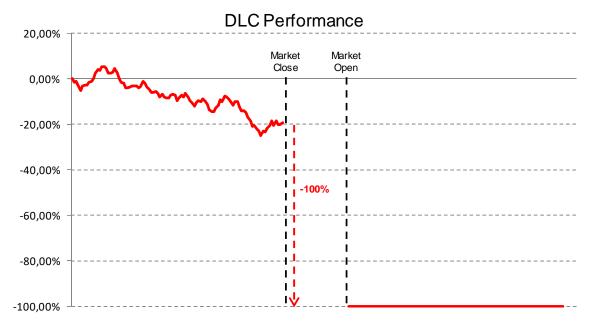
Scenarios where the investor may lose the entire value of the investment

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

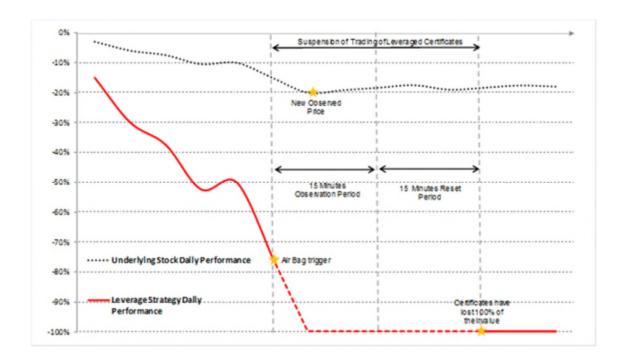
On any business day, the opening price of the Underlying Stock may be higher or lower than the closing price on the previous day. The difference between the previous closing price and the opening price of the Underlying Stock is termed a "gap". If the opening price of the Underlying Stock is 20% or more 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 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 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:

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

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' (excluding any cost	performance and fees)
1.20	1.32	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

 $Div_t = \$0$

 $DivExc_t = \$0$

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:

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

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 cos	t and fees)
1.20	1.26	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 (i.e. subscription price of \$40)

M = 0.5 (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:

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

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)
1.20	1.50	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:

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

$$S_t = $85$$

$$Div_t = \$0$$

$$DivExc_t = \$0$$

$$R = $0$$

M = 0.2 (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:

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

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 cos	st and fees)
1.20	1.32	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.

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

$$S_t = $84$$

$$Div_t = \$0$$

$$DivExc_t = $20$$

$$R = $0$$

$$M = 0$$

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

As a consequence:

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

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' performa		
		(excluding any cost and fees)		
1.20	1.50	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. The Issuer has not independently verified any of such information.

Hong Kong Exchanges and Clearing Limited (the "Company") is principally engaged in the operation of stock exchanges. The Company operates through five business segments. The Cash segment includes various equity products traded on the Cash Market platforms, the Shanghai Stock Exchange and the Shenzhen Stock Exchange. The Equity and Financial Derivatives segment includes derivatives products traded on Hong Kong Futures Exchange Limited (HKFE) and the Stock Exchange of Hong Kong Limited (SEHK) and other related activities. The Commodities segment includes the operations of the London Metal Exchange (LME). The Clearing segment includes the operations of various clearing houses, such as Hong Kong Securities Clearing Company Limited, the SEHK Options Clearing House Limited, HKFE Clearing Corporation Limited, over the counter (OTC) Clearing Hong Kong Limited and LME Clear Limited. The Platform and Infrastructure segment provides users with access to the platform and infrastructure of the Company.

The information set out in Appendix I of this document relates to the consolidated financial statements of the Company and its subsidiaries for the year ended 31 December 2020 and has been extracted and reproduced from an announcement by the Company dated 24 February 2021 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 : 10,000 Certificates

offer spread

(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 GUARANTOR

The information set out in Appendix II of this document is a reproduction of the press release dated 10 February 2021 containing the Guarantor's consolidated financial results for the fourth quarter ended 31 December 2020.

SUPPLEMENTAL GENERAL INFORMATION

The information set out herein is supplemental to, and should be read in conjunction with, the information set out on page 105 of the Base Listing Document.

- 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.
- Settlement of trades done on a normal "ready basis" on the SGX-ST generally take place on the second Business Day following the transaction. Dealing in the 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 31 December 2019 or the Guarantor since 31 December 2020, 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 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:

- (a) it has not offered or sold and will not offer or sell in Hong Kong, by means of any document, any Certificates (except for Certificates which are a "structured product" as defined in the Securities and Futures Ordinance (Cap.571) of Hong Kong) other than (i) to "professional investors" as defined in the Securities and Futures Ordinance and any rules made under that Ordinance; or (ii) in other circumstances which do not result in the document being a "prospectus", as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32) of Hong Kong (CWUMPO) or which do not constitute an offer to the public within the meaning of that Ordinance; and
- (b) it has not issued or had in its possession for the purposes of issue, and will not issue or have in its possession for the purposes of issue, whether in Hong Kong or elsewhere, any advertisement, invitation or document relating to the 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 and any rules made under that Ordinance.

European Economic Area and the United Kingdom

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 or in the United Kingdom. For the purposes of this provision:

- (a) the expression "retail investor" means a person who is one (or more) of the following:
 - (i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, "MiFID II"); 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 Regulation (EU) 2017/1129 (as amended and superseded, the Prospectus Regulation); and
- (b) the expression "**offer**" includes the communication in any form and by any means of sufficient information on the terms of the offer and the Certificates to be offered so as to enable an investor to decide to purchase or subscribe the Certificates.

In respect of the United Kingdom, each dealer has further represented and agreed, and each further dealer appointed in respect of the Certificates will be required to further 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 (the "CFTC Rules"), 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 CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2020 OF HONG KONG EXCHANGES AND CLEARING LIMITED AND ITS SUBSIDIARIES

The information set out below is a reproduction of the consolidated financial statements of the Company and its subsidiaries for the year ended 31 December 2020 and has been extracted and reproduced from an announcement by the Company dated 24 February 2021 in relation to the same.

Pursuant to Chapter 38 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited, the Securities and Futures Commission regulates Hong Kong Exchanges and Clearing Limited (HKEX) in relation to the listing of its shares on The Stock Exchange of Hong Kong Limited. The Securities and Futures Commission 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.

The financial information relating to the years ended 31 December 2020 and 2019 included in this document does not constitute the statutory annual consolidated financial statements of HKEX for those years but is derived from those financial statements. Further information relating to these statutory financial statements required to be disclosed in accordance with section 436 of the Companies Ordinance is as follows:

HKEX has delivered the financial statements for the year ended 31 December 2019 to the Registrar of Companies as required by section 662(3) of, and Part 3 of Schedule 6 to, the Companies Ordinance and will deliver the financial statements for the year ended 31 December 2020 in due course.

HKEX's auditor has reported on the consolidated financial statements for both years. The auditor's reports were unqualified, did not include a reference to any matters to which the auditor drew attention by way of emphasis without qualifying its reports, and did not contain a statement under sections 406(2), 407(2) or (3) of the Companies Ordinance.



香港交易及結算所有限公司 HONG KONG EXCHANGES AND CLEARING LIMITED

(Incorporated in Hong Kong with limited liability)

(Stock Code: 388)

Consolidated Financial Statements

For the year ended 31 December 2020

As at 24 February 2021, the board of directors of HKEX comprises 12 Independent Non-executive Directors, namely Mrs Laura May-Lung CHA (Chairman), Mr Apurv BAGRI, Mr CHAN Tze Ching, Ignatius, Mr CHEAH Cheng Hye, Mrs CHOW WOO Mo Fong, Susan, Ms FUNG Yuen Mei, Anita, Mr Rafael GIL-TIENDA, Dr HU Zuliu, Fred, Mr HUNG Pi Cheng, Benjamin, Mr LEUNG Pak Hon, Hugo, Mr John Mackay McCulloch WILLIAMSON and Mr YIU Kin Wah, Stephen, and one Executive Director, Mr TAI Chi Kin, Calvin, who is also HKEX's Interim Chief Executive.

CONSOLIDATED INCOME STATEMENT FOR THE YEAR ENDED 31 DECEMBER 2020

(Financial figures are expressed in Hong Kong Dollar)

	Note	2020 \$m	2019 \$m
Trading fees and trading tariffs	5(a)	6,959	5,592
Stock Exchange listing fees	5(b)	1,899	1,633
Clearing and settlement fees		4,355	3,160
Depository, custody and nominee services fees		1,264	1,052
Market data fees		953	919
Other revenue	5(c)	1,405	1,209
Revenue	5	16,835	13,565
Investment income		2,577	3,977
Interest rebates to Participants		(349)	(1,248)
Net investment income	6	2,228	2,729
HKEX Foundation donation income	7	106	-
Sundry income	8	21	17
Revenue and other income		19,190	16,311
Less: Transaction-related expenses	9	(110)	(51)
Revenue and other income less transaction-related expenses	-	19,080	16,260
Operating expenses		•	,
Staff costs and related expenses	10	(2,967)	(2,703)
Information technology and computer maintenance expenses	11	(635)	(580)
Premises expenses		(119)	(127)
Product marketing and promotion expenses		(81)	(68)
Professional fees		(151)	(119)
HKEX Foundation charitable donations		(112)	- -
Other operating expenses	12	(374)	(400)
		(4,439)	(3,997)
EBITDA		14,641	12,263
Depreciation and amortisation		(1,197)	(1,044)
Operating profit	13	13,444	11,219
Costs relating to proposed combination with LSEG		-	(123)
Finance costs	14	(181)	(177)
Share of profits less losses of joint ventures		69	32
Profit before taxation		13,332	10,951
Taxation	17	(1,845)	(1,561)
Profit for the year		11,487	9,390
Profit/(loss) attributable to:			
Shareholders of HKEX	46	11,505	9,391
Non-controlling interests	27(a)(i)	(18)	(1)
Profit for the year		11,487	9,390
Basic earnings per share	18(a)	\$9.11	\$7.49
Diluted earnings per share	18(b)	\$9.09	\$7.47

The notes on pages 8 to 98 are an integral part of these consolidated financial statements.

Details of dividends are set out in note 19 to the consolidated financial statements.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME FOR THE YEAR ENDED 31 DECEMBER 2020

(Financial figures are expressed in Hong Kong Dollar)

	Note	2020 \$m	2019 \$m
Profit for the year		11,487	9,390
Other comprehensive income			
Items that may be reclassified subsequently to profit or loss:			
Currency translation differences of foreign subsidiaries	2(e)(iii)	(29)	(96)
Cash flow hedges	44(a)	(6)	6
Changes in fair value of financial assets measured at fair value through other comprehensive income, net of tax	44(b)	28	3
Other comprehensive income		(7)	(87)
Total comprehensive income		11,480	9,303
Total comprehensive income attributable to:			
Shareholders of HKEX		11,490	9,303
Non-controlling interests		(10)	-
Total comprehensive income		11,480	9,303

The notes on pages 8 to 98 are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION AT 31 DECEMBER 2020

(Financial figures are expressed in Hong Kong Dollar)

			At 31 Dec 2020)	А	t 31 Dec 2019	
	N-4-	Current	Non-current	Total		Non-current	Total
Assets	Note	\$m	\$m	\$m	\$m	\$m	\$m
Cash and cash equivalents	20.21	157,996		157 996	129 152		100 150
Financial assets measured at fair value	20,21	157,336	-	157,996	128,152	-	128,152
through profit or loss Financial assets measured at fair value through other comprehensive	20,22	100,081	516	100,597	56,729	672	57,401
income	20,23	7,942	-	7,942	4,569	-	4,569
Financial assets measured at amortised cost	20,24	62,589	99	62,688	39,954	718	40,672
Accounts receivable, prepayments and deposits	26	47,059	21	47,080	25,791	21	25,812
Tax recoverable		26	-	26	-	-	-
Interests in joint ventures	28	-	164	164	-	95	95
Goodwill and other intangible assets	29	-	18,737	18,737	-	18,378	18,378
Fixed assets	30	-	1,657	1,657	-	1,589	1,589
Right-of-use assets	31	-	2,193	2,193	-	2,366	2,366
Deferred tax assets	41(d)	-	26	26	-	17	17
Total assets		375,693	23,413	399,106	255,195	23,856	279,051
Liabilities and equity							
Liabilities							
Financial liabilities at fair value through profit or loss	32	92,884	-	92,884	48,008	-	48,008
Margin deposits, Mainland security and settlement deposits, and cash collateral from Clearing							
Participants	20,33	187,008	-	187,008	142,536	-	142,536
Accounts payable, accruals and other liabilities	34	42,974	-	42,974	22,447	-	22,447
Deferred revenue	35	1,049	371	1,420	1,033	403	1,436
Taxation payable		1,174	-	1,174	1,760	-	1,760
Other financial liabilities	36	48	-	48	59	-	59
Participants' contributions to Clearing House Funds	20,37	20,439	-	20,439	14,394	-	14,394
Lease liabilities	38	304	2,054	2,358	272	2,234	2,506
Borrowings	39	340	83	423	338	80	418
Provisions	40	114	98	212	90	104	194
Deferred tax liabilities	41(d)	-	930	930	-	792	792
Total liabilities		346,334	3,536	349,870	230,937	3,613	234,550
Equity			i			Г	
Share capital	42			31,891			30,449
Shares held for Share Award Scheme	42			(485)			(770)
Employee share-based compensation reserve	43			232			250
Hedging and revaluation reserves	44			25			3
Exchange reserve	2(e)(iii)			(218)			(181)
Designated reserves	37,45			628			587
Reserve relating to written put options to non- controlling interests				(369)			(369)
Retained earnings	46			17,214			14,204
Equity attributable to shareholders of HKEX				48,918			44,173
Non-controlling interests	27(a)(i)			318			328
Total equity				49,236			44,501
Total liabilities and equity				399,106			279,051
Net current assets				29,359			24,258

The notes on pages 8 to 98 are an integral part of these consolidated financial statements.

Approved by the Board of Directors on 24 February 2021

Laura M CHA TAI Chi Kin, Calvin

Director Director

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 31 DECEMBER 2020

(Financial figures are expressed in Hong Kong Dollar)

	Attributable to shareholders of HKEX									
	Share capital					Reserve				
	and shares	Employee	Hedging			relating to				
	held for	share-based	and			written				
	Share Award	compensation	revaluation		Designated	put options to	Retained		Non-	
	Scheme	reserve	reserves	Exchange	reserves	non-controlling		earnings	controlling	Total
	(note 42)	(note 43)	(note 44)	reserve	(note 45)	interests	(note 46)	Total	interests	equity
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
At 1 Jan 2019	27,068	218	(6)	(84)	523	(369)	13,371	40,721	174	40,895
Profit for the year	-	-	-	-	-	-	9,391	9,391	(1)	9,390
Other comprehensive income	-	-	9	(97)	-	-	, <u>-</u>	(88)	ĺ	(87)
Total comprehensive income	-	-	9	(97)	-	-	9,391	9,303	-	9,303
Total transactions with shareholders of HKEX,				` '						
recognised directly in equity:										
- 2018 second interim dividend at \$3.07 per share	-	-	-	-	-	-	(3,830)	(3,830)	-	(3,830)
- 2019 first interim dividend at \$3.72 per share	-	-	-	-	-	-	(4,668)	(4,668)	=	(4,668)
- Unclaimed HKEX dividends forfeited (note 34(a))	-	-	-	-	-	-	19	19	-	19
- Shares issued in lieu of cash dividends	2,673	-	-	-	-	-	-	2,673	-	2,673
- Shares purchased for Share Award Scheme	(285)	-	-	-	-	-	-	(285)	-	(285)
 Vesting of shares of Share Award Scheme 	223	(208)	-	-	-	-	(15)	-	=	-
 Employee share-based compensation benefits 	-	240	-	-	-	-	· -	240	-	240
- Transfer of reserves	-	-	-	-	64	-	(64)	-	-	-
 Non-controlling interests on acquisition of a 							` '			
subsidiary	-	-	-	-	-	-	-	-	154	154
	2,611	32	-	-	64	-	(8,558)	(5,851)	154	(5,697)
At 31 Dec 2019	29,679	250	3	(181)	587	(369)	14,204	44,173	328	44,501

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (CONTINUED) FOR THE YEAR ENDED 31 DECEMBER 2020

	Attributable to shareholders of HKEX									
	Share capital and shares held for	Employee share-based	Hedging and			Reserve relating to written				
	Share Award Scheme (note 42) \$m	compensation reserve (note 43) \$m	revaluation reserves (note 44) \$m	Exchange reserve \$m	Designated reserves (note 45) \$m	put options to non-controlling interests \$m	Retained earnings (note 46) \$m	Total \$m	Non- controlling interests \$m	Total equity \$m
At 1 Jan 2020	29,679	250	3	(181)	587	(369)	14,204	44,173	328	44,501
Profit for the year	-	-	-	-	-	` -	11,505	11,505	(18)	11,487
Other comprehensive income	-	-	22	(37)	-	-	-	(15)	8	(7)
Total comprehensive income	-	-	22	(37)	-	-	11,505	11,490	(10)	11,480
Total transactions with shareholders of HKEX, recognised directly in equity:										
- 2019 second interim dividend at \$2.99 per share	-	-	-	-	-	-	(3,761)	(3,761)	-	(3,761)
- 2020 first interim dividend at \$3.71 per share	-	-	-	-	-	-	(4,692)	(4,692)	-	(4,692)
- Unclaimed HKEX dividends forfeited (note 34(a))	-	-	-	-	-	-	21	21	-	21
- Shares issued in lieu of cash dividends	1,428	-	-	-	-	-	-	1,428	-	1,428
 Shares purchased for Share Award Scheme 	(31)	-	-	-	-	=	=	(31)	-	(31)
 Vesting of shares of Share Award Scheme 	330	(299)	-	-	-	-	(31)		-	
- Employee share-based compensation benefits	-	281	-	-	-	-	-	281	-	281
 Tax relating to Share Award Scheme 	-	-	-	-	-	-	9	9	-	9
- Transfer of reserves	-	-	-	-	41	-	(41)	-	-	
	1,727	(18)	-	-	41	-	(8,495)	(6,745)	-	(6,745)
At 31 Dec 2020	31,406	232	25	(218)	628	(369)	17,214	48,918	318	49,236

The notes on pages 8 to 98 are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 31 DECEMBER 2020

(Financial figures are expressed in Hong Kong Dollar)

(Financial ligures are expressed in Hong Kong Dollar)			
	Note	2020 \$m	2019 \$m
Cash flows from principal operating activities		· · · · · · · · · · · · · · · · · · ·	****
Net cash inflow from principal operating activities	47(a)	11,956	11,143
Cash flows from other operating activities			
Net redemption from/(payments to) external fund managers for			
sales/(purchases) of financial assets measured at fair value through profit or loss		2,813	(1,081)
-			
Net cash inflow from operating activities		14,769	10,062
Cash flows from investing activities		(4.054)	(4.004)
Payments for purchases of fixed assets and intangible assets		(1,351)	(1,091)
Net (increase)/decrease in financial assets of Corporate Funds:			4
Increase in time deposits with original maturities more than three months		(5,850)	(2,384)
Proceeds received upon maturity of financial assets measured at amortised cost (excluding time deposits) Payments for purchases of financial assets measured at amortised cost		207	536
(excluding time deposits) Payments for financial assets measured at fair value through profit or		(384)	(634)
loss		(160)	(50)
Interest received from financial assets measured at fair value through other comprehensive income		56	97
Cash acquired upon acquisition of a subsidiary		-	41
Net cash outflow from investing activities		(7,482)	(3,485)
Cash flows from financing activities			
Purchases of shares for Share Award Scheme		(31)	(285)
Repayment of borrowings	47(b)	-	(744)
Payments of interest on borrowings	47(b)	-	(11)
Payments of other finance costs		(87)	(81)
Dividends paid to shareholders of HKEX		(6,983)	(5,785)
Lease payments	47(b), 47(c)		
- Capital elements		(284)	(159)
- Interest elements		(89)	(89)
Net cash outflow from financing activities		(7,474)	(7,154)
Net decrease in cash and cash equivalents		(187)	(577)
Cash and cash equivalents at 1 Jan		10,603	11,180
Exchange differences on cash and cash equivalents		26	_
Cash and cash equivalents at 31 Dec		10,442	10,603
Analysis of cash and cash equivalents		·	,
Cash on hand and balances and deposits with banks and short-term investments of Corporate Funds	21	10,753	11,421
Less: Cash reserved for supporting Skin-in-the-Game and default fund			
credits of clearing houses	21(b)	(311)	(818)

The notes on pages 8 to 98 are an integral part of these consolidated financial statements.

(a) "Cash flows from principal operating activities" is a non-Hong Kong Financial Reporting Standard (non-HKFRS) measure used by management for monitoring cash flows of the Group (defined in note 1) and represents the cash flows generated from the trading and clearing operations of the four exchanges and five clearing houses and ancillary services of the Group. This non-HKFRS measure may not be comparable to similar measures presented by other companies. Cash flows from principal operating activities and cash flows from other operating activities together represent cash flows from operating activities as defined by Hong Kong Accounting Standard (HKAS) 7: Statement of Cash Flows.

(Financial figures are expressed in Hong Kong Dollar unless otherwise stated)

1. General Information

Hong Kong Exchanges and Clearing Limited (HKEX or the Company) and its subsidiaries (collectively, the Group) own and operate the only stock exchange and futures exchange in Hong Kong and their related clearing houses, a clearing house for clearing over-the-counter derivatives contracts in Hong Kong, an exchange and a clearing house for the trading and clearing of base, ferrous and precious metals futures and options contracts operating in the United Kingdom (UK), and a commodity trading platform in the Mainland.

HKEX is a limited company incorporated and domiciled in Hong Kong. The address of its registered office is 8th Floor, Two Exchange Square, 8 Connaught Place, Central, Hong Kong.

These consolidated financial statements were approved for issue by the Board of Directors (Board) on 24 February 2021.

2. Principal Accounting Policies

Apart from the accounting policies presented within the corresponding notes to the consolidated financial statements, other principal accounting policies applied in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

(a) Statement of compliance

These consolidated financial statements have been prepared in accordance with Hong Kong Financial Reporting Standards (HKFRSs) issued by the Hong Kong Institute of Certified Public Accountants (HKICPA), and accounting principles generally accepted in Hong Kong. These consolidated financial statements also comply with the applicable disclosure requirements of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (Main Board Listing Rules) and the applicable requirements of the Hong Kong Companies Ordinance (Chapter 622).

(b) Basis of preparation

These consolidated financial statements have been prepared under the historical cost convention, as modified by the revaluation of certain financial assets and financial liabilities measured at fair value.

The preparation of consolidated financial statements requires the use of certain critical accounting estimates, and requires management to exercise its judgement when applying the Group's accounting policies. Areas involving significant estimates and judgement are disclosed in note 3.

Adoption of new/revised HKFRSs

In 2020, the Group has adopted the following amendments to HKFRSs which are pertinent to the Group's operations and effective for accounting periods beginning on or after 1 January 2020:

Amendments to HKAS 1 and HKAS 8 Presentation of Financial Statements and

Accounting Policies, Changes in Accounting Estimates and Errors: Definition of Material

Amendments to HKFRS 3 Business Combination: Definition of a Business

The adoption of these amendments did not have any financial impact on the Group.

2. Principal Accounting Policies (continued)

(b) Basis of preparation (continued)

New/revised HKFRSs issued before 31 December 2020 but not yet effective and not early adopted

The Group has not applied the following amendments to HKFRSs which were issued before 31 December 2020 and are pertinent to its operations but not yet effective:

Amendments to HKAS 1 Presentation of Financial Statements: Classification

of Liabilities as Current or Non-Current3

Amendments to HKAS 16 Property, Plant and Equipment: Proceeds before

Intended Use²

Amendments to HKAS 37 Provisions, Contingent Liabilities and Contingent

Assets: Onerous Contracts - Cost of Fulfilling a

Contract²

Amendments to HKFRS 3 Business Combinations: Reference to the

Conceptual Framework²

Leases: COVID-19-Related Rent Concessions1 Amendments to HKFRS 16

Annual Improvements to HKFRSs 2018-

2020:

Amendments to HKFRS 9 Financial Instruments: Fees in the "10 per cent" Test

for Derecognition of Financial Liabilities²

Amendments to Illustrative Examples

accompanying HKFRS 16

Leases: Lease Incentives²

The adoption of the amendments to HKFRSs would not have any financial impact on the Group.

There are no other new/revised HKFRSs not yet effective that are expected to have any impact on the Group.

Change in presentation of consolidated income statement

In prior years, certain licence fees, bank charges and other costs that directly vary with trading and clearing transactions (transaction-related expenses) were included under other operating expenses. From 2020 onwards, transaction-related expenses are presented under a separate line below Revenue and other income, to more appropriately reflect the nature of such direct costs. The comparative figures have been restated to conform with the revised presentation.

HKEX Foundation Limited (HKEX Foundation) was established to deepen HKEX's connectivity and long-standing commitment to our communities. From July 2020 onwards, the donation income from the Stock Code Balloting Charity Scheme were received by HKEX Foundation, and the amounts previously paid by the issuers directly to the Hong Kong Community Chest were paid by HKEX Foundation. To facilitate readers' understanding of the HKEX Foundation's activities, HKEX Foundation donation income and HKEX Foundation charitable donations are presented as separate lines under Revenue and other income and Operating expenses respectively. No restatement of prior year comparative figures was made as the amounts were immaterial to the overall consolidated financial statements.

¹ Effective for accounting periods beginning on or after 1 June 2020

² Effective for accounting periods beginning on or after 1 January 2022

³ Effective for accounting periods beginning on or after 1 January 2023

2. Principal Accounting Policies (continued)

(c) Basis of consolidation

Subsidiaries are entities (including structured entities) over which the Group has control. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases. All material intra-group transactions and balances have been eliminated on consolidation.

Accounting policies of subsidiaries have been aligned on consolidation to ensure consistency with the policies adopted by the Group.

(d) Impairment of non-financial assets

Assets with an indefinite useful life, which include interests in joint ventures, goodwill and tradenames, are not subject to amortisation but are tested at least annually for impairment. Assets subject to amortisation are reviewed for impairment whenever there is any indication that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount (ie, the higher of an asset's fair value less costs to sell and value-in-use). Such impairment losses are recognised in the consolidated income statement. An impairment loss other than goodwill is reversed if the circumstances and events leading to the impairment cease to exist.

(e) Foreign currency translation

(i) Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the functional currency). The consolidated financial statements are presented in Hong Kong Dollar (HKD), which is the Company's functional and presentation currency.

(ii) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the consolidated income statement. They are deferred in hedging reserve under equity if they relate to qualifying cash flow hedges (note 44(a)).

Translation differences on non-monetary financial assets that are classified as financial assets measured at fair value through profit or loss are reported as part of the fair value gain or loss.

(iii) Group companies

The results and financial position of each of the Group's entities that have a non-HKD functional currency are translated into HKD as follows:

- assets and liabilities (including goodwill and fair value adjustments arising on the acquisition
 of foreign subsidiaries) for each statement of financial position presented are translated at
 the closing rate at the end of the reporting period;
- income and expenses for each income statement are translated at the exchange rates approximating the foreign exchange rates ruling at the dates of the transactions; and
- all resulting currency translation differences are recognised in other comprehensive income in the exchange reserve under equity.

3. Critical Accounting Estimates and Assumptions

The Group makes estimates and assumptions concerning the future when the consolidated financial statements are prepared. The resulting accounting estimates may differ from the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below:

(a) Goodwill and tradenames

The Group tests annually whether goodwill and tradenames have suffered any impairment in accordance with the accounting policy stated in note 29.

The recoverable amounts of relevant cash generating units (CGUs) and relevant group of CGUs have been determined based on value-in-use calculations, which are disclosed in note 29. These calculations require the use of estimates and significant judgement by management, including the future cash flows expected to arise from the CGUs, discount rates for calculating the present value and growth rates used to extrapolate cash flow projections beyond the financial forecasts approved by management.

Changes in facts and circumstances may result in revisions to estimates of recoverable amounts and to the conclusion as to whether an indication of impairment exists, which could affect the consolidated income statement in future years.

(b) Valuation of investments

The Group has a significant amount of investments that are not classified as Level 1 investments under HKFRS 13: Fair Value Measurement. Except for investments in minority stakes in unlisted companies (note 53(d)(i)), the valuations have been determined based on quotes from market makers, alternative pricing sources supported by observable inputs, latest transaction prices or redemption prices provided by fund administrators of collective investment schemes.

At 31 December 2020, the financial assets that were not classified as Level 1 investments (excluding the base, ferrous and precious metals futures and options contracts cleared through LME Clear Limited (LME Clear) that did not qualify for netting under the current accounting standards) under HKFRS 13 amounted to \$9,085 million (31 December 2019: \$8,256 million) which mainly comprised \$6,362 million (31 December 2019: \$6,696 million) of investments under collective investment schemes.

As the valuation of investments reflects movements in their estimated fair values, fair value gains or losses may fluctuate or reverse until the investments are sold, mature or are realised upon redemption. The potential impact of the fair value change of such investments on the Group's consolidated income statement is disclosed in note 53(a)(iv).

4. Operating Segments

Accounting Policy

Operating segments are reported in a manner consistent with the internal management reports that are used to make strategic decisions provided to the chief operating decision-maker. The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, is the Chief Executive of HKEX. Information relating to segment assets and liabilities is not disclosed as such information is not regularly reported to the chief operating decision-maker.

The accounting policies of the reportable segments are the same as the Group's accounting policies. Taxation charge/credit is not allocated to reportable segments.

The Group has five reportable segments ("Corporate Items" is not a reportable segment). The segments are managed separately as each segment offers different products and services and requires different information technology systems and marketing strategies.

The operations in each of the Group's reportable segments are as follows:

The **Cash** segment covers all equity products traded on the Cash Market platforms of The Stock Exchange of Hong Kong Limited (Stock Exchange), the Shanghai Stock Exchange and the Shenzhen Stock Exchange through Shanghai-Hong Kong Stock Connect and Shenzhen-Hong Kong Stock Connect (Stock Connect), sales of market data relating to these products and other related activities. The major sources of revenue of the segment are trading fees, trading tariffs, listing fees of equity products and market data fees.

The **Equity and Financial Derivatives** segment refers to derivatives products traded on the Stock Exchange and Hong Kong Futures Exchange Limited (Futures Exchange) and other related activities. These include the provision and maintenance of trading platforms for a range of equity and financial derivatives products, such as stock and equity index futures and options, derivatives warrants (DWs), callable bull/bear contracts (CBBCs) and warrants, and sales of related market data. The major sources of revenue are trading fees, trading tariffs, listing fees of derivatives products and market data fees.

The **Commodities** segment refers to the operations of The London Metal Exchange (LME), which operates an exchange in the UK for the trading of base, ferrous and precious metals futures and options contracts, and the operations of Qianhai Mercantile Exchange Co., Ltd. (QME), the commodity trading platform in the Mainland. It also covers the commodities contracts traded on the Futures Exchange. The major sources of revenue of the segment are trading fees of commodity products, commodity market data fees and fees from ancillary operations.

The **Post Trade** segment refers to the operations of the five clearing houses, which are responsible for clearing, settlement and custodian activities of the exchanges of the Group and Northbound trades under Stock Connect, and clearing and settlement of over-the-counter derivatives contracts. Its principal sources of revenue are derived from providing clearing, settlement, depository, custody and nominee services and net investment income earned on the Margin Funds and Clearing House Funds.

The **Technology** segment refers to all services in connection with providing users with access to the platform and infrastructure of the Group, and services provided by BayConnect Technology Company Limited (BayConnect). Its major sources of revenue are network, terminal user, data line and software sub-license fees and hosting services fees.

4. Operating Segments (continued)

Central income (including net investment income of Corporate Funds and HKEX Foundation donation income) and central costs (including costs of central support functions that provide services to all operating segments, HKEX Foundation charitable donations, and other costs not directly related to any operating segment) are included as "Corporate Items".

The chief operating decision-maker assesses the performance of the operating segments principally based on their EBITDA (defined below).

EBITDA is defined as earnings before interest expenses and other finance costs, taxation, depreciation and amortisation. It excludes the Group's share of results of the joint ventures and other non-recurring costs. EBITDA is a non-HKFRS measure used by management for monitoring business performance. It may not be comparable to similar measures presented by other companies.

An analysis by operating segment of the Group's EBITDA, profit before taxation and other selected financial information (including analysis of revenue by timing of revenue recognition) for the year, is set out as follows:

				2020			
	Cash \$m	Equity and Financial Derivatives \$m	Commodities \$m	Post Trade \$m	Technology \$m	Corporate Items \$m	Group \$m
Timing of revenue recognition:							
Point in time	3,460	2,079	1,171	5,667	62	1	12,440
Over time	1,531	1,162	278	575	844	5	4,395
Revenue	4,991	3,241	1,449	6,242	906	6	16,835
Net investment income	-	-	-	1,386	_	842	2,228
HKEX Foundation donation income	-	-	_	_	_	106	106
Sundry income	-	-	5	9	4	3	21
Revenue and other income	4,991	3,241	1,454	7,637	910	957	19,190
Less: Transaction-related expenses	-	(85)	_	(25)	_	_	(110)
Revenue and other income less transaction-related expenses	4,991	3,156	1,454	7,612	910	957	19,080
Operating expenses	(595)	(607)	(692)	(860)	(304)	(1,381)	(4,439)
Reportable segment EBITDA	4,396	2,549	762	6,752	606	(424)	14,641
Depreciation and amortisation	(133)	(114)	(340)	(322)	(38)	(250)	(1,197)
Finance costs	(13)	(13)	(8)	(84)	(2)	(61)	(181)
Share of profits less losses of joint ventures	68	1	-	-	-	-	69
Reportable segment profit before taxation	4,318	2,423	414	6,346	566	(735)	13,332
Other segment information:							
Interest income	-	-	-	1,738	-	384	2,122
Interest rebates to Participants	-	-	-	(349)	-	-	(349)
Other material non-cash item:							
Employee share-based compensation expenses	(40)	(40)	(42)	(46)	(7)	(106)	(281)

4. Operating Segments (continued)

				2019			
	Cash \$m	Equity and Financial Derivatives \$m	Commodities \$m	Post Trade \$m	Technology \$m	Corporate Items \$m	Group \$m
Timing of revenue recognition:							
Point in time	0.454	2.002	4.400	4.040	66	11	0.704
Over time	2,151 1,495	2,092 896	1,126 270	4,318 403	727	10	9,764
	,			4,721		21	3,801
Revenue	3,646	2,988	1,396	*	793		13,565
Net investment income	-	-	-	1,496	-	1,233	2,729
Sundry income	<u> </u>		3	9	3	2	17
Revenue and other income	3,646	2,988	1,399	6,226	796	1,256	16,311
Less: Transaction-related expenses	-	(41)	-	(10)	-	-	(51)
Revenue and other income less transaction-related expenses	3,646	2,947	1,399	6,216	796	1,256	16,260
Operating expenses	(603)	(510)	(668)	(814)	(245)	(1,157)	(3,997)
Reportable segment EBITDA	3,043	2,437	731	5,402	551	99	12,263
Depreciation and amortisation	(128)	(94)	(327)	(237)	(39)	(219)	(1,044)
Costs relating to proposed combination with LSEG	(120)	-	-	-	-	(123)	(123)
Finance costs	(15)	(12)	(8)	(82)	(1)	(59)	(177)
Share of profits less losses of joint ventures	38	(6)	- -	-	-	· · ·	32
Reportable segment profit before taxation	2,938	2,325	396	5,083	511	(302)	10,951
Other segment information:							
Interest income	-	-	-	2,750	-	443	3,193
Interest rebates to Participants	-	=	-	(1,248)	_	-	(1,248)
Other material non-cash item:				,			,
Employee share-based compensation expenses	(36)	(30)	(35)	(37)	(4)	(98)	(240)

(a) Geographical information

The Group's revenue is derived from its operations in Hong Kong, the UK and Mainland China. Such information and the Group's non-current assets (excluding financial assets and deferred tax assets) by geographical location are detailed below:

	Revenue		Non-curre	nt assets	
	2020 \$m	2019 \$m	At 31 Dec 2020 \$m	At 31 Dec 2019 \$m	
Hong Kong (place of domicile)	14,641	11,543	5,374	5,037	
United Kingdom	2,124	1,991	17,096	17,126	
Mainland China	70	31	302	286	
	16,835	13,565	22,772	22,449	

(b) Information about major customers

In 2020 and 2019, the revenue from the Group's largest customer amounted to less than 10 per cent of the Group's total revenue.

5. Revenue

Accounting Policy

Revenue excludes value added tax or other sales tax, and is recognised in the consolidated income statement on the following basis:

Trading fees and trading tariffs are recognised on a trade date basis.

Stock Exchange listing fees mainly comprise annual listing fees and initial listing fees. Annual listing fees are recognised on a straight-line basis over the period covered. Initial listing fees are recognised over time when the services are transferred to the listed companies or issuers of warrants, CBBCs and other securities.

Clearing and settlement fees arising from trades between Participants transacted on the Stock Exchange are recognised on the day following the trade day upon acceptance of the trades. Fees for clearing and settlement of trades transacted on the Shanghai Stock Exchange and Shenzhen Stock Exchange through Stock Connect (A shares) are recognised on the trade day upon acceptance of the trades. Fees for clearing and settlement of trades in respect of base, ferrous and precious metals futures and options contracts transacted on the LME are recognised on the trade match day. Fees for all other settlement transactions are recognised upon completion of the settlement.

Custody fees for securities held in the Central Clearing and Settlement System (CCASS) depository are calculated and accrued on a monthly basis. Portfolio fees for A shares held or recorded in the CCASS depository and for Hong Kong securities held by China Depository and Clearing Corporation Limited (ChinaClear) are calculated and accrued on a daily basis.

Income on registration and transfer fees for nominee services are calculated and accrued on the book close dates of the relevant stocks during the financial year.

Market data fees and other fees are recognised when the related services are rendered.

(a) Trading Fees and Trading Tariffs

	2020	2019
	\$m	\$m
Equity securities traded on the Stock Exchange and through Stock Connect	3,409	2,100
DWs, CBBCs and warrants traded on the Stock Exchange	699	610
Futures and options contracts traded on the Stock Exchange and		
the Futures Exchange	1,764	1,848
Base, ferrous and precious metals futures and options contracts traded on the		
LME and QME	1,087	1,034
	6,959	5,592

5. Revenue (continued)

(b) Stock Exchange Listing Fees

		2020				2	2019	
	Equi	ty	CBBCs,		Equ	iity	CBBCs,	
	Main Board	GEM	DWs & others	Total	Main Board	GEM	DWs & others	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Annual listing fees Initial and subsequent	713	52	3	768	704	54	2	760
issue listing fees	130	14	979	1,123	158	18	688	864
Other listing fees	7	1	-	8	8	1	-	9
	850	67	982	1,899	870	73	690	1,633

(c) Other Revenue

	2020 \$m	2019 \$m
Network, terminal user, data line and software sub-license fees	610	575
Hosting services fees	230	188
Commodities stock levies and warehouse listing fees	67	63
Participants' subscription and application fees	112	94
Accommodation income (note (i))	160	79
Sales of Trading Rights	24	22
LME financial over-the-counter booking fees	49	45
BayConnect sales and service revenue	66	30
Brokerage on IPO direct allotments	26	23
Miscellaneous revenue	61	90
	1,405	1,209

- (i) Accommodation income mainly comprises income from Participants on securities deposited as alternatives to cash deposits of Margin Funds, or depositing currencies whose relevant bank deposit rates are negative, and interest shortfall collected from LME Clear Participants on cash collateral where the investment return on the collateral is below the benchmarked interest rates stipulated in the clearing rules of LME Clear.
- (d) Revenue recognised in 2020 that was included in the deferred revenue balance at the beginning of the year amounted to \$1,033 million (2019: \$1,000 million).

6. Net Investment Income

Accounting Policy

Interest income on investments and interest rebates to Participants are recognised on a time apportionment basis using the effective interest method.

Gains and losses arising from changes in fair value of financial assets measured at fair value through profit or loss and financial liabilities at fair value through profit or loss are included under net investment income in the consolidated income statement.

	2020	2019
	\$m	\$m
Gross interest income from financial assets measured at amortised cost	2,066	3,096
Gross interest income from financial assets measured at fair value through		
other comprehensive income	56	97
Interest rebates to Participants	(349)	(1,248)
Net interest income	1,773	1,945
Net gains on financial assets mandatorily measured at fair value through		
profit or loss and financial liabilities at fair value through profit or loss	487	789
Others	(32)	(5)
Net investment income	2,228	2,729

7. HKEX Foundation Donation Income

Accounting Policy

HKEX Foundation donation income is recognised when the right to receive such donation is established.

	2020	2019
	\$m	\$m
Stock Code Balloting Scheme (note (a))	105	-
Others	1	-
	106	-

(a) From July 2020 onwards, donation income from the Stock Code Balloting Charity Scheme were received by the HKEX Foundation and recorded by the Group as HKEX Foundation donation income. The donations paid by HKEX Foundation were recorded under operating expenses as HKEX Foundation charitable donations.

8. Sundry Income

	2020	2019
	\$m	\$m
Forfeiture of unclaimed dividends (note (a))	9	9
Others	12	8
	21	17

(a) In accordance with CCASS Rule 1109, the Group exercised its forfeiture right to appropriate cash dividends of \$9 million (2019: \$9 million) held by HKSCC Nominees Limited, which had remained unclaimed for a period of more than seven years and recognised these as sundry income. The Group has, however, undertaken to honour all forfeited claims amounting to \$206 million at 31 December 2020 (31 December 2019: \$197 million) if adequate proof of entitlement is provided by the beneficial owner claiming any dividends forfeited.

9. Transaction-related Expenses

Accounting Policy

Transaction-related expenses comprise of license fees, bank charges and other costs which directly vary with trading and clearing transactions. They are presented below Revenue and other income to reflect the nature of such direct costs. They are expensed in the period in which they are incurred.

10. Staff Costs and Related Expenses

	2020	2019
	\$m	\$m
Salaries and other short-term employee benefits	2,487	2,280
Employee share-based compensation benefits of Share Award Scheme		
(note 43)	281	240
Termination benefits	20	11
Retirement benefit costs (note (a)):		
- ORSO Plan	142	138
- MPF Scheme	5	4
- LME Pension Scheme	28	24
- PRC Retirement Schemes	4	6
	2,967	2,703

(a) Retirement Benefit Costs

Accounting Policy

Contribution to the defined contribution plans are expensed as incurred.

10. Staff Costs and Related Expenses (continued)

(a) Retirement Benefit Costs (continued)

The Group has sponsored a defined contribution provident fund scheme (ORSO Plan) which is registered under the Occupational Retirement Schemes Ordinance (ORSO) and a Mandatory Provident Fund scheme (MPF Scheme) for the benefits of its employees in Hong Kong. The Group contributes 12.5 per cent of the employee's basic salary to the ORSO Plan if an employee contributes 5 per cent. If the employee chooses not to contribute, the Group will contribute 10 per cent of the employee's salary to the ORSO Plan. Contributions to the MPF Scheme are in accordance with the statutory limits prescribed by the MPF Ordinance. Forfeited contributions of the ORSO Plan for employees who leave before the contributions are fully vested are not used to offset existing contributions but are credited to a reserve account of that Plan, and are available for distribution to the members of the Plan at the discretion of the trustees.

For employees of LME and LME Clear, the Group has also sponsored a defined contribution pension scheme (LME Pension Scheme). For employees who joined LME and LME Clear before 1 May 2014, the Group contributes 15 per cent to 17 per cent of the employee's basic salary to the LME Pension Scheme. For employees who joined the LME and LME Clear on or after 1 May 2014, they are automatically enrolled into the LME Pension Scheme on a matched contribution basis and may choose a personal contribution level ranging from 3 per cent to 5 per cent of their basic salaries, which is matched by the Group's contribution ranging from 6 per cent to 10 per cent of their basic salaries. Staff may opt-out of the scheme if they wish. There are no forfeited contributions for the LME Pension Scheme as the contributions are fully vested to the employees upon payment to the scheme.

Pursuant to the relevant laws and regulations in the People's Republic of China (PRC), the Group has joined defined contribution retirement schemes for the employees arranged by local government labour and security authorities (PRC Retirement Schemes). The Group makes contributions to the retirement schemes at the applicable rates based on the amounts stipulated by the local government organisations. Upon retirement, the local government labour and security authorities are responsible for the payment of the retirement benefits to the retired employees.

Assets of the ORSO Plan, MPF Scheme, LME Pension Scheme and PRC Retirement Schemes are held separately from those of the Group and are independently administered and are not included in the consolidated statement of financial position.

11. Information Technology and Computer Maintenance Expenses

	2020 \$m	2019 \$m
Costs of services and goods:		
- consumed by the Group	551	487
- directly consumed by Participants	84	93
	635	580

12. Other Operating Expenses

	2020	2019
	\$m	\$m_
Bank charges	14	14
Communication expenses	13	15
Contribution to Financial Reporting Council	-	8
Custodian and fund management related fees	28	22
Financial data subscription fees	49	39
Insurance	10	14
Non-executive directors' fees	21	20
Office demolition and relocation expenses	9	12
Provision for impairment losses of receivables	12	9
Repairs and maintenance expenses	69	67
Security expenses	23	23
Travel expenses	19	49
UK regulatory fees	18	18
Other miscellaneous expenses	89	90
	374	400

⁽a) In prior years, transaction-related expenses that directly vary with trading and clearing transactions were included under other operating expenses. From 2020 onwards, they are presented under a separate line below Revenue and other income. Comparative figures have been restated to conform with current year's presentation (note 2(b)).

13. Operating Profit

	2020 \$m	2019 \$m
Operating profit is stated after charging:		
Auditor's remuneration		
- audit fees	19	15
- other non-audit fees (note (a))	3	2
Lease rentals for land and buildings (note (b))	4	15
Provision for impairment losses of receivables Net foreign exchange losses on financial assets and liabilities (excluding financial assets and financial liabilities measured at fair value through	12	9
profit or loss)	32	5

⁽a) In 2019, another \$10 million non-audit fees were paid to the auditor and included under "Costs relating to proposed combination with LSEG".

⁽b) The amounts represent lease rentals relating to short-term leases under HKFRS 16.

14. Finance Costs

Accounting Policy

Interest expenses (other than interest on lease liabilities) are charged to the consolidated income statement and recognised on a time apportionment basis, taking into account the principal and the applicable interest rates using the effective interest method.

Interest on lease liabilities is charged to the consolidated income statement over the lease periods so as to produce a constant periodic rate of interest on the remaining balance of the lease liabilities (note 38) for each period.

Other finance costs, which represent banking facility commitment fees that relate to liquidity support provided to the Group's clearing houses, are recognised in the consolidated income statement in the period in which they are incurred.

	2020 \$m	2019 \$m
Interest on borrowings	5	7
Interest on lease liabilities (note 38)	89	89
Banking facility commitment fees	53	52
Negative interest on Euro and Japanese Yen deposits	34	29
	181	177

15. Directors' Emoluments and Interests of Directors

All Directors, including one Executive Director (the HKEX's Chief Executive), received emoluments during the years ended 31 December 2020 and 31 December 2019. The aggregate emoluments paid and payable to the Directors during the year were as follows:

	2020	2019
	\$'000	\$'000
Executive Director:		
Salaries and other short-term employee benefits	14,684	9,679
Performance bonus	80,700	16,000
Retirement benefit costs	1,333	1,164
	96,717	26,843
Employee share-based compensation benefits (note (a))	23,773	24,262
	120,490	51,105
Non-executive Directors:		
Fees	21,327	20,236
Other benefits	37	35
	21,364	20,271
	141,854	71,376

(a) Employee share-based compensation benefits represent the fair value of share awards granted under the Share Award Scheme (Awarded Shares) on grant date (note 43) recognised in the consolidated income statement during the year.

15. Directors' Emoluments and Interests of Directors (continued)

(b) The emoluments of all Directors, including HKEX's Chief Executive who is an ex-officio member, are set out below. The amounts represent emoluments paid or receivable in respect of their services as a director.

					2020			
			Other		Retirement		Employee	
			benefits	Performance	benefit costs		share-based compensation	
	Fees	Salary	(note (i))	bonus	(note (ii))	Sub-total	benefits	Total
Name of Director	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Laura M Cha	4,894	-	37	-	-	4,931	-	4,931
Charles X Li (note (iii))	-	9,315	5,369	80,700	1,333	96,717	23,773	120,490
Apurv Bagri	1,010	-	-	-	-	1,010	-	1,010
T C Chan	1,354	-	-	-	-	1,354	-	1,354
C H Cheah	1,580	-	-	-	-	1,580	-	1,580
Susan M F Chow Woo (note (iv))	788	-	-	-	-	788	-	788
Anita Y M Fung	1,182	-	-	-	-	1,182	-	1,182
Rafael Gil-Tienda	1,945	-	-	-	-	1,945	-	1,945
Fred Z Hu	1,277	-	-	-	-	1,277	-	1,277
Benjamin P C Hung	1,125	-	-	-	-	1,125	-	1,125
Hugo P H Leung	1,536	-	-	-	-	1,536	-	1,536
John M M Williamson	1,755	-	-	-	-	1,755	-	1,755
Stephen K W Yiu	2,881	-	-	-	-	2,881	-	2,881
Total	21,327	9,315	5,406	80,700	1,333	118,081	23,773	141,854

					2019			
			Other benefits	Performance	Retirement benefit costs		Employee share-based	
	Fees	Salary	(note (i))	bonus	(note (ii))	Sub-total	compensation benefits	Total
Name of Director	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Laura M Cha	4,574	-	35	-	-	4,609	-	4,609
Charles X Li	-	9,315	364	16,000	1,164	26,843	24,262	51,105
Apurv Bagri	940	-	-	-	-	940	-	940
T C Chan	1,286	-	-	-	-	1,286	-	1,286
C H Cheah	1,525	-	-	-	-	1,525	-	1,525
Anita Y M Fung	1,134	-	-	-	-	1,134	-	1,134
Rafael Gil-Tienda	1,750	-	-	-	-	1,750	-	1,750
Fred Z Hu	1,123	-	-	-	=	1,123	=	1,123
Benjamin P C Hung	973	-	-	-	-	973	-	973
Margaret M Y Leung Ko (note (v))	274	-	-	-	-	274	-	274
Hugo P H Leung	1,509	-	-	-	-	1,509	-	1,509
Mary X Ma (note (vi))	413	-	-	-	-	413	-	413
John M M Williamson	1,966	-	-	-	-	1,966	-	1,966
Stephen K W Yiu	2,769	-	-	-	=	2,769	=	2,769
Total	20,236	9,315	399	16,000	1,164	47,114	24,262	71,376

Notes:

- (i) Other benefits included leave pay, insurance premium, club membership, relocation allowance, settlement of the UK tax liability on behalf of Non-Resident Director.
- (ii) Retirement benefit costs include employer's contributions to provident fund and long service payment. Employees who retire before normal retirement age are eligible for 18 per cent of the employer's contribution to the provident fund after completion of two years of service. The rate of vested benefit increases at an annual increment of 18 per cent thereafter reaching 100 per cent after completion of seven years of service.
- (iii) Mr. Li retired on 31 December 2020. His performance bonus in 2020 includes a special bonus payment of \$30 million approved by the Board.
- (iv) Appointment effective 7 May 2020
- (v) Retired on 24 April 2019
- (vi) Ms Mary X Ma, who was appointed as a director effective 24 April 2019, passed away on 31 August 2019.

15. Directors' Emoluments and Interests of Directors (continued)

(c) Directors' material interests in transactions, arrangement or contracts

No significant transactions, arrangements and contracts in relation to HKEX's business to which HKEX was a party and in which a director of HKEX had a material interest, whether directly or indirectly, subsisted at the end of the year or at any time during the year.

16. Five Top-paid Employees

One (2019: one) of the five top-paid employees was a Director whose emoluments are disclosed in note 15. Details of the emoluments of the other four (2019: four) top-paid employees were as follows:

	2020 \$'000	2019 \$'000
Salaries and other short-term employee benefits	17,681	19,873
Performance bonus	19,716	18,173
Retirement benefit costs	1,654	1,884
	39,051	39,930
Employee share-based compensation benefits (note (a))	21,554	23,305
	60,605	63,235

- (a) Employee share-based compensation benefits represent the fair value of Awarded Shares on grant date (note 43) amortised to the consolidated income statement during the year.
- (b) The emoluments of these four (2019: four) employees, including share-based compensation benefits, were within the following bands:

	2020	2019
	Number of	Number of
	employees	employees
\$12,500,001 - \$13,000,000	1	-
\$14,500,001 - \$15,000,000	1	-
\$15,000,001 - \$15,500,000	1	3
\$17,000,001 - \$17,500,000	-	1
\$17,500,001 - \$18,000,000	1	-
	4	4

The above employees included senior executives who were also Directors of the subsidiaries during the years. No Directors of the subsidiaries waived any emoluments.

17. Taxation

Accounting Policy

Tax charge for the period comprises current and deferred tax. Tax is recognised in the consolidated income statement, except to the extent that it relates to items recognised directly in equity, in which case, the tax is also recognised directly in equity.

The current tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the end of the reporting period in the countries where HKEX and its subsidiaries operate and generate taxable income. Provisions are established where appropriate on the basis of amounts expected to be paid to the tax authorities.

The Group's accounting policy for recognition of deferred tax is described in note 41.

(a) Taxation charge/(credit) in the consolidated income statement represented:

	2020	2019
	\$m	\$m
Current tax - Hong Kong Profits Tax		
- Provision for the year	1,537	1,314
- Over provision in respect of prior years	(2)	-
	1,535	1,314
Current tax - Overseas Tax		
- Provision for the year	177	200
- Under/(over) provision in respect of prior years	1	(1)
	178	199
Total current tax (note (i))	1,713	1,513
Deferred tax		
- Provision for temporary differences	71	48
- Impact of changes in UK Corporate Tax rate (note (ii))	61	-
Total deferred tax (note 41(a))	132	48
Taxation charge	1,845	1,561

- (i) Hong Kong Profits Tax has been provided at the rate of 16.5 per cent (2019: 16.5 per cent) on the estimated assessable profit for the year. Taxation on overseas profits has been calculated on the estimated assessable profit at the rates of taxation prevailing in the countries in which the Group operates, with the average corporation tax rate applicable to the subsidiaries in the UK being 19 per cent (2019: 19 per cent).
- (ii) Through the enactment of the Finance Act 2020, the UK Corporate Tax rate would remain at 19 per cent from 1 April 2020 instead of reducing to 17 per cent, the previously enacted rate. As a result, a one-off deferred tax charge of \$61 million was recognised during the year ended 31 December 2020.

17. Taxation (continued)

(b) The taxation on the Group's profit before taxation differs from the theoretical amount that would arise using the weighted average tax rate applicable to profits of the consolidated entities as follows:

	2020 \$m	2019 \$m
Profit before taxation	13,332	10,951
Tax calculated at domestic tax rates applicable to profits in the respective countries (note (i))	2,188	1,835
Income not subject to taxation	(510)	(391)
Expenses not deductible for taxation purposes	59	61
Remeasurement of deferred tax assets and liabilities arising from changes in UK Corporate Tax rate	61	-
Change in deferred tax arising from unrecognised tax losses and other deferred tax adjustments	48	57
Over provision in respect of prior years	(1)	(1)
Taxation charge	1,845	1,561

⁽i) The weighted average applicable tax rate was 16.4 per cent (2019: 16.8 per cent).

18. Earnings Per Share

The calculation of the basic and diluted earnings per share is as follows:

(a) Basic earnings per share

	2020	2019
Profit attributable to shareholders (\$m)	11,505	9,391
Weighted average number of shares in issue less shares		
held for Share Award Scheme (in '000)	1,262,746	1,253,730
Basic earnings per share (\$)	9.11	7.49

(b) Diluted earnings per share

	2020	2019
Profit attributable to shareholders (\$m)	11,505	9,391
Weighted average number of shares in issue less shares		
held for Share Award Scheme (in '000)	1,262,746	1,253,730
Effect of Awarded Shares (in '000)	3,057	2,971
Weighted average number of shares for the purpose of calculating		
diluted earnings per share (in '000)	1,265,803	1,256,701
Diluted earnings per share (\$)	9.09	7.47

2020

2010

19. Dividends

Accounting Policy

Dividends declared are recognised as liabilities in the consolidated financial statements in the period in which the dividends are approved by shareholders or directors, where appropriate.

	2020 \$m	2019 \$m
First interim dividend paid:	ψ	ΨΠ
\$3.71 (2019: \$3.72) per share	4,704	4,680
Less: Dividend for shares held by Share Award Scheme (note (a))	(12)	(12)
	4,692	4,668
Second interim dividend declared (note (b)):		
\$4.46 (2019: \$2.99) per share based on issued share capital at 31 Dec	5,655	3,771
Less: Dividend for shares held by Share Award Scheme at 31 Dec (note (a))	(9)	(10)
	5,646	3,761
	10,338	8,429

- (a) The results and net assets of The HKEx Employees' Share Award Scheme (Share Award Scheme) are included in HKEX's financial statements. Therefore, dividends for shares held by the Share Award Scheme were deducted from the total dividends.
- (b) The second interim dividend declared after 31 December was not recognised as a liability at 31 December as it had not been approved by the Board.

20. Financial Assets

Accounting Policy

The Group classifies its financial assets in the following measurement categories:

- those measured at fair value (either through profit or loss (note 22) or through other comprehensive income (note 23)); and
- · those measured at amortised cost (note 24).

The classification depends on the business model for managing the financial assets and the contractual terms of the cash flows.

The Group reclassifies debt investments when and only when its business model for managing those assets changes.

Financial assets of Clearing House Funds and Margin Funds are classified as current assets as they will be liquidated whenever liquid funds are required.

Other financial assets are classified as current assets unless they are expected to mature or be disposed of after twelve months from the end of the reporting period, in which case, they are included in non-current assets. For collective investment schemes which have no maturity date, they are included in current assets unless they cannot be redeemed within twelve months from the end of the reporting period.

Financial assets are derecognised when the rights to receive cash flows from the assets have expired or have been transferred and the Group has transferred substantially all the risks and rewards of ownership of the assets.

21. Cash and Cash Equivalents

Accounting Policy

Cash and cash equivalents comprise cash on hand, bank balances and other short-term highly liquid investments that are readily convertible into known amounts of cash and are subject to an insignificant risk of changes in value (mainly reverse repurchase investments, time deposits and short-term debt securities), with original maturities of three months or less, or with remaining maturities of three months or less from the date of acquisition.

	At 31 Dec 2020					
	Cash for	Corporate	Margin	Clearing		
	A shares	Funds	Funds	House Funds		
	(notes (a)	(notes (b)	(notes (c)	(notes (c)		
	and (c))	and 25)	and 33)	and 37)	Total	
	\$m	\$m	\$m	\$m	\$m	
Cash on hand and balances and						
deposits with banks	6,212	9,824	48,673	5,044	69,753	
Unlisted debt securities	-	-	-	3,262	3,262	
Reverse repurchase investments	-	929	73,511	10,541	84,981	
	6,212	10,753	122,184	18,847	157,996	

			At 31 Dec 2019		
	Cash for	Corporate	Margin	Clearing	
	A shares	Funds	Funds	House Funds	
	(notes (a)	(notes (b)	(notes (c)	(notes (c)	
	and (c))	and 25)	and 33)	and 37)	Total
	\$m	\$m	\$m	\$m	\$m
Cash on hand and balances and					_
deposits with banks	1,460	10,359	42,399	7,643	61,861
Reverse repurchase investments	-	1,062	57,696	7,533	66,291
	1,460	11,421	100,095	15,176	128,152

(a) Cash for A shares includes:

- (i) Renminbi (RMB) cash prepayments received by Hong Kong Securities Clearing Company Limited (HKSCC) from its Clearing Participants for releasing their allocated A shares on the trade day. Such prepayments will be used to settle HKSCC's Continuous Net Settlement (CNS) obligations payable on the next business day; and
- (ii) Hong Kong Dollar/United States Dollar cash collateral received by HKSCC from its Clearing Participants for releasing their allocated A shares on the trade day. Such collateral will be refunded to the Clearing Participants when they settle their RMB CNS obligations on the next business day.
- (b) At 31 December 2020, cash and cash equivalents of Corporate Funds of \$311 million (31 December 2019: \$818 million) were solely used to support Skin-in-the-Game and default fund credits for HKSCC Guarantee Fund, SEOCH Reserve Fund and HKCC Reserve Fund (note 37(a)).
- (c) The cash and cash equivalents of Margin Funds, Clearing House Funds, Corporate Funds reserved for supporting Skin-in-the-Game and default fund credits of Clearing House Funds (note (b)), and Cash for A shares are held for specific purposes and cannot be used by the Group to finance other activities. These balances are not included in cash and cash equivalents of the Group for cash flow purpose in the consolidated statement of cash flows.

22. Financial Assets Measured at Fair Value through Profit or Loss

Accounting Policy

Classification

Investments and other financial assets are classified under financial assets measured at fair value through profit or loss if they do not meet the conditions to be measured at fair value through other comprehensive income (note 23) or amortised cost (note 24). On initial recognition, the Group may irrevocably designate a financial asset as at fair value through profit or loss that otherwise meets the requirements to be measured at amortised cost or at fair value through other comprehensive income if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise. Derivative financial instruments (see below) are classified as financial assets measured at fair value through profit or loss when their fair values are positive.

Investments in equity instruments that are not held for trading are classified under financial assets measured at fair value through profit or loss unless the Group has made an irrevocable election at the time of initial recognition to account for the investment at fair value through other comprehensive income.

Recognition and measurement

Purchases and sales of financial assets measured at fair value through profit or loss are recognised on the trade date. They are initially recognised at fair value with transaction costs recognised as expenses in the consolidated income statement and subsequently carried at fair value. Gains and losses arising from changes in fair value are included in the consolidated income statement in the period in which they arise.

Interest income is included in net fair value gains/(losses) from these financial assets.

Fair values of quoted investments are based on the most representative prices within the bid-ask spreads which are currently considered as the bid-prices. The collective investment schemes are valued based on the latest available transaction price or redemption price for each fund, as determined by the fund administrator. For unlisted securities or financial assets without an active market, the Group establishes the fair value by using valuation techniques including the use of recent arm's length transactions, reference to other instruments that are substantially the same and discounted cash flow analysis.

Derivative financial instruments

Derivative financial instruments include outstanding derivatives contracts of LME Clear, which acts as a central counterparty to the base, ferrous and precious metals futures and options contracts traded on the LME, and forward foreign exchange contracts. Derivatives are initially recognised at fair value on trade date and subsequently remeasured at their fair values. Except where outstanding derivatives contracts are held in the capacity as a central counterparty, derivatives are categorised as held for trading with changes in fair value recognised in the consolidated income statement.

22. Financial Assets Measured at Fair Value through Profit or Loss (continued)

		At 31 Dec 2020	
		Metals	
	Corporate	derivatives	
	Funds	contracts	
	(note 25)	(note (a))) Total
	\$m	\$m	\$m
Mandatorily measured at fair value			
Collective investment schemes:			
- listed outside Hong Kong	1,131	-	1,131
- unlisted	6,362	-	6,362
	7,493		7,493
Unlisted equity securities	220	-	220
Derivative financial instruments:			
- base, ferrous and precious metals futures and			
options contracts cleared through LME Clear		02 004	02 004
(note (a))	7,713	92,884 92,884	92,884 100,597
	7,713	92,004	100,337
The expected recovery dates of the financial assets			
are analysed as follows: Within twelve months	7 107	02 004	100 001
	7,197	92,884	100,081 516
More than twelve months	516 7,713	92,884	100,597
	7,713	92,004	100,557
		At 31 Dec 2019	
		Metals	
	Corporate	derivatives	
	Funds	contracts	
	(note 25)	(note (a))	Total
Mandatorily measured at fair value	\$m	\$m	\$m
Collective investment schemes:			
	0.047		0.047
- listed outside Hong Kong	2,647	-	2,647
- unlisted	6,696	-	6,696
	9,343	-	9,343
Unlisted equity securities	50	-	50
Derivative financial instruments:			
- base, ferrous and precious metals futures and			
options contracts cleared through LME Clear			
(note (a))	-	48,008	48,008
(**************************************	9,393	48,008	57,401
The expected recovery dates of the financial assets			
are analysed as follows:			
Within twelve months	8,721	ላዩ ባባዩ	56,729
More than twelve months	672	48,008	672
MOLE MINI MENE MOUNTS		49 000	
	9,393	48,008	57,401

⁽a) Metals derivatives contracts represent the fair value of the outstanding base, ferrous and precious metals futures and options contracts cleared through LME Clear that do not qualify for netting under HKAS 32 - Financial Instruments: Presentation, where LME Clear is acting in its capacity as a central counterparty to the contracts traded on the LME. A corresponding amount has been recognised under financial liabilities at fair value through profit or loss (note 32).

23. Financial Assets Measured at Fair Value through Other Comprehensive Income

Accounting Policy

Classification

A debt investment is measured at fair value through other comprehensive income if it meets both of the following conditions and is not designated as at fair value through profit or loss:

- it is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

The nature of any derivatives embedded in the debt instruments is considered in determining whether the cash flows are solely payment of principal and interest on the principal outstanding and are not accounted for separately. If the combined cash flows of the debt instruments and embedded derivatives are considered not satisfying the "solely payments of principal and interest" condition, the financial assets are classified as financial assets measured at fair value through profit or loss (note 22).

Recognition and measurement

At initial recognition, the Group measures a financial asset at its fair value plus transaction costs that are directly attributable to the acquisition of the financial asset.

Financial assets measured at fair value through other comprehensive income are subsequently measured at fair value. Interest income calculated using the effective interest method, foreign exchange gains and losses and impairment are recognised in the consolidated income statement. Other changes in carrying amounts are recognised in other comprehensive income. On derecognition, gains and losses accumulated in other comprehensive income are reclassified to the consolidated income statement.

Fair values of quoted investments or investments with an active market are based on the most representative prices within the bid-ask spreads which are currently considered as the bid-prices. For unlisted securities or financial assets without an active market, the Group establishes the fair value by using valuation techniques including the use of recent arm's length transactions and dealer quotes for similar investments.

Impairment

The Group assesses on a forward looking basis the expected credit losses associated with its debt instruments measured at fair value through other comprehensive income. Expected credit losses are a probability-weighted estimate of credit losses. Credit losses are measured as the present value of all expected cash shortfalls (ie, the difference between the cash flows due to the Group in accordance with the contract and the cash flows that the Group expects to receive).

In measuring expected credit losses, the Group takes into account reasonable and supportable information that is available without undue cost or effort. This includes information about past events, current conditions and forecasts of future economic conditions.

23. Financial Assets Measured at Fair Value through Other Comprehensive Income (continued)

Accounting Policy (continued)

Impairment (continued)

Expected credit losses are measured on either of the following bases:

- 12-month expected credit losses: these are losses that are expected to result from possible default events within the 12 months after the reporting date; and
- Lifetime expected credit losses: these are losses that are expected to result from all possible
 default events over the expected lives of the items to which the expected credit loss model
 applies.

For financial assets measured at fair value through other comprehensive income, the Group recognises a provision for impairment losses equal to 12-month expected credit losses unless there has been a significant increase in credit risk of the financial assets since initial recognition, in which case the provision for impairment losses is measured at an amount equal to lifetime expected credit losses.

Expected credit losses are measured at each reporting date to reflect changes in the financial asset's credit risk since initial recognition.

In assessing whether the credit risk of a financial asset has increased significantly since initial recognition, the Group compares the risk of default occurring on the financial asset assessed at the reporting date with that assessed at the date of initial recognition. In making this reassessment, the Group considers that a default event occurs when the financial asset is past due by 90 days or one or more credit impaired events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred.

The following information is taken into account when assessing whether credit risk has increased significantly since initial recognition:

- failure to make payments of principal or interest on their contractually due dates;
- an actual or expected significant deterioration in a financial asset's external or internal credit rating (if available);
- · an actual or expected significant deterioration in the operating results of the debtor; and
- existing or forecast changes in the technological, market, economic or legal environment that have a significant adverse effect on the debtor's ability to meet its obligation to the Group.

Depending on the nature of the financial instruments, the assessment of a significant increase in credit risk is performed on either an individual basis or a collective basis. When the assessment is performed on a collective basis, the financial assets are grouped based on shared credit risk characteristics, such as past due status and credit risk ratings.

Any change in the expected credit loss amount is recognised as an impairment loss or reversal of impairment loss in the consolidated income statement, with a corresponding adjustment to the other comprehensive income.

23. Financial Assets Measured at Fair Value through Other Comprehensive Income (continued)

	A		
	Margin Funds (note 33) \$m	Clearing House Funds (note 37) \$m	Total \$m
Unlisted debt securities (note (a))	5,538	2,404	7,942
The expected recovery dates of the financial assets are analyst	sed as follows:		
Within twelve months (note (b))	5,538	2,404	7,942
	А	at 31 Dec 2019	
		Clearing	
	Margin	House	
	Funds	Funds	
	(note 33)	(note 37)	Tota
	\$m	\$m	\$m
Unlisted debt securities (note (a))	4,569	-	4,569
The expected recovery dates of the financial assets are analyst	sed as follows:		
Within twelve months (note (b))	4,569	-	4,569

- (a) No provision for impairment loss was made at 31 December 2020 and 31 December 2019 as the financial assets were considered to be of low credit risk and the expected credit loss was minimal. The investments in debt securities held were of investment grade and had a weighted average credit rating of Aa2 (Moody) (31 December 2019: Aa1 (Moody)) with no history of default and there was no unfavourable current conditions and forecast of future economic conditions at the reporting dates.
- (b) Includes financial assets maturing after twelve months of \$3,435 million (31 December 2019: \$2,684 million) attributable to Margin Funds that could readily be liquidated to meet liquidity requirements of the Fund (note 53(b)).

24. Financial Assets Measured at Amortised Cost

Accounting Policy

Classification

Investments are classified under financial assets measured at amortised cost if they satisfy both of the following conditions:

- the assets are held within a business model whose objective is to hold assets in order to collect contractual cash flows; and
- the contractual terms of the financial assets give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

The nature of any derivatives embedded in the financial assets is considered in determining whether the cash flows are solely payment of principal and interest on the principal outstanding and are not accounted for separately. If the combined cash flows of the financial assets and embedded derivatives are considered not satisfying the "solely payments of principal and interest" condition, the financial assets are classified as financial assets measured at fair value through profit or loss (note 22).

Accounts receivable and other deposits are also classified under this category (note 26).

24. Financial Assets Measured at Amortised Cost (continued)

Accounting Policy (continued)

Recognition and measurement

Financial assets measured at amortised cost are initially recognised at fair value plus transaction costs and subsequently carried at amortised cost using the effective interest method. The amortised cost is reduced by loss allowance for expected credit losses. Interest income, foreign exchange gains and losses and impairment are recognised in the consolidated income statement. Any gains and losses on derecognition is recognised in the consolidated income statement.

Impairment

The Group assesses on a forward-looking basis the expected credit loss associated with its financial assets measured at amortised cost.

For accounts receivable due from customers, the Group applies the simplified approach permitted by HKFRS 9 (2014): Financial Instruments, which requires expected lifetime losses (note 23) to be recognised from initial recognition of the receivables. Expected credit losses of receivables are estimated using a provision matrix based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors and an assessment of both the current and forecast general economic conditions at the reporting date.

For all other financial assets measured at amortised cost (including time deposits, debt instruments and other deposits), the Group recognises a provision for impairment losses equal to 12-month expected credit losses (refer to note 23 for details of assessment of credit risk) unless there has been a significant increase in credit risk of the financial assets since initial recognition, in which case the provision for impairment losses is measured at an amount equal to lifetime expected credit losses.

Expected credit losses are remeasured at each reporting date to reflect changes in the financial asset's credit risk since initial recognition (note 23). Any change in the expected credit loss amount is recognised as an impairment loss or reversal of impairment loss in the consolidated income statement, with a corresponding adjustment to the carrying amount through a loss allowance account.

The gross carrying amount of a financial asset is written off (either partially or in full) to the extent that there is no realistic prospect of recovery. This is generally the case when the Group determines that the debtor does not have assets or sources of income that could generate sufficient cash flows to repay the amounts subject to the write-off.

Subsequent recoveries of an asset that has previously been written off are recognised as a reversal of impairment in the consolidated income statement in the period in which the recovery occurs.

24. Financial Assets Measured at Amortised Cost (continued)

	At	31 Dec 2020	
	Corporate Funds (notes (b) and 25) \$m	Margin Funds (note 33) \$m	Total \$m
Debt securities	1,740	-	1,740
Time deposits with original maturities over three months	13,442	47,407	60,849
Other financial assets	99	-	99
	15,281	47,407	62,688
The expected recovery dates of the financial assets are analysed as follows:			
Within twelve months	15,182	47,407	62,589
More than twelve months	99	-	99
	15,281	47,407	62,688
	At	31 Dec 2019	
	Corporate Funds (notes (b) and 25) \$m	Margin Funds (note 33) \$m	Total \$m
Debt securities	633	-	633
Time deposits with original maturities over three months	7,592	32,348	39,940
Other financial assets	99	-	99
	8,324	32,348	40,672
The expected recovery dates of the financial assets are analysed as follows:			
Within twelve months	7,606	32,348	39,954
More than twelve months	718	-	718
	8,324	32,348	40,672

- (a) No provision for impairment loss for these financial assets was made at 31 December 2020 and 31 December 2019 as the financial assets were considered to be of low credit risk and the expected credit loss of these financial assets was minimal. Debt securities held were of investment grade and had a weighted average credit rating of Aa2 (Moody) (31 December 2019: Aaa (Moody)). Deposits were placed with the investment grade banks, licensed banks and restricted licence banks regulated by the Hong Kong Monetary Authority, and banks regulated by local banking regulators in the countries where the Group's subsidiaries operate. All these financial assets had no history of default and there was no unfavourable current conditions and forecast of future economic conditions at the reporting dates.
- (b) At 31 December 2020, debt securities of Corporate Funds of \$930 million (31 December 2019: \$Nil) were solely used to support Skin-in-the-Game and default fund credits for HKSCC Guarantee Fund (note 37(a)).
- (c) The fair values of financial assets maturing after twelve months are disclosed in note 53(d)(ii).

25. Corporate Funds

	At	At
	31 Dec 2020	31 Dec 2019
	\$m	\$m
Corporate Funds comprised the following instruments:		
Cash and cash equivalents (notes (b) and 21)	10,753	11,421
Financial assets measured at fair value through profit or loss (note 22)	7,713	9,393
Financial assets measured at amortised cost (notes (b) and 24)	15,281	8,324
	33,747	29,138

- (a) Financial assets held by the Group which are funded by share capital and funds generated from operations are classified as Corporate Funds (ie, other than financial assets of Margin Funds, Clearing House Funds, Cash for A shares, and base, ferrous and precious metals derivatives contracts).
- (b) At 31 December 2020, cash and cash equivalents and financial assets measured at amortised cost of Corporate Funds of \$1,241 million (31 December 2019: \$818 million) were solely used to support Skin-in-the-Game and default fund credits for HKSCC Guarantee Fund, SEOCH Reserve Fund and HKCC Reserve Fund (note 37(a)).

26. Accounts Receivable, Prepayments and Deposits

Accounting Policy

Accounts receivable and other deposits are financial assets measured at amortised cost less impairment. The accounting policy for financial assets measured at amortised cost is described in note 24.

	At	At
	31 Dec 2020	31 Dec 2019
	\$m	\$m
Receivable from ChinaClear, and Exchange and Clearing Participants:		
- CNS money obligations receivable (note (a))	32,910	18,730
- transaction levy, stamp duty and fees receivable	1,321	670
- Settlement Reserve Fund and Settlement Guarantee Fund held by ChinaClear		
(note 33)	11,862	5,516
- others	17	7
Receivables for collective investment schemes sold before 31 Dec	28	-
Other receivables, prepayments and deposits	984	918
Less: Provision for impairment losses of receivables (notes (b) and (c))	(42)	(29)
	47,080	25,812

(a) Upon acceptance of Stock Exchange trades for settlement in CCASS under the CNS basis, HKSCC interposes itself between the HKSCC Clearing Participants as the settlement counterparty to the trades through novation. The CNS money obligations due by/to HKSCC Clearing Participants on the Stock Exchange trades are recognised as receivables and payables (note 34) when they are confirmed and accepted on the day after the trade day.

For a trade in A shares transacted for Stock Exchange Participants, the rights and obligations of the parties to the trade will be transferred to ChinaClear, and a market contract between HKSCC and the relevant HKSCC Clearing Participants is created through novation. The CNS money obligations due by/to HKSCC Clearing Participants and ChinaClear are recognised as receivables and payables (note 34) when the trades are confirmed on the trade day.

26. Accounts Receivable, Prepayments and Deposits (continued)

(b) Expected credit losses

For accounts receivable, the Group applies the simplified approach permitted by HKFRS 9 (2014), which requires expected lifetime losses to be recognised from initial recognition of the receivables.

The expected loss rates are based on the payment profiles of debtors and the corresponding historical credit losses experienced during the year. The historical loss rates are adjusted to reflect current and forward-looking information on macroeconomic factors affecting the ability of the customers to settle the receivables. On that basis, the loss allowance for accounts receivable as at 31 December 2020 and 31 December 2019 was determined as follows:

	At 31 Dec 2020							
	Current or	31 to	More than					
	within 30 days	vithin 30 days 180 days 180 day	within 30 days 180 days 180	thin 30 days 180 days 180 days	within 30 days 180 days 180 days	180 days 180 days	180 days	
	past due	past due	past due	Total				
Expected loss rate	2%	9%	100%					
Gross carrying amount – accounts receivable								
subject to expected credit loss provision (\$m)	581	53	26	660				
Loss allowance (\$m)	11	5	26	42				

	At 31 Dec 2019				
	Current or				
	within 30 days	180 days	180 days		
	past due	past due	past due	Total	
Expected loss rate	<1%	9%	100%		
Gross carrying amount – accounts receivable					
subject to expected credit loss provision (\$m)	543	58	19	620	
Loss allowance (\$m)	5	5	19	29	

For the remaining receivables and other deposits (excluding prepayments) amounting to \$46,266 million as of 31 December 2020 (31 December 2019: \$25,089 million), the expected credit loss was minimal as these receivables were mainly due from Participants which are subject to the Group's stringent financial requirements and admission criteria, compliance monitoring and risk management measures, these receivables had no recent history of default, part of the receivables were subsequently settled, and there was no unfavourable current conditions and forecast future economic conditions at the reporting dates.

(c) The movements in provision for impairment losses of receivables were as follows:

	2020 \$m	2019 \$m
At 1 Jan	29	10
Acquisition of a subsidiary Provision for loss allowance for receivables under other operating	-	11
expenses	12	9
Exchange differences	1	(1)
At 31 Dec	42	29

(d) CNS money obligations receivable mature within two days after the trade date. The majority of the remaining accounts receivable, prepayments and deposits were due within three months.

27. Principal Subsidiaries and Controlled Structured Entities

Accounting Policy

Subsidiaries are entities (including structured entities (note (b))) over which the Group has control. The Group controls an entity when the Group is exposed to, or has the rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

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 as when any voting rights relate to administrative tasks only and the relevant activities are directed by means of contractual arrangements.

The Group considers all of its investments in collective investment schemes to be investments in unconsolidated structured entities, which are classified as financial assets measured at fair value through profit or loss (note 22).

(a) Principal subsidiaries

HKEX had direct or indirect interests in the following principal subsidiaries:

	Place of incorporation	Issued and fully paid up			st held Group
Company	and operation	share/registered capital	Principal activities	At 31 Dec 2020	At 31 Dec 2019
Direct principal subsidia	ries:				
The Stock Exchange of Hong Kong Limited	Hong Kong	929 ordinary shares (\$929)	Operates the only Stock Exchange in Hong Kong	100%	100%
Hong Kong Futures Exchange Limited	Hong Kong	230 ordinary shares (\$28,750,000)	Operates a futures and options exchange in Hong Kong	100%	100%
Hong Kong Securities Clearing Company Limited (HKSCC)	Hong Kong	4 ordinary shares (\$1,060,000,002)	Operates a clearing house for securities traded on the Stock Exchange in Hong Kong, Shanghai Stock Exchange and Shenzhen Stock Exchange in Mainland China through Stock Connect and the central securities depository, and provides custody and nominee services for eligible securities listed in Hong Kong and Mainland China	100%	100%
OTC Clearing Hong Kong Limited (OTC Clear) (note (i))	Hong Kong	11,187 ordinary shares (\$921,206,421) 3,541 non-voting ordinary shares (\$433,291,660)	Operates a clearing house for over-the-counter derivatives	76%	76%

27. Principal Subsidiaries and Controlled Structured Entities (continued)

(a) Principal subsidiaries (continued)

	Place of incorporation	Issued and fully paid up		Interes by the	st held Group
Company	and operation	share/registered capital	Principal activities	At 31 Dec 2020	At 31 Dec 2019
Direct principal subsidiar	ies (continued):				
HKFE Clearing Corporation Limited (HKCC)	Hong Kong	3,766,700 ordinary shares (\$831,010,000)	Operates a clearing house for derivatives contracts traded on the Futures Exchange	100%	100%
The SEHK Options Clearing House Limited (SEOCH)	Hong Kong	4,000,000 ordinary shares (\$271,000,000)	Operates a clearing house for stock options contracts traded on the Stock Exchange in Hong Kong	100%	100%
Indirect principal subsidia	aries:				
The London Metal Exchange	United Kingdom	100 ordinary shares of £1 each	Operates an exchange for the trading of base, ferrous and precious metals futures and options contracts	100%	100%
LME Clear Limited	United Kingdom	107,500,001 ordinary shares of £1 each	Operates a clearing house for base, ferrous and precious metals futures and options contracts	100%	100%
Qianhai Mercantile Exchange Co.,Ltd. (QME) (note (i))	Mainland China	RMB400,000,000	Operates a commodity trading platform in Mainland China	90%	90%

The above table lists the subsidiaries of the Group which, in the opinion of its directors, principally affect the results or assets of the Group.

27. Principal Subsidiaries and Controlled Structured Entities (continued)

(a) Principal subsidiaries (continued)

(i) Subsidiaries with non-controlling interests

At 31 December 2020, the Group held 76 per cent (31 December 2019: 76 per cent) interest in OTC Clear, while the remaining 24 per cent (31 December 2019: 24 per cent) interest was held by non-controlling interests. The non-controlling interests do not have voting rights at general meetings of OTC Clear.

QME is a limited company established in Mainland China. At 31 December 2020, the Group held 90 per cent (31 December 2019: 90 per cent) interest in QME, while the remaining 10 per cent (31 December 2019: 10 per cent) interest was held by non-controlling interests.

BayConnect is a limited company established in Mainland China. At 31 December 2020, the Group held 51 per cent (31 December 2019: 51 per cent) interest in BayConnect, while the remaining 49 per cent (31 December 2019: 49 per cent) interest was held by non-controlling interests.

Set out below is the financial information related to the non-controlling interests of each subsidiary:

OTC Clear		Q	ME	BayConnect	
2020	2020 2019 2020	2019	2020	2019	
\$m	\$m	\$m	\$m	\$m	\$m
9	13	(13)	(14)	(14)	-
At	At	At	At	At	At
31 Dec 2020	31 Dec 2019	31 Dec 2020	31 Dec 2019	31 Dec 2020	31 Dec 2019
\$m	\$m	\$m	\$m	\$m	\$m
195	186	(28)	(13)	151	155
	2020 \$m 9 At 31 Dec 2020 \$m	2020 2019 \$m \$m 9 13 At At At 31 Dec 2020 31 Dec 2019 \$m \$m	2020 2019 2020 \$m \$m \$m 9 13 (13) At At At 31 Dec 2020 31 Dec 2019 31 Dec 2020 \$m \$m \$m	2020 2019 2020 2019 \$m \$m \$m \$m 9 13 (13) (14) At At At At At 31 Dec 2020 31 Dec 2019 31 Dec 2020 31 Dec 2019 \$m \$m \$m \$m	2020 2019 2020 2019 2020 \$m \$m \$m \$m \$m 9 13 (13) (14) (14) At At At At At 31 Dec 2020 31 Dec 2019 31 Dec 2020 31 Dec 2019 31 Dec 2020 \$m \$m \$m \$m \$m

No summarised financial information of OTC Clear, QME and BayConnect is presented as the non-controlling interests are not material to the Group.

(ii) Significant restrictions

Cash and savings deposits are held by subsidiaries in Mainland China and are subject to exchange control restrictions. The carrying amount of these restricted assets in the consolidated statement of financial position at 31 December 2020 was \$327 million (31 December 2019: \$394 million).

27. Principal Subsidiaries and Controlled Structured Entities (continued)

(b) Controlled structured entities

HKEX controls two structured entities which operate in Hong Kong, particulars of which are as follows:

Structured entity	Principal activities
The HKEx Employees' Share Award Scheme	Purchases, administers and holds HKEX
(HKEX Employee Share Trust)	shares for the Share Award Scheme for the benefit of eligible HKEX employees (note 43)
HKEX Foundation Limited	Charitable foundation

HKEX has the power to direct the relevant activities of the HKEX Employee Share Trust and HKEX Foundation Limited and it has the ability to use its power over the entities to affect its exposure to returns. Therefore, they are considered as controlled structured entities of the Group.

28. Interests in Joint Ventures

Accounting Policy

Interests in joint ventures are accounted for in the consolidated financial statements under the equity method. The entire carrying amount of each investment is tested for impairment in accordance with the accounting policy stated in note 2(d).

	At	At
	31 Dec 2020	31 Dec 2019
	\$m	\$m
Share of net assets of joint ventures	164	95

(a) Details of the joint ventures were as follows:

Name	Place of business and country of incorporation	_	% of ownership interest		
		Principal activities	At 31 Dec 2020	At 31 Dec 2019	
China Exchanges Services Company Limited (CESC)	Hong Kong	Development of index- linked and equity derivatives products	33%	33%	
Bond Connect Company Limited (BCCL)	Hong Kong	Provision of support services related to Bond Connect	40%	40%	

In 2012, HKEX, the Shanghai Stock Exchange and the Shenzhen Stock Exchange established a joint venture, CESC, with an aim of developing financial products and related services. CESC is a strategic investment for the Group and it is expected to enhance the competitiveness of Hong Kong, help promote the development of Mainland China's capital markets and the internationalisation of the Group.

28. Interests in Joint Ventures (continued)

(a) Details of the joint ventures were as follows: (continued)

In 2017, HKEX and China Foreign Exchange Trade System (CFETS) established a joint venture, BCCL, which provides support services related to Bond Connect. BCCL is a strategic investment of the Group as it provides services to facilitate the trading of Bond Connect, which enhances HKEX's position in the fixed income market and expands the mutual market programme from equity into bonds.

Set out below is the measurement method and the carrying amounts of the two joint ventures:

		Carrying amount		
		At	At	
	Measurement	31 Dec 2020	31 Dec 2019	
Name	method	\$m	\$m	
CESC	Equity	38	37	
BCCL	Equity	126	58	
		164	95	

The two joint ventures are private companies and no quoted market prices are available for their shares.

No summarised financial information of CESC and BCCL is presented as the joint ventures are not material to the Group.

29. Goodwill and Other Intangible Assets

Accounting Policy

Goodwill

Goodwill arising on the acquisition of subsidiaries is carried at cost as established at the date of acquisition less accumulated impairment losses, if any.

For the purpose of impairment testing, goodwill acquired in a business combination is allocated to each CGU, or group of CGUs, that is expected to benefit from the synergies of the combination. Each CGU or group of CGUs to which the goodwill is allocated represents the lowest level within the entity at which the goodwill is monitored for internal management purposes (ie, operating segment level).

Goodwill is not amortised but impairment reviews are undertaken annually or more frequently if events or changes in circumstances indicate a potential impairment. The carrying value of goodwill is compared to the recoverable amount, which is the higher of value-in-use and the fair value less costs to sell. Any impairment is recognised immediately in the consolidated income statement and is not subsequently reversed.

29. Goodwill and Other Intangible Assets (continued)

Accounting Policy (continued)

<u>Tradenames</u>

Tradenames acquired in a business combination are recognised at fair value at the acquisition date. The fair value is based on the discounted estimated royalty payments that are expected to be avoided as a result of the tradenames being owned.

Tradenames arising from the acquisition of LME entities have indefinite useful lives and are carried at cost less accumulated impairment losses, if any.

Tradenames are reviewed annually to determine whether events and circumstances continue to support the indefinite useful life assessment.

Customer relationships

Customer relationships acquired in a business combination are recognised initially at fair value at the acquisition date. The fair value is determined using the multi-period excess earnings method, whereby the asset is valued after deducting a fair return on all other assets that are part of creating the related cash flows. Subsequently, the customer relationships are carried at cost (ie, the initial fair value) less accumulated amortisation and impairment losses, if any. Amortisation is calculated using the straight-line method over the expected lives of the customer relationships, which are determined to be 8 to 25 years.

Computer software systems

Development costs that are directly attributable to the design, building and testing of identifiable and unique software products controlled by the Group are recognised as intangible assets if the related software does not form an integral part of the hardware on which it operates (ie, system software without which the related hardware can still operate) and when the following criteria are met:

- It is technically feasible to complete the software so that it will be available for use;
- · Management intends to complete the software and use it;
- There is an ability to use the software;
- It can be demonstrated how the software will generate probable future economic benefits;
- Adequate technical, financial and other resources to complete the development and to use the software are available; and
- The expenditure attributable to the software during its development can be reliably measured.

Other development expenditures that do not meet these criteria are recognised in the consolidated income statement as incurred. Development costs previously recognised in the consolidated income statement are not recognised as an asset in a subsequent period.

Qualifying software system development expenditure and related directly attributable costs capitalised as intangible assets are amortised when they are available for use. They are amortised at rates sufficient to write off their costs net of residual values over their estimated useful lives of three to five years on a straight-line basis. The residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

Costs associated with maintaining computer systems and software programmes are recognised in the consolidated income statement as incurred.

The Group's accounting policy for impairment is described in note 2(d).

29. Goodwill and Other Intangible Assets (continued)

	-	Other Intangible Assets			
			Customer	Software	
	Goodwill	Tradenames	relationships	systems	Total \$m
Conti	\$m	\$m	\$m	\$m	
Cost:	40.000	200	0.444	0.400	00.750
At 1 Jan 2019	13,298	899	3,141	3,420	20,758
Exchange differences	(65)	(4)	(15)	(11)	(95)
Acquisition of a subsidiary	111	-	18	20	149
Additions	-	-	-	830	830
Disposals	-	-	-	(85)	(85)
At 31 Dec 2019	13,344	895	3,144	4,174	21,557
At 1 Jan 2020	13,344	895	3,144	4,174	21,557
Exchange differences	(58)	(4)	(14)	3	(73)
Additions	-	-	-	1,073	1,073
Disposals	-	-	-	(45)	(45)
At 31 Dec 2020	13,286	891	3,130	5,205	22,512
Accumulated amortisation:					
At 1 Jan 2019	_	_	792	1,947	2,739
Exchange differences	_	_	(5)	(8)	(13)
Amortisation	_	_	132	406	538
Disposals	_	_	102	(85)	(85)
At 31 Dec 2019			919	2,260	3,179
				·	
At 1 Jan 2020	-	-	919	2,260	3,179
Exchange differences	-	-	(3)	-	(3)
Amortisation	-	-	131	513	644
Disposals	-	-	-	(45)	(45)
At 31 Dec 2020	-	-	1,047	2,728	3,775
Net book value:					
At 31 Dec 2020	13,286	891	2,083	2,477	18,737
At 31 Dec 2019	13,344	895	2,225	1,914	18,378
Cost of software systems under development included above:					
At 31 Dec 2020	-	-	-	1,143	1,143
At 31 Dec 2019	-	-	-	1,044	1,044

Amortisation of \$644 million (2019: \$538 million) is included in "depreciation and amortisation" in the consolidated income statement.

Tradenames are regarded as having indefinite useful lives and there is no foreseeable limit to the period over which they are expected to generate cash flows for the Group as it is expected that their values will not be reduced through usage and there are no legal or similar limits on the period for their use.

29. Goodwill and Other Intangible Assets (continued)

Impairment tests for CGUs containing goodwill and intangible assets with indefinite useful lives

Goodwill and tradenames that arose on the acquisition of subsidiaries are allocated to and monitored by management at the operating segment level, which comprises CGUs, or groups of CGUs that are expected to benefit from synergies of combination with the acquired businesses. A summary of the allocation of goodwill and tradenames to these operating segments is as follows:

	At 31 Dec 2020		At 31 Dec	2019
	Goodwill	Tradenames	Goodwill	Tradenames
	\$m	\$m	\$m	\$m
Commodities segment	10,310	698	10,361	701
Post Trade segment	2,858	193	2,872	194
Technology segment	118	-	111	-
	13,286	891	13,344	895

The Commodities segment comprises the commodities trading platform in the UK (LME commodities CGU) and the commodities trading platform in Mainland China (China commodities CGU). As the China commodities CGU is still considered at development stage, its valuation has not been taken into account in determining the recoverable amount of the Commodities segment at 31 December 2020.

The recoverable amount of each CGU is determined based on value-in-use calculations. These calculations use cash flow projections based on financial forecasts approved by management covering a five-year period. Cash flows beyond the five-year period are extrapolated using the estimated terminal growth rates stated below. The key assumptions, EBITDA margins, growth rates and discount rates used for value-in-use calculations are as follows:

	At 31 Dec 2020			,	At 31 Dec 2019)
	Commodities	Post Trade	Technology	Commodities	Post Trade	Technology
	segment	segment	segment	segment	segment	segment
EBITDA margin (average						
of next five years)	65%	49%	33%	65%	50%	24%
Growth rate	3%	3%	3%	3%	3%	3%
Discount rate	9%	9%	14%	9%	9%	14%

Management determined the EBITDA margins based on past performance, expectations regarding market development, and the business model the entity undertakes. The growth rates do not exceed the long-term average growth rate for the business in the markets in which each of the CGUs currently operates. The discount rates used are pre-tax and reflect specific risks relating to each CGU.

The recoverable amounts of the operating segments based on the estimated value-in-use calculations were higher than their carrying amounts (including goodwill and tradenames) at 31 December 2020 and 31 December 2019. Accordingly, no provision for impairment loss for goodwill or tradenames is considered necessary.

If the LME trading fee in the forecast period was 10 per cent lower than forecast, or the discount rate increased to 10 per cent, the recoverable amount of the Commodities segment would be approximately equal to its carrying amount. If LME Clear clearing fees in the forecast period was 8 per cent lower than forecast, or the discount rate increased to 10 per cent, the recoverable amount of LME Clear under the Post Trade segment would be approximately equal to the carrying amount. Except for this, any reasonably possible changes in the key assumptions used in the value-in-use assessment would not affect management's view on impairment at 31 December 2020.

30. Fixed Assets

Accounting Policy

Tangible fixed assets are stated at historical cost less accumulated depreciation and impairment losses. Historical cost includes expenditure that is directly attributable to the acquisition of the assets.

Tangible fixed assets are depreciated when they are available for use. They are depreciated at rates sufficient to write off their costs net of expected residual values over their estimated useful lives on a straight-line basis. The residual values and useful lives are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

The useful lives of major categories of fixed assets are as follows:

Leasehold buildings Up to 35 years or remaining lives of the leases if shorter

Leasehold improvements Over the remaining lives of the leases but not

exceeding 10 years

Computer trading and clearing systems

- hardware and software
Other computer hardware and software
Furniture, equipment and motor vehicles
Data centre facilities and equipment
3 to 5 years
3 to 20 years

Expenditure incurred in the construction of leasehold buildings and other directly attributable costs are capitalised when it is probable that future economic benefits associated with the expenditure will flow to the Group and the costs can be measured reliably.

Qualifying software expenditure and related directly attributable costs are capitalised and recognised as a fixed asset if the software forms an integral part of the hardware on which it operates (ie, operating system software without which the related hardware cannot operate).

Subsequent costs and qualifying development expenditure incurred after the completion of a system are included in the asset's carrying amount or recognised as a separate asset only when it is probable that future economic benefits associated with that item will flow to the Group and the cost of the item can be measured reliably. All other repairs and maintenance costs and other subsequent expenditure are charged to the consolidated income statement when incurred.

The Group's accounting policy for impairment is described in note 2(d).

30. Fixed Assets (continued)

	Leasehold buildings \$m	Computer trading and clearing systems \$m	Other computer hardware and software \$m	Data centre facilities and equipment \$m	Leasehold improvements, furniture, equipment and motor vehicles	Total \$m
Cost:						
At 1 Jan 2019	708	1,427	649	428	1,163	4,375
Exchange differences	-	(1)	(2)	-	(1)	(4)
Additions	-	44	95	12	87	238
Disposals	-	(370)	(111)	-	(142)	(623)
At 31 Dec 2019	708	1,100	631	440	1,107	3,986
At 1 Jan 2020	708	1,100	631	440	1,107	3,986
Exchange differences	-	5	-	-	2	7
Additions	-	154	105	7	49	315
Disposals	-	(49)	(105)	-	(6)	(160)
At 31 Dec 2020	708	1,210	631	447	1,152	4,148
Accumulated depreciation	:					
At 1 Jan 2019	178	1,240	509	167	692	2,786
Exchange differences	-	-	(1)	_	(1)	(2)
Depreciation	28	42	33	29	103	235
Disposals	-	(370)	(111)	-	(141)	(622)
At 31 Dec 2019	206	912	430	196	653	2,397
At 1 Jan 2020	206	912	430	196	653	2,397
Exchange differences	-	3	-	-	2	5
Depreciation	28	46	53	30	91	248
Disposals	-	(48)	(105)	-	(6)	(159)
At 31 Dec 2020	234	913	378	226	740	2,491
Net book value:						
At 31 Dec 2020	474	297	253	221	412	1,657
At 31 Dec 2019	502	188	201	244	454	1,589
Cost of fixed assets in the course of construction included above:	332					.,000
At 31 Dec 2020	-	150	91	-	102	343
At 31 Dec 2019	_	56	118	_	86	260

Depreciation of \$248 million (2019: \$235 million) is included in "depreciation and amortisation" in the consolidated income statement.

31. Right-of-use Assets

Accounting Policy

A contract is, or contains, a lease if the contract conveys a right to control the use of an identified asset for a period of time in exchange for consideration. The Group recognises a right-of-use asset and a lease liability (note 38) at the lease commencement date.

For an asset leased by the Group, the right-of-use asset is initially measured at cost (which comprises the initial measurement of lease liabilities, initial direct costs, reinstatement costs, any payments made at or before the commencement date less any lease incentives received), and subsequently at cost less any accumulated depreciation and impairment losses. The right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis.

The Group has applied judgement to determine the lease term of some lease contracts which includes renewal options. The assessment of whether the Group is reasonably certain to exercise such options impacts the lease term, which significantly affects the amount of lease liabilities and right-of-use assets recognised.

Payments associated with short-term leases (ie, leases with a lease term of 12 months or less) and low value leases are recognised on a straight-line basis as an expense in the consolidated income statement.

	Lease premium for land \$m	Properties \$m	Information technology facilities \$m	Equipment and motor vehicles \$m	Total \$m
At 1 Jan 2019	20	2,398	38	19	2,475
Additions	-	172	-	1	173
Adjustment relating to reassessment of lease liabilities	-	(11)	-	-	(11)
Depreciation	(1)	(255)	(10)	(5)	(271)
At 31 Dec 2019	19	2,304	28	15	2,366
At 1 Jan 2020	19	2,304	28	15	2,366
Exchange differences	-	3	-	-	3
Additions	-	60	69	-	129
Depreciation	(1)	(285)	(14)	(5)	(305)
At 31 Dec 2020	18	2,082	83	10	2,193

- (a) Lease premium for land represents prepaid lease payment for a medium-term lease in Hong Kong. In addition, the Group leases various properties, information technology facilities, office equipment and motor vehicles through lease contracts. These contracts are expected to expire within 10 years.
- (b) Depreciation of \$305 million (2019: \$271 million) is included in "depreciation and amortisation" in the consolidated income statement.

32. Financial Liabilities at Fair Value through Profit or Loss

Accounting Policy

Financial liabilities at fair value through profit or loss are initially recognised at fair value on trade date and subsequently remeasured at their fair values. Changes in fair value of the liabilities are recognised in the consolidated income statement.

	At 31 Dec 2020 \$m	At 31 Dec 2019 \$m
Held by LME Clear in its capacity as a central counterparty	·	<u> </u>
Derivative financial instruments:		
- base, ferrous and precious metals futures and options contracts cleared		
through LME Clear (note (a))	92,884	48,008
	92,884	48,008

(a) The amount represents the fair value of outstanding base, ferrous and precious metals futures and options contracts cleared through LME Clear that do not qualify for netting under HKAS 32: Financial Instruments - Presentation, where LME Clear is acting in its capacity as a central counterparty to the contracts traded on the LME.

33. Margin Deposits, Mainland Security and Settlement Deposits, and Cash Collateral from Clearing Participants

Accounting Policy

The obligation to refund the Margin deposits, Mainland security and settlement deposits, and cash collateral from Clearing Participants is disclosed under current liabilities. Non-cash collateral received from Clearing Participants is not recognised on the consolidated statement of financial position.

Margin Funds are established by cash received or receivable from Clearing Participants in respect of margin deposits, Mainland security and settlement deposits, and cash collateral of the five clearing houses to cover their open positions. Part of the Mainland security and settlement deposits is used by HKSCC to satisfy its obligations as a clearing participant of ChinaClear in respect of trades transacted through Stock Connect. These funds are held in segregated accounts of the respective clearing houses for this specified purpose and cannot be used by the Group to finance any other activities.

33. Margin Deposits, Mainland Security and Settlement Deposits, and Cash Collateral from Clearing Participants (continued)

	At 31 Dec 2020 \$m	At 31 Dec 2019 \$m
Margin deposits, Mainland security and settlement deposits, and cash collateral from Clearing Participants comprised:		
SEOCH Clearing Participants' margin deposits	16,873	8,174
HKCC Clearing Participants' margin deposits	59,422	55,664
HKSCC Clearing Participants' margin deposits, Mainland security and settlement deposits, and cash collateral	27,111	12,367
OTC Clear Clearing Participants' margin deposits	6,899	5,180
LME Clear Clearing Participants' margin deposits	76,703	61,151
	187,008	142,536
The margin deposits, Mainland security and settlement deposits, and cash collateral were invested in the following instruments for managing the obligations of the Margin Funds (note 20):		
Cash and cash equivalents (note 21)	122,184	100,095
Financial assets measured at fair value through other comprehensive income (note 23)	5,538	4,569
Financial assets measured at amortised cost (note 24)	47,407	32,348
Settlement Reserve Fund and Settlement Guarantee Fund held by ChinaClear (note 26)	11,862	5,516
Margin receivable from Clearing Participants	17	8
	187,008	142,536

34. Accounts Payable, Accruals and Other Liabilities

Accounting Policy

Financial liabilities (other than financial liabilities at fair value through profit or loss (note 32) and financial guarantee contracts (note 36)) are initially recognised at fair value, which is then treated as their cost after initial recognition, and subsequently carried at amortised cost using the effective interest method.

	At	At
	31 Dec 2020	31 Dec 2019
	\$m	\$m
Payable to ChinaClear and Exchange and Clearing Participants:		
- CNS money obligations payable (note 26(a))	39,120	20,076
- HKD/USD cash collateral for A shares (note 21(a)(ii))	2	115
- others	553	298
Transaction levy payable to the SFC	185	97
Unclaimed dividends (note (a))	376	343
Stamp duty payable to the Collector of Stamp Revenue	914	420
Payables for collective investment schemes traded before 31 Dec	504	-
Other payables, accruals and deposits received	1,320	1,098
	42,974	22,447

34. Accounts Payable, Accruals and Other Liabilities (continued)

- (a) Unclaimed dividends represent dividends declared by listed companies, including HKEX, but not yet claimed by their shareholders. During the year, cash dividends of listed companies other than HKEX held by HKSCC Nominees Limited which had remained unclaimed for a period of more than seven years amounting to \$9 million (2019: \$9 million) were forfeited and recognised as sundry income (note 8) and dividends declared by HKEX which were unclaimed over a period of six years amounting to \$21 million (2019: \$19 million) were forfeited and transferred to retained earnings in accordance with HKEX's Articles of Association (note 46).
- (b) CNS money obligations payable mature within two days after the trade date. The majority of the remaining accounts payable, accruals and other liabilities would mature within three months.

35. Deferred Revenue

Accounting Policy

Deferred revenue, or "contract liability" under HKFRS 15, is recognised when the Group receives consideration (or the amount is due) from the customers before the Group transfers goods or services to the customers.

	At 31 Dec 2020 \$m	At 31 Dec 2019 \$m
Deferred revenue arising from unsatisfied performance obligations	1,420	1,436
Analysed as:		
Non-current liabilities	371	403
Current liabilities	1,049	1,033
	1,420	1,436

36. Other Financial Liabilities

Accounting Policy

A financial guarantee contract is a contract that requires the Group to make specified payments to reimburse the holder for a loss it incurs because a specified entity or person fails to make payment when due in accordance with the original or modified terms of an undertaking.

Financial guarantee contracts are initially recognised at fair value, and subsequently at the higher of the amount determined in accordance with the expected credit loss model under HKFRS 9 (2014) and the amount initially recognised less, where appropriate, the cumulative amount of income recognised in accordance with the principles of HKFRS 15: Revenue from Contracts with Customers.

	At 31 Dec 2020 \$m	At 31 Dec 2019 \$m
Financial liabilities of Clearing House Funds (note 37)	28	39
Financial liabilities of Corporate Funds:		
Financial guarantee contract (note (a))	20	20
	48	59

(a) The amount represents the carrying value of a financial guarantee provided by the Group to the Collector of Stamp Revenue, details of which are disclosed in note 49(b).

37. Clearing House Funds

Accounting Policy

Clearing Participants' cash contributions to Clearing House Funds are included under current liabilities. Non-cash collateral received from Clearing Participants is not recognised on the consolidated statement of financial position.

Clearing House Funds, or default funds, are established under the Clearing House Rules. Assets contributed by the Clearing Participants and the Group are held by the respective clearing houses (together with the accumulated income less related expenses for the clearing houses in Hong Kong) expressly for the purpose of ensuring that the respective clearing houses are able to fulfil their counterparty obligations in the event that one or more of the Clearing Participants fail to meet their obligations to the clearing houses. The HKSCC Guarantee Fund also provides resources to enable HKSCC to discharge its liabilities and obligations if defaulting Clearing Participants deposit defective securities into CCASS. The amounts earmarked for contribution to the Rates and FX Guarantee Resources of OTC Clear and its accumulated investment income was also included in Clearing House Funds for presentation purpose. These funds are held in segregated accounts of the respective clearing houses for this specified purpose and cannot be used by the Group to finance any other activities. Contributions by HKSCC, HKCC and SEOCH to their respective default funds (Skin-in-the-Game) are set at 10 per cent of the size of the respective funds, and such contributions, together with default fund credits granted to HKSCC and HKCC Participants, are included in Corporate Funds.

37. Clearing House Funds (continued)

	At 31 Dec 2020 \$m	At 31 Dec 2019 \$m
The Clearing House Funds comprised:		
Clearing Participants' cash contributions	20,439	14,394
Contribution to OTC Clear Rates and FX Guarantee Resources	156	156
Clearing house funds reserves (note 45)	628	587
	21,223	15,137
The Clearing House Funds were invested in the following instruments for managing the obligations of the Funds (note 20):		
Cash and cash equivalents (note 21)	18,847	15,176
Financial assets measured at fair value through other comprehensive income (note 23)	2,404	-
Less: Other financial liabilities of Clearing House Funds (note 36)	(28)	(39)
	21,223	15,137
The Clearing House Funds comprised the following Funds:		
HKSCC Guarantee Fund	5,667	2,281
SEOCH Reserve Fund	909	947
HKCC Reserve Fund	1,205	1,660
OTC Clear Rates and FX Guarantee Fund	2,730	2,548
OTC Clear Rates and FX Guarantee Resources	171	168
LME Clear Default Fund	10,541	7,533
	21,223	15,137

⁽a) At 31 December 2020, the Skin-in-the-Game, together with default fund credits granted to HKSCC and HKCC Participants (note 53(c)), amounted to \$1,241 million (31 December 2019: \$818 million), and were included in Corporate Funds (note 25(b)).

38. Lease Liabilities

Accounting Policy

A contract is, or contains, a lease if the contract conveys a right to control the use of an identified asset for a period of time in exchange for consideration. The Group recognises a right-of-use asset (note 31) and a lease liability at the lease commencement date.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the lessee's incremental borrowing rate is used. Generally, the lessee uses its incremental borrowing rate as the discount rate. The lease liability subsequently increases by the interest cost on the lease liability and is reduced by lease payments made. Each lease payment is allocated between the principal and interest expense.

	At 31 Dec 2020 \$m	At 31 Dec 2019 \$m
Total lease liabilities	2,358	2,506
Analysed as:		
Non-current liabilities	2,054	2,234
Current liabilities	304	272
	2,358	2,506

Some lease contracts include an option to renew for an additional period after the end of the initial contract term. Where practicable, the Group seeks to include in all leases such extension options exercisable by the Group to provide operational flexibility. The Group assesses at the lease commencement date the likelihood of exercising the extension options, and only include those reasonably certain to be exercised in the measurement of lease liabilities. At 31 December 2020, the potential undiscounted future lease payments under extension options for a leased property of \$14 million (31 December 2019: \$14 million) have not been included in the lease liabilities as the renewal options are unlikely to be exercised.

39. Borrowings

Accounting Policy

The potential cash payments related to put options issued by HKEX for the non-voting ordinary shares of a subsidiary held by non-controlling interests are accounted for as financial liabilities under borrowings, which are initially recognised at present value of amount payable by HKEX to acquire the shares held by non-controlling interests with a corresponding charge directly to equity under "reserve relating to written put options to non-controlling interests".

The written put option financial liabilities are subsequently measured at amortised cost (ie, the initial fair value plus cumulative amortisation of the difference between the initial fair value and the cash payments related to the put options using the effective interest method). The interest charge arising is recorded under finance costs in the consolidated income statement.

The written put options liabilities are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least twelve months after the end of the reporting period.

At 31 Dec 2020		At 31 Dec 2019	
\$1 Dec 2020 \$m	\$1 Dec 2019 \$m		
423	418		
83	80		
340	338		
423	418		
	31 Dec 2020 \$m 423 83 340		

The amounts were repayable as follows:

	At	At
	31 Dec 2020	31 Dec 2019
	\$m	\$m
Within one year	340	338
After two years but within five years	83	80
	423	418

At 31 December 2020, OTC Clear has issued 3,541 non-voting ordinary shares to certain third party shareholders at a total consideration of \$433 million. As part of the arrangement, put options were written by HKEX to the non-controlling interests to sell part or all of their non-voting ordinary shares in OTC Clear to HKEX at the initial subscription prices less accumulated dividends received by the non-controlling interests. The put options are exercisable by the non-controlling interests at any time following the date falling five years after the shares were issued if the non-controlling interests can demonstrate to HKEX that they have used reasonable endeavours for at least three months to find a suitable purchaser for their shares at a price equal to or more than their fair market values. The carrying amount of written put options represents the present value of the amount payable by HKEX to acquire the shares held by non-controlling interests at the date at which the written put options first become exercisable.

39. Borrowings (continued)

At 31 December 2020, \$340 million of the written put options were exercisable (31 December 2019: \$252 million) and the remaining \$83 million of the options will become exercisable in October 2023. During the year ended 31 December 2020, none of the written put options was exercised (2019: none).

The effective interest rate of the options before they are exercisable was 3.0 per cent (2019: 3.0 per cent) per annum.

40. Provisions

Accounting Policy

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate of the amount can be made. The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period.

	Reinstatement costs \$m	Employee benefit costs \$m	Total \$m
At 1 Jan 2020	105	89	194
Provision for the year	2	126	128
Amount used during the year	-	(90)	(90)
Amount paid during the year	(1)	(19)	(20)
At 31 Dec 2020	106	106	212
Analysed as:			
Non-current liabilities	98	-	98
Current liabilities	8	106	114
	106	106	212

- (a) The provision for reinstatement costs represents the estimated costs of restoring the leased office premises to their original state upon the expiry of the leases. The leases are expected to expire within 10 years.
- (b) The provision for employee benefit costs represents unused annual leave that has been accumulated at the end of the reporting period. It is expected to be fully utilised in the coming twelve months.

41. Deferred Taxation

Accounting Policy

Deferred tax is recognised, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements, except that deferred tax liabilities are not recognised if they arise from the initial recognition of goodwill. Deferred tax is determined using tax rates that have been enacted or substantively enacted by the end of the reporting period and are expected to apply when the related deferred tax asset is realised or the deferred tax liability is settled.

Deferred tax assets are recognised to the extent that it is probable that future taxable profit will be available against which the temporary differences or the current tax losses can be utilised.

(a) The movements on the net deferred tax liabilities account were as follows:

	2020	2019
	\$m	\$m
At 1 Jan	775	724
Exchange differences	(3)	(3)
Acquisition of a subsidiary	-	6
Charged to the consolidated income statement (note 17(a))	132	48
Charged to the consolidated statement of comprehensive income	5	-
Credited directly to retained earnings	(5)	-
At 31 Dec (note (d))	904	775

- (b) The Group had unrecognised tax losses of \$1,623 million at 31 December 2020 (31 December 2019: \$1,443 million) that may be carried forward for offsetting against future taxable income. Tax losses of PRC entities amounting to \$662 million (31 December 2019: \$556 million) will expire 5 years after the losses were incurred, and the remaining tax losses have no expiry date and can be carried forward indefinitely.
- (c) The movements on the net deferred tax liabilities/(assets) were as follows:

Accelerated

	Accelerated														
	ta	X	Intan	gible			Empl	oyee			Fina	ncial			
	depred	iation	ation assets1		Tax lo	Tax losses benefits			Lea	Leases		assets	Tot	Total	
•	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	
At 1 Jan	305	226	533	555	(22)	(39)	(21)	(18)	(20)	-	-	-	775	724	
Exchange															
differences	-	-	(3)	(3)	-	-	-	-	-	-	-	-	(3)	(3)	
Acquisition of a															
subsidiary	-	-	-	6	-	-	-	-	-	-	-	-	-	6	
Charged/(credited) to the consolidated															
income statement	77	79	36	(25)	3	17	(3)	(3)	19	(20)	-	-	132	48	
Charged to the consolidated statement of comprehensive															
income	-	-	-	-	-	-	-	-	-	-	5	-	5	-	
Credited directly to															
retained earnings	-	-	-	-	-	-	(5)	-	-	-	-	-	(5)	-	
At 31 Dec	382	305	566	533	(19)	(22)	(29)	(21)	(1)	(20)	5	-	904	775	

¹ Intangible assets include customer relationships and tradenames.

41. Deferred Taxation (continued)

(d) Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when the deferred taxes relate to tax levied by the same taxation authority on the same taxable entity or different taxable entities where there is an intention to settle the balances on a net basis. The following amounts, determined after appropriate offsetting, are shown in the consolidated statement of financial position:

	At	At
	31 Dec 2020	31 Dec 2019
	\$m	\$m
Deferred tax assets	(26)	(17)
Deferred tax liabilities	930	792
	904	775

(e) The analysis of deferred tax (assets)/liabilities is as follows:

	At	At
	31 Dec 2020	31 Dec 2019
	\$m	\$m
Deferred tax assets		
Amounts to be recovered after more than 12 months	(25)	(17)
Amounts to be recovered within 12 months	(1)	-
	(26)	(17)
Deferred tax liabilities		
Amounts to be settled after more than 12 months	921	788
Amounts to be settled within 12 months	9	4
	930	792
Net deferred tax liabilities	904	775

42. Share Capital and Shares Held for Share Award Scheme

Accounting Policy

Shares

Ordinary shares are classified as equity.

Shares held for Share Award Scheme

Where HKEX shares are acquired by the Share Award Scheme from the market or by electing for scrip in lieu of cash dividends, the total consideration of shares acquired from the market (including any directly attributable incremental costs) or under the scrip dividend scheme is presented as Shares held for Share Award Scheme and deducted from total equity.

Upon vesting, the related costs of the vested Awarded Shares purchased from the market and shares acquired from reinvesting dividends or received under the scrip dividend scheme (dividend shares) are credited to Shares held for Share Award Scheme, with a corresponding decrease in employee share-based compensation reserve for Awarded Shares, and decrease in retained earnings for dividend shares.

Issued and fully paid – ordinary shares with no par:

	Number of shares '000	Number of shares held for Share Award Scheme ¹ '000	Share capital \$m	Shares held for Share Award Scheme \$m	Total \$m
At 1 Jan 2019	1,250,632	(3,115)	27,750	(682)	27,068
Shares issued in lieu of cash dividends (note (a))	10,569	(84)	2,694	(21)	2,673
Shares purchased for Share Award Scheme (note (b))	-	(1,115)	-	(285)	(285)
Vesting of shares of Share Award Scheme (note (c))	-	1,040	5	218	223
At 31 Dec 2019	1,261,201	(3,274)	30,449	(770)	29,679
At 1 Jan 2020	1,261,201	(3,274)	30,449	(770)	29,679
Shares issued in lieu of cash dividends (note (a))	6,636	(45)	1,438	(10)	1,428
Shares purchased for Share Award Scheme (note (b))	-	(84)	-	(31)	(31)
Vesting of shares of Share Award Scheme (note (c))	-	1,420	4	326	330
At 31 Dec 2020	1,267,837	(1,983)	31,891	(485)	31,406

¹ Excluding shares vested but not yet transferred to awardees of 307,960 shares at 31 December 2020 (31 December 2019: 50,341 shares)

42. Share Capital and Shares Held for Share Award Scheme (continued)

(a) During the year, the following shares were issued to shareholders who elected to receive HKEX shares in lieu of cash dividends pursuant to the scrip dividend scheme:

			2020		
				Shares held for	
			Share	Share Award	
	Number of	Scrip price	capital	Scheme	Total
	shares	\$	\$m	\$m	\$m
Issued as 2019 second interim scri	p dividends:				
- total	6,635,576	216.70	1,438	-	1,438
- to Share Award Scheme	(45,127)	216.70	-	(10)	(10)
	6,590,449		1,438	(10)	1,428
			2019		
			2019	Shares held for	
			Share	Share Award	
	Number of	Scrip price	capital	Scheme	Total
	shares	\$, \$m	\$m	\$m
Issued as 2018 second interim scri	p dividends:				
- total	7,476,293	260.77	1,950	-	1,950
- to Share Award Scheme	(36,539)	260.77	-	(10)	(10)
Issued as 2019 first interim scrip di	vidends:				
- total	3,092,966	240.40	744	-	744
- to Share Award Scheme	(47,800)	240.40	-	(11)	(11)
	10.484.920		2.694	(21)	2.673

- (b) During the year, the Share Award Scheme (note 43) acquired 84,000 HKEX shares (2019: 1,115,300 shares) through purchases on the open market. The total amount paid to acquire the shares during the year was \$31 million (2019: \$285 million).
- (c) During the year, a total of 1,419,931 HKEX shares (2019: 1,040,143 shares) were vested. The total cost of the vested shares was \$326 million (2019: \$218 million). In 2020, \$4 million (2019: \$5 million) was credited to share capital in respect of vesting of certain shares whose fair values were higher than the costs.

43. Employee Share-based Arrangements

Accounting Policy

The Group operates the Share Award Scheme (the Scheme), which is an equity-settled share-based compensation plan under which Awarded Shares are granted to employees of the Group (including the Executive Director) as part of their remuneration package.

The amount to be expensed as share-based compensation expenses is determined by reference to the fair value of the Awarded Shares granted, taking into account all non-vesting conditions associated with the grants on grant date. The total expense is recognised on a straight-line basis over the relevant vesting periods (or on the grant date if the shares vest immediately), with a corresponding credit to an employee share-based compensation reserve under equity.

For those Awarded Shares which are amortised over the vesting periods, the Group revises its estimates of the number of Awarded Shares that are expected to ultimately vest based on the vesting conditions at the end of each reporting period. Any resulting adjustment to the cumulative amount recognised in prior years is charged/credited to employee share-based compensation expense in the current year, with a corresponding adjustment to the employee share-based compensation reserve.

The movements of employee share-based compensation reserve were as follows:

	2020 \$m	2019 \$m
At 1 Jan	250	218
Employee share-based compensation benefits (note 10)	281	240
Vesting of shares of Share Award Scheme	(299)	(208)
At 31 Dec	232	250

The Scheme allows shares to be granted to employees under the following two categories of awards:

- (i) Employee Share Awards for all employees of the Group (including the Executive Director); and
- (ii) Senior Executive Awards for selected senior executives of the Group (including the Executive Director).

43. Employee Share-based Arrangements (continued)

Following the Board's decision to award an award sum (Awarded Sum) for the purchase of Awarded Shares to eligible employees and/or selected senior executives, the Awarded Shares are either purchased from the market or are awarded by regranting the forfeited or unallocated shares held by the Scheme. Before vesting, the Awarded Shares are held in a trust set up by the Scheme.

Further shares are derived from dividends payable on the Awarded Shares held in the Scheme from reinvesting dividends or scrip shares received under the scrip dividend scheme (dividend shares), and are allocated to the awardees on a pro rata basis and have the same vesting periods as the related Awarded Shares.

(a) Employee Share Awards

Employee Share Awards vest progressively over the vesting period after the awards are granted, provided that the relevant awardee (i) remains employed by the Group (ii) is made redundant or (iii) is deemed to be a "good leaver", and Employee Share Awards vest immediately if the relevant awardee retires on reaching normal retirement age or suffers from permanent disability. Unless otherwise determined by the Board, the Remuneration Committee or the Chief Executive, the vesting period of Employee Share Awards granted is three years, and the shares will be vested in two equal tranches from the second to the third year after the shares are granted.

For awardees who do not meet the vesting criteria, the unvested shares are forfeited. The forfeited shares are held by the trustee of the Scheme who may award such shares to the other awardees, taking into consideration recommendations of the Board.

Details of Awarded Shares awarded during 2019 and 2020

		Average	
	Number of	fair value	
	Awarded Shares	per share	
Date of award	awarded	\$	Vesting period
13 Jun 2019	996	259.65	13 Jun 2019 - 12 Dec 2019
13 Jun 2019	9,603	259.65	8 Apr 2021 - 8 Apr 2022
18 Nov 2019	6,400	245.67	18 Nov 2019 - 10 Jun 2022
31 Dec 2019	1,261,069 ^{1,2}	254.40	12 Dec 2021 - 12 Dec 2022
22 Jun 2020	9,700	307.10	17 Jun 2022 - 17 Jun 2023
4 Dec 2020	42,500	389.08	8 Dec 2021 - 8 Dec 2024

¹ 55,169 were awarded to the HKEX's Chief Executive on 31 December 2019.

In addition to the above, total Awarded Shares amounting to \$327 million were also granted to selected employees in 2020. At 31 December 2020, the purchase of shares had not yet been completed.

² 219,143 shares were awarded by re-granting the forfeited or unallocated shares held by the Scheme on 31 December 2019.

43. Employee Share-based Arrangements (continued)

(a) Employee Share Awards (continued)

Details of Awarded Shares (excluding dividend shares) vested during 2019 and 2020

During the year, 1,112,075 HKEX shares (2019: 944,989 shares) were vested at an aggregate fair value of \$257 million (2019: \$200 million), of which 146,156 shares (2019: 61,031 shares) were for the HKEX's Chief Executive.

(b) Senior Executive Awards

The actual number of shares to be transferred to the awardees under the Senior Executive Awards is conditional on the satisfaction of performance conditions set by the Board. The Board has full discretion to determine the actual amount of award to be paid at the end of a performance assessment period (which shall normally be a period of at least three financial years) in accordance with these criteria.

The vesting of Senior Executive Awards is not affected by the awardees ceasing employment with the Group before the end of the performance assessment period. The Senior Executive Awards are considered to be vested immediately upon grant and the performance conditions are considered as non-vesting conditions.

Details of Senior Executive Awards awarded during 2019 and 2020

No Senior Executive Awards were awarded in 2020, and details of Senior Executive Awards awarded during 2019 were as follows:

Date of award	Number of Awarded Shares awarded	Average fair value per share \$	Total fair value \$m	Performance period
31 Dec 2019	56,154	190.80	11	2020 - 2022

All of the Senior Executive Awards were awarded to the HKEX's Chief Executive. The fair value per share is determined by taking into account various factors including the probability of the performance conditions being satisfied.

43. Employee Share-based Arrangements (continued)

(b) Senior Executive Awards (continued)

Details of Senior Executive Awards transferred to awardee during 2019 and 2020

Details of Senior Executive Awards transferred to awardee during 2019 and 2020 (including shares transferred upon retirement of the HKEX's Chief Executive in December 2020) were as follows:

Date of award	Month of transfer	Number of Awarded Shares awarded	Number of Awarded Shares transferred	Total cost of Awarded Shares transferred \$m
31 Dec 2015	Mar 2019	56,800	30,672	6
30 Dec 2016	Mar 2020	67,400	47,854	9
29 Dec 2017	Dec 2020	62,123	62,123	14
31 Dec 2018	Dec 2020	61,560	61,560	14
31 Dec 2019	Dec 2020	56,154	56,154	15

The total cost of shares transferred to the HKEX's Chief Executive during 2020 amounted to \$52 million (2019: \$6 million), and \$10 million was debited to retained earnings as the cost of the Awarded Shares vested was higher than the fair value of shares previously charged to the consolidated income statement (2019: \$2 million was credited to share capital).

(c) Summary of Awarded Shares awarded and dividend shares

Movements in number of Awarded Shares awarded and dividend shares

	2020	2019
Number of Awarded Shares and dividend shares:		
Outstanding at 1 Jan	3,272,042	3,114,689
Awarded ³	52,200	1,334,222
Forfeited	(246,576)	(207,979)
Vested	(1,339,766)	(975,661)
Dividend shares:		
- allocated to awardees	73,046	79,809
- allocated to awardees but subsequently forfeited	(8,737)	(8,556)
- vested ⁴	(80,165)	(64,482)
Outstanding at 31 Dec	1,722,044	3,272,042

³ Average fair value per share was \$373.85 (2019: \$251.72).

⁴ In 2020, 80,165 dividend shares (2019: 64,482 shares), including 21,065 shares (2019: 7,134 shares) for the HKEX's Chief Executive, at a cost of \$21 million (2019: \$15 million) were vested.

43. Employee Share-based Arrangements (continued)

(c) Summary of Awarded Shares awarded and dividend shares (continued)

Remaining vesting periods or performance period of Awarded Shares awarded and dividend shares outstanding at 31 December

	At 31 Dec 2020		At 31 Dec	2019
		Number of		Number of
		Awarded Shares		Awarded Shares
		and		and
	Remaining vesting or	dividend shares	Remaining vesting or	dividend shares
	performance period	outstanding	performance period	outstanding
Shares awarded in				
2016	-	-	-	67,400
2017	-	-	0.04 year to 1.00 year	482,125
2018	0.05 year to 1.05 years	523,567	0.05 year to 2.06 years	1,323,153
2019	0.11 year to 1.95 years	1,093,163	0.12 year to 3.00 years	1,330,394
2020	0.94 year to 3.94 years	52,200	-	-
Dividend shares	0.05 year to 2.46 years	53,114	0.00 year to 2.27 years	68,970
		1,722,044		3,272,042

(d) Total number of shares held by Share Award Scheme

At	At
31 Dec 2020	31 Dec 2019
1,722,044	3,272,042
261,516	2,322
1,983,560	3,274,364
	31 Dec 2020 1,722,044 261,516

⁵ The shares will be regranted to eligible employees in future.

⁶ Excluding shares vested but not yet transferred to awardees of 307,960 shares at 31 December 2020 (31 December 2019: 50,341 shares).

44. Hedging and Revaluation Reserves

	At	At
	31 Dec 2020	31 Dec 2019
	\$m	\$m
Hedging reserve (note (a))	-	6
Revaluation reserve (note (b))	25	(3)
	25	3

(a) Hedging reserve

Accounting Policy

The Group designates certain bank balances as hedges of foreign exchange risks associated with the cash flows of highly probable forecast transactions (cash flow hedges).

The Group documents at the inception of the transaction the relationship between hedging instruments and hedged items, as well as its risk management objectives and strategies for undertaking various hedge transactions. The Group also documents its assessment, both at hedge inception and on an ongoing basis, of whether the hedging instruments have been and will continue to be highly effective in offsetting changes in cash flows of hedged items.

The changes in the fair value relating to the effective portion of hedging instruments that are designated and qualify as cash flow hedges is recognised in other comprehensive income and accumulated in hedging reserve in equity. The gains or losses relating to the ineffective portion are recognised immediately in the consolidated income statement.

Amounts accumulated in hedging reserve are reclassified to the consolidated income statement in the periods when the hedged item is recognised in the consolidated income statement.

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in hedging reserve at that time remains in hedging reserve and is recognised when the forecast transaction is ultimately recognised in the consolidated income statement. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that is retained in hedging reserve is immediately reclassified to the consolidated income statement.

The movements of hedging reserve were as follows:

	2020 \$m	2019 \$m
At 1 Jan	6	-
Cash flow hedges:		
- net fair value gains/(losses) of hedging instruments	10	(2)
 reclassified to goodwill as part of acquisition cost of BayConnect (note (i)) 	-	9
- reclassified to the consolidated income statement as staff costs and related expenses (note (ii)) - reclassified to the consolidated income statement as information	(15)	-
technology and computer maintenance expenses (note (ii))	(1)	(1)
At 31 Dec	-	6
Fair value of hedging instruments at 31 Dec	-	103

44. Hedging and Revaluation Reserves (continued)

- (a) Hedging reserve (continued)
 - (i) During the year ended 31 December 2019, the Group designated certain bank deposits of RMB233 million as cash flow hedges for hedging the foreign exchange risk of the acquisition of a 51 per cent equity interest of BayConnect. The net fair value loss of the bank deposits of \$9 million was initially deferred in hedging reserve and included as part of the cost of the acquisition completed on 28 June 2019.
 - (ii) The functional currencies of LME and LME Clear are United States Dollars (USD). To hedge the foreign currency exposure of their operating expenses, these entities have designated certain bank balances of Pound sterling (GBP) as cash flow hedges for hedging the foreign exchange risk of their staff costs and related expenses, and information technology and computer maintenance expenses. At 31 December 2020, there was no outstanding bank balance designated as cash flow hedges (31 December 2019: GBP10 million of the bank balances was outstanding).
 - (iii) The total amounts arising from ineffective cash flow hedges recognised in the consolidated income statement of the Group during the year amounted to \$Nil (2019: \$Nil).

(b) Revaluation reserve

	2020 \$m	2019 \$m
At 1 Jan	(3)	(6)
Changes in fair value of financial assets measured at fair value through other comprehensive income	33	3
Deferred tax on financial assets measured at fair value through other comprehensive income	(5)	-
At 31 Dec	25	(3)

45. Designated Reserves

Clearing House Funds reserves (note 37)

	HKSCC Guarantee Fund reserve \$m	SEOCH Reserve Fund reserve \$m	HKCC Reserve Fund reserve \$m	OTC Clear Rates and FX Guarantee Fund reserve \$m	OTC Clear Rates and FX Guarantee Resources reserve \$m	Total \$m
At 1 Jan 2019	161	106	231	17	8	523
Surplus of net investment income net of expenses of Clearing House Funds transfer from retained						
earnings (note 46)	13	5	8	34	4	64
At 31 Dec 2019	174	111	239	51	12	587
At 1 Jan 2020 Surplus of net investment income net of expenses of Clearing House Funds transfer from retained	174	111	239	51	12	587
earnings (note 46)	11	2	5	20	3	41
At 31 Dec 2020	185	113	244	71	15	628

46. Retained Earnings

	2020 \$m	2019 \$m
At 1 Jan	14,204	13,371
Profit attributable to shareholders	11,505	9,391
Transfer to Clearing House Funds reserves (note 45)	(41)	(64)
Dividends:		
2019/2018 second interim dividend	(3,761)	(3,830)
2020/2019 first interim dividend	(4,692)	(4,668)
Unclaimed HKEX dividends forfeited (note 34(a))	21	19
Vesting of shares of Share Award Scheme	(31)	(15)
Tax relating to Share Award Scheme	9	-
At 31 Dec	17,214	14,204

47. Notes to the Consolidated Statement of Cash Flows

(a) Reconciliation of profit before taxation to net cash inflow from principal operating activities

	2020	2019
	\$m	\$m
Profit before taxation	13,332	10,951
Adjustments for:		
Net interest income	(1,773)	(1,945)
Net fair value gains on financial assets mandatorily measured at		
fair value through profit or loss and financial liabilities at fair		
value through profit or loss	(487)	(789)
Finance costs	181	177
Depreciation and amortisation	1,197	1,044
Employee share-based compensation benefits	281	240
Provision for impairment losses of receivables	12	9
Share of profits less losses of joint ventures	(69)	(32)
Other non-cash adjustments	12	6
Net increase in financial assets of Margin Funds	(44,439)	(18,805)
Net increase in financial liabilities of Margin Funds	44,472	18,808
Net (increase)/decrease in Clearing House Fund financial assets	(6,075)	329
Net increase/(decrease) in Clearing House Fund financial liabilities	6,034	(393)
(Increase)/decrease in cash prepayments and collateral for A shares	(4,752)	1,554
Increase in Corporate Funds used for supporting Skin-in-the-		
Game and default fund credits	(423)	(94)
Increase in accounts receivable, prepayments and deposits	(14,901)	(5,479)
Increase in other liabilities	19,957	4,145
Net cash inflow from principal operations	12,559	9,726
Interest received from financial assets measured at amortised cost and		
cash and cash equivalents	2,066	3,096
Interest paid to Participants	(349)	(1,248)
Income tax paid	(2,320)	(431)
Net cash inflow from principal operating activities	11,956	11,143

47. Notes to the Consolidated Statement of Cash Flows (continued)

(b) Reconciliation of liabilities arising from financing activities

		Lease
	Borrowings	liabilities
	\$m	\$m
At 1 Jan 2019	1,166	2,512
New leases	-	156
Adjustment relating to reassessment of lease liabilities	-	(11)
Interest on borrowings (note 14)	7	-
Interest on lease liabilities (note 14)	-	89
Cash flows		
- Repayment of notes	(744)	-
- Payments of interest on notes	(11)	-
- Payments of capital elements of lease liabilities	-	(159)
- Payments of interest elements of lease liabilities	-	(89)
Exchange differences	-	8
At 31 Dec 2019	418	2,506
At 1 Jan 2020	418	2,506
New leases	-	127
Interest on borrowings (note 14)	5	-
Interest on lease liabilities (note 14)	-	89
Cash flows		
- Payments of capital elements of lease liabilities	-	(284)
- Payments of interest elements of lease liabilities	-	(89)
Exchange differences	-	9
At 31 Dec 2020	423	2,358

(c) Cash outflow for leases

Amounts for leases included in the consolidated statement of cash flow comprise the following:

	2020 \$m	2019 \$m
Within operating cash flows	(4)	(17)
Within financing cash flows	(373)	(248)
Total lease rental paid	(377)	(265)

48. Commitments

(a) Commitments in respect of capital expenditures

	At	At
	31 Dec 2020	31 Dec 2019
	\$m	\$m
Contracted but not provided for:		
- fixed assets	15	24
- intangible assets	146	82
Authorised but not contracted for:		
- fixed assets	260	461
- intangible assets	469	650
	890	1,217

(b) Commitments for investment in an unlisted equity investment

In November 2020, the Group entered into an agreement to acquire a 7 per cent equity interest in Guangzhou Futures Exchange Co. Ltd. (GFE), a newly established futures exchange in Guangdong-Hong Kong-Macao Greater Bay Area, which will initially focus on serving the real economy and green development initiatives. At 31 December 2020, the total capital investment to be made by the Group was RMB210 million.

49. Contingent Liabilities

Accounting Policy

A contingent liability is a possible obligation that arises from past events and whose existence will only be confirmed by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Group. It can also be a present obligation arising from past events that is not recognised because it is not probable that outflow of economic resources will be required or the amount of obligation cannot be measured reliably.

A contingent liability is not recognised but is disclosed in the consolidated financial statements. When a change in the probability of an outflow occurs so that outflow is probable or when the amount of obligation becomes reliably measurable, it will then be recognised as a provision.

At 31 December 2020, the Group's material contingent liabilities were as follows:

- (a) The Group had a contingent liability in respect of potential calls to be made by the SFC to replenish all or part of compensation less recoveries paid by the Unified Exchange Compensation Fund established under the repealed Securities Ordinance up to an amount not exceeding \$71 million (31 December 2019: \$71 million). Up to 31 December 2020, no calls had been made by the SFC in this connection.
- (b) The Group had undertaken to indemnify the Collector of Stamp Revenue against any underpayment of stamp duty by its Participants of up to \$200,000 for each Participant (note 36(a)). In the unlikely event that all of its 635 trading Participants (31 December 2019: 658) covered by the indemnity at 31 December 2020 defaulted, the maximum contingent liability of the Group under the indemnity would amount to \$127 million (31 December 2019: \$132 million).
- (c) HKEX has given an undertaking in favour of HKSCC to contribute up to \$50 million in the event of HKSCC being wound up while it is a wholly-owned subsidiary of HKEX or within one year after HKSCC ceases to be a wholly-owned subsidiary of HKEX, for payment of the liabilities of HKSCC contracted before HKSCC ceases to be a wholly-owned subsidiary of HKEX, and for the costs of winding up.

50. Connected Transactions and Material Related Party Transactions

(a) Connected transactions and related party transactions

Certain Directors of HKEX may be directors and/or shareholders of (i) Exchange Participants of the Stock Exchange, Futures Exchange, the LME and QME (Exchange Participants) and Clearing Participants of HKSCC, HKCC, SEOCH, LME Clear and OTC Clear (Clearing Participants); (ii) companies listed on the Stock Exchange; and (iii) Exchange Participants for buying shares on behalf of HKSCC. Securities and derivatives contracts traded by, and fees levied on, these Exchange Participants and Clearing Participants, fees levied on these listed companies and fees paid to these Exchange Participants for buying shares on behalf of HKSCC are all undertaken in the ordinary course of business of the Group on the standard terms and conditions applicable to all other Exchange Participants, Clearing Participants, listed companies and Exchange Participants for buying shares on behalf of HKSCC.

(b) Material related party transactions

In addition to the above and those disclosed elsewhere in these consolidated financial statements, the Group entered into the following material related party transactions:

(i) Key management personnel compensation

	2020	2019
	\$m	\$m
Salaries and other short-term employee benefits	233	187
Employee share-based compensation benefits	68	80
Retirement benefit costs	8	8
	309	275

(ii) Post-retirement benefit plans

The Group has sponsored an ORSO Plan and the LME Pension Scheme as its post-retirement benefit plans (note 10(a)).

(iii) Save as aforesaid, the Group has entered into other transactions in the ordinary course of business with companies that are related parties but the amounts were immaterial.

51. Pledges of Assets

LME Clear receives securities, gold bullion and warrants as collateral for margins posted by its Clearing Participants. The total fair value of this collateral was US\$2,241 million (HK\$17,376 million) at 31 December 2020 (31 December 2019: US\$1,872 million (HK\$14,586 million)). LME Clear is obliged to return this non-cash collateral upon request when the Clearing Participants' collateral obligations have been substituted with cash collateral or otherwise discharged.

LME Clear also holds securities as collateral in respect of its investments in overnight triparty reverse repurchase agreements under which it is obliged to return equivalent securities to the counterparties at maturity of the reverse repurchase agreements. The fair value of this collateral was US\$11,486 million (HK\$89,061 million) at 31 December 2020 (31 December 2019: US\$8,904 million (HK\$69,378 million)).

The above non-cash collateral, which LME Clear is permitted to sell or repledge in the absence of default by the counterparties, was not recorded on the consolidated statement of financial position of the Group at 31 December 2020. Such non-cash collateral, together with certain financial assets amounting to US\$496 million (HK\$3,845 million) at 31 December 2020 (31 December 2019: US\$474 million (HK\$3,692 million)), have been repledged to LME Clear's investment agent and custodian banks under first floating charge and security arrangements for the settlement and depository services they provide in respect of the collateral and investments held. The floating charge could convert to a fixed charge in the event of contract termination, or default or insolvency of LME Clear.

52. Capital Management

The Group's objectives when managing capital are:

- To safeguard the Group's ability to continue as a going concern, so that it continues to provide returns for shareholders and benefits for other stakeholders;
- To support the Group's stability and growth;
- To provide capital for the purpose of strengthening the Group's risk management capability; and
- To ensure that the Group's regulated entities comply with their respective regulatory capital requirements.

The Group actively and regularly reviews and manages its capital structure to ensure an optimal capital structure and shareholder returns. The Group takes into consideration the expected capital requirements and capital efficiency, regulatory capital requirements of its regulated entities, prevailing and projected profitability, projected operating cash flows, projected capital expenditures and projected strategic investment opportunities.

52. Capital Management (continued)

The Group has a number of regulated entities that are subject to regulatory capital requirements set by the respective regulators. The regulatory capital requirements of the Group's subsidiaries at 31 December 2020 are summarised as follows:

Subsidiaries Stock Exchange, Futures Exchange	Regulatory authority SFC, Hong Kong	Regulatory capital requirements Maintain at all times net current assets funded by equity sufficient to cover each subsidiary's projected total operating expenses for at least the following six months (approximately \$1,536 million), and net current assets funded by equity or long-term loans from HKEX sufficient to cover its projected total operating expenses for at least the following twelve months (approximately \$3,072 million).
HKSCC, HKCC, SEOCH, OTC Clear	SFC, Hong Kong	Maintain at all times liquid net assets funded by equity (ie, liquid assets of Corporate Funds (excluding those solely used to support Skin-in-the-Game and default fund credits of Clearing House Funds) minus non-current liabilities) sufficient to cover each subsidiary's projected total operating expenses for at least the following six months (approximately \$703 million), and net current assets funded by equity or long-term loans from HKEX (excluding those solely used to support Skin-in-the-Game and default fund credits of Clearing House Funds) sufficient to cover its projected total operating expenses for at least the following twelve months (approximately \$1,406 million).
LME	The Financial Conduct Authority, UK	Maintain at all times net capital and liquid financial resources of at least the costs of orderly closure plus a risk based capital charge, amounting to US\$73.7 million (approximately HK\$572 million)).
LME Clear	Bank of England, UK	Maintain cash or highly liquid financial instruments with minimal market and credit risk, amounting to US\$92.7 million (HK\$719 million), plus 10 per cent minimum reporting threshold of US\$9.3 million (HK\$72 million) and US\$23.2 million (HK\$180 million) financial resources available to set off losses in the event of default. Capital resources must be in the form of share capital, retained earnings and reserves, reduced by intangible assets and retained losses.

At 31 December 2020, the Group had set aside \$4,000 million (31 December 2019: \$4,000 million) of shareholders' funds for the purpose of supporting the risk management regime of the clearing houses in their roles as central counterparties, of which \$2,160 million (31 December 2019: \$2,160 million) had been injected into HKSCC, HKCC and SEOCH as share capital.

52. Capital Management (continued)

All regulated entities of the Group had adequate capital to meet their regulatory requirements at 31 December 2020 and 31 December 2019.

The Group adopts a dividend policy of providing shareholders with regular dividends with a normal target payout ratio of 90 per cent of the Group's profit of the year (excluding the financial results of HKEX Foundation Limited) and it may also offer a scrip dividend alternative to shareholders if considered appropriate. The consideration of share capital issued under the scrip dividend scheme (if any), together with the 10 per cent of the profit not declared as dividends, are retained as capital of the Group for future use.

The Group monitors capital on the basis of its gross gearing ratio (ie, gross debt divided by adjusted capital) and net gearing ratio (ie, net debt divided by adjusted capital). For this purpose, the Group defines gross debt as the total borrowings (excluding lease liabilities), net debt as gross debt less cash and cash equivalents of Corporate Funds (excluding those reserved for supporting Skin-in-the-Game and default fund credits of Clearing House Funds), and adjusted capital as all components of equity attributable to shareholders of HKEX other than designated reserves. The Group's strategy is to maintain the ratios at less than 50 per cent.

	At 31 Dec 2020	At 31 Dec 2019
Borrowings (note 39)	\$m 423	\$m 418
Less:		
Cash and cash equivalents of Corporate Funds (note 21) Less: Amounts reserved for supporting Skin-in-the-Game and default	10,753	11,421
fund credits of Clearing House Funds (note 21(b))	(311)	(818)
	(10,442)	(10,603)
Net debt (note (a))	-	-
Equity attributable to shareholders of HKEX	48,918	44,173
Less: Designated reserves	(628)	(587)
Adjusted capital	48,290	43,586
Gross gearing ratio	1%	1%
Net gearing ratio	0%	0%

(a) Net debt is zero when the amount of cash and cash equivalents of Corporate Funds (excluding those reserved for supporting Skin-in-the-Game and default fund credits of Clearing House Funds) is higher than gross debt.

53. Financial Risk Management

The Group's activities expose it to a variety of financial risks: market risk (including foreign exchange risk, price risk and interest rate risk), liquidity risk and credit risk. The Group's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's performance.

(a) Market risk

Nature of risk

Market risk is the risk of loss arising from movements in observable market variables such as foreign exchange rates, equity prices and interest rates. The Group is exposed to market risk primarily through its financial assets and financial liabilities (including borrowings and lease liabilities). The Group is also exposed to credit-contingent market risk arising from the default of Clearing Participants, which is further elaborated under credit risk (note (c)).

Risk management

The Group's investment policy is to prudently invest all funds managed by the Group in a manner which will satisfy liquidity requirements, safeguard financial assets and manage risks while optimising return on investments.

Investment and fund management by HKEX and the Group's subsidiaries is governed by the HKEX Investment Policy, Restrictions and Guidelines (Investment Guidelines), which is approved by the Board and reviewed regularly. Investment restrictions and guidelines form an integral part of risk control. Fund-specific restrictions and guidelines are set according to the investment objectives of each fund (ie, Corporate Funds, Clearing House Funds, Margin Funds and Cash for A shares). Specific limits are set for each fund to control risks (eg, permissible asset type, asset allocation, liquidity, credit requirement, counterparty concentration, maturity, foreign exchange exposures and interest rate risks) of the investments.

A portion of the Corporate Funds is invested in collective investment schemes (External Portfolio) under the External Investment Guidelines (the Investment Policy, Restrictions and Guidelines for externally-managed Corporate Funds) approved by the Board. The guidelines include an asset allocation policy which aims to preserve and enhance the return of the External Portfolio by investing in a diverse mix of asset classes whose returns are not highly correlated to each other over time to mitigate portfolio volatility and asset class concentration risk. The guidelines also define the risk-return parameters for the External Portfolio and restrictions to be observed, and the governance structure on selection and monitoring of fund managers. The fund managers of the collective investment schemes are selected based on their performance track records and areas of expertise, and each should be financially strong and stable, and their selections are approved by the Investment Committee as delegated by the Board. Specific risk management limits are set for the External Portfolio (eg, permissible asset type, asset allocation, liquidity and foreign exchange exposures and stress loss limits under extreme but plausible conditions).

The Investment Committee, comprised of Non-executive Directors of HKEX, advises the Board on portfolio management and monitors the risk and performance of HKEX's investments. A Treasury team in the Finance Division is dedicated to the day-to-day management and investment of the internally-managed funds, and monitor the performance of the External Portfolio.

53. Financial Risk Management (continued)

- (a) Market risk (continued)
 - (i) Foreign exchange risk

Nature of risk

Foreign exchange risk is the risk that the value or cash flows of an asset, liability or forecast transaction denominated in foreign currency (ie, a currency other than the functional currency of the entity to which the transactions relate) will fluctuate because of changes in foreign exchange rates. The functional currency of the Hong Kong and PRC entities are either HKD or Renminbi (RMB) and the functional currency of the LME entities is USD. Foreign exchange risks arise mainly from the Group's investments and bank deposits in currencies other than HKD and USD and its GBP expenditure for the LME entities.

Risk management

The Group manages its foreign exchange rate risks by setting limits of net foreign currency positions held from single currency and on an aggregated basis.

Forward foreign exchange contracts and foreign currency bank deposits may be used to hedge the currency exposure of the Group's non-HKD and non-USD assets and liabilities and highly probable forecast transactions to mitigate risks arising from fluctuations in exchange rates. In particular, the LME entities may designate certain GBP bank balances as cash flow hedges for hedging the foreign exchange risk of certain operating expenses.

Under the Investment Guidelines, investment in non-HKD financial instruments is subject to the following restrictions:

- Under the External Investment Guidelines, up to 50 per cent of the External Portfolio may be invested in non-HKD or non-USD investments not hedged back to HKD or USD.
- For internally-managed Corporate Funds, Clearing House Funds, Margin Funds and Cash
 for A shares, unhedged investments in currencies other than HKD or USD must fully match
 the respective liabilities or forecast payments for the funds. Unhedged investments in USD
 may not exceed 20 per cent of the respective funds.

For LME Clear, investments of the Margin Fund and Default Fund will generally be in the currency in which cash was received.

53. Financial Risk Management (continued)

- (a) Market risk (continued)
 - (i) Foreign exchange risk (continued)

Exposure

The following table details the Group's financial assets and financial liabilities denominated in a currency other than the functional currency of the entity to which they relate and the net open foreign currency positions (ie, gross positions less forward foreign exchange contracts and other offsetting exposures (hedges)), at 31 December presented in HKD equivalents.

		At 31 Dec 2020			At 31 Dec 2019		
		Gross		Net	Gross		Net
		open		open	open		open
	Foreign	position	Hedges	position	position	Hedges	position
	currency	\$m	\$m	\$m	\$m	\$m	\$m
Financial assets ¹	EUR	3,902	(3,897)	5	9,649	(9,640)	9
	GBP	5,499	(5,193)	306	11,455	(11,026)	429
	JPY	4,908	(4,906)	2	8,264	(8,262)	2
	RMB	25,951	(25,602)	349	10,601	(10,468)	133
	USD	7,285	(4,353)	2,932	3,192	(1,553)	1,639
	Others	6	(1)	5	2	-	2
Financial liabilities ²	EUR	(3,897)	3,897	-	(9,640)	9,640	-
	GBP	(5,469)	5,193	(276)	(11,445)	11,026	(419)
	JPY	(4,906)	4,906	-	(8,262)	8,262	-
	RMB	(25,606)	25,602	(4)	(10,473)	10,468	(5)
	USD	(4,918)	4,354	(564)	(1,598)	1,553	(45)
	Others	(6)	1	(5)	(1)	-	(1)
Total net open	EUR			5			9
positions for	GBP			30			10
the Group	JPY			2			2
	RMB			345			128
	USD			2,368			1,594
	Others			-			1
				2,750			1,744

¹ Financial assets comprised cash and cash equivalents, financial assets measured at fair value through profit or loss (excluding collective investment schemes), financial assets measured at fair value through other comprehensive income, financial assets measured at amortised cost, and accounts receivable and deposits.

(ii) Equity and commodity price risk

Nature of risk

The Group is exposed to equity price risk from equity investments in collective investment schemes held as part of the External Portfolio. The Group is also exposed to equity price risk on the investments in minority stakes in unlisted companies (note 53(d)(i)).

The movements of fair value of base, ferrous and precious metals futures and options contracts cleared through LME Clear would not have any financial impact on the Group's results as the assets and liabilities will move by the same amount and fully offset each other.

² Financial liabilities comprised margin deposits, Mainland security and settlement deposits, and cash collateral from Clearing Participants, Participants' contributions to Clearing House Funds, financial liabilities at fair value through profit or loss, borrowings, lease liabilities, and accounts payable and other liabilities.

53. Financial Risk Management (continued)

- (a) Market risk (continued)
 - (ii) Equity and commodity price risk (continued)

Risk management

The Group sets prudent investment limits and restrictions to control investments in collective investment schemes and a stress loss limit is set to limit its exposures. The Group selects fund managers after an extensive assessment of the underlying funds, their strategy and the overall quality of the fund managers, and the performance of the funds is monitored on a monthly basis.

(iii) Interest rate risk

Nature of risk

There are two types of interest rate risk:

- Fair value interest rate risk the risk that the value of a financial instrument will fluctuate because of changes in market interest rates; and
- Cash flow interest rate risk the risk that the future cash flows of a financial instrument will fluctuate because of changes in market interest rates.

The Group is exposed to both fair value and cash flow interest rate risks as the Group has significant assets and liabilities (including borrowings) which are interest-bearing.

Risk management

The Group manages its interest rate risks by setting a stress loss limit to limit its exposure. Limits are also set for residual maturity of the investments under the internally managed funds.

Exposure

The following tables present the carrying value and highest and lowest contractual interest rates of the financial assets held by the Group (excluding investments in collective investment schemes, zero-coupon Exchange Fund Bills, and bank deposits held at savings and current accounts) at 31 December:

	Fixed rate financial assets		Floating rate financial assets	
	At	At	At	At
	31 Dec 2020 \$m	31 Dec 2019 \$m	31 Dec 2020 \$m	31 Dec 2019 \$m
	*	*	*	
Carrying value (\$m)	84,696	58,305	89,503	70,779
Highest contractual interest rates	3.25%	4.50%	1.33%	3.00%
Lowest contractual interest rates ¹	0.03%	0.66%	-2.00%	-0.70%

¹ The contractual interest rates for certain reverse repurchase investments denominated in Euro held by LME Clear were below 0 per cent.

53. Financial Risk Management (continued)

- (a) Market risk (continued)
 - (iv) Sensitivity analysis

Investments other than collective investment schemes

The Group also uses Value at Risk (VaR) and portfolio stress testing to identify and measure foreign exchange risk and interest rate risks of the Group's investments other than collective investment schemes.

VaR measures the expected maximum loss over a given time interval (a holding period of 10 trading days is used by the Group) at a given confidence level (95 per cent confidence interval is adopted by the Group) based on historical data (one year is used by the Group).

VaR is a statistical measure of risks and has limitations associated with the assumptions employed. The calculation is based on historical simulation and therefore vulnerable to sudden changes in market behaviour. The use of a 10-day holding period may be insufficient at times of severe illiquidity. Also, VaR does not necessarily reflect all aspects of risks that affect the price of financial instruments and may underestimate real market risk exposure. In addition, VaR does not factor in the possibility of catastrophic risks but the use of stress testing for abnormal market conditions can mitigate this limitation.

The VaR for each risk factor and the total VaR of the investments other than collective investment schemes and related hedges of the Group at 31 December were as follows:

	At	At
	31 Dec 2020	31 Dec 2019
	\$m	\$m
Foreign exchange risk	16	11
Interest rate risk	18	20
Total VaR	19	26

VaR for each risk factor is the independently derived largest potential loss due to fluctuations solely in that risk factor. The individual VaRs did not add up to the total VaR as there was diversification effect due to correlation amongst the risk factors.

53. Financial Risk Management (continued)

- (a) Market risk (continued)
 - (iv) Sensitivity analysis (continued)

Collective investment schemes

At 31 December, the fair value of the Group's collective investment schemes (Funds) by strategy employed was as follows:

At	At
31 Dec 2020	31 Dec 2019
\$m	\$m
1,684	2,440
1,914	1,604
2,216	2,583
1,679	2,716
7,493	9,343
25	23
	31 Dec 2020 \$m 1,684 1,914 2,216 1,679 7,493

¹ Includes \$264 million invested in money market funds (31 December 2019: \$Nil)

The Group monitors the market value sensitivity of the Funds through a high-level simulation of the Funds' 1-year Value at Risk (simplified 1-year VaR) using the Funds' returns and volatilities. The simplified 1-year VaR helps to determine the potential changes in the market values of the Funds over a 1-year period. At 31 December 2020, the simplified 1-year VaR calculated at a 95 per cent confidence interval was 1.5 per cent (31 December 2019: 2.3 per cent), implying that the market value of the Group's Funds could potentially change by approximately \$112 million (2019: \$215 million).

The simplified 1-year VaR is computed using historical monthly returns of the Funds with the following steps:

- Compute blended monthly returns of the Group's Funds using monthly historical returns of the respective Funds for the past 36 months, and their corresponding portfolio weights as of the latest month;
- 2. Compute the average monthly return and standard deviation of the Funds' returns and derive the annualised amounts; and
- 3. Compute the simplified 1-year VaR, at a 95 per cent confidence interval, by subtracting 1.65 times of the annualised standard deviation from the annualised average return.

The simplified 1-year VaR is a statistical measure of the historical risks and has limitations associated with the assumptions employed. Historical simulation assumes that actual observed historical changes in the respective Funds' monthly performance reflect possible future changes. This implies that the approach is vulnerable to sudden changes in market behaviour. In addition, it does not cover stressed market events, nor does it represent the Group's forecast of the Funds' future returns.

53. Financial Risk Management (continued)

(b) Liquidity risk

Nature of risk

Liquidity risk is the risk that an entity will encounter difficulty in meeting obligations associated with financial liabilities that are settled by delivering cash or another financial asset, and it results from amount and maturity mismatches of assets and liabilities.

Risk management

The Group employs projected cash flow analysis to manage liquidity risk by forecasting the amount of cash required and monitoring the working capital of the Group to ensure that all liabilities due and known funding requirements could be met.

Investments are kept sufficiently liquid to meet operational needs and regulatory requirements, and possible liquidity requirements of the Clearing House Funds and Margin Funds. The Group sets minimum levels of highly liquid assets for Corporate Funds, Clearing House Funds and Margin Funds. In particular, Corporate Funds solely used for supporting the Skin-in-the Game and default fund credits of Clearing House Funds are invested in overnight deposits or Exchange Fund Bills issued by the Hong Kong Monetary Authority and monitored on a daily basis.

As recognised clearing houses, the Group's clearing houses have to observe the liquidity requirements laid down in Principles for Financial Market Infrastructures (PFMI requirements) issued by the Committee on Payments and Market Infrastructures (CPMI) and the International Organization of Securities Commissions (IOSCO). In particular, HKSCC, HKCC and SEOCH conduct daily liquidity stress testing that covers a number of potential stress scenarios, and sufficient liquidity has to be set aside to cover such stress testing.

Banking facilities have been put in place for contingency purposes. At 31 December 2020, the Group's total available banking facilities for its daily operations amounted to \$21,223 million (31 December 2019: \$21,246 million), which included \$14,722 million (31 December 2019: \$14,745 million) of committed banking facilities and \$6,500 million (31 December 2019: \$6,500 million) of repurchase facilities.

The Group also put in place foreign exchange facilities for its daily clearing operations and for the RMB Equity Trading Support Facility to support the trading of RMB stocks listed on the Stock Exchange. At 31 December 2020, the total amount of such facilities was HK\$30,244 million (31 December 2019: HK\$24,052 million).

In addition, the Group has arranged contingency banking facilities amounting to RMB13,000 million (HK\$15,516 million) (31 December 2019: RMB13,000 million (HK\$14,543 million)) for settling payment obligations to ChinaClear should there be events that disrupt normal settlement arrangements for Stock Connect.

53. Financial Risk Management (continued)

(b) Liquidity risk (continued)

Exposure

The Group is not exposed to liquidity risk on the outstanding base, ferrous and precious metals futures and options contracts cleared through LME Clear. Accordingly, they are not included in the analyses for financial assets and financial liabilities in the tables below.

The tables below analyse the Group's financial assets into the relevant maturity buckets based on the following criteria:

- investments held under the collective investment schemes are allocated taking into account the redemption notice periods, lock-up periods and redemption restrictions;
- the expected amounts, subject to costs to liquidate that are expected to be immaterial, that
 could be realised from the investments (other than collective investment schemes), bank
 deposits and cash and cash equivalents within one month to meet cash outflows on financial
 liabilities if required are allocated to the up to 1-month bucket;
- investments in minority stakes in unlisted companies are allocated to the >5 years bucket; and
- other financial assets are allocated based on their contractual maturity dates or the expected dates of disposal.

	At 31 Dec 2020							
-	Un to	>1 month	>3 months	>1 year				
	Up to 1 month \$m	to 3 months \$m	to 1 year \$m	to 5 years \$m	>5 years \$m	Total \$m		
Cash and cash equivalents	157,996	-	-	-	-	157,996		
Financial assets measured at fair value through profit or loss Financial assets measured at fair	4,264	1,818	1,115	296	220	7,713		
value through other comprehensive income Financial assets measured at	7,942	-	-	-	-	7,942		
amortised cost	62,589	-	-	91	8	62,688		
Accounts receivable and deposits ¹	46,858	24	2	-	-	46,884		
	279,649	1,842	1,117	387	228	283,223		

	At 31 Dec 2019						
		>1 month	>3 months	>1 year			
	Up to	to	to	to			
	1 month	3 months	1 year	5 years	>5 years	Total	
	\$m	\$m	\$m	\$m	\$m	\$m	
Cash and cash equivalents	128,152	-	-	-	-	128,152	
Financial assets measured at fair							
value through profit or loss	6,242	2,033	446	622	50	9,393	
Financial assets measured at fair							
value through other							
comprehensive income	4,569	-	-	_	-	4,569	
Financial assets measured at	,					,	
amortised cost	40,573	_	-	23	76	40,672	
Accounts receivable and deposits ¹	25,647	28	5	-	-	25,680	
	205,183	2,061	451	645	126	208,466	

¹ Amounts exclude prepayments of \$196 million (31 December 2019: \$132 million).

53. Financial Risk Management (continued)

(b) Liquidity risk (continued)

Exposure (continued)

The table below analyses the Group's financial liabilities at 31 December into relevant maturity buckets based on their contractual maturity dates. The amounts disclosed in the tables are the contractual undiscounted cash flows.

	At 31 Dec 2020						
		>1 month	>3 months	>1 year			
	Up to	to	to	to			
	1 month	3 months	1 year	5 years	>5 years	Total	
	\$m	\$m	\$m	\$m	\$m	\$m	
Margin deposits, Mainland security and							
settlement deposits, and cash collateral from							
Clearing Participants	187,008	-	-	-	-	187,008	
Accounts payable, accruals and other liabilities	42,834	13	127	-	-	42,974	
Other financial liabilities:							
Other financial liabilities of Clearing House							
Funds	28	-	-	-	-	28	
Other financial liabilities of Corporate Funds:							
Financial guarantee contract (maximum							
amount guaranteed) (note 49(b))	127	-	-	-	-	127	
Participants' contributions to Clearing House							
Funds	19,916	471	52	-	-	20,439	
Borrowings:							
Written put options to non-controlling interests	-	-	340	93	-	433	
Lease liabilities	38	60	288	1,248	1,101	2,735	
Total	249,951	544	807	1,341	1,101	253,744	

	At 31 Dec 2019					
		>1 month	>3 months	>1 year		
	Up to	to	to	to		
	1 month	3 months	1 year	5 years	>5 years	Total
	\$m	\$m	\$m	\$m	\$m	\$m
Margin deposits, Mainland security and settlement deposits, and cash collateral from						
Clearing Participants	142,536	-	-	-	-	142,536
Accounts payable, accruals and other liabilities	22,321	16	110	-	-	22,447
Other financial liabilities:						
Other financial liabilities of Clearing House						
Funds	34	4	1	-	-	39
Other financial liabilities of Corporate Funds: Financial guarantee contract (maximum						
amount guaranteed) (note 49(b))	132	-	-	-	-	132
Participants' contributions to Clearing House						
Funds	13,873	468	53	-	-	14,394
Borrowings:						
Written put options to non-controlling interests	-	-	340	93	-	433
Lease liabilities	38	55	264	1,276	1,325	2,958
Total	178,934	543	768	1,369	1,325	182,939

53. Financial Risk Management (continued)

(c) Credit risk

Nature of risk

The Group is exposed to credit risk, which is the risk that a counterparty will be unable to pay amounts in full when due. It arises primarily from the Group's investments and accounts receivable. Impairment provisions are made against the Group's investments and accounts receivable based on the accounting policy set out in notes 23 and 24.

The Group is also exposed to clearing and settlement risk, as the clearing houses of the Group act as the counterparties to eligible trades concluded on the Stock Exchange, the Futures Exchange, the over-the-counter market, and the LME through the novation of the obligations of the buyers and sellers. HKSCC is also responsible for the good title to the securities deposited and accepted in the CCASS depository. As a result, the Group has considerable market risk and credit risk since the Participants' ability to honour their obligations in respect of their trades and securities deposited may be adversely impacted by economic conditions. If the Participants default on their obligations on settlement or there are defects in the title of securities deposited and accepted in the CCASS depository, the Group could be exposed to potential risks not otherwise accounted for in these consolidated financial statements.

Risk management - Investment and accounts receivable risk

The Group limits its exposure to credit risk by rigorously selecting the counterparties (ie, deposit-takers, bond issuers, debtors and fund managers) and by diversification. All investments (excluding those held by the collective investment schemes) were governed by the Group Credit Limit for Settlement and Investments framework. Under the framework, specific limits are set on an investment portfolio level and on single counterparty level. The investment portfolio is subject to a maximum portfolio expected loss limit, each investment counterparty is subject to a minimum investment grade rating, and each investment is also subject to maximum concentration limit per counterparty. Fund managers of collective investment schemes are financially strong and stable, and their selections are approved by the Investment Committee as delegated by the Board.

At 31 December 2020, the investments in debt securities held by the Group (excluding those held by the collective investment schemes) were of investment grade and had a weighted average credit rating of Aa2 (Moody) (31 December 2019: Aa1 (Moody)). Deposits are placed only with the investment grade banks, licensed banks and restricted licence banks regulated by the Hong Kong Monetary Authority, and banks regulated by local banking regulators in the countries where the Group's subsidiaries operate. LME entities invest a significant portion of cash in reverse repurchase investments, where high quality assets are held against such investments as collateral.

The Group mitigates its exposure to risks relating to accounts receivable from its Participants by requiring the Participants to meet the Group's established financial requirements and criteria for admission as Participants.

53. Financial Risk Management (continued)

(c) Credit risk (continued)

Risk management - Clearing and settlement risk

The Group mitigates its exposure to clearing and settlement-related risks by requiring the Participants to meet the Group's established financial requirements and criteria for admission as Participants, monitoring compliance with risk management measures such as imposing position limits and requiring Clearing Participants to deposit margins, Mainland security and settlement deposits, and cash collateral and contribute to the Clearing House Funds set up by the Group's five clearing houses. HKSCC also retains recourse against those Participants whose securities are deposited and accepted in the CCASS depository.

Under the Margin Fund and Guarantee Fund arrangements, each HKSCC Clearing Participant is granted by HKSCC a Margin Credit of \$5 million and a Dynamic Contribution Credit of \$1 million, and each HKCC Clearing Participant is granted a Dynamic Contribution Credit of HKCC Reserve Fund of \$1 million. If a HKSCC or HKCC Clearing Participant defaults and any loss arises, HKSCC will absorb the default loss up to the Margin Credit and Dynamic Contribution Credit utilised by the defaulting HKSCC Clearing Participant, after deducting its collateral and Guarantee Fund contribution maintained with HKSCC, and HKCC will absorb the default loss up to the Dynamic Contribution Credit utilised by the defaulting HKCC Clearing Participant, after deducting its collateral and Reserve Fund contribution maintained with HKCC. After the initial losses, HKSCC is required to absorb further losses after the HKSCC Guarantee Fund reserve and the Guarantee Fund contribution (excluding the Dynamic Contribution portion) of non-defaulting HKSCC Clearing Participants are depleted, and HKCC is required to absorb further losses after the HKCC Reserve Fund reserve and the Reserve Fund contribution (excluding the Dynamic Contribution portion) of non-defaulting HKCC Clearing Participants are depleted. The amount of losses borne by HKSCC and HKCC will be calculated on a pro rata basis with reference to the non-defaulting HKSCC and HKCC Clearing Participants' Dynamic Contributions and Dynamic Contribution Credits granted by HKSCC and HKCC respectively.

At 31 December 2020, HKSCC had 643 Clearing Participants (31 December 2019: 647) and the total amounts of Margin Credit and Dynamic Contribution Credit utilised by HKSCC Clearing Participants amounted to \$1,212 million (31 December 2019: \$949 million), while HKCC had 166 Clearing Participants (31 December 2019: 169) and the total amount of Dynamic Contribution Credit utilised by HKCC Clearing Participants amounted to \$58 million (31 December 2019: \$65 million).

The HKSCC Margin Credit and Dynamic Contribution Credit and the HKCC Dynamic Contribution Credit are supported by the \$4,000 million of shareholders' funds set aside by the HKEX Group for risk management purpose, of which \$1,060 million and \$830 million were injected into HKSCC and HKCC respectively.

53. Financial Risk Management (continued)

(c) Credit risk (continued)

Exposure

At 31 December, the maximum exposure to credit risk of the financial assets of the Group was equal to their carrying amounts. The maximum exposure to credit risk of the financial guarantee contract issued by the Group was as follows:

	At 31 De	c 2020	At 31 Dec	: 2019
	Carrying amount in consolidated statement of financial position \$m	Maximum exposure to credit risk \$m	Carrying amount in consolidated statement of financial position \$m	Maximum exposure to credit risk \$m
Financial guarantee contract Undertaking to indemnify the Collector of Stamp Revenue				
(note 49(b))	(20)	127	(20)	132

Collateral held for mitigating credit risk

Certain securities, cash deposits and non-cash collateral are being held by the Group to mitigate the Group's exposure to credit risk. The financial effect of the collateral, which is capped by the amount receivable from each counterparty, was as follows:

	At 31 Dec 2	2020	At 31 Dec 2	019
	Carrying		Carrying	
	amount in		amount in	
	consolidated	Collateral	consolidated	Collateral
	statement of	held for	statement of	held for
	financial	mitigating	financial	mitigating
	position	credit risk	position	credit risk
	\$m	\$m	\$m	\$m
Accounts receivable and				
deposits ¹	46,884	11,953	25,680	6,914
Fair value of base, ferrous and				
precious metals futures and				
options contracts cleared				
through LME Clear	92,884	92,884	48,008	48,008
Reverse repurchase investments	84,981	84,981	66,291	66,291

¹ Amounts exclude prepayments of \$196 million (31 December 2019: \$132 million).

53. Financial Risk Management (continued)

- (d) Fair values of financial assets and financial liabilities
 - (i) Financial assets and financial liabilities carried at fair value

At 31 December 2020 and 31 December 2019, no non-financial assets or liabilities were carried at fair values.

The following tables present the carrying value of financial assets and financial liabilities measured at fair value according to the levels of the fair value hierarchy defined in HKFRS 13: Fair Value Measurement, with the fair value of each financial asset and financial liability categorised based on the lowest level of input that is significant to that fair value measurement. The levels are defined as follows:

- Level 1: fair values measured using quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: fair values measured using valuation techniques in which all significant inputs other than quoted prices included within Level 1 are directly or indirectly based on observable market data.
- Level 3: fair values measured using valuation techniques in which any significant input is not based on observable market data.

53. Financial Risk Management (continued)

- (d) Fair values of financial assets and financial liabilities (continued)
 - (i) Financial assets and financial liabilities carried at fair value (continued)

	At 31 Dec 2020			At 31 Dec 2019				
Recurring fair value measurements:	Level 1 \$m	Level 2 \$m	Level 3 \$m	Total \$m	Level 1 \$m	Level 2 \$m	Level 3 \$m	Total \$m
Financial assets								
Financial assets measured at fair value through profit or loss:								
- collective investment schemes	1,131	6,362	-	7,493	2,647	6,696	-	9,343
- equity securities	-	-	220	220	-	-	50	50
base, ferrous, and precious metals futures and options contracts cleared through LME Clear Financial assets measured at fair value through other comprehensive income:	-	92,884	-	92,884	-	48,008	-	48,008
- debt securities	5,439	2,503	-	7,942	3,059	1,510	-	4,569
	6,570	101,749	220	108,539	5,706	56,214	50	61,970
Financial liabilities								
Financial liabilities at fair value through profit or loss:								
base, ferrous, and precious metals futures and options contracts cleared through LME Clear		02 004		02 994		40.000		48,008
LIVIE Clear		92,884	-	92,884		48,008	-	40,000

During 2020 and 2019, there were no transfers of instruments between Level 1 and Level 2 or transfer into or out of Level 3.

Level 2 fair values of collective investment schemes, debt securities, base, ferrous and precious metals futures and options contracts have been determined based on quotes from market makers, funds administrators or alternative pricing sources supported by observable inputs. The most significant input are market interest rates, market prices of metals, net asset values and latest redemption prices or transaction prices of the respective collective investment schemes.

The Group's policy is to recognise transfers into and out of fair value hierarchy levels as of the date of the event or change in circumstances that caused the transfer.

53. Financial Risk Management (continued)

- (d) Fair values of financial assets and financial liabilities (continued)
 - (i) Financial assets and financial liabilities carried at fair value (continued)

Fair value measurements using significant unobservable inputs (Level 3)

	2020 \$m	2019 \$m
At 1 Jan	50	-
Investment in minority stakes in unlisted companies	160	50
Gains recognised in other comprehensive income	10	-
At 31 Dec	220	50
Total gains or losses recognised in the consolidated income statement for assets held at 31 Dec	-	-

Level 3 valuations are prepared on bi-annually basis, at each interim and annual reporting date, by a team in the Finance Division. The assumptions and inputs to the valuation model, the valuation techniques and the valuation results are reviewed and approved by management.

The following table summarises the basis of valuation used in level 3 fair value measurements:

_	Fair va	alue			
Description	31 Dec 2020 \$m	31 Dec 2019 \$m	Valuation technique	Unobservable inputs	Range
Minority stake in Fusion Bank Limited	100	50	Market approach	N/A	N/A
Minority stake in Huakong TsingJiao Information Science (Beijing) Limited	120	-	Market approach	N/A	N/A
Total	220	50			

Fusion Bank Limited has a virtual banking license granted by the Hong Kong Monetary Authority. The investment is not traded in an active market. The company launched its virtual banking platform in 2020, offering a variety of banking services including savings, time deposits, local fund transfers and foreign exchange. At 31 December 2020, the latest fair value was based on recent market transactions.

Huakong TsingJiao Information Science (Beijing) Limited is a data technology company, which specialises in the research and development of multi-party computation technologies, allowing collaborative data analysis without revealing private data during the computation and analysis process. Management believes that investment in the company would be one of the building blocks for HKEX in developing its data strategy. The investment is not traded in an active market. At 31 December 2020, the latest fair value was based on recent market transactions.

53. Financial Risk Management (continued)

- (d) Fair values of financial assets and financial liabilities (continued)
 - (ii) Fair values of financial assets and financial liabilities not reported at fair values

Summarised in the following table are the carrying amounts and fair values of financial assets and financial liabilities not presented in the consolidated statement of financial position at their fair values, except for lease liabilities where disclosure of fair values is not required. These assets and liabilities were classified under Level 2 in the fair value hierarchy.

At 24 Dec 2020

At 31 Dec 2010

	At 31 Dec	2020	At 31 Dec 2019		
	Carrying		Carrying		
	amount in		amount in		
	consolidated		consolidated		
	statement of		statement of		
	financial		financial		
	position	Fair value	position	Fair value	
	\$m	\$m	\$m	\$m	
Assets					
Financial assets measured at amortised					
cost:					
 debt securities maturing over one year¹ 	-	-	619	619	
 other financial assets maturing over 					
one year ²	99	94	99	79	
Liabilities					
Borrowings:					
 written put options to non-controlling 					
interests ³	423	430	418	422	
Financial guarantee to the Collector of					
Stamp Řevenue⁴	20	76	20	50	

¹ The fair values are provided by a reputable independent financial institution.

The carrying amounts of short-term financial assets and receivables (eg, accounts receivable, financial assets measured at amortised cost and cash and cash equivalents) and short-term payables (eg, accounts payable and other liabilities) approximated their fair values, and accordingly no disclosure of the fair values of these items is presented.

² The fair values are based on cash flows discounted using Hong Kong Government bond rates of a tenor similar to the contractual maturity of the respective assets, adjusted by an estimated credit spread. The discount rates used ranged from 0.12 per cent to 0.60 per cent at 31 December 2020 (31 December 2019: 2.44 per cent to 2.58 per cent).

³ The fair values are based on cash flows discounted using the prevailing market interest rates for loans with similar credit rating and similar tenor of the respective loans. The discount rate used was 1.19 per cent at 31 December 2020 (31 December 2019: 2.82 per cent to 2.99 per cent).

⁴ The fair values are based on the fees charged by financial institutions for granting such guarantees discounted to perpetuity using a ten-year Hong Kong Government bond rate, adjusted by an estimated credit spread, but capped at the maximum exposure of the financial guarantee. The discount rate used was 2.10 per cent at 31 December 2020 (31 December 2019: 3.26 per cent).

53. Financial Risk Management (continued)

(e) Offsetting financial assets and financial liabilities

Accounting Policy

Financial assets and liabilities are offset and the net amount reported in the consolidated statement of financial position when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business and in the event of default, insolvency or bankruptcy of the company or the counterparty.

For base, ferrous and precious metals futures and options contracts cleared through LME Clear, the asset and liability positions of LME Clear arising through its activities as a central counterparty are matched. Therefore, the same amounts are recorded for both assets and liabilities with the fair value gains and losses recognised, but offset, in the consolidated income statement.

The disclosures set out in the tables below include financial assets and financial liabilities that:

- · are offset in the Group's consolidated statement of financial position; or
- are subject to an enforceable master netting arrangement or similar agreement that covers similar financial instruments, irrespective of whether they are offset in the consolidated statement of financial position.

53. Financial Risk Management (continued)

- (e) Offsetting financial assets and financial liabilities (continued)
 - (i) Financial assets and financial liabilities subject to offsetting, enforceable master netting arrangements or similar agreements

		At 31 Dec 2020						
				Related amo offse				
		0	Net	in the conso				
		Gross amount	amount presented	position				
		offset in the	in the	Amounts				
		consolidated statement of	consolidated statement of	subject to master				
	Gross	financial	financial	netting	Cash	Net		
Type of financial	amount	position	position ³	arrangements	collateral	amount		
instruments	\$m	\$m	\$m	\$m	\$m	\$m		
Financial assets:								
CNS money obligations receivable ¹	489,300	(456 200)	32,910	(40.424)	(0.000)	14,767		
Base, ferrous and precious	409,300	(456,390)	32,910	(10,134)	(8,009)	14,767		
metals futures and options								
contracts cleared through								
LME Clear ²	1,556,627	(1,463,743)	92,884	(38,673)	(54,211)	-		
Other accounts receivable								
from Participants, ChinaClear, information								
vendors and hosting								
services customers, net of								
provision for impairment								
losses	878	-	878	-	(140)	738		
Total	2,046,805	(1,920,133)	126,672	(48,807)	(62,360)	15,505		
Financial liabilities:								
CNS money obligations								
payable ¹	495,510	(456,390)	39,120	(10,134)	-	28,986		
Base, ferrous and precious metals futures and options								
contracts cleared through								
LME Clear ²	1,556,627	(1,463,743)	92,884	(38,673)		54,211		
Total	2,052,137	(1,920,133)	132,004	(48,807)	-	83,197		

53. Financial Risk Management (continued)

- (e) Offsetting financial assets and financial liabilities (continued)
 - (i) Financial assets and financial liabilities subject to offsetting, enforceable master netting arrangements or similar agreements (continued)

			At 31 De	c 2019		
				Related amo	unts not	
				offset	t	
			Net	in the conso	olidated	
		Gross	amount	statement of	financial	
		amount	presented	position	on	
		offset in the	in the	Amounts		
		consolidated	consolidated	subject to		
		statement of	statement of	master		
	Gross	financial	financial	netting	Cash	Net
Type of financial	amount	position	position ³	arrangements	collateral	amount
instruments	\$m	\$m	\$m	\$m	\$m	\$m
Financial assets:						
CNS money obligations						
receivable ¹	244,632	(225,902)	18,730	(3,249)	(5,267)	10,214
Base, ferrous and precious						
metals futures and options						
contracts cleared through						
LME Clear ²	967,485	(919,477)	48,008	(32,429)	(15,579)	-
Other accounts receivable						
from Participants,						
ChinaClear, information						
vendors and hosting						
services customers, net of						
provision for impairment						
losses	502	-	502	-	(106)	396
Total	1,212,619	(1,145,379)	67,240	(35,678)	(20,952)	10,610
Financial liabilities:						
CNS money obligations						
payable ¹	245,978	(225,902)	20,076	(3,249)	=	16,827
Base, ferrous and precious						
metals futures and options						
contracts cleared through						
LME Clear ²	967,485	(919,477)	48,008	(32,429)	-	15,579
Total	1,213,463	(1,145,379)	68,084	(35,678)	-	32,406

¹ HKSCC currently has a legally enforceable right to set off certain CNS money obligations receivable and payable relating to the same Clearing Participant and it intends to settle on a net basis.

² LME Clear has a legally enforceable right to set off open positions of certain contracts within an individual member's account for those contracts settling on the same date and it intends to settle on a net basis.

³ For the net amounts of CNS money obligations receivable or payable and net fair value of base, ferrous and precious metals futures and options contracts (ie, after set-off) and other accounts receivable due from customers, they do not meet the criteria for offsetting in the consolidated statement of financial position since the right of set-off of the recognised amounts is only enforceable following an event of default of the customers. In addition, the Group does not intend to settle the balances on a net basis.

53. Financial Risk Management (continued)

- (e) Offsetting financial assets and financial liabilities (continued)
 - (ii) The tables below reconcile the "net amounts of financial assets and financial liabilities presented in the consolidated statement of financial position", as set out above, to the "accounts receivable, prepayments and deposits", "accounts payable, accruals and other liabilities", "financial assets measured at fair value through profit or loss" and "financial liabilities at fair value through profit or loss" presented in the consolidated statement of financial position.

	A	a a is salala	Financial assets		
	Accounts re prepayments a	•	fair va	profit or loss	
-	At	At	At	At	
	31 Dec 2020	31 Dec 2019	31 Dec 2020	31 Dec 2019	
	\$m	\$m	\$m	\$m	
Net amount of financial assets after					
offsetting as stated above:					
- CNS money obligations receivable	32,910	18,730	-	-	
- Other accounts receivable from					
Participants, ChinaClear,					
information vendors and hosting					
services customers, net of provision					
for impairment losses	878	502	-	-	
- Base, ferrous and precious metals					
futures and options contracts					
cleared through LME Clear	-	-	92,884	48,008	
Financial assets not in scope of offsetting					
disclosures	13,096	6,448	7,713	9,393	
Prepayments	196	132	-	-	
Amounts presented in the consolidated					
statement of financial position	47,080	25,812	100,597	57,401	

	Accounts payable, accruals and other liabilities at fair very other liabilities through profit or loss				
	At	At	At	At	
	31 Dec 2020	31 Dec 2019	31 Dec 2020	31 Dec 2019	
	\$m	\$m	\$m	\$m	
Net amount of financial liabilities after offsetting as stated above:					
 CNS money obligations payable Base, ferrous and precious metals futures and options contracts 	39,120	20,076	-	-	
cleared through LME Clear	-	-	92,884	48,008	
Financial liabilities not in scope of offsetting disclosures	3,854	2,371	-	-	
Amounts presented in the consolidated statement of financial position	42,974	22,447	92,884	48,008	

54. Statement of Financial Position and Reserve Movements of HKEX

Accounting Policy

In HKEX's statement of financial position, investments in subsidiaries are stated at cost less impairment losses, if necessary. The results of subsidiaries are accounted for by HKEX on the basis of dividends received and receivable.

Investment in a subsidiary is tested for impairment upon receiving a dividend from that subsidiary if the dividend exceeds the total comprehensive income of the subsidiary concerned in the period the dividend is declared or if the carrying amount of the subsidiary in HKEX's statement of financial position exceeds the carrying amount of the subsidiary's net assets.

The financial statements of the controlled special purpose entity, The HKEx Employees' Share Award Scheme, are included in HKEX's financial statements.

Written put options to non-controlling interests initially recognised at fair value are accounted for as an investment in subsidiaries with a corresponding credit to financial liabilities at fair value through profit or loss. Subsequent changes in fair value of the financial liabilities are recognised in HKEX's income statement. Written put options to non-controlling interests are included under financial liabilities at fair value through profit or loss on the statement of financial position.

54. Statement of Financial Position and Reserve Movements of HKEX (continued)

Statement of Financial Position of HKEX

		At 31 Dec 2020)	Д	At 31 Dec 2019		
	Current	Non-current	Total	Current	Non-current	Total	
	\$m	\$m	\$m	\$m	\$m	\$m	
ASSETS							
Cash and cash equivalents Financial assets measured at	4,057	-	4,057	2,309	-	2,309	
fair value through profit or loss Financial assets measured at	7,197	296	7,493	8,721	622	9,343	
amortised cost Accounts receivable,	7,263	74	7,337	3,856	75	3,931	
prepayments and deposits	96	21	117	62	21	83	
Amounts due from subsidiaries	1,008	11,581	12,589	798	11,822	12,620	
Interests in joint ventures	, -	114	114	_	114	114	
Intangible assets	_	457	457	<u>-</u>	340	340	
Fixed assets	_	434	434	<u>-</u>	446	446	
Right-of-use assets	_	1,867	1,867	_	1,985	1,985	
Investments in subsidiaries	_	15,451	15,451	_	15,141	15,141	
Total assets	19,621	30,295	49,916	15,746	30,566	46,312	
LIABILITIES AND EQUITY	-,-		-,-	-, -	,	-,-	
Liabilities							
Financial liabilities at fair value							
through profit or loss	347	-	347	325	-	325	
Accounts payable, accruals and							
other liabilities	994	-	994	528	-	528	
Amounts due to subsidiaries	345	-	345	269	-	269	
Taxation payable	299	-	299	236	-	236	
Other financial liabilities	11	-	11	11	-	11	
Lease liabilities	211	1,745	1,956	189	1,867	2,056	
Provisions	103	63	166	81	66	147	
Deferred tax liabilities	-	90	90	-	57	57	
Total liabilities	2,310	1,898	4,208	1,639	1,990	3,629	
Equity							
Share capital			31,891			30,449	
Shares held for Share Award							
Scheme			(485)			(770)	
Employee share-based			222			250	
compensation reserve			232			250	
Merger reserve			694			694	
Retained earnings			13,376			12,060	
Equity attributable to shareholders of HKEX			45,708			42,683	
Total liabilities and equity			49,916			46,312	
Net current assets			17,311			14,107	

Approved by the Board of Directors on 24 February 2021

Laura M CHA

Director

TAl Chi Kin, Calvin

Director

54. Statement of Financial Position and Reserve Movements of HKEX (continued)

(a) Reserve movements of HKEX

	Employee share-based compensation reserve \$m	Merger reserve \$m	Retained earnings \$m
At 1 Jan 2019	218	694	11,668
Profit attributable to shareholders	-	-	8,886
2018 second interim dividend at \$3.07 per share	-	-	(3,830)
2019 first interim dividend at \$3.72 per share	-	-	(4,668)
Unclaimed HKEX dividends forfeited	-	-	19
Vesting of shares of Share Award Scheme	(208)	-	(15)
Employee share-based compensation benefits	240	-	-
At 31 Dec 2019	250	694	12,060
At 1 Jan 2020	250	694	12,060
Profit attributable to shareholders	-	-	9,779
2019 second interim dividend at \$2.99 per share	-	-	(3,761)
2020 first interim dividend at \$3.71 per share	-	-	(4,692)
Unclaimed HKEX dividends forfeited	-	-	21
Vesting of shares of Share Award Scheme	(299)	-	(31)
Employee share-based compensation benefits	281	<u>-</u>	-
At 31 Dec 2020	232	694	13,376

APPENDIX II

REPRODUCTION OF THE PRESS RELEASE DATED 10 FEBRUARY 2021 CONTAINING THE GUARANTOR'S CONSOLIDATED FINANCIAL RESULTS FOR THE FOURTH QUARTER ENDED 31 DECEMBER 2020

The information set out below is a reproduction of the press release dated 10 February 2021 containing the Guarantor's consolidated financial results for the fourth quarter ended 31 December 2020.



RESULTS AT DECEMBER 31ST 2020

Press release

Paris, February 10th 2021

Q4 20: CONFIRMATION OF THE IMPROVEMENT OF THE COMMERCIAL AND FINANCIAL PERFORMANCES

Resilience of revenues in an environment still marked by the crisis (+1.6%* vs. Q3 20, -2.3%* vs. Q4 19)

Continued discipline in cost management (-3.0%^{(1)*} vs. Q4 19) with a positive jaws effect

Cost of risk at 54 basis points resulting from the very good performance of the loan portfolio while including prudent provisioning

Underlying Group net income of EUR 631m (EUR 470m on a reported basis)

2020: RESPONSIBLE MANAGEMENT OF THE CRISIS, RESILIENCE OF THE BUSINESSES AND SOLIDITY OF THE BALANCE SHEET

Ongoing support for customers, exceptional mobilisation of employees

Underlying Group net income of EUR 1.4bn (reported result EUR -258m)

Underlying operating expenses of EUR 16.5bn⁽¹⁾ (-5.2%⁽¹⁾ vs. 2019)

Cost of risk contained at 64 basis points (including EUR 1.4bn of provisioning on performing loans, i.e. 41% of the total)

Disciplined capital management: CET1 ratio at 13.4%⁽²⁾, around 440 basis points above the regulatory requirement)

Payment of a cash dividend calculated in accordance with the maximum authorised by the European Central Bank (ECB) recommendation: EUR 0.55 per share

Share buy-back programme, in Q4 21, for an amount equivalent to the amount assigned to the dividend payment (around EUR 470m, i.e. an impact of around 13 basis points on the Group's CET1 ratio), subject to the non-renewal of the ECB's recommendation and the authorisation for its implementation

2021 PRIORITY: DISCIPLINED EXECUTION OF THE STRATEGIC ROADMAP

First year of preparation of the merger of the Societe Generale and Crédit du Nord networks Finalisation of the repositioning of Global Markets

Ramping up of growth drivers

Further development of **Corporate Social Responsibility** dynamics

Increased operational efficiency efforts mainly through the digitalisation of processes

Frédéric Oudéa, the Group's Chief Executive Officer, commented:

"The Q4 results provide further confirmation of the rebound in our businesses observed in Q3 after a beginning of the year marked by the impacts of the COVID crisis. Confident in the quality of our franchises and our balance sheet, drawing on the exceptional commitment of our teams, in H2 we defined ambitious and value-creating strategic trajectories for our businesses, demonstrating our ability to adapt and transform in a durably more uncertain environment. We are therefore entering 2021 with confidence and determination with, as a priority, the execution of our strategic roadmap. Consistent with our raison d'être, we will continue to support our customers in all the transformations accelerated by this crisis, whether they concern the growing use of digital technologies or increased attention to corporate social responsibility issues."

⁽¹⁾ Underlying data (see methodology note No. 5 for the transition from accounting data to underlying data)

⁽²⁾ Phased-in ratio; fully-loaded ratio of 13.2%

The footnote * in this document corresponds to data adjusted for changes in Group Structure and at constant exchange rates

1. GROUP CONSOLIDATED RESULTS

In EURm	Q4 20	Q4 19	Cha	inge	2020	2019	Cha	ange
Net banking income	5,838	6,213	-6.0%	-2.3%*	22,113	24,671	-10.4%	-7.6%*
Operating expenses	(4,351)	(4,503)	-3.4%	-0.2%*	(16,714)	(17,727)	-5.7%	-3.4%*
Underlying operating expenses(1)	(4,318)	(4,595)	-6.0%	-3.0%*	(16,504)	(17,411)	-5.2%	-2.8%*
Gross operating income	1,487	1,710	-13.0%	-7.8%*	5,399	6,944	-22.2%	-18.8%*
Underlying gross operating income(1)	1,520	1,618	-6.0%	-0.1%*	5,609	7,260	-22.7%	-19.5%*
Net cost of risk	(689)	(371)	+85.7%	+92.4%*	(3,306)	(1,278)	x 2.6	x 2.7*
Underlying net cost of risk (1)	(669)	(371)	+80.3%	+86.8%*	(3,286)	(1,260)	x 2.6	x 2.7*
Operating income	798	1,339	-40.4%	-36.4%*	2,093	5,666	-63.1%	-61.6%*
Underlying operating income(1)	851	1,247	-31.7%	-26.8%*	2,323	6,000	-61.3%	-59.8%*
Net profits or losses from other assets	(94)	(125)	+24.8%	+24.9%*	(12)	(327)	+96.3%	+96.3%*
Underlying net profits or losses from other assets(1)	7	12	-41.7%	-40.7%*	166	59	x 2.8	X2.8*
Net income from companies accounted for by the equity method	3	(154)	n/s	n/s	3	(129)	n/s	n/s
Underlying net income from companies accounted for by the equity method(1)	3	4	n/s	n/s	3	29	n/s	n/s
Impairment losses on goodwill	0	0	n/s	n/s	(684)	0	n/s	n/s
Income tax	(125)	(230)	-45.7%	-46.9%*	(1,204)	(1,264)	-4.8%	+9.2%*
Reported Group net income	470	654	-28.1%*	-17.6%*	(258)	3,248	n/s	n/s
Underlying Group net income(1)	631	875	-27.9%	-20.3%*	1,435	4,061	-64.7%	-63.9%*
ROE	2.4%	3.7%			-1.7%	5.0%		
ROTE	2.7%	5.0%			-0.4%	6.2%	-	
Underlying ROTE (1)	4.1%	6.2%			1.7%	7.6%	-	

⁽¹⁾ Adjusted for exceptional items and linearisation of IFRIC 21

Societe Generale's Board of Directors, which met on February 9th, 2021, under the chairmanship of Lorenzo Bini Smaghi, examined the Societe Generale Group's results for Q4 and approved the results for full-year 2020.

The various restatements enabling the transition from underlying data to published data are presented in the methodology notes (section 10.5).

Net banking income

2020 was impacted by a global health crisis resulting in net banking income for the Group of EUR 22,113 million, down -7.6%* vs. 2019. After a H1 marked by the effects of the health crisis and the dislocation of businesses, the performance of the three business divisions improved significantly in H2, in a still uncertain environment.

Net banking income (excluding PEL/CEL provision) for French Retail Banking was up +2% in H2 2020 vs. H1, with a full-year contraction of -6.1% vs. 2019. The dynamic rebound in H2 was also observed on International Retail Banking & Financial Services' revenues (+2.6%* vs. H1 20); its full-year trend was -2.9%*.

There was also a sharp rebound in Global Banking & Investor Solutions' net banking income in H2 (+17% vs. H1) against the backdrop of the normalisation of market conditions. Revenues were down -12.5% (-11.8%*) in 2020.

Q4 confirmed the improvement in revenues observed in Q3, despite the worsening health crisis in several regions. The three business divisions contributed to the growth in the Group's net banking income which came to EUR 5,838 million, up +1.6%* when adjusted for changes in Group structure and at constant exchange rates vs. Q3 20.

Operating expenses

Underlying operating expenses were substantially lower in 2020 at EUR 16,504 million (-5.2% vs. 2019, -2.8%*), in line with the full-year target.

Operating expenses included a EUR 210 million restructuring charge recognised in Q4 and as a result came to EUR 16,714 million, down -5.7% vs. 2019 (-3.4%*). They included a EUR 316 million restructuring provision in 2019.

All the Group's businesses contributed to this decline: French Retail Banking's costs were down -4.9% vs. 2019, those of International Retail Banking & Financial Services fell by -9.6% in 2020 and those of Global Banking & Investor Solutions by -8.7%.

The Group is committed to a decline in its underlying operating expenses as from 2023 (vs. 2020). Several initiatives, already launched, will contribute to this process with benefits already expected in 2022 (a decline in underlying costs of around EUR 450 million in Global Markets between now and 2022/2023 and around EUR 450 million in French Retail Banking by 2025 - with around 80% already expected to be achieved in 2024 - as well as additional reductions expected in particular following the finalisation of remediation efforts and the industrialisation of processes).

In 2021, the Group intends to continue to strictly manage its costs and is aiming for a positive jaws effect with costs slightly higher.

Underlying operating expenses totalled EUR 4,318 million in Q4 20, down -6.0% vs. Q4 19, after restatement of a restructuring charge of EUR 210 million and an IFRIC 21 adjustment charge of EUR -177 million. Underlying operating expenses were down -3% when adjusted for changes in Group structure and at constant exchange rates, enabling a positive jaws effect.

Cost of risk

The commercial cost of risk amounted to 64 basis points in 2020, representing a net cost of risk of EUR 3,306 million (vs. EUR 1,278 million in 2019). This rise can be attributed primarily to an increase in provisions in respect of performing loans (classified in Stage 1 and Stage 2) for a total amount of EUR 1,367 million, including an impact of EUR 1,010 million related to the review of macro-economic scenarios.

The gross doubtful outstandings ratio remained at low levels throughout the year and amounted to 3.3%⁽¹⁾ at December 31st 2020 (3.1% at December 31st 2019). The Group's gross coverage ratio for doubtful outstandings stood at 52%⁽²⁾ at December 31st 2020 (56% at December 31st 2019).

In Q4, the commercial cost of risk stood at 54 basis points (40 basis points in Q3 20 and 29 basis points in Q4 19). The net cost of risk of EUR 689 million includes provisions related to loans classified in performing (Stage 1 and Stage 2) for a total amount of EUR 367 million.

The total amount of repayment moratoriums, within the meaning of the EBA definition, granted at end-September 2020 was around EUR 35 billion, with around EUR 5 billion still in force at December 31st 2020. Of the total repayment moratoriums granted at 31 December 2020, 2.2% were classified in Stage 3 (creditimpaired loans).

- (1) NPL ratio calculated according to the new EBA methodology
- (2) Ratio between the amount of provisions on doubtful outstandings and the amount of these same outstandings.

The Group also granted EUR 19 billion of State-guaranteed loans in all geographies o/w EUR 18 billion in France. Net exposure of the Group on State-guaranteed loans in France ("*PGE*") is around EUR 2 billion. At 31 December 2020, 2.3% of State-guaranteed loans are classified in Stage 3 (non-performing loans).

The Group expects a lower commercial cost of risk in 2021 than in 2020.

Net profits or losses from other assets

Net profits or losses from other assets totalled EUR -12 million in 2020 and EUR -94 million in Q4 20.

Group net income

In EURm	Q4 20	Q4 19	2020	2019
Reported Group net income	470	654	(258)	3,248
Underlying Group net income(1)	631	875	1,435	4,061

In %	Q4 20	Q4 19	2020	2019
ROTE (reported)	2.7%	5.0%	-0.4%	6.2%
Underlying ROTE ⁽¹⁾	4.1%	6.2%	1.7%	7.6%

Distribution to shareholders

The Board of Directors has decided to propose the payment of a dividend of EUR 0.55 per share in cash to the Ordinary General Meeting of Shareholders on May 18th, 2021, in accordance with the methodology recommended by the European Central Bank (ECB). The dividend will be detached on May 25th, 2021 and paid on May 27th, 2021.

The Group intends to launch a share buy-back programme, in Q4 2021, for an amount equivalent to the amount assigned to the dividend payment (around EUR 470m, i.e. an impact of around 13 basis points on the Group's CET1 ratio), subject to the non-renewal of the ECB's recommendation and the authorisation for its implementation. The fully loaded pro forma ratio would be 13% at end-December 2020 (phased-in pro-forma ratio of 13.3%).

Additional information

Societe Generale's Board of Directors, which met on January 14th, 2021, decided to submit to the May 2024 General Meeting of Shareholders that will approve the financial statements for the 2023 financial year, the appointment of the firms KPMG and PwC as from January 1st, 2024 as statutory auditors for a 6-year term to replace the firms Deloitte and EY, whose terms of office will expire and can no longer be renewed in accordance with legal provisions. This decision follows a tender process managed under the supervision of the audit and internal control committee. The committee interviewed all the candidates and made its choice independently of the management. It presented the possible different choices to the Board of Directors before formulating its proposal.

⁽¹⁾ Underlying data. See methodology note No. 5 for the transition from accounting data to underlying data

2. THE GROUP'S FINANCIAL STRUCTURE

Group **shareholders' equity** totalled EUR 61.7 billion at December 31st, 2020. Net asset value per share was EUR 62.3 and tangible net asset value per share was EUR 54.8.

The **consolidated balance sheet** totalled EUR 1,462 billion at December 31st, 2020. The net amount of customer loan outstandings at December 31st, 2020, including lease financing, was EUR 440 billion (EUR 430 billion at December 31st, 2019) – excluding assets and securities purchased under resale agreements. At the same time, customer deposits amounted to EUR 451 billion, vs. EUR 410 billion at December 31st, 2019 (excluding assets and securities sold under repurchase agreements).

At end-December 2020, the parent company had issued EUR 34.3 billion of medium/long-term debt (including EUR 3.9 billion of pre-financing for the 2021 programme), having an average maturity of 5.4 years and an average spread of 59 basis points (vs. the 6-month midswap, excluding subordinated debt). The subsidiaries had issued EUR 2.9 billion. At December 31st, 2020, the Group had issued a total of EUR 37.2 billion of medium/long-term debt. The LCR (Liquidity Coverage Ratio) was well above regulatory requirements at 149% at end-December 2020 (153% on average for the quarter), vs. 119% at end-December 2019. At the same time, the NSFR (Net Stable Funding Ratio) was over 100% at end December 2020.

The Group's **risk-weighted assets** (RWA) amounted to EUR 352.4 billion at December 31st, 2020 (vs. EUR 345.0 billion at end-December 2019) according to CRR/CRD4 rules. Risk-weighted assets in respect of credit risk represent 81.7% of the total, at EUR 287.9 billion, up 1.9% vs. December 31st, 2019.

At December 31st, 2020, the Group's **Common Equity Tier 1** ratio stood at 13.4% (or around 440 basis points above the regulatory requirement). The CET1 ratio at December 31st, 2020 includes an effect of +28 basis points for phasing of the IFRS 9 impact. Excluding this effect, the fully-loaded ratio amounts to 13.2%. The Tier 1 ratio stood at 15.7%⁽¹⁾ at end-December 2020 (15.1% at end-December 2019) and the total capital ratio amounted to 18.9%⁽¹⁾ (18.3% at end-December 2019).

The Group aims to operate with a CET1 ratio more than 200 basis points above the regulatory requirement, including after the entry into force of the regulation finalising the Basel III reform whose impact is expected to be around EUR 39 billion⁽²⁾ as from 2023, or around 115 basis points⁽³⁾

In 2021, the CET1 ratio is expected to be at a level significantly higher than 200 basis points above the regulatory requirement.

The **leverage ratio** stood at 4.7%⁽¹⁾ at December 31st, 2020 (4.3% at end-December 2019).

With a level of $30.6\%^{(1)}$ of RWA and $9.2\%^{(1)}$ of leveraged exposure at end-December 2020, the Group's TLAC ratio is above the FSB's requirements for 2020. At December $31^{\rm st}$, 2020, the Group was also above its MREL requirements of 8.51% of the TLOF⁽⁴⁾ (which, in December 2017, represented a level of 24.4% of RWA), which were used as a reference for the SRB calibration.

The Group is rated by four rating agencies: (i) Fitch Ratings - long-term rating "A-", stable outlook, senior preferred debt rating "A", short-term rating "F1"; (ii) Moody's – long-term rating (senior preferred debt) "A1", stable outlook, short-term rating "P-1"; (iii) R&I - long-term rating (senior preferred debt) "A", stable outlook; and (iv) S&P Global Ratings - long-term rating (senior preferred debt) "A", negative outlook, short-term rating "A-1".

⁽¹⁾ Excluding IFRS 9 phasing

⁽²⁾ Including the credit risk, FRTB, operational risk and taking into account the main EU-specific assumptions communicated by the EBA in response to the European Commission's consultation paper (published in December 2020) and excluding the output floor which would not be binding before 2027/2028 (3) On a prospective basis in 2023

⁽⁴⁾ Total Liabilities and Own Funds

3. FRENCH RETAIL BANKING

In EURm	Q4 20	Q4 19	Change	2020	2019	Change
Net banking income	1,845	1,957	-5.7%	7,315	7,746	-5.6%
Net banking income excl. PEL/CEL	1,870	1,969	-5.0%	7,381	7,863	-6.1%
Operating expenses	(1,443)	(1,491)	-3.2%	(5,418)	(5,700)	-4.9%
Gross operating income	402	466	-13.7%	1,897	2,046	-7.3%
Net cost of risk	(276)	(149)	+85.2%	(1,097)	(467)	X2.3
Operating income	126	317	-60.3%	800	1,579	-49.3%
Reported Group net income	104	230	-54.8%	666	1,131	-41.1%
RONE	3.7%	8.2%		5.8%	10.0%	
Underlying RONE (1)	3.5%	9.3%		6.2%	11.1%	_

⁽¹⁾ Adjusted for the linearisation of IFRIC 21 and PEL/CEL provision

After the substantial impact of the lockdown on activity at the beginning of the year, French Retail Banking's commercial performance continued to improve in Q4.

The brands continued to expand their activity in the core businesses

French Retail Banking continued to support the economy, accompanying individual, corporate and professional customers.

In the Corporate and Professional customers segment, the Bank supported its customers in France primarily through granting State Guaranteed Loans (PGE), for which it received more than 98,200 applications for a total disbursed amount of EUR 18 billion.

Life insurance saw its inflow grow by +7.5% vs. Q3 20, with the unit-linked share accounting for 39% of new business in Q4 20. Property/casualty premiums and protection insurance delivered good performances, with premiums up +3.9% vs. 2019. The number of personal protection policies was up +5.3% vs. 2019.

Private Banking's net inflow remained buoyant at EUR 553 million in Q4 20 and EUR 2.5 billion in 2020.

Boursorama consolidated its position as the leading online bank in France, with more than 2.6 million clients at end-December 2020. Client onboarding at Boursorama reached a record level, with around 590,000 new clients in 2020 including around 192,000 in Q4 20. Housing loan production experienced strong growth of +22% vs. Q4 19, with a record level in Q4 20. In addition, the number of stock market orders tripled compared to 2019.

Average investment loan outstandings (including leases), rose 25.0% vs. Q4 19 to EUR 88.9 billion (+2.3% excluding State Guaranteed Loans). Average outstanding loans to individuals were up 2.8% at EUR 123.2 billion, bolstered by housing loans which were up +3.5% vs. Q4 19.

Private Banking's assets under management totalled EUR 70.4 billion at end-December 2020. **Average outstanding balance sheet deposits**⁽¹⁾ were 15.1% higher than in Q4 19 at EUR 242.6 billion, still driven by sight deposits (+18.7% vs. Q4 19).

As a result, the average loan/deposit ratio stood at 92% in Q4 20 vs. 96% in Q4 19.

 $^{{\}it (1) Including BMTN (negotiable medium-term notes)}$

Net banking income excluding PEL/CEL

recovery in financial and service commissions.

2020: revenues (excluding PEL/CEL) totalled EUR 7,381 million, down -6.1% vs. 2019, reflecting the effects of Covid-19 and the low interest rate environment. Net interest income (excluding PEL/CEL) was $3.6\%^{(1)}$ lower and commissions declined by -5.7%⁽¹⁾.

Q4 20: revenues (excluding PEL/CEL) totalled EUR 1,870 million, up +0.7% vs. Q3 20 and down -5.0% vs. Q4 19. Net interest income (excluding PEL/CEL) was $4.2\%^{(1)}$ lower than in Q4 19 against a backdrop of low interest rates and a sharp rise in deposits. However, it picked up compared to Q3 20 (+0.4%⁽¹⁾). Commissions were $3.3\%^{(1)}$ lower than in Q4 19 but picked up compared to Q3 20 (+2.5%⁽¹⁾), with a gradual

Operating expenses

2020: operating expenses were lower at EUR 5,418 million (-4.9% vs. 2019 and -5.5% excluding Boursorama). The cost to income ratio (restated for the PEL/CEL provision) stood at 73.4%.

Q4 20: operating expenses were lower at EUR 1,443 million (-3.2% vs. Q4 19), illustrating the Group's work on costs. The cost to income ratio (after linearisation of the IFRIC 21 charge and restated for the PEL/CEL provision) stood at 78.9%.

Cost of risk

2020: the commercial cost of risk amounted to EUR 1,097 million or 52 basis points, higher than in 2019 (year in which it amounted to EUR 467 million or 24bp), divided between EUR 646 million of S1/S2 provisioning and EUR 451 million of S3 (non-performing loans) provisioning.

Q4 20: the commercial cost of risk amounted to EUR 276 million or 50 basis points. It corresponds to EUR 236 million of S1/S2 (performing/underperforming loans) provisioning and EUR 41 million of S3 (non-performing loans) provisioning.

Contribution to Group net income

2020: the contribution to Group net income totalled EUR 666 million (-41.1% vs. 2019). RONE (restated for the PEL/CEL provision) stood at 6.2% in 2020.

Q4 20: the contribution to Group net income totalled EUR 104 million. RONE (after linearisation of the IFRIC 21 charge and restated for the PEL/CEL provision) stood at 3.5% and excluding Boursorama, French Retail Banking's adjusted RONE stood at 5.0%.

⁽¹⁾ Reallocation of pro forma revenues following a change in accounting treatment in Q4 20

4. INTERNATIONAL RETAIL BANKING & FINANCIAL SERVICES

In EURm	Q4 20	Q4 19	Cha	inge	2020	2019	Cha	nge
Net banking income	1,919	2,077	-7.6%	+0.3%*	7,524	8,373	-10.1%	-2.9%*
Operating expenses	(1,018)	(1,141)	-10.8%	-2.4%*	(4,142)	(4,581)	-9.6%	-1.6%*
Gross operating income	901	936	-3.7%	+3.6%*	3,382	3,792	-10.8%	-4.5%*
Net cost of risk	(287)	(158)	+81.6%	+94.1%*	(1,265)	(588)	x 2.2	x 2.3
Operating income	614	778	-21.1%	-15.0%*	2,117	3,204	-33.9%	-29.2%*
Net profits or losses from other assets	6	1	x 6.0	x 7.9	15	3	x 5.0	x 5.5
Reported Group net income	376	463	-18.8%*	-11.7%*	1,304	1,955	-33.3%*	-27.1%*
RONE	14.9%	17.3%			12.4%	17.7%		
Underlying RONE (1)	14.3%	16.8%	_		12.4%	17.9%		

⁽¹⁾ Adjusted for the linearisation of IFRIC 21 and the restructuring provision of EUR 34 million in 2019 (including EUR 5 million in Q4 19)

In International Retail Banking, there was further confirmation of the rebound observed in H2 on loan and deposit production, despite the new lockdown measures in Q4. Outstanding loans totalled EUR 85.9 billion. They rose +2.5%* vs. end-December 2019 (-2.8% at current structure and exchange rates given, in particular, the disposal of SG Antilles and the currency effect in Russia). Outstanding deposits climbed +8.8%* (+2.0% at current structure and exchange rates) vs. December 2019, to EUR 79.6 billion.

For the Europe scope, outstanding loans were up $+2.8\%^*$ vs. December 2019 at EUR 54.9 billion (+1.0% at current structure and exchange rates), driven by the Czech Republic ($+4.6\%^*$, +1.2%) and to a lesser extent Western Europe (+2.0%). Outstanding deposits were up $+8.2\%^*$ (+5.3% at current structure and exchange rates), with a healthy momentum in the Czech Republic ($+8.9\%^*$, +5.4%).

In Russia, outstanding loans rose +2.7%* at constant exchange rates (-21.5% at current exchange rates) while outstanding deposits climbed +13.7%* (-13.0% at current exchange rates).

In Africa, Mediterranean Basin and French Overseas Territories, outstanding loans rose +1.8%* (or -2.7%) vs. December 2019. Outstanding deposits enjoyed a strong momentum, up +7.9%* (+3.4%).

In the Insurance business, the life insurance savings business saw outstandings increase +0.5%* vs. December 2019. There was confirmation of a recovery in gross life insurance inflow (+43% vs. Q3 20), with the good composition of inflow (46% of unit-linked products in Q4 20). Protection insurance increased +1.6%* vs. 2019 and +5.5%* vs. Q4 19. This growth was driven partially by an 11.0%* increase in property/casualty premiums vs. Q4 19 (+9.9%* vs. 2019) and to a lesser extent by a rise in personal protection premiums (+1.9%* vs. Q4 19, -3.3%* vs. 2019). In France, protection premiums were 8%* higher than in Q4 19.

Financial Services to Corporates delivered a resilient commercial performance. The number of contracts for Operational Vehicle Leasing and Fleet Management was stable vs. end-December 2019, at 1.76 million contracts at end-December 2020. Equipment Finance's outstanding loans were slightly lower (-0.8%*) vs. end-December 2019, at EUR 14.1 billion (excluding factoring).

Net banking income

Revenues amounted to EUR 7,524 million in 2020, down -2.9%* (-10.1%) vs. 2019. Net banking income amounted to EUR 1,919 million in Q4 20, up +0.3%* (-7.6%) vs. Q4 19. The increase of +4.1%* vs. Q3 20 illustrates the recovery in activity.

In **International Retail Banking**, net banking income totalled EUR 4,902 million in 2020, down -3.4%* (-12.3%) vs. 2019, marked in particular by reduced activity due to the lockdowns and a fall in net interest income in the Czech Republic and Romania, in conjunction with the decline in rates.

Net banking income amounted to EUR 1,236 million in Q4 20, down -3.5%* vs. Q4 19, excluding the structure effect and the currency effect (-11.2%). In Europe, revenues were down -5.9%* (-11.7%) impacted primarily by the rates in the Czech Republic and Romania in H1. However, activity remained dynamic in consumer credit, with stable revenues vs. Q4 19. Revenues (-2.5%*, -24.3%) held up well for SG Russia⁽¹⁾ despite the lockdown measures and a decline in rates, with particularly dynamic activity in housing loans (production up +18%* vs. Q4 19). Revenues were up +0.9%* (-3.0%) in Africa, Mediterranean Basin and French Overseas Territories vs. Q4 19, with a confirmed recovery in commissions. Revenues were higher in Sub-Saharan Africa in 2020 (+3%* vs. 2019).

The Insurance business saw net banking income decline by -2.1%*vs.2019, to EUR 887 million. When adjusted for the contribution to the solidarity fund in France, net banking income was down -0.9%* vs. 2019, illustrating a resilient financial performance. Gross inflow was of good quality in 2020, with the unit-linked share accounting for 44%. Net banking income was up +1.1%* (+0.9%) in Q4 20 vs. Q4 19, at EUR 224 million. The second half of 2020 was marked primarily by a rebound in gross life insurance inflow. Moreover, gross inflow continued to be of good quality, with the unit-linked contracts share accounting for 46% in Q4 20.

Financial Services to Corporates' net banking income was down -2.1%* (-7.3%) in 2020, at EUR 1,735 million. However, in 2020, ALD posted a used car sale result (EUR 201 per unit) above the guidance, while margins were higher in Equipment Finance. Financial Services to Corporates' net banking income came to EUR 459 million in Q4 20, up +11.8%* (-0.9%) vs. Q4 19.

Operating expenses

Operating expenses were down -1.6%* (-9.6%) vs. 2019. When restated for restructuring costs related to the simplification of the head office (EUR 34 million in 2019), the tax on financial assets in Romania (EUR 16 million in 2019) and the contribution to COVID guarantee funds in the Mediterranean Basin (EUR 15 million in 2020), operating expenses were 0.8%* lower than in 2019.

Operating expenses were down -2.4%* (-10.8%) in Q4 20 vs. Q4 19. When restated for the tax in Romania, operating expenses were 0.9%* lower, reflecting control of costs.

The cost to income ratio stood at 55.1% in 2020 and 53.0% in Q4 20.

In International Retail Banking, operating expenses were down -1.4%* (-10.8%) vs. 2019 and down -4.3%* (-12.8% at current structure and exchange rates) vs. Q4 19 which included the tax in Romania. For the SG Russia⁽¹⁾ scope, the rationalisation of the network and pooling initiatives helped optimise costs (-8.6%* in Q4 20 vs. Q4 19) and gross operating income (+10.9%* vs. Q4 19). For the Africa, Mediterranean Basin and French Overseas Territories scope, costs were lower (-1.8%* vs. Q4 19).

In the **Insurance business**, operating expenses rose $+2.5\%^*$ (+2.0%) vs. 2019 to EUR 356 million and were slightly higher $+0.5\%^*$, (0.0%) than in Q4 19, in conjunction with efforts to control costs.

In **Financial Services to Corporates**, operating expenses were down -0.3%* (-6.5%) vs. 2019 and were 4.4%* higher than in Q4 19 (-5.7%).

⁽¹⁾ SG Russia encompasses the entities Rosbank, Rusfinance Bank, Societe Generale Insurance, ALD Automotive and their consolidated subsidiaries.

Cost of risk

2020: the cost of risk amounted to 96 basis points (or EUR 1,265 million). It was 43 basis points in 2019. The estimate of expected credit losses in Stage 1 and Stage 2 amounts to EUR 389 million.

Q4 20: the commercial cost of risk amounted to 89 basis points in Q4 20 (or EUR 287 million), vs. 102 basis points in Q3 20, and 46 basis points in Q4 19. The Q4 cost of risk includes EUR 79 million for the estimate of expected credit losses in Stage 1 and Stage 2.

Contribution to Group net income

The contribution to Group net income totalled EUR 1,304 million in 2020 (-27.1% * , -33.3% vs. 2019) and EUR 376 million in Q4 20 (-11.7% * , -18.8% vs. Q4 19).

Underlying RONE stood at the high level of 12.4% in 2020, vs. 17.9% in 2019 and 14.3% in Q4 20 vs. 16.8% in Q4 19 (with RONE of 10.0% in International Retail Banking and 20.0% in financial services and insurance).

5. GLOBAL BANKING & INVESTOR SOLUTIONS

In EURm	Q4 20	Q4 19	Cha	ange	2020	2019	Cha	inge
Net banking income	2,072	2,186	-5.2%	-2.7%*	7,613	8,704	-12.5%	-11.8%*
Operating expenses	(1,688)	(1,773)	-4.8%	-2.3%*	(6,713)	(7,352)	-8.7%	-7.9%*
Gross operating income	384	413	-7.0%	-4.5%*	900	1,352	-33.4%	-33.0%*
Net cost of risk	(104)	(66)	+57.6%	+64.5%*	(922)	(206)	x 4.5	x 4.5
Operating income	280	347	-19.3%	-17.3%*	(22)	1,146	n/s	n/s
Reported Group net income	280	291	-3.8%*	-1.6%*	57	958	-94.1%*	-94.0%*
RONE	7.8%	8.3%			0.4%	6.3%		
Underlying RONE (1)	9.0%	6.5%	-		1.3%	7.4%	_	

⁽¹⁾ Adjusted for restructuring charges in 2020 (EUR 157m), the restructuring provision in 2019 (EUR 227m) and the linearisation of IFRIC 21

Net banking income

2020: Global Banking & Investor Solutions' revenues were down -12.5% vs. 2019. When restated for the impact of restructuring in Global Markets in 2019 and the revaluation of SIX securities (EUR +66 million), they were down -10.0%.

Q4 20: net banking income was down -5.2% (-2.7%* when adjusted for changes in Group structure and at constant exchange rates) at EUR 2,072 million vs. Q4 19 and rebounded +1.9% (+2.4%*) vs. Q3 20.

In 2020, a strategic review carried out by the Group of its Global Markets business contributed to reducing the risk profile on equity and credit structured products in order to reduce the sensitivity of Global Markets' revenues to market dislocations. A cost reduction plan was also launched in 2020, with the objective of an expected net reduction of around EUR 450 million between now and 2022-2023.

In Global Markets & Investor Services, revenues were down -20.1% (-19.3%*) in 2020 vs. 2019, at EUR 4,164 million, after a H1 impacted by the health crisis. When restated for the impact of restructuring in Global Markets in 2019 and the revaluation of SIX securities, they were down -16.9%*.

Net banking income totalled EUR 1,160 million in Q4 20, down -10.8% (-8.2%*) vs. Q4 19.

The performance of Fixed Income & Currency activities was up +14.9% in 2020 vs. 2019 (+21.3% when restated for the impact of activities discontinued in 2019), with revenues of EUR 2,292 million. They were driven by a healthy commercial momentum and particularly favourable market conditions in H1, in all regions. They normalised in H2 2020.

In Q4 20, Fixed Income & Currency activities were hit by a slowdown in client activity, in rate activities and the compression of short-term financing spreads in financing activities. Credit's good performance failed to offset the overall decline in revenues of -16.2% vs. Q4 19.

Equity activities' net banking income was down -49.0% in 2020 vs. 2019, at EUR 1,275 million, with structured products hard hit by the market dislocation in H1. Losses were mitigated by the increased revenues for listed products and equity flow products. Revenues rebounded in H2, in a normalising market environment. The integration of EMC activities was successfully finalised in Q1 20.

Q4 20 provided further confirmation of the improvement in revenues observed in Q3 20, with net banking income up +11.5% (-6.9% vs. Q4 19) and in particular a gradual recovery in structured products. Flow & hedging activities enjoyed strong volumes over the quarter and the Asia region performed well in all products.

Securities Services' assets under custody amounted to EUR 4,315 billion at end-December 2020, slightly lower (-0.3%) than at end-September 2020. Over the same period, assets under administration were up +4.1% at EUR 638 billion.

Securities Services' revenues totalled EUR 597 million in 2020, down -12.2% (when restated for the revaluation of SIX securities) vs. 2019 (-16.4% on a reported basis). They were down -9.5% in Q4 20 vs. Q4 19, at EUR 153 million.

Financing & Advisory revenues totalled EUR 2,546 million in 2020, up +0.6%* vs. 2019 (stable at current structure and exchange rates), with the strengthening of the franchises and ongoing support for clients during this challenging year. Investment Banking performed particularly well, benefiting from a high level of issues in the debt and equity capital markets and buoyant acquisition financing activity.

Financing & Advisory enjoyed solid net banking income of EUR 681 million in Q4 20, increasing by +9.0%* vs. Q4 19 (+5.9% at current structure and exchange rates) and rebounding by +18.3%* vs. Q3 20. This increase reflects the good performance of asset financing activities, the Asset Backed Products platform and the recovery in Global Transaction and Payment Services. Investment Banking revenues continued to grow in Q4 20.

Asset and Wealth Management's net banking income totalled EUR 903 million in 2020, down -4.6% vs. 2019 (-1.3% when restated for the revaluation of SIX securities). It was 4.9% lower in Q4 20 than in Q4 19.

Lyxor's net banking income amounted to EUR 207 million in 2020, up +3.5% vs. 2019, driven by a high level of performance fees. It rebounded by +20.8% in Q4 20 vs. Q3 20 (+12.3% vs. Q4 19), with growth in the Active Management segment. Lyxor confirmed its leadership position in the Green Bond segment in 2020 and enhanced its ESG ETF offering. Lyxor's assets under management totalled EUR 140 billion at end-December 2020, up +5.9% vs. Q4 19.

Private Banking's performance was lower in 2020 (-2.4%, when restated for the revaluation of SIX securities) vs. 2019, with net banking income of EUR 678 million. Revenues were hit by pressures on interest margins despite stable commercial revenues. Net banking income was 10.5% lower in Q4 20 than in Q4 19.

Assets under management were up +2.0% in Q4 20, at EUR 116 billion. Net inflow totalled EUR 1.7 billion in 2020, driven by France.

Operating expenses

2020: underlying operating expenses (restated for the restructuring provision recognised in Q2 19 for EUR 227 million and the restructuring charge recognised in Q4 20 for EUR 157 million, related to the new EUR 450 million cost savings plan between now and 2022/2023), were substantially lower (-7.2%*) than in 2019. This decline reflects the successful cost savings plan (EUR 500 million) implemented in Global Banking & Investor Solutions in 2018. They were down -7.9%* on a reported basis.

Q4 20: underlying operating expenses were down -9.7%* (-2.3%* on a reported basis) vs. Q4 19, with a positive jaws effect in Q4 20.

Net cost of risk

2020: the cost of risk amounted to 57 basis points (or EUR 922 million) vs. 13 basis points in 2019. It includes EUR 310 million of S1/S2 provisioning and EUR 612 million of S3 (non-performing loans) provisioning. **Q4 20:** the commercial cost of risk amounted to 28 basis points (or EUR 104 million), vs. 14 basis points in Q3 20 and 17 basis points in Q4 19. It includes EUR 26 million of S1/S2 (performing/underperforming loans) provisioning and EUR 77 million of S3 (credit-impaired loans) provisioning.

Contribution to Group net income

2020: the underlying contribution to Group net income (after linearisation of IFRIC 21 and adjusted for restructuring charges in 2020 and the restructuring provision in 2019) came to EUR 183 million. **Q4 20:** the underlying contribution to Group net income amounted to EUR 320 million, up +46%* vs. Q4 19.

Underlying RONE stood at 1.3% in 2020 vs. 7.4% in 2019 and 9.0% in Q4 20 vs. 6.5% in Q4 19.

6. CORPORATE CENTRE

In EURm	Q4 20	Q4 19	2020	2019
Net banking income	2	(7)	(339)	(152)
Operating expenses	(202)	(98)	(441)	(94)
Underlying operating expenses	(162)	(110)	(388)	(94)
Gross operating income	(200)	(105)	(780)	(246)
Underlying gross operating income	(160)	(117)	(727)	(246)
Net cost of risk	(22)	2	(22)	(17)
Net profits or losses from other assets	(105)	(145)	(185)	(394)
Impairment losses on goodwill	-	-	(684)	-
Net income from companies accounted for by the equity method	(1)	(155)	0	(152)
Reported Group net income	(290)	(330)	(2,285)	(796)

⁽¹⁾ Adjusted for the linearisation of IFRIC 21

The Corporate Centre includes:

- the property management of the Group's head office,
- the Group's equity portfolio,
- the Treasury function for the Group,
- certain costs related to cross-functional projects and certain costs incurred by the Group and not reinvoiced to the businesses.

The Corporate Centre's net banking income totalled EUR 2 million in Q4 20 vs. EUR -7 million in Q4 19 and EUR -339 million in 2020 vs. EUR -152 million in 2019. In 2020, it includes notably the change in fair value of financial instruments corresponding to economic hedges of financial debt but that do not meet IFRS hedge accounting criteria.

Operating expenses totalled EUR -202 million in Q4 20 vs. EUR -98 million in Q4 19. They amounted to EUR -441 million in 2020 vs. EUR -94 million in 2019 (which included an operating tax adjustment for EUR +241 million). In 2020, they include a restructuring charge of EUR 53 million recorded in Q4 20.

Gross operating income totalled EUR -200 million in Q4 20 vs. EUR -105 million in Q4 19 and EUR -780 million in 2020 vs. EUR -246 million in 2019.

Net profits or losses from other assets amounted to EUR -105 million in Q4 20 vs. EUR -145 million in Q4 19 and EUR -185 million in 2020 vs. EUR -394 million in 2019 related to the application of IFRS 5 as part of the implementation of the Group's refocusing plan (in 2020, EUR -101 million in respect of the disposal of SG Finans and EUR -69 million for the finalisation of the disposal of Societe Generale de Banque aux Antilles).

Net income from companies accounted for by the equity method is nil in 2020. In 2019, it included an impairment of EUR -158 million corresponding to the Group's entire minority stake (16.8%) in SG de Banque au Liban.

In 2020, the review of Global Markets & Investor Services' financial trajectory led to the impairment of the associated goodwill for EUR -684 million and deferred tax assets for EUR -650 million.

The Corporate Centre's contribution to Group net income was EUR -290 million in Q4 20 vs. EUR -330 million in Q4 19 and EUR -2,285 million in 2020 vs. EUR -796 million in 2019.

7. OUTLOOK

The Group is aiming for a decline in underlying operating expenses in relation to 2020, as from 2023. In 2021, it will maintain strict discipline and target a positive jaws effect against the backdrop of an improvement in the economic outlook with a slight increase in its costs.

The 2021 cost of risk is expected to be lower than in 2020.

The Group aims to operate with a CET1 ratio more than 200 basis points above the regulatory requirement, including after the entry into force of the regulation finalising the Basel III reform whose impact is expected to be around EUR 39 billion⁽¹⁾ as from 2023, or around 115 basis points⁽²⁾

In 2021, the CET1 ratio is expected to be at a level significantly higher than 200 basis points above the regulatory requirement.

Regarding its distribution policy for the 2021 financial year, the Board of Directors has confirmed the objective defined before the outbreak of the COVID crisis, i.e. a payout ratio of 50% of underlying Group net income⁽³⁾, which may include a share buy-back component (up to 10%)⁽⁴⁾; the dividend component being paid in cash.

Finally, the Group will present its Global Banking & Investor Solutions' strategy to the market on May 10th, 2021 and its focus on CSR in H2.

8. CONCLUSION

The year 2020 will have been marked by a global health crisis, the economic and social (confinements and curfews) consequences have affected the Group's business, particularly in the first half of the year. With a significant improvement in H2 (+11% in H2 20 vs. H1 20), the Group's full-year revenues totalled EUR 22,113 million, down -7.6%* (vs. 2019), confirming the relevance of its diversified business model, the resilience of its franchises and its ability to generate capital.

In this challenging environment, the Group achieved all its financial targets in terms of costs (underlying operating expenses of EUR 16.5 billion), cost of risk (64 basis points, below the target of 70 basis points) and capital (CET1 ratio of 13.4%, i.e. above 12%).

More generally, the Group demonstrated its ability to manage this crisis responsibly throughout the year, by playing its role with its employees, customers and communities.

Moreover, this crisis has proved to be an accelerator of societal trends that the Group had already identified as a priority: Corporate Social Responsibility and digital technology. In 2020, the Group achieved a new milestone in terms of the energy transition by becoming the No. 2 globally in renewable energy financing and No. 1 on the advisory component. Moreover, the Board of Directors has validated a binding objective: the Group's governing bodies will have to include at least 30% women by 2023, ensuring compliance with this objective both in the businesses and the functions. More generally, the Group's extra-financial ratings are among the leaders in the banking sector: highest rating (A1+) assigned by the extra-financial rating agency Vigeo Eiris, position in the first decile of the ISS ESG ranking (C+ Prime), top 14% in the bank MSCI ranking (AA) and first decile of the RobecoSAM ranking with a place of 25th worldwide, after being ranked 1st worldwide on environmental issues in 2019.

In 2021, the Group shall remain fully committed to its priorities (i) its customers (ii) maintaining strict cost discipline, managing the cost of risk and the allocation of capital, (iii) creating value for its shareholders.

⁽¹⁾ Including the credit risk, FRTB, operational risk and taking into account the main EU-specific assumptions communicated by the EBA in response to the European Commission's consultation paper (published in December 2020) and excluding the output floor which would not be binding before 2027/2028 (2)On a prospective basis in 2023

 $⁽³⁾ After \ deducting \ interest \ on \ deeply \ subordinated \ notes \ and \ undated \ subordinated \ notes$

⁽⁴⁾Subject to the approval of the General Meeting of Shareholders and regulatory bodies

9. 2021 FINANCIAL CALENDAR

2021 Financial communication calendar

May 6th, 2021 First quarter 2021 results

May 18th, 2021 General Meeting
May 25th, 2021 Dividend detachment
May 27th, 2021 Dividend payment

August 3rd, 2021 Second quarter and first half 2021 results November 4th, 2021 Third quarter and nine-month 2021 results

The Alternative Performance Measures, notably the notions of net banking income for the pillars, operating expenses, IFRIC 21 adjustment, (commercial) cost of risk in basis points, ROE, ROTE, RONE, net assets, tangible net assets, and the amounts serving as a basis for the different restatements carried out (in particular the transition from published data to underlying data) are presented in the methodology notes, as are the principles for the presentation of prudential ratios.

This document contains forward-looking statements relating to the targets and strategies of the Societe Generale Group.

These forward-looking statements are based on a series of assumptions, both general and specific, in particular the application of accounting principles and methods in accordance with IFRS (International Financial Reporting Standards) as adopted in the European Union, as well as the application of existing prudential regulations.

These forward-looking statements have also been developed from scenarios based on a number of economic assumptions in the context of a given competitive and regulatory environment. The Group may be unable to:

- anticipate all the risks, uncertainties or other factors likely to affect its business and to appraise their potential consequences;
- evaluate the extent to which the occurrence of a risk or a combination of risks could cause actual results to differ materially from those provided in this document and the related presentation.

Therefore, although Societe Generale believes that these statements are based on reasonable assumptions, these forward-looking statements are subject to numerous risks and uncertainties, in particular in the Covid-19 crisis context, including matters not yet known to it or its management or not currently considered material, and there can be no assurance that anticipated events will occur or that the objectives set out will actually be achieved. Important factors that could cause actual results to differ materially from the results anticipated in the forward-looking statements include, among others, overall trends in general economic activity and in Societe Generale's markets in particular, regulatory and prudential changes, and the success of Societe Generale's strategic, operating and financial initiatives.

More detailed information on the potential risks that could affect Societe Generale's financial results can be found in the Universal Registration Document filed with the French Autorité des Marchés Financiers.

Investors are advised to take into account factors of uncertainty and risk likely to impact the operations of the Group when considering the information contained in such forward-looking statements. Other than as required by applicable law, Societe Generale does not undertake any obligation to update or revise any forward-looking information or statements. Unless otherwise specified, the sources for the business rankings and market positions are internal.

10. APPENDIX 1: FINANCIAL DATA GROUP NET INCOME BY CORE BUSINESS

In EURm	Q4 20	Q4 19	Change	2020	2019	Change
French Retail Banking	104	230	-54.8%	666	1,131	-41.1%
International Retail Banking and Financial Services	376	463	-18.8%	1,304	1,955	-33.3%
Global Banking and Investor Solutions	280	291	-3.8%	57	958	-94.1%
Core Businesses	760	984	-22.8%	2 027	4,044	-49.9%
Corporate Centre	(290)	(330)	+12.1%	(2,285)	(796)	n/s
Group	470	654	-28.1%	(258)	3,248	n/s

CHANGES Q4 20/Q3 20 - NET BANKING INCOME, OPERATING EXPENSES AND GROSS OPERATING INCOME

Net Banking Income (in EURm)	Q4 20	Q3 20	Chan	ge
French Retail Banking	1,845	1,836	+0.5%	+0.5%*
International Retail Banking and Financial Services	1,919	1,891	+1.5%	+4.1%*
Global Banking and Investor Solutions	2,072	2,034	+1.9%	+2.4%*
Corporate Centre	2	48	-95.8%	-95.6%*
Group	5,838	5,809	+0.5%	+1.6%*

Operating Expenses (in EURm)	Q4 20	Q3 20	Chan	ge
French Retail Banking	(1,443)	(1,292)	+11.7%	+11.7%*
International Retail Banking and Financial Services	(1,018)	(999)	+1.9%	+4.1%*
Global Banking and Investor Solutions	(1,688)	(1,478)	+14.2%	+14.7%*
Corporate Centre	(202)	(56)	x3.6	x3.6*
Group	(4,351)	(3,825)	+13.8%	+14.6%*

Gross operating income (in EURm)	Q4 20	Q3 20	Chan	ge
French Retail Banking	402	544	-26.1%	-26.1%*
International Retail Banking and Financial Services	901	892	+1.0%	+4.1%*
Global Banking and Investor Solutions	384	556	-30.9%	-30.3%*
Corporate Centre	(200)	(8)	n/s	n/s*
Group	1,487	1,984	-25.1%	-23.7%*

CONSOLIDATED BALANCE SHEET

	31.12.2020	31.12.2019
Cash, due from central banks	168,179	102,311
Financial assets at fair value through profit or loss	429,458	385,739
Hedging derivatives	20,667	16,837
Financial assets measured at fair value through other comprehensive income	52,060	53,256
Securities at amortised cost	15,635	12,489
Due from banks at amortised cost	53,380	56,366
Customer loans at amortised cost	448,761	450,244
Revaluation differences on portfolios hedged against interest rate risk	378	401
Investment of insurance activities	166,854	164,938
Tax assets	5,001	5,779
Other assets	67,341	68,045
Non-current assets held for sale	6	4,507
Investments accounted for using the equity method	100	112
Tangible and intangible assets*	30,088	30,844
Goodwill	4,044	4,627
Total	1,461,952	1,356,495

	31.12.2020	31.12.2019
Central banks	1,489	4,097
Financial liabilities at fair value through profit or loss	390,247	364,129
Hedging derivatives	12,461	10,212
Debt securities issued	138,957	125,168
Due to banks	135,571	107,929
Customer deposits	456,059	418,612
Revaluation differences on portfolios hedged against interest rate risk	7,696	6,671
Tax liabilities	1,223	1,409
Other liabilities*	84,937	85,254
Non-current liabilities held for sale	-	1,333
Liabilities related to insurance activities contracts	146,126	144,259
Provisions	4,775	4,387
Subordinated debts	15,432	14,465
Total liabilities	1,394,973	1,287,925
SHAREHOLDERS' EQUITY		
Shareholders' equity, Group share		
Issued common stocks and capital reserves	22,333	21,969
Other equity instruments	9,295	9,133
Retained earnings	32,076	29,558
Net income	(258)	3,248
Sub-total	63,446	63,908
Unrealised or deferred capital gains and losses	(1,762)	(381)
Sub-total equity, Group share	61,684	63,527
Non-controlling interests	5,295	5,043
Total equity	66,979	68,570
Total	1,461,952	1,356,495

^{*}The amount has been restated compared with the published financial statements for the year ended 31 December 2019 following the IFRS Interpretations Committee (IFRS IC) decisions on 26 November 2019 related to IFRS 16.

11. APPENDIX 2: METHODOLOGY

1 – The financial information presented in respect of the fourth quarter and 2020 was examined by the Board of Directors on February 9th, 2021 and has been prepared in accordance with IFRS as adopted in the European Union and applicable at that date. This information has not been audited.

2 - Net banking income

The pillars' net banking income is defined on page 43 of Societe Generale's 2020 Universal Registration Document. The terms "Revenues" or "Net Banking Income" are used interchangeably. They provide a normalised measure of each pillar's net banking income taking into account the normative capital mobilised for its activity.

3 - Operating expenses

Operating expenses correspond to the "Operating Expenses" as presented in note 8.1 to the Group's consolidated financial statements as at December 31st, 2019 (pages 423 et seq. of Societe Generale's 2020 Universal Registration Document). The term "costs" is also used to refer to Operating Expenses.

The Cost/Income Ratio is defined on page 43 of Societe Generale's 2020 Universal Registration Document.

4 - IFRIC 21 adjustment

The IFRIC 21 adjustment corrects the result of the charges recognised in the accounts in their entirety when they are due (generating event) so as to recognise only the portion relating to the current quarter, i.e. a quarter of the total. It consists in smoothing the charge recognised accordingly over the financial year in order to provide a more economic idea of the costs actually attributable to the activity over the period analysed.

5 - Exceptional items - Transition from accounting data to underlying data

It may be necessary for the Group to present underlying indicators in order to facilitate the understanding of its actual performance. The transition from published data to underlying data is obtained by restating published data for exceptional items and the IFRIC 21 adjustment.

Moreover, the Group restates the revenues and earnings of the French Retail Banking pillar for **PEL/CEL provision allocations or write-backs**. This adjustment makes it easier to identify the revenues and earnings relating to the pillar's activity, by excluding the volatile component related to commitments specific to regulated savings.

The reconciliation enabling the transition from published accounting data to underlying data is set out in the table below:

Q4 20 (in EURm)	Operating Expenses	Net cost of risk	Net profit or losses from other assets	Impairment losses on goodwill	Income tax	Group net income	Business
Reported	(4,351)	(689)	(94)	0	(125)	470	
(+) IFRIC 21 linearisation	(177)				52	(121)	
(-) Restructuring charges*(1)	(210)				63	(147) 1	/w GBIS (EUR - 57m), Corporate Center (EUR -53m)
(-) Group refocusing plan*		(20)	(101)		(14)	(135) (orporate center
Underlying	(4,318)	(669)	7	0	(123)	631	

2020 (in EURm)	Operating Expenses	Net cost of risk	Net profit or losses from other assets	Impairment losses on goodwill	Income tax	Group net income	Business
Reported	(16,714)	(3,306)	(12)	(684)	(1,204)	(258)	
(-) Group refocusing plan*		(20)	(178)		(14)	(212)	Corporate center
(-) Goodwill impairment*				(684)		(684)	Corporate center
(-) DTA impairment*					(650)	(650)	Corporate center
(-) Restructuring charges*(1)	(210)				63	(147)	n/w GBIS (EUR - 157m), Corporate Center (EUR -53m)
Underlying	(16,504)	(3,286)	166	0	(603)	1,435	

Q4 19 (in EURm)	Operating Expenses	Net cost of risk	Net profit or losses from other assets	Net income from companies under equity method	Income tax	Group net income	Business
Reported	(4,503)	(371)	(125)	(154)	(230)	654	
(+) IFRIC 21 linearisation	(152)				36	(112)	
(-) Restructuring provision*	(60)				20	(40)	o/w RBDF (EUR - 55m), IBFS (EUR - 5m)
(-) Write-off of Group minority stake in SG de Banque au Liban*				(158)		(158)	Corporate center
(-) Group refocusing plan*			(137)		2	(135)	Corporate center
Underlying	(4,595)	(371)	12	4	(216)	875	

2019 (in EURm)	Operating Expenses	Net cost of risk	Net profit or losses from other assets	Net income from companies under equity method	Income tax	Group net income	Business
Reported	(17,727)	(1,278)	(327)	(129)	(1,264)	3,248	
(-) Restructuring provision*	(316)				83	(233) 55 34	/w RBDF (EUR - 5m), IBFS (EUR - 4m), GBIS (EUR - 27m)
(-) Write-off of Group minority stake in SG de Banque au Liban*				(158)		(158) C	orporate center
(-) Group refocusing plan*		(18)	(386)		(18)	(422) C	orporate center
Underlying	(17,411)	(1,260)	59	29	(1,329)	4,061	

^(*) exceptional items(1) Restructuring charges including restructuring provisions and various restructuring charges

6 - Cost of risk in basis points, coverage ratio for doubtful outstandings

The cost of risk or commercial cost of risk is defined on pages 45 and 574 of Societe Generale's 2020 Universal Registration Document. This indicator makes it possible to assess the level of risk of each of the pillars as a percentage of balance sheet loan commitments, including operating leases.

	(In EUR m)	Q4 20	Q4 19	2020	2019
	Net Cost Of Risk	276	149	1,097	467
French Retail Banking	Gross loan Outstandings	222,926	197,813	212,185	194,359
	Cost of Risk in bp	50	30	52	24
International Detail Dealine and	Net Cost Of Risk	287	158	1,265	588
International Retail Banking and Financial Services	Gross loan Outstandings	128,965	137,222	132,082	136,303
	Cost of Risk in bp	89	46	96	43
	Net Cost Of Risk	104	66	922	206
Global Banking and Investor Solutions	Gross loan Outstandings	147,508	157,528	160,918	161,865
	Cost of Risk in bp	28	17	57	13
	Net Cost Of Risk	22	(2)	22	17
Corporate Centre	Gross loan Outstandings	14,044	9,714	11,611	9,403
	Cost of Risk in bp	62	(13)	20	17
	Net Cost Of Risk	689	371	3,306	1,278
Societe Generale Group	Gross loan Outstandings	513,443	502,277	516,797	501,929
	Cost of Risk in bp	54	29	64	25

The **gross coverage ratio for doubtful outstandings** is calculated as the ratio of provisions recognised in respect of the credit risk to gross outstandings identified as in default within the meaning of the regulations, without taking account of any guarantees provided. This coverage ratio measures the maximum residual risk associated with outstandings in default ("doubtful").

7 - ROE, ROTE, RONE

The notions of ROE (Return on Equity) and ROTE (Return on Tangible Equity), as well as their calculation methodology, are specified on page 45 and 46 of Societe Generale's 2020 Universal Registration Document. This measure makes it possible to assess Societe Generale's return on equity and return on tangible equity. RONE (Return on Normative Equity) determines the return on average normative equity allocated to the Group's businesses, according to the principles presented on page 46 of Societe Generale's 2020 Universal Registration Document.

Group net income used for the ratio numerator is book Group net income adjusted for "interest net of tax payable on deeply subordinated notes and undated subordinated notes, interest paid to holders of deeply subordinated notes and undated subordinated notes, issue premium amortisations" and "unrealised gains/losses booked under shareholders' equity, excluding conversion reserves" (see methodology note No. 9). For ROTE, income is also restated for goodwill impairment.

Details of the corrections made to book equity in order to calculate ROE and ROTE for the period are given in the table below:

ROTE calculation: calculation methodology

End of period	Q4 20	Q4 19	2020	2019
Shareholders' equity Group share	61,684	63,527	61,684	63,527
Deeply subordinated notes	(8,830)	(9,501)	(8,830)	(9,501)
Undated subordinated notes	(264)	(283)	(264)	(283)
Interest net of tax payable to holders of deeply subordinated notes & undated subordinated notes, interest paid to holders of				
deeply subordinated notes & undated subordinated notes,				
issue premium amortisations	19	4	19	4
OCI excluding conversion reserves	(942)	(575)	(942)	(575)
Dividend provision	(467)	(1,869)	(467)	(1,869)
ROE equity end-of-period	51,201	51,303	51,201	51,303
Average ROE equity	51,294	51,415	52,088	50,586
Average Goodwill	(3,928)	(4,544)	(4,172)	(4,586)
Average Intangible Assets	(2,477)	(2,327)	(2,432)	(2,243)
Average ROTE equity	44,889	44,544	45,484	43,757
Group net Income (a)	470	654	(258)	3,248
Underlying Group net income (b)	631	875	1,435	4,061
Interest on deeply subordinated notes and undated subordinated notes (c)	(164)	(178)	(611)	(715)
Cancellation of goodwill impairment (d)	0	85	684	200
Ajusted Group net Income (e) = (a)+ (c)+(d)	306	561	(185)	2,733
Ajusted Underlying Group net Income (f)=(b)+(c)	467	697	824	3,346
Average DOTE aguity (a)	44.000	44 544	4E 404	42 757
Average ROTE equity (g) ROTE [quarter: (4*e/g), 12M: (e/g)]	44,889 2.7%	44,544 5.0%	45,484 -0.4%	43,757 6.2%
1012 [quarter: (4 6/8/, 1214. (5/8/)	2.170	5.070	0.170	0.2 /0
Average ROTE equity (underlying) (h)	45,050	44,619	47,177	43,983
Underlying ROTE [quarter: (4*f/h), 12M: (f/h)]	4.1%	6.2%	1.7%	7.6%

RONE calculation: Average capital allocated to Core Businesses (in EURm)

In EURm	Q4 20	Q4 19	Change	2020	2019	Variation
French Retail Banking	11,186	11,165	+0.2%	11,427	11,263	+1.5%
International Retail Banking and Financial Services	10,112	10,675	-5.3%	10,499	11,075	-5.2%
Global Banking and Investor Solutions	14,287	13,943	+2.5%	14,302	15,201	-5.9%
Core Businesses	35,585	35,783	-0.6%	36,228	37,539	-3.5%
Corporate Centre	15,709	15,632	+0.5%	15,860	13,047	+21.6%
Group	51,294	51,415	-0.2%	52,088	50,586	+3.0%

8 - Net assets and tangible net assets

Net assets and tangible net assets are defined in the methodology, page 48 of the Group's 2020 Universal Registration Document. The items used to calculate them are presented below:

End of period	2020	2019	2018
Shareholders' equity Group share	61,684	63,527	61,026
Deeply subordinated notes	(8,830)	(9,501)	(9,330)
Undated subordinated notes	(264)	(283)	(278)
Interest, net of tax, payable to holders of deeply subordinated notes & undated subordinated notes, interest paid to holders of deeply subordinated notes & undated subordinated notes, issue premium amortisations	19	4	(14)
Bookvalue of own shares in trading portfolio	301	375	423
Net Asset Value	52,910	54,122	51,827
Goodwill	(3,928)	(4,510)	(4,860)
Intangible Assets	(2,484)	(2,362)	(2,224)
Net Tangible Asset Value	46,498	47,250	44,743
Number of shares used to calculate NAPS**	848,859	849,665	801,942
Net Asset Value per Share	62.3	63.7	64.6
Net Tangible Asset Value per Share	54.8	55.6	55.8

^{**} The number of shares considered is the number of ordinary shares outstanding as at December 31st, 2020, excluding treasury shares and buybacks, but including the trading shares held by the Group.

In accordance with IAS 33, historical data per share prior to the date of detachment of a preferential subscription right are restated by the adjustment coefficient for the transaction.

9 - Calculation of Earnings Per Share (EPS)

The EPS published by Societe Generale is calculated according to the rules defined by the IAS 33 standard (see page 47 of Societe Generale's 2020 Universal Registration Document). The corrections made to Group net income in order to calculate EPS correspond to the restatements carried out for the calculation of ROE and ROTE. As specified on page 47 of Societe Generale's 2020 Universal Registration Document, the Group also publishes EPS adjusted for the impact of non-economic and exceptional items presented in methodology note No. 5 (underlying EPS).

The calculation of Earnings Per Share is described in the following table:

Average number of shares (thousands)	2020	2019	2018
Existing shares	853,371	834,062	807,918
Deductions			
Shares allocated to cover stock option plans and free shares awarded to staff	2,987	4,011	5,335
Other own shares and treasury shares		149	842
Number of shares used to calculate EPS**	850,385	829,902	801,741
Group net Income	(258)	3,248	4,121
Interest on deeply subordinated notes and undated subordinated notes	(611)	(715)	(719)
Capital gain net of tax on partial buybacks			
Adjusted Group net income	(869)	2,533	3,402
EPS (in EUR)	(1.02)	3.05	4.24
Underlying EPS* (in EUR)	0.97	4.03	5.00

^(*) Excluding exceptional items and including linearisation of the IFRIC 21 effect.

10 - The Societe Generale Group's Common Equity Tier 1 capital is calculated in accordance with applicable CRR/CRD4 rules. The fully-loaded solvency ratios are presented pro forma for current earnings, net of dividends, for the current financial year, unless specified otherwise. When there is reference to phased-in ratios, these do not include the earnings for the current financial year, unless specified otherwise. The leverage ratio is calculated according to applicable CRR/CRD4 rules including the provisions of the delegated act of October 2014.

^(**)The number of shares considered is the number of ordinary shares outstanding as at December 31st, 2020, excluding treasury shares and buybacks, but including the trading shares held by the Group.

- NB (1) The sum of values contained in the tables and analyses may differ slightly from the total reported due to rounding rules.
- (2) All the information on the results for the period (notably: press release, downloadable data, presentation slides and supplement) is available on Societe Generale's website www.societegenerale.com in the "Investor" section.

Societe Generale

Societe Generale is one of the leading European financial services groups. Based on a diversified and integrated banking model, the Group combines financial strength and proven expertise in innovation with a strategy of sustainable and responsible growth. Committed to the positive transformations of the world's societies and economies, Societe Generale and its teams seek to build, day after day, together with its clients, a better and sustainable future through responsible and innovative financial solutions.

Active in the real economy for over 150 years, with a solid position in Europe and connected to the rest of the world, Societe Generale has over 138,000 members of staff in 62 countries and supports on a daily basis 29 million individual clients, businesses and institutional investors around the world by offering a wide range of advisory services and tailored financial solutions. The Group is built on three complementary core businesses:

- French Retail Banking which encompasses the Societe Generale, Crédit du Nord and Boursorama brands. Each
 offers a full range of financial services with omnichannel products at the cutting edge of digital innovation;
- International Retail Banking, Insurance and Financial Services to Corporates, with networks in Africa, Russia,
 Central and Eastern Europe, and specialised businesses that are leaders in their markets;
- Global Banking and Investor Solutions, which offers recognised expertise, key international locations and integrated solutions.

Societe Generale is included in the principal socially responsible investment indices: DJSI (World and Europe), FTSE4Good (Global and Europe), Euronext Vigeo (World, Europe and Eurozone), four of the STOXX ESG Leaders indices, and the MSCI Low Carbon Leaders Index.

For more information, you can follow us on Twitter @societegenerale or visit our website www.societegenerale.com

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