

Non-collateralised Structured Products
Addendum to Base Listing Document relating to
Hong Kong Listed Structured Products

to be issued by



The Hongkong and Shanghai Banking Corporation Limited

(incorporated in Hong Kong with limited liability under the Companies Ordinance of Hong Kong)

The Hongkong and Shanghai Banking Corporation Limited (the “**Issuer**”, “**we**” or “**us**”) has published this document in respect of call/put warrants on single equities, call/put warrants on indices, call/put warrants on unit funds (together the “**Warrants**”), inline warrants on single equities and inline warrants on indices (together the “**Inline Warrants**”), callable bull/bear contracts on single equities, callable bull/bear contracts on indices and callable bull/bear contracts on unit funds (together the “**CBBCs**” and, together with the Warrants, the Inline Warrants and any other structured products approved by The Stock Exchange of Hong Kong Limited (the “**stock exchange**”) from time to time, the “**structured products**”) to be issued by us in series (each a “**series**”) from time to time and listed on the stock exchange.

Hong Kong Exchanges and Clearing Limited and the stock exchange and Hong Kong Securities Clearing Company Limited take no responsibility for the contents of this document, make no representation as to its accuracy or completeness and expressly disclaim any liability whatsoever for any loss howsoever arising from or in reliance upon the whole or any part of the contents of this document.

This document, for which we accept full responsibility, includes particulars given in compliance with the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited for the purpose of giving information with regard to us and the structured products. We, having made all reasonable enquiries, confirm that to the best of our knowledge and belief the information contained in the base listing document dated 7 April 2021 (the “**base listing document**”) and this document is accurate and complete in all material respects and not misleading or deceptive, and there are no other matters the omission of which would make any statement herein or this document misleading.

This document supplements and amends the base listing document and should be read in conjunction with the base listing document. Additional terms relating to each series of our structured products will be set out in a launch announcement and supplemental listing document (each a “**launch announcement and supplemental listing document**”) which will be supplemental to, and should be read in conjunction with, the base listing document and this document.

The structured products involve derivatives. You should not invest in the structured products unless you fully understand and are willing to assume the risks associated with the structured products. The structured products are complex products. You should exercise caution in relation to them. You are warned that the price of our structured products may fall in value as rapidly as it may rise and you may sustain a total loss of your investment. Prospective purchasers should therefore ensure that they understand the nature of our structured products and carefully study the risk factors set out in the base listing document, this document and the relevant launch announcement and supplemental listing document and, where necessary, seek professional advice, before they invest in any of our structured products. The Issuer is part of a large global financial institution and has many financial products and contracts outstanding at any given time.

The structured products constitute general unsecured contractual obligations of the Issuer and of no other person and will rank equally among themselves and with all of the Issuer’s other unsecured obligations (save for those obligations preferred by law) upon liquidation. If you purchase the structured products, you are relying upon the Issuer’s creditworthiness and have no rights under the structured products against (a) any company which has issued the underlying asset, (b) the trustee or the manager of the underlying fund, or (c) the index compiler of any underlying index or any other person. If the Issuer becomes insolvent or defaults on its obligations under the structured products, you may not be able to recover all or even part of the amount due under the structured products (if any).

Dated 2 August 2021

IMPORTANT

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

This document is supplemental to, and should be read in conjunction with, the base listing document. You should read the base listing document, this document, together with any other addenda to the base listing document and the relevant launch announcement and supplemental listing document, before deciding whether to invest in our structured products.

Save as modified and supplemented in this document, the information contained in the base listing document is up-to-date and is true and accurate as at the date of this document. Please note that the base listing document may from time to time be further amended or updated. If you intend to invest in our structured products, you should ask us if any additional addenda or any updated base listing document has been issued.

We cannot give you investment advice. You must decide for yourself whether our structured products meet your investment needs, and obtain independent professional advice if appropriate. This document is for information purposes only and is not intended to be, and should not be considered as, a recommendation or advice by us or any of our affiliates that you should purchase any of our structured products, and you must make your own independent investigation of our financial condition and affairs and your own appraisal of our creditworthiness.

We undertake during the period in which our structured products are listed on the stock exchange to make the following documents available to you for inspection during usual business hours on any weekday (Saturdays, Sundays and public holidays excepted) at the office of The Hongkong and Shanghai Banking Corporation Limited, which is presently at HSBC Main Building, 1 Queen's Road Central, Hong Kong:

- (a) a copy of the base listing document, this document and any other addenda to the base listing document (both the English version and the Chinese translation);
- (b) a copy of our latest publicly available annual report and interim report (both the English version and the Chinese translation); and
- (c) a copy of the consent letter from our auditor referred to in the base listing document.

本公司承諾，下列文件可於結構性產品在聯交所上市的期間內於任何平日(星期六、星期日及公眾假期除外)的一般辦公時間內，在香港上海滙豐銀行有限公司辦事處(地址現為香港皇后大道中1號滙豐總行大廈)供閣下查閱：

- (a) 基本上市文件、本文件及基本上市文件的任何增編(英文版本及中文譯本)；
- (b) 本公司最近期可供查閱的年報及中期報告(英文版本及中文譯本)；及
- (c) 基本上市文件所述本公司核數師的同意函件。

Our structured products are not available to any person that is, (a) a U.S. Person (as defined in Regulation S of the United States Securities Act of 1933, as amended), (b) a U.S. person as defined in 17 C.F.R. § 23.23(a)(23) (a “**CFTC U.S. Person**”) or to others for

offer or sale to or for the account or benefit of any such CFTC U.S. person or (c) a “United States person” as defined in U.S. Executive Order 13959, as amended by U.S. Executive Order 14032 (“**E.O. 13959 U.S. Persons**”), to the extent that the underlyings for the relevant structured products include (i) equities whose purchase or sale by E.O. 13959 U.S. Persons is restricted under Executive Order 13959 (as amended) or (ii) provide any investment exposure to any such equities ((i) and (ii) collectively, “**E.O. 13959 Restricted Underlyings**”).

E.O. 13959 U.S. Persons are restricted from purchasing or selling the structured products with E.O. 13959 Restricted Underlyings after the effective date of the Executive Order 13959 (as amended) restrictions applicable to those underlyings and investors should seek their own independent legal advice regarding compliance with Executive Order 13959 (as amended).

What are our credit ratings?

Our long-term debt ratings are:

<i>Rating agency</i>	<i>Rating as of the day immediately preceding the date of this document</i>
Moody’s Investors Service, Inc.	Aa3 (Stable Outlook)
S&P Global Ratings	AA- (Stable Outlook)

Rating agencies usually receive a fee from the companies that they rate. When evaluating our creditworthiness, you should not solely rely on our credit ratings because:

- (a) a credit rating is not a recommendation to buy, sell or hold our structured products;
- (b) ratings of companies may involve difficult-to-quantify factors such as market competition, the success or failure of new products and markets and managerial competence;
- (c) a high credit rating is not necessarily indicative of low risk. Our credit ratings as of the day immediately preceding the date of this document are for reference only. Any downgrading of our ratings could result in a reduction in the value of our structured products;
- (d) a credit rating is not an indication of the liquidity or volatility of our structured products; and
- (e) a credit rating may be downgraded if the credit quality of the Issuer declines.

Our structured products are not rated.

Our credit ratings are subject to change or withdrawal at any time within each rating agency’s sole discretion. You should conduct your own research using publicly available sources to obtain the latest information with respect to our ratings from time to time.

Are we subject to any litigation?

Except as set out in Exhibit A and Exhibit B of the base listing document, this document, the launch announcement and supplemental listing document , there are no legal or arbitration proceedings (including any such proceedings which are pending or threatened of which we are aware) which may have, or have had in the previous 12 months, a significant effect on us and our subsidiaries.

Has our financial position changed since last financial year?

Except as set out in this document and Exhibit A and Exhibit B of the base listing document, there has been no material adverse change in our financial or trading position or prospects or indebtedness since 31 December 2020.

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UPDATED INFORMATION

- (i) **The last two paragraphs in the section headed “IMPORTANT” included on page 2 of our base listing document shall be replaced with the following in its entirety:**

“Our structured products are not available to any person that is, (a) a U.S. Person (as defined in Regulation S of the United States Securities Act of 1933, as amended), (b) a U.S. person as defined in 17 C.F.R. § 23.23(a)(23) (a “**CFTC U.S. Person**”) or to others for offer or sale to or for the account or benefit of any such CFTC U.S. person or (c) a “United States person” as defined in U.S. Executive Order 13959, as amended by U.S. Executive Order 14032 (“**E.O. 13959 U.S. Persons**”), to the extent that the underlyings for the relevant structured products include (i) equities whose purchase or sale by E.O. 13959 U.S. Persons is restricted under Executive Order 13959 (as amended) or (ii) provide any investment exposure to any such equities ((i) and (ii) collectively, “**E.O. 13959 Restricted Underlyings**”).

E.O. 13959 U.S. Persons are restricted from purchasing or selling the structured products with E.O. 13959 Restricted Underlyings after the effective date of the Executive Order 13959 (as amended) restrictions applicable to those underlyings and investors should seek their own independent legal advice regarding compliance with Executive Order 13959 (as amended).”

- (ii) **The risk factor entitled “*The Financial Institutions (Resolution) Ordinance may adversely affect the structured products*” in the section headed “RISK FACTORS” included on pages 9 to 10 of our base listing document shall be replaced with the following in its entirety:**

“(5) The Financial Institutions (Resolution) Ordinance may adversely affect the structured products

On 7 July 2017, the Financial Institutions (Resolution) Ordinance (Cap. 628) of Hong Kong (the “**FIRO**”) came into operation. The FIRO provides for, among other things, the establishment of a resolution regime for authorized institutions and other within scope financial institutions in Hong Kong which may be designated by the relevant resolution authorities, which includes us as the issuer of the structured products. The resolution regime seeks to provide the relevant resolution authorities with administrative powers to bring about timely and orderly resolution in order to stabilise and secure continuity for a failing authorized institution or within scope financial institution in Hong Kong. In particular, the relevant resolution authority is provided with powers to affect contractual and property rights as well as payments (including in respect of any priority of payment) that creditors would receive in resolution. These may include, but are not limited to, powers to cancel, write off, modify, convert or replace all or a part of the structured products or cash payment under the structured products, and powers to amend or alter the contractual provisions of the structured products, all of which may adversely affect the value of the structured products, and the holders thereof may suffer a loss of some or all of their investment as a result. Holders of the structured products may become subject to and bound by the FIRO.

On 31 December 2020, the Hong Kong Monetary Authority (the “HKMA”) published (i) the Financial Institutions (Resolution) (Contractual Recognition of Suspension of Termination Rights - Banking Sector) Rules for consultation (the “Stay Rules”) and (ii) the conclusions to its January 2020 consultation paper on proposals for making rules relating to contractual stays on termination rights in financial contracts for authorized institutions under the FIRO. The consultation period for the Stay Rules ended on 31 January 2021. The Stay Rules are expected to come into operation on 27 August 2021 following completion of the vetting process by the Legislative Council of Hong Kong. Following a transitional period of 24 months from the date of the commencement of the Stay Rules for the earliest first phase compliance, entities subject to the Stay Rules are required to adopt appropriate provisions in certain financial contracts to the effect that the contractual parties agree to be bound by the temporary stay that may be imposed by the HKMA under the FIRO, which may in turn affect any in-scope financial contracts between a qualifying entity and its counterparty(ies).

As the implementation of FIRO remains untested and certain details relating to FIRO will be set out through secondary legislation and supporting rules, we are unable to assess the full impact of FIRO, the Stay Rules, any potential secondary legislation and/or supporting rules and regulations made under FIRO on the financial system generally, our counterparties, us, any of our consolidated subsidiaries, our operations and/or our financial position. **In the worst case scenario, you may get nothing back and the maximum loss could be 100% of your initial investment amount.**”

- (iii) **The risk factor entitled “Recent and future U.S. government actions” in the section headed “RISK FACTORS” included on page 10 of our base listing document shall be replaced with the following in its entirety:**

“(6) Recent and future U.S. government actions

The US government’s recent and future actions against mainland China and Hong Kong may affect the price or value of the underlying equities or indices (as applicable) and the prevailing trading price of the structured products. There can be no assurances that any future actions taken by the U.S. government (or other governments) against mainland China and Hong Kong will not have an adverse effect on the trading price or value of the structured products.”

- (iv) **The risk factor entitled “Restrictions on E.O. 13959 U.S. Persons” in the section headed “RISK FACTORS” included on page 10 of our base listing document shall be replaced with the following in its entirety:**

“(7) Restrictions on E.O. 13959 U.S. Persons

To the extent the structured products include underlying equities or indices that are or become E.O. 13959 Restricted Underlyings, E.O. 13959 U.S. Persons are or will be restricted under Executive order 13959 (as amended) from purchasing and selling the structured products, which may adversely affect the prevailing trading price of the structured products. E.O. 13959 U.S. Persons are urged to seek independent legal advice regarding compliance with Executive Order 13959 (as amended).”

- (v) The risk factor entitled “*The underlyings of the structured products may include indices or equities that are restricted under E.O. 13959*” in the section headed “RISK FACTORS” included on page 10 of our base listing document shall be deleted in its entirety.
- (vi) The sub-section titled “*Names of Directors*” in the section headed “INFORMATION ABOUT US” included on page 112 of our base listing document shall be replaced with the following in its entirety:

“Names of Directors

Peter Tung Shun Wong[#], GBS, JP, *Chairman*
David Gordon Eldon[#], GBS, CBE, JP, *Deputy Chairman*
David Yi Chien Liao, *Co-Chief Executive Officer*
Surendranath Ravi Rosha, *Co-Chief Executive Officer*
Graham John Bradley*
Sonia Chi Man Cheng*
Dr Christopher Wai Chee Cheng*, GBS, OBE
Yiu Kwan Choi*
Beau Khoon Chen Kuok*
Irene Yun-lien Lee*
Victor Tzar Kuoi Li[#]
Kevin Anthony Westley*, BBS
Tan Sri (Sir) Francis Sock Ping Yeoh*, KBE, CBE

* *independent non-executive Director*

non-executive Director”

OUR INTERIM FINANCIAL STATEMENT AS AT AND FOR THE SIX-MONTH PERIOD ENDED 30 JUNE 2021

The following information has been extracted from our 2021 interim report. References to page numbers (i.e. the numeric page numbers as referred to within this section and the numeric page numbers which appear on the bottom of the pages of this section) in this section are to pages of our 2021 interim report. The extracts set out in this section are not complete and reference should be made to our 2021 interim report which is available for inspection at the office of The Hongkong and Shanghai Banking Corporation Limited, HSBC Main Building, 1 Queen's Road Central, Hong Kong.

References in this section to "**HSBC**", "**HSBC Group**" or "**the Group**" are to HSBC Holdings plc and its subsidiaries and references in this section to "**the Bank**" are to The Hongkong and Shanghai Banking Corporation Limited and "**the group**" are to The Hongkong and Shanghai Banking Corporation Limited and its subsidiaries.

Interim condensed consolidated financial statements

Consolidated income statement

	Half-year to	
	30 Jun 2021 HK\$m	30 Jun 2020 HK\$m
Net interest income	48,741	60,958
– interest income	60,260	83,617
– interest expense	(11,519)	(22,659)
Net fee income	24,005	20,678
– fee income	29,941	25,700
– fee expense	(5,936)	(5,022)
Net income from financial instruments held for trading or managed on a fair value basis	15,585	19,277
Net income/(expense) from assets and liabilities of insurance businesses, including related derivatives, measured at fair value through profit or loss	13,197	(3,999)
Changes in fair value of designated debts issued and related derivatives	(312)	119
Changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	(27)	172
Gains less losses from financial investments	1,133	1,341
Net insurance premium income	32,230	30,763
Other operating income/(expense)	(180)	5,128
Total operating income	134,372	134,437
Net insurance claims and benefits paid and movement in liabilities to policyholders	(41,520)	(31,491)
Net operating income before change in expected credit losses and other credit impairment charges	92,852	102,946
Change in expected credit losses and other credit impairment charges	(1,607)	(14,112)
Net operating income	91,245	88,834
Employee compensation and benefits	(20,246)	(17,453)
General and administrative expenses	(24,578)	(21,030)
Depreciation and impairment of property, plant and equipment	(4,409)	(4,657)
Amortisation and impairment of intangible assets	(2,053)	(2,076)
Total operating expenses	(51,286)	(45,216)
Operating profit	39,959	43,618
Share of profit in associates and joint ventures	10,548	8,049
Profit before tax	50,507	51,667
Tax expense	(7,868)	(7,395)
Profit for the period	42,639	44,272
Attributable to:		
– ordinary shareholders of the parent company	37,545	39,270
– other equity holders	1,837	1,576
– non-controlling interests	3,257	3,426
Profit for the period	42,639	44,272

Interim condensed consolidated financial statements (unaudited)

Consolidated statement of comprehensive income

	Half-year to	
	30 Jun 2021 HK\$m	30 Jun 2020 HK\$m
Profit for the period	42,639	44,272
Other comprehensive income/(expense)		
Items that will be reclassified subsequently to profit or loss when specific conditions are met:		
Debt instruments at fair value through other comprehensive income	(2,145)	3,161
– fair value gains/(losses)	(1,716)	5,010
– fair value gains transferred to the income statement on disposal	(996)	(1,343)
– expected credit (recoveries)/ losses recognised in the income statement	(76)	262
– income taxes	643	(768)
Cash flow hedges	(325)	913
– fair value gains	5,309	1,708
– fair value gains reclassified to the income statement	(5,694)	(618)
– income taxes	60	(177)
Share of other comprehensive income/(expense) of associates and joint ventures	480	(267)
Exchange differences	(805)	(9,949)
Items that will not be reclassified subsequently to profit or loss:		
Property revaluation	2,500	(4,464)
– fair value gains/(losses)	3,004	(5,344)
– income taxes	(504)	880
Equity instruments designated at fair value through other comprehensive income	(2,721)	(910)
– fair value losses	(2,716)	(903)
– income taxes	(5)	(7)
Changes in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk	(392)	3,602
– before income taxes	(464)	4,303
– income taxes	72	(701)
Remeasurement of defined benefit asset/liability	686	(866)
– before income taxes	832	(1,030)
– income taxes	(146)	164
Other comprehensive expense for the period, net of tax	(2,722)	(8,780)
Total comprehensive income for the period	39,917	35,492
Attributable to:		
– ordinary shareholders of the parent company	34,996	31,266
– other equity holders	1,837	1,576
– non-controlling interests	3,084	2,650
Total comprehensive income for the period	39,917	35,492

Consolidated balance sheet

	Notes	At	
		30 Jun 2021 HK\$m	31 Dec 2020 HK\$m
Assets			
Cash and balances at central banks		285,708	347,999
Items in the course of collection from other banks		57,966	21,943
Hong Kong Government certificates of indebtedness		325,224	313,404
Trading assets		678,226	600,414
Derivatives		349,914	422,945
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss		196,564	178,960
Reverse repurchase agreements – non-trading		630,901	520,344
Loans and advances to banks		454,693	403,884
Loans and advances to customers	3	3,901,132	3,668,681
Financial investments	4	1,993,524	2,175,432
Amounts due from Group companies		151,411	83,203
Interests in associates and joint ventures	5	181,750	168,754
Goodwill and intangible assets		90,296	89,968
Property, plant and equipment		129,039	128,537
Deferred tax assets		3,549	3,325
Prepayments, accrued income and other assets		334,124	288,610
Total assets		9,764,021	9,416,403
Liabilities			
Hong Kong currency notes in circulation		325,224	313,404
Items in the course of transmission to other banks		106,209	25,699
Repurchase agreements – non-trading		236,509	136,157
Deposits by banks		311,257	248,628
Customer accounts	6	5,901,495	5,911,396
Trading liabilities		89,742	60,812
Derivatives		322,876	428,211
Financial liabilities designated at fair value		164,318	167,013
Debt securities in issue		75,467	79,419
Retirement benefit liabilities		1,858	2,701
Amounts due to Group companies		361,732	296,308
Accruals and deferred income, other liabilities and provisions		300,203	215,987
Liabilities under insurance contracts		613,439	581,406
Current tax liabilities		3,945	2,669
Deferred tax liabilities		32,213	30,997
Subordinated liabilities		4,041	4,065
Total liabilities		8,850,528	8,504,872
Equity			
Share capital		172,335	172,335
Other equity instruments		44,615	44,615
Other reserves		146,045	149,500
Retained earnings		484,042	478,903
Total shareholders' equity		847,037	845,353
Non-controlling interests		66,456	66,178
Total equity		913,493	911,531
Total liabilities and equity		9,764,021	9,416,403

Interim condensed consolidated financial statements (unaudited)

Consolidated statement of cash flows

	Half-year to	
	30 Jun 2021 HK\$m	30 Jun 2020 HK\$m
Profit before tax	50,507	51,667
Adjustments for non-cash items:		
Depreciation and amortisation	6,462	6,733
Net gain from investing activities	(1,243)	(648)
Share of profits in associates and joint ventures	(10,548)	(8,049)
(Gain)/loss on disposal of subsidiaries, businesses, associates and joint ventures	(6)	1
Change in expected credit losses gross of recoveries and other credit impairment charges	2,107	14,433
Provisions	277	(235)
Share-based payment expense	512	328
Other non-cash items included in profit before tax	3,364	(5,067)
Change in operating assets	(255,831)	(160,147)
Change in operating liabilities	184,338	370,792
Elimination of exchange differences	5,533	12,577
Dividends received from associates	77	83
Contributions paid to defined benefit plans	(156)	(167)
Tax paid	(4,430)	(14,390)
Net cash from operating activities	(19,037)	267,911
Purchase of financial investments	(696,433)	(446,254)
Proceeds from the sale and maturity of financial investments	715,439	409,753
Purchase of property, plant and equipment	(1,286)	(1,711)
Proceeds from sale of property, plant and equipment and assets held for sale	177	27
Proceeds from disposal of customer loan portfolios	1,812	2,920
Net investment in intangible assets	(4,006)	(2,894)
Net cash from investing activities	15,703	(38,159)
Subordinated loan capital issued ¹	43,632	–
Subordinated loan capital repaid ¹	(19,665)	–
Dividends paid to shareholders of the parent company and non-controlling interests	(38,539)	(38,107)
Net cash from financing activities	(14,572)	(38,107)
Net increase/(decrease) in cash and cash equivalents	(17,906)	191,645
Cash and cash equivalents at 1 Jan	1,047,807	677,664
Exchange differences in respect of cash and cash equivalents	(18,788)	(8,901)
Cash and cash equivalents at 30 Jun ²	1,011,113	860,408

Interest received in the first half of 2021 was HK\$65,677m (first half of 2020: HK\$87,960m), interest paid in the first half of 2021 was HK\$13,261m (first half of 2020: HK\$29,940m) and dividends received in the first half of 2021 was HK\$2,101m (first half of 2020: HK\$1,165m).

- Changes in subordinated liabilities (including those issued to Group companies) during the first half year included amounts from issuance and repayments as presented above, and non-cash changes from foreign exchange loss of HK\$691m in the first half of 2021 (first half of 2020: loss of HK\$972m) and fair value loss after hedging of HK\$3,808m in the first half of 2021 (first half of 2020: fair value gain of HK\$7,466m).*
- The amount of cash and cash equivalents that are subject to exchange control and regulatory restrictions amounted to HK\$180,085m at 30 June 2021 (at 30 June 2020: HK\$128,039m).*

Consolidated statement of changes in equity

	Half-year to 30 Jun 2021										
	Share capital ¹	Other equity instruments	Retained earnings	Other reserves					Total shareholders' equity	Non-controlling interests	Total equity
				Property revaluation reserve	Financial assets at FVOCI reserve	Cash flow hedge reserve	Foreign exchange reserve	Other ²			
	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m
At 1 Jan 2021	172,335	44,615	478,903	63,793	9,883	772	(10,688)	85,740	845,353	66,178	911,531
Profit for the period	–	–	39,382	–	–	–	–	–	39,382	3,257	42,639
Other comprehensive income/(expense) (net of tax)	–	–	199	2,296	(3,779)	(291)	(1,007)	33	(2,549)	(173)	(2,722)
– debt instruments at fair value through other comprehensive income	–	–	–	–	(2,023)	–	–	–	(2,023)	(122)	(2,145)
– equity instruments designated at fair value through other comprehensive income	–	–	–	–	(2,181)	–	–	–	(2,181)	(540)	(2,721)
– cash flow hedges	–	–	–	–	–	(291)	–	–	(291)	(34)	(325)
– changes in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk	–	–	(392)	–	–	–	–	–	(392)	–	(392)
– property revaluation	–	–	–	2,296	–	–	–	–	2,296	204	2,500
– remeasurement of defined benefit asset/liability	–	–	569	–	–	–	–	–	569	117	686
– share of other comprehensive expense of associates and joint ventures	–	–	22	–	425	–	–	33	480	–	480
– exchange differences	–	–	–	–	–	–	(1,007)	–	(1,007)	202	(805)
Total comprehensive income/(expense) for the period	–	–	39,581	2,296	(3,779)	(291)	(1,007)	33	36,833	3,084	39,917
Dividends to shareholders ³	–	–	(35,713)	–	–	–	–	–	(35,713)	(2,826)	(38,539)
Movement in respect of share-based payment arrangements	–	–	77	–	–	–	–	(77)	–	(3)	(3)
Transfers and other movements ⁴	–	–	1,194	(1,509)	(13)	–	–	892	564	23	587
At 30 Jun 2021	172,335	44,615	484,042	64,580	6,091	481	(11,695)	86,588	847,037	66,456	913,493
	Half-year to 30 Jun 2020										
At 1 Jan 2020	172,335	44,615	464,629	72,013	6,959	(104)	(28,118)	82,349	814,678	64,603	879,281
Profit for the period	–	–	40,846	–	–	–	–	–	40,846	3,426	44,272
Other comprehensive income/(expense) (net of tax)	–	–	2,870	(4,128)	2,278	826	(9,778)	(72)	(8,004)	(776)	(8,780)
– debt instruments at fair value through other comprehensive income	–	–	–	–	3,047	–	–	–	3,047	114	3,161
– equity instruments designated at fair value through other comprehensive income	–	–	–	–	(581)	–	–	–	(581)	(329)	(910)
– cash flow hedges	–	–	–	–	–	826	–	–	826	87	913
– changes in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk	–	–	3,601	–	–	–	–	–	3,601	1	3,602
– property revaluation	–	–	–	(4,128)	–	–	–	–	(4,128)	(336)	(4,464)
– remeasurement of defined benefit asset/liability	–	–	(724)	–	–	–	–	–	(724)	(142)	(866)
– share of other comprehensive income/(expense) of associates and joint ventures	–	–	(7)	–	(188)	–	–	(72)	(267)	–	(267)
– exchange differences	–	–	–	–	–	–	(9,778)	–	(9,778)	(171)	(9,949)
Total comprehensive income/(expense) for the period	–	–	43,716	(4,128)	2,278	826	(9,778)	(72)	32,842	2,650	35,492
Dividends to shareholders ³	–	–	(34,416)	–	–	–	–	–	(34,416)	(3,695)	(38,111)
Movement in respect of share-based payment arrangements	–	–	79	–	–	–	–	276	355	10	365
Transfers and other movements ⁴	–	–	(44)	(1,482)	2	–	–	1,072	(452)	(108)	(560)
At 30 Jun 2020	172,335	44,615	473,964	66,403	9,239	722	(37,896)	83,625	813,007	63,460	876,467

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Consolidated statement of changes in equity (continued)

	Half-year to 31 Dec 2020										
	Share capital ¹	Other equity instruments	Retained earnings	Property revaluation reserve	Other reserves				Total shareholders' equity	Non-controlling interests	Total equity
					Financial assets at FVOCI reserve	Cash flow hedge reserve	Foreign exchange reserve	Other ²			
	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m
At 1 Jul 2020	172,335	44,615	473,964	66,403	9,239	722	(37,896)	83,625	813,007	63,460	876,467
Profit for the period	—	—	28,601	—	—	—	—	—	28,601	2,818	31,419
Other comprehensive income/(expense) (net of tax)	—	—	(2,968)	(1,158)	643	50	27,208	(30)	23,745	1,222	24,967
– debt instruments at fair value through other comprehensive income	—	—	—	—	(844)	—	—	—	(844)	(79)	(923)
– equity instruments designated at fair value through other comprehensive income	—	—	—	—	1,880	—	—	—	1,880	677	2,557
– cash flow hedges	—	—	—	—	—	50	—	—	50	6	56
– changes in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk	—	—	(3,344)	—	—	—	—	—	(3,344)	(1)	(3,345)
– property revaluation	—	—	—	(1,158)	—	—	—	—	(1,158)	(152)	(1,310)
– remeasurement of defined benefit asset/liability	—	—	412	—	—	—	—	—	412	139	551
– share of other comprehensive income/(expense) of associates and joint ventures	—	—	(36)	—	(393)	—	—	(30)	(459)	—	(459)
– exchange differences	—	—	—	—	—	—	27,208	—	27,208	632	27,840
Total comprehensive income/(expense) for the period	—	—	25,633	(1,158)	643	50	27,208	(30)	52,346	4,040	56,386
Dividends to shareholders ³	—	—	(19,852)	—	—	—	—	—	(19,852)	(1,158)	(21,010)
Movement in respect of share-based payment arrangements	—	—	41	—	—	—	—	(63)	(22)	2	(20)
Transfers and other movements ⁴	—	—	(883)	(1,452)	1	—	—	2,208	(126)	(166)	(292)
At 31 Dec 2020	172,335	44,615	478,903	63,793	9,883	772	(10,688)	85,740	845,353	66,178	911,531

1 Ordinary share capital includes preference shares which have been redeemed or bought back via payments out of distributable profits in previous years.

2 The other reserves mainly comprise share of associates' other reserves, purchase premium arising from transfer of business from fellow subsidiaries, property revaluation reserve relating to transfer of properties to a fellow subsidiary and the share-based payment reserve. The share-based payment reserve is used to record the amount relating to share awards and options granted to employees of the group directly by HSBC Holdings plc.

3 Including distributions paid on perpetual subordinated loans classified as equity under HKFRS.

4 The movement from retained earnings to other reserves includes the relevant transfers in associates according to local regulatory requirements, and from the property revaluation reserve to retained earnings in relation to depreciation of revalued properties.

Notes on the Interim condensed consolidated financial statements

1 Basis of preparation and significant accounting policies

(a) Compliance with Hong Kong Financial Reporting Standards

The Interim condensed consolidated financial statements of the group have been prepared in accordance with HKAS 34 'Interim Financial Reporting' as issued by the Hong Kong Institute of Certified Public Accountants ('HKICPA') and the Disclosure Guidance and Transparency Rules sourcebook of the UK's Financial Conduct Authority. These financial statements should be read in conjunction with the *Annual Report and Accounts 2020*.

Standards applied during the half-year to 30 June 2021

There were no new standards or amendments to standards that had a material effect on these interim condensed consolidated financial statements.

(b) Use of estimates and judgements

Management believes that the group's critical accounting estimates and judgements are those which relate to the impairment of amortised cost and FVOCI debt financial assets, the valuation of financial instruments, interests in associates and liabilities under insurance contracts and present value of in-force long-term insurance business. There were no changes in the current period to the critical accounting estimates and judgements applied in 2020, which are stated in Note 1 of the *Annual Report and Accounts 2020*.

(c) Composition of the group

There were no material changes in the composition of the group in the half-year to 30 June 2021.

(d) Future accounting developments

HKFRS 17 'Insurance Contracts' was issued in January 2018, with amendments to the standard issued in October 2020. The standard sets out the requirements that an entity should apply in accounting for insurance contracts it issues and reinsurance contracts it holds. Following the amendments, HKFRS 17 is effective from 1 January 2023. The group is in the process of implementing HKFRS 17. Industry practice and interpretation of the standard are still developing. Therefore, the likely impact of its implementation remains uncertain. However, compared with the group's current accounting policy for insurance, there will be no PVIF asset recognised; rather the estimated future profit will be included in the measurement of the insurance contract liability as the contractual service margin and gradually recognised in revenue as services are provided over the duration of the insurance contract.

(e) Going concern

The interim condensed consolidated financial statements are prepared on a going concern basis, as the Directors are satisfied that the group and the Bank have the resources to continue in business for the foreseeable future. In making this assessment, the Directors have considered a wide range of information relating to present and future conditions, including future projections of profitability, cash flows, capital requirements and capital resources. These considerations include stressed scenarios that reflect the continuing uncertainty that Covid-19 pandemic has had on the group's operations, as well as considering potential impacts from other top and emerging risks, and the related impact on profitability, capital and liquidity.

(f) Accounting policies

The accounting policies applied by the group for the Interim condensed consolidated financial statements are consistent with those described in Note 1 of the *Annual Report and Accounts 2020*, as are the methods of computation.

(g) Presentation of information

Certain disclosures required by HKFRSs have been included in the sections marked as '*Reviewed by PricewaterhouseCoopers*' in this *Interim Report 2021* as follows:

- Consolidated income statement and balance sheet data by global business are included in the 'Financial Review' on page 3.
- 'Summary of credit risk (excluding debt instruments measured at fair value through other comprehensive income ('FVOCI')) by stage distribution and ECL coverage by industry sector' included in 'Risk' section on pages 13 to 14.
- 'Measurement uncertainty and sensitivity analysis of ECL estimates' included in 'Risk' section on pages 14 to 18.

Notes on the Interim condensed consolidated financial statements (unaudited)

2 Dividends

	Half-year to			
	30 Jun 2021		30 Jun 2020	
	HK\$ per share	HK\$m	HK\$ per share	HK\$m
Dividends paid on ordinary shares				
– fourth interim dividend in respect of the previous financial year approved and paid during the half-year	0.47	21,665	0.58	27,026
– first interim dividend paid	0.26	12,211	0.13	5,814
Total	0.73	33,876	0.71	32,840
Total coupons on other equity instruments		1,837		1,576
Dividends to shareholders		35,713		34,416

The Directors declared a second interim dividend in respect of the half-year ended 30 June 2021 of HK\$0.24 per ordinary share (HK\$11,153m) (half-year ended 30 June 2020 of HK\$0.19 per ordinary share (HK\$8,915m)).

Total coupons on other equity instruments

	Half-year to	
	30 Jun 2021	30 Jun 2020
	HK\$m	HK\$m
US\$1,000m Fixed rate perpetual subordinated loan (interest rate fixed at 6.090%) ¹	474	370
US\$1,200m Fixed rate perpetual subordinated loans (interest rate fixed at 6.172%) ¹	576	445
US\$600m Fixed rate perpetual subordinated loan (interest rate fixed at 5.910%) ¹	275	249
US\$1,100m Fixed rate perpetual subordinated loan (interest rate fixed at 6.000%) ¹	512	512
Total	1,837	1,576

¹ These subordinated loans were issued in May and June 2019 and discretionary coupons are paid annually.

3 Loans and advances to customers

	At	
	30 Jun 2021	31 Dec 2020
	HK\$m	HK\$m
Gross loans and advances to customers	3,930,014	3,697,568
Expected credit loss allowances	(28,882)	(28,887)
Total	3,901,132	3,668,681

The following table provides an analysis of loans and advances to customers by industry sector based on the Statistical Classification of economic activities in the European Community ('NACE') codes.

Analysis of gross loans and advances to customers

	At	
	30 Jun 2021	31 Dec 2020
	HK\$m	HK\$m
Residential mortgages	1,125,473	1,097,760
Credit card advances	81,930	86,735
Other personal	369,274	267,852
Total personal	1,576,677	1,452,347
Real estate	639,665	638,560
Wholesale and retail trade	417,846	394,624
Manufacturing	385,209	379,853
Transportation and storage	113,812	97,204
Other	489,810	489,737
Total corporate and commercial	2,046,342	1,999,978
Non-bank financial institutions	306,995	245,243
Total	3,930,014	3,697,568
By geography¹		
Hong Kong	2,566,354	2,357,375
Rest of Asia Pacific	1,363,660	1,340,193

¹ The geographical information shown above has been classified by the location of the principal operations of the subsidiary and by the location of the branch responsible for advancing the funds.

Gross loans and advances to customers increased by HK\$232bn, or 6%. Excluding the unfavourable foreign exchange translation effects of HK\$15bn, gross loans and advances to customers increased by HK\$247bn, driven by increases in other personal lending of HK\$103bn and non-bank financial institution lending of HK\$62bn, mainly in Hong Kong, coupled with corporate and commercial lending of HK\$54bn. Residential mortgages also increased by HK\$33bn, mainly in Hong Kong and Australia.

4 Financial investments

Carrying amounts of financial investments

	At	
	30 Jun 2021 HK\$m	31 Dec 2020 HK\$m
Financial investments measured at fair value through other comprehensive income	1,504,230	1,700,406
– treasury and other eligible bills	651,254	790,627
– debt securities	845,037	899,193
– equity securities	7,939	10,586
Debt instruments measured at amortised cost	489,294	475,026
– treasury and other eligible bills	3,502	4,443
– debt securities	485,792	470,583
	1,993,524	2,175,432

5 Interests in associates and joint ventures

Bank of Communications Co., Ltd ('BoCom')

The group's investment in BoCom is classified as an associate. Significant influence in BoCom was established with consideration of all relevant factors, including representation on BoCom's Board of Directors and participation in a Resource and Experience Sharing agreement ('RES'). Under the RES, HSBC staff have been seconded to assist in the maintenance of BoCom's financial and operating policies. Investments in associates are recognised using the equity method of accounting in accordance with HKAS 28 whereby the investment is initially recognised at cost and adjusted thereafter for the post-acquisition change in the group's share of BoCom's net assets. An impairment test is required if there is any indication of impairment.

Impairment testing

At 30 June 2021, the fair value of the group's investment in BoCom had been below the carrying amount for approximately nine years. As a result, the group performed an impairment test on the carrying amount, which confirmed that there was no impairment at 30 June 2021 as the recoverable amount as determined by a value-in-use ('VIU') calculation was higher than the carrying value.

	At					
	30 Jun 2021			31 Dec 2020		
	VIU HK\$bn	Carrying value HK\$bn	Fair value HK\$bn	VIU HK\$bn	Carrying value HK\$bn	Fair value HK\$bn
BoCom	183.6	178.1	73.6	169.3	165.4	57.8

In future periods, the VIU may increase or decrease depending on the effect of changes to model inputs. The main model inputs are described below and are based on factors observed at period-end. The factors that could result in a change in the VIU and an impairment include a short-term under-performance by BoCom, a change in regulatory capital requirements, or an increase in uncertainty regarding the future performance of BoCom resulting in a downgrade of the forecast of future asset growth or profitability. An increase in the discount rate as a result of an increase in the risk premium or risk-free rates could also result in a reduction of VIU and an impairment. At the point where the carrying value exceeds the VIU, impairment would be recognised.

If the group did not have significant influence in BoCom, the investment would be carried at fair value rather than the current carrying value.

Basis of recoverable amount

The impairment test was performed by comparing the recoverable amount of BoCom, determined by a VIU calculation, with its carrying amount. The VIU calculation uses discounted cash flow projections based on management's best estimates of future earnings available to ordinary shareholders prepared in accordance with HKAS 36. Significant management judgement is required in arriving at the best estimate. There are two main components to the VIU calculation. The first component is management's best estimate of BoCom's earnings which is based on explicit forecasts over the short to medium term. This results in forecast earnings growth that is lower than recent historical actual growth and also reflects the uncertainty arising from the current economic outlook. Earnings beyond the short to medium term are then extrapolated into perpetuity using a long-term growth rate to derive a terminal value, which comprises the majority of the VIU. The second component is the capital maintenance charge ('CMC') which is management's forecast of the earnings that need to be withheld in order for BoCom to meet capital requirements over the forecast period (i.e. CMC is deducted when arriving at management's estimate of future earnings available to ordinary shareholders). The principal inputs to the CMC calculation include estimates of asset growth, the ratio of risk-weighted assets to total assets, and the expected capital requirements. An increase in the CMC as a result of a change to these principal inputs would reduce VIU. Additionally, management considers other factors (including qualitative factors) to ensure that the inputs to the VIU calculation remain appropriate.

Notes on the Interim condensed consolidated financial statements (unaudited)

Key assumptions in value-in-use calculation

We used a number of assumptions in our VIU calculation, in accordance with the requirements of HKAS 36:

- Long-term profit growth rate: 3% (31 December 2020: 3%) for periods after 2024, which does not exceed forecast GDP growth in mainland China and is consistent with forecasts by external analysts.
- Long-term asset growth rate: 3% (31 December 2020: 3%) for periods after 2024, which is the rate that assets are expected to grow to achieve long-term profit growth of 3%.
- Discount rate: 10.59% (31 December 2020: 11.37%) which is based on a Capital Asset Pricing Model ('CAPM') calculation for BoCom, using market data. Management also compares the rate derived from the CAPM with discount rates from external sources. The discount rate used is within the range of 9.5% to 15.0% (31 December 2020: 10.3% to 15.0%) indicated by external sources. The lower rate reflects the impact of updates to certain components of CAPM arising from a relative reduction in the volatility of Chinese banks, the maturity of the Chinese banking industry, and a decrease in the mainland China's credit risk due to its relatively quick recovery from the impact of the Covid-19 outbreak.
- Expected credit losses as a percentage of customer advances ('ECLs'): ranges from 0.98% to 1.10% (31 December 2020: 0.98% to 1.22%) in the short to medium term, reflecting a decrease in the upper end of the range due to BoCom's actual results and an improved outlook for ECLs following the peak of the Covid-19 outbreak in mainland China. For periods after 2024, the ratio is 0.88% (2020: 0.88%), which is slightly lower than BoCom's average ECLs in recent years prior to the Covid-19 outbreak.
- Risk-weighted assets as a percentage of total assets: ranges from 61% to 62% (31 December 2020: 61% to 62%) in the short to medium term, reflecting increases that may arise from relatively elevated ECLs in the short term, followed by reductions that may arise from a subsequent lowering of ECLs and a continuation of the trend of strong retail loan growth. For periods after 2024, the ratio is 61% (2020: 61%). These rates are similar to BoCom's actual results in recent years and are slightly below forecasts disclosed by external analysts.
- Operating income growth rate: ranges from 4.4% to 6.3% (31 December 2020: 3.5% to 6.7%) in the short to medium term, and are lower than BoCom's actual results in recent years and forecasts disclosed by external analysts, reflecting BoCom's most recent actual results, global trade tensions and industry developments in mainland China.
- Cost-income ratio: 36.1% (31 December 2020: 36.3% to 36.8%) in the short to medium term. These ratios are similar to BoCom's actual results in recent years and slightly lower than forecasts disclosed by external analysts.
- Effective tax rate ('ETR'): ranges from 10.0% to 14.3% (31 December 2020: 7.8% to 16.5%) in the short to medium term reflecting BoCom's actual results and an expected increase towards the long-term assumption through the forecast period. For periods after 2024, the rate is 16.8% (2020: 16.8%), which is higher than the recent historical average, above the most likely rate within the range of the minimum tax rate as proposed by the OECD/G20 Inclusive Framework on Base Erosion and Profit Shifting, and forecasts for the short to medium term disclosed by external analysts.
- Capital requirements: Capital adequacy ratio ('CAR'): 12.5% (31 December 2020: 11.5%) and tier 1 capital adequacy ratio: 9.5% (31 December 2020: 9.5%), based on BoCom's capital risk appetite and the minimum regulatory requirements, respectively. The CAR assumption was updated to 12.5% from 11.5% (the minimum regulatory requirement) following the recent approval of BoCom's capital management plan.

The following table shows the change to each key assumption in the VIU calculation that on its own would reduce the headroom to nil:

Key assumption	Changes to key assumption to reduce headroom to nil
• Long-term profit growth rate	• Decrease by 19 basis points
• Long-term asset growth rate	• Increase by 17 basis points
• Discount rate	• Increase by 24 basis points
• Expected credit losses as a percentage of customer advances	• Increase by 3 basis points
• Risk-weighted assets as a percentage of total assets	• Increase by 131 basis points
• Operating income growth rate	• Decrease by 35 basis points
• Cost-income ratio	• Increase by 79 basis points
• Long-term effective tax rate	• Increase by 207 basis points
• Capital requirements – capital adequacy ratio	• Increase by 27 basis points
• Capital requirements – tier 1 capital adequacy ratio	• Increase by 196 basis points

The following table further illustrates the impact on VIU of reasonably possible changes to key assumptions. This reflects the sensitivity of the VIU to each key assumption on its own and it is possible that more than one favourable and/or unfavourable change may occur at the same time. The selected rates of reasonably possible changes to key assumptions are largely based on external analysts' forecasts which can change period to period.

	Favourable change			Unfavourable change		
	Increase in VIU		VIU HK\$bn	Decrease in VIU		VIU HK\$bn
	bps	HK\$bn		bps	HK\$bn	
At 30 June 2021						
Long-term asset/profit growth rate ¹	-50 / –	14.5 / –	198.1 / 183.6	– / -50	– / (13.5)	183.6 / 170.1
Discount rate	-109	29.3	212.9	+31	(6.9)	176.7
Expected credit losses as a percentage of customer advances	2021 to 2024: 99 2025 onwards: 79	14.7	198.3	2021 to 2024: 112 2025 onwards: 102	(24.0)	159.6
Risk-weighted assets as a percentage of total assets	-81	1.7	185.3	+87	(5.3)	178.3
Operating income growth rate	+16	2.7	186.3	-46	(7.6)	176.0
Cost-income ratio	-168	13.0	196.6	+287	(20.9)	162.7
Long-term effective tax rate	-180	4.7	188.3	+820	(21.7)	161.9
Capital requirements – capital adequacy ratio	–	–	183.6	+254	(57.8)	125.8
Capital requirements – tier 1 capital adequacy ratio	–	–	183.6	+332	(37.5)	146.1
At 31 December 2020						
Long-term asset/profit growth rate ¹	-50 / –	11.0 / –	180.3 / 169.3	– / -50	– / (10.0)	169.3 / 159.3
Discount rate	-47	9.4	178.7	+53	(9.3)	160.0
Expected credit losses as a percentage of customer advances	2020 to 2024: 96 2025 onwards: 76	17.7	187.0	2020 to 2024: 122 2025 onwards: 95	(16.5)	152.8
Risk-weighted assets as a percentage of total assets	-40	0.4	169.7	+166	(6.7)	162.6
Operating income growth rate	+2	0.9	170.2	-69	(11.8)	157.5
Cost-income ratio	-149	9.9	179.2	+120	(9.6)	159.7
Long-term effective tax rate	-316	6.9	176.2	+820	(17.7)	151.6
Capital requirements – capital adequacy ratio	–	–	169.3	+297	(61.0)	108.3
Capital requirements – tier 1 capital adequacy ratio	–	–	169.3	+263	(41.5)	127.8

1 The reasonably possible ranges of the long-term profit growth rate and long-term asset growth rate assumptions reflect the close relationship between these assumptions, which would result in offsetting changes to each assumption.

Considering the interrelationship of the changes set out in the table above, management estimates that the reasonably possible range of VIU is HK\$152.1bn to HK\$201.0bn (31 December 2020: HK\$140.9bn to HK\$187.9bn). The range is based on the favourable/unfavourable change in the earnings in the short to medium term and long-term expected credit losses as a percentage of customer advances as set out in the table above. All other long-term assumptions, the discount rate and the basis of the CMC have been kept unchanged when determining the reasonably possible range of the VIU.

6 Customer accounts

Customer accounts by country/territory

	At	
	30 Jun 2021 HK\$m	31 Dec 2020 HK\$m
Hong Kong	4,109,367	4,120,955
Mainland China	444,405	440,608
Singapore	404,796	427,537
Australia	212,310	227,072
India	186,188	156,615
Malaysia	122,878	124,036
Taiwan	119,334	124,375
Indonesia	43,433	40,304
Other	258,784	249,894
	5,901,495	5,911,396

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7 Fair values of financial instruments carried at fair value

The accounting policies, control framework and hierarchy used to determine fair values at 30 June 2021 are consistent with those applied for the *Annual Report and Accounts 2020*.

The following table provides an analysis of financial instruments carried at fair value and bases of valuation.

	Fair value hierarchy			Third-party total HK\$m	Inter-company ² HK\$m	Total HK\$m
	Level 1 HK\$m	Level 2 HK\$m	Level 3 HK\$m			
At 30 Jun 2021						
Assets						
Trading assets ¹	441,769	233,640	2,817	678,226	–	678,226
Derivatives	600	237,930	1,873	240,403	109,511	349,914
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	100,578	34,406	61,580	196,564	–	196,564
Financial investments	1,121,918	378,396	3,916	1,504,230	–	1,504,230
Liabilities						
Trading liabilities ¹	55,202	34,540	–	89,742	–	89,742
Derivatives	759	210,589	2,391	213,739	109,137	322,876
Financial liabilities designated at fair value ¹	–	141,365	22,953	164,318	–	164,318

At 31 Dec 2020

Assets						
Trading assets ¹	403,730	195,447	1,237	600,414	–	600,414
Derivatives	2,140	342,357	1,028	345,525	77,420	422,945
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	97,590	31,836	49,534	178,960	–	178,960
Financial investments	1,315,696	378,075	6,635	1,700,406	–	1,700,406
Liabilities						
Trading liabilities ¹	52,504	8,308	–	60,812	–	60,812
Derivatives	2,015	334,934	3,538	340,487	87,724	428,211
Financial liabilities designated at fair value ¹	–	146,529	20,484	167,013	–	167,013

¹ Amounts with HSBC Group entities are not reflected here.

² Derivatives balances with HSBC Group entities are largely under 'Level 2'.

Transfers between Level 1 and Level 2 fair values

	Assets				Liabilities		
	Financial investments HK\$m	Trading assets HK\$m	Designated and otherwise mandatorily measured at fair value HK\$m	Derivatives HK\$m	Trading liabilities HK\$m	Designated at fair value HK\$m	Derivatives HK\$m
At 30 Jun 2021							
Transfers from Level 1 to Level 2	37,696	16,727	1,163	802	74	–	1,652
Transfers from Level 2 to Level 1	28,014	13,822	725	–	3,411	–	–
At 31 Dec 2020							
Transfers from Level 1 to Level 2	31,809	20,534	1,901	–	236	–	–
Transfers from Level 2 to Level 1	37,387	26,796	1,860	5	191	–	–

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

Movements in Level 3 financial instruments

There were no material transfers between Level 3 and Levels 1 or 2 as a result of change in observability of valuation input, sales, issues or settlement, nor material gains/losses recognised in the income statement/other comprehensive income during the first half of 2021 in relation to financial instruments carried at fair value in Level 3 (first half of 2020: immaterial). The increase in Level 3 assets was mainly due to the purchase of private equity fund and other alternative investments of HK\$10,432m (first half of 2020: HK\$6,710m) to back policyholder liabilities to support growth in the insurance business.

8 Fair values of financial instruments not carried at fair value

	At			
	30 Jun 2021		31 Dec 2020	
	Carrying amount HK\$m	Fair value HK\$m	Carrying amount HK\$m	Fair value HK\$m
Assets				
Reverse repurchase agreements – non-trading	630,901	631,016	520,344	520,401
Loans and advances to banks	454,693	455,197	403,884	404,327
Loans and advances to customers	3,901,132	3,889,792	3,668,681	3,650,316
Financial investments – at amortised cost	489,294	533,111	475,025	534,886
Liabilities				
Repurchase agreements – non-trading	236,509	236,506	136,157	136,157
Deposits by banks	311,257	311,257	248,628	248,629
Customer accounts	5,901,495	5,902,401	5,911,396	5,911,813
Debt securities in issue	75,467	76,049	79,419	80,066
Subordinated liabilities	4,041	3,898	4,065	3,749

Other financial instruments not carried at fair value are typically short term in nature or re-priced to current market rates frequently. Accordingly, their carrying amount is a reasonable approximation of fair value. Details of how the fair values of financial instruments that are not carried at fair value on the balance sheet are calculated can be found in Note 34 of the *Annual Report and Accounts 2020*.

9 Contingent liabilities, contractual commitments and guarantees

	At	
	30 Jun 2021	31 Dec 2020
	HK\$m	HK\$m
Guarantees and contingent liabilities	353,673	329,706
Commitments	2,873,872	2,815,583
	3,227,545	3,145,289

The above table discloses the nominal principal amounts of commitments (excluding capital commitments), guarantees and other contingent liabilities, which represents the amounts at risk should contracts be fully drawn upon and clients default. The amount of commitments shown above reflects, where relevant, the expected level of take-up of pre-approved facilities. As a significant portion of guarantees and commitments is expected to expire without being drawn upon, the total of the nominal principal amounts is not indicative of future liquidity requirements.

Contingent liabilities at 30 June 2021 included amounts in relation to legal and regulatory matters as set out in Note 12.

10 Segmental analysis

The Executive Committee ('EXCO') is considered the Chief Operating Decision Maker ('CODM') for the purpose of identifying the group's reportable segments. The global businesses are considered our reportable segments under HKFRS 8 'Operating Segments'. The basis of identifying segments and measuring segmental results is set out in Note 31 'Segmental Analysis' of the *Annual Report and Accounts 2020*.

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

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

Our global businesses

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

- Wealth and Personal Banking ('WPB') offers a full range of retail banking and wealth products to our customers from personal banking to ultra-high net worth individuals. Typically, customer offerings include retail banking products, such as current and savings accounts, mortgages and personal loans, credit cards, debit cards and local and international payment services. We also provide wealth management services, including insurance and investment products, global asset management services, investment management and Private Wealth Solutions for customers with more sophisticated and international requirements.
- Commercial Banking ('CMB') offers a broad range of products and services to serve the needs of our commercial customers, including small and medium-sized enterprises, mid-market enterprises and corporates. These include credit and lending, international trade and receivables finance, treasury management and liquidity solutions (payments and cash management and commercial cards), commercial insurance and investments. CMB also offers its customers access to products and services offered by other global businesses, such as Global Banking and Markets, which include foreign exchange products, raising capital on debt and equity markets and advisory services.
- Global Banking and Markets ('GBM') provides tailored financial solutions to major government, corporate and institutional clients and private investors worldwide. The client-focused business lines deliver a full range of banking capabilities including financing, advisory

Notes on the Interim condensed consolidated financial statements (unaudited)

and transaction services, a markets business that provides services in credit, rates, foreign exchange, equities, money markets and securities services, and principal investment activities.

Financial performance by global business is set out in the Financial Review on page 3, which forms part of the Interim condensed consolidated financial statements.

Geographical regions

	Hong Kong HK\$m	Rest of Asia-Pacific HK\$m	Intra-segment elimination HK\$m	Total HK\$m
Half-year to 30 Jun 2021				
Total operating income	94,168	40,229	(25)	134,372
Profit before tax	26,062	24,445	–	50,507
At 30 Jun 2021				
Total assets	6,937,249	3,578,737	(751,965)	9,764,021
Total liabilities	6,454,854	3,147,639	(751,965)	8,850,528
Credit commitments and contingent liabilities (contract amounts)	1,742,763	1,484,782	–	3,227,545
Half-year to 30 Jun 2020				
Total operating income	95,357	39,152	(72)	134,437
Profit before tax	35,987	15,680	–	51,667
At 30 Jun 2020				
Total assets	6,489,110	3,295,482	(687,254)	9,097,338
Total liabilities	5,999,611	2,908,514	(687,254)	8,220,871
Credit commitments and contingent liabilities (contract amounts)	1,800,026	1,385,934	–	3,185,960

11 Related party transactions

There were no changes in the related party transactions as described in the *Annual Report and Accounts 2020* that have had a material effect on the financial position or performance of the group in the half-year to 30 June 2021. All related party transactions that took place in the half-year to 30 June 2021 were similar in nature to those described in the *Annual Report and Accounts 2020*.

12 Legal proceedings and regulatory matters

The group is party to legal proceedings and regulatory matters in a number of jurisdictions arising out of its normal business operations. Apart from the matters described below, the group considers that none of these matters are material. The recognition of provisions is determined in accordance with the accounting policies set out in Note 1.2(n) of the *Annual Report and Accounts 2020*. While the outcomes of legal proceedings and regulatory matters are inherently uncertain, management believes that, based on the information available to it, appropriate provisions have been made in respect of these matters as at 30 June 2021. Any provision recognised does not constitute an admission of wrongdoing or legal liability. It is not practicable to provide an aggregate estimate of potential liability for our legal proceedings and regulatory matters as a class of contingent liabilities.

Anti-money laundering and sanctions-related matters

In December 2012, HSBC Holdings plc ('HSBC Holdings') entered into a number of agreements, including an undertaking with the UK Financial Services Authority (replaced with a Direction issued by the UK Financial Conduct Authority ('FCA') in 2013 and again in 2020) as well as a cease-and-desist order with the US Federal Reserve Board ('FRB'), both of which contained certain forward-looking anti-money laundering ('AML') and sanctions-related obligations. HSBC also agreed to retain an independent compliance monitor (who was, for FCA purposes, a 'Skilled Person' under section 166 of the Financial Services and Markets Act and, for FRB purposes, an 'Independent Consultant') to produce periodic assessments of the Group's AML and sanctions compliance programme. In 2020, HSBC's engagement with the independent compliance monitor, acting in his roles as both Skilled Person and Independent Consultant, concluded. The role of FCA Skilled Person was assigned to a new individual in the second quarter of 2020. Separately, in early 2021, a new FRB Independent Consultant was appointed pursuant to the cease-and-desist order.

There are many factors that may affect the range of outcomes, and the resulting financial impact of these matters, which could be significant.

Singapore Interbank Offered Rate ('Sibor'), Singapore Swap Offer Rate ('SOR') and Australia Bank Bill Swap Rate ('BBSW')

In July and August 2016, HSBC and other panel banks were named as defendants in two putative class actions filed in the New York District Court on behalf of persons who transacted in products related to the Sibor, SOR and BBSW benchmark rates. The complaints allege, among other things, misconduct related to these benchmark rates in violation of US antitrust, commodities and racketeering laws, and state law.

In the Sibor/SOR litigation, in March 2021, following an appeal by the plaintiffs, the Second Circuit Court of Appeals reversed the dismissal of the plaintiffs' third amended complaint and remanded the case to the New York District Court where it remains pending against the defendants, including the Bank.

In the BBSW litigation, in November 2018, the court dismissed all foreign defendants, including all the HSBC entities, on personal jurisdiction grounds. In April 2019, the plaintiffs filed an amended complaint, which the defendants moved to dismiss. In February 2020, the court again dismissed the plaintiffs' amended complaint against all the HSBC entities.

There are many factors that may affect the range of outcomes, and the resulting financial impact of these matters, which could be significant.

United States Bankruptcy Court for the Southern District of New York litigation

In June 2018, a complaint naming the Bank as the defendant was filed in the United States Bankruptcy Court for the Southern District of New York by the Chapter 11 Trustee of CFG Peru Investments Pte. Ltd. (Singapore) (the 'Trustee Complaint'). The Trustee Complaint made allegations under the Peruvian Civil Code, Hong Kong and U.S. common law and the Bankruptcy Code. The Trustee was seeking damages and equitable subordination or disallowance of the Bank's Chapter 11 claims in a related bankruptcy proceeding.

On 10 June 2021, the U.S. Bankruptcy Court confirmed a restructuring plan comprising, among other things, settlement of the Trustee Complaint between the Bank and the Trustee.

Foreign exchange-related investigations

In January 2018, following the conclusion of the investigation of the US Department of Justice ('DoJ') into HSBC's historical foreign exchange activities, HSBC Holdings entered into a three-year deferred prosecution agreement with the Criminal Division of the DoJ (the 'FX DPA'), regarding fraudulent conduct in connection with two particular transactions in 2010 and 2011. In January 2021, the FX DPA expired and, in July 2021, the DoJ filed a motion to dismiss the charges deferred by the FX DPA, which remains pending.

Other regulatory investigations, reviews and litigation

The Bank and/or certain of its affiliates are subject to a number of other investigations and reviews by various regulators and competition and law enforcement authorities, as well as litigation, in connection with various matters relating to the firm's businesses and operations, including investigations by tax administration, regulatory and law enforcement authorities in India and elsewhere in connection with allegations of tax evasion or tax fraud, money laundering and unlawful cross-border banking solicitation.

There are many factors that may affect the range of outcomes, and the resulting financial impact, of these matters, which could be significant.

13 Interim Report 2021 and statutory accounts

The information in this *Interim Report 2021* is unaudited and does not constitute statutory accounts. The *Interim Report 2021* was approved by the Board of Directors on 2 August 2021. The Bank's statutory annual consolidated accounts for the year ended 31 December 2020 have been delivered to the Registrar of Companies and the Hong Kong Monetary Authority. The auditor has reported on those financial statements in their report dated 23 February 2021. The auditor's report was unqualified; did not include a reference to any matters to which the auditor drew attention by way of emphasis without qualifying its report; and did not contain a statement under sections 406(2), 407(2) or (3) of the Hong Kong Companies Ordinance (Cap. 622).

14 Ultimate holding company

The Hongkong and Shanghai Banking Corporation Limited is an indirectly-held, wholly-owned subsidiary of HSBC Holdings plc, which is incorporated in England.

RISK

The information in this section describes the principal risks and risk management system of the Issuer and references herein to the “**HSBC Group**” or the “**group**” are to the Issuer and its subsidiaries. The information in this section has been extracted from our 2021 interim report. References to page numbers (i.e. the page numbers which appear on the bottom of the pages) in this section are to pages of our 2021 interim report. The extracts set out in this section are not complete and reference should be made to our 2021 interim report which is available for inspection at the Issuer’s office at HSBC Main Building, 1 Queen’s Road Central, Hong Kong.

Operating expenses

	Half-year to	
	30 Jun 2021 HK\$m	30 Jun 2020 HK\$m
Employee compensation and benefits	20,246	17,453
General and administrative expenses	24,578	21,030
Depreciation of property, plant and equipment	4,409	4,657
Amortisation and impairment of intangible assets	2,053	2,076
Operating expenses	51,286	45,216

Employee compensation and benefits increased by HK\$2,793m, or 16%. Excluding the impact from foreign exchange, employee compensation and benefits increased by HK\$2,235m, or 12%, driven by higher accruals on performance-related pay and wage inflation, partly offset by lower average headcount across the region.

General and administrative expenses increased by HK\$3,548m, or 17%. Excluding the impact from foreign exchange, general and administrative expenses increased by HK\$3,209m, or 15%, driven by an increase in investments, mainly IT-related costs to enhance our digital capabilities. To a lesser extent, there were also increases in marketing expenses, professional and consultancy expenses, and premises and equipment costs.

Share of profit in associates and joint ventures

At 30 June 2021, an impairment review on the group's investment in Bank of Communications Co., Limited ('BoCom') was carried out and it was concluded that the investment was not impaired based on our value-in-use calculation (see Note 5 on the Interim condensed consolidated financial statements for further details).

As discussed in that note, in future periods, the value-in-use may increase or decrease depending on the effect of changes to model inputs. It is expected that the carrying amount will increase due to retained profits earned by BoCom. At the point where the carrying amount exceeds the value-in-use, impairment would be recognised. The group would continue to recognise its share of BoCom's profit or loss, but the carrying amount would be reduced to equal the value-in-use, with a corresponding reduction in income. An impairment review would continue to be performed at each subsequent reporting period, with the carrying amount and income adjusted accordingly.

Risk

Principal risks and uncertainties

The group continuously monitors and identifies risks. Our principal risks are credit risk, treasury risk, market risk, resilience risk, regulatory compliance risk, financial crime risk, model risk, as well as financial and insurance risks from our insurance manufacturing operations. A description of principal risks and a summary of our current policies and practices regarding the management of risk is set out on pages 25 to 26 in the 'Risk' section of the *Annual Report and Accounts 2020*.

We have maintained a consistent approach to risk management throughout our history, helping to ensure we protect customers' funds, lend responsibly and support economies.

Banks continued to play an expanded role in supporting society and customers during the first half of 2021 due to the unprecedented global economic events caused by the Covid-19 pandemic. Many of our customers' business models and income were impacted by the global economic downturn, requiring them to take significant levels of support from both governments and banks.

Throughout the pandemic, we have continued to support our customers and adapted our operational processes. We have maintained high levels of service as our people, processes and systems responded to the required changes.

The financial performance of our operations varied in different geographies, but the balance sheet and liquidity of the group remained strong. This helped us to support our customers both

during periods of government-imposed restrictions and when these restrictions were eased.

To meet the additional challenges caused by the Covid-19 pandemic, we supplemented our existing approach to risk management with additional tools and practices, and these continue to be in place today. We increased our focus on the quality and timeliness of the data used to inform management decisions, through measures such as early warning indicators, prudent active risk management of our risk appetite, and ensuring regular communication with our Board and key stakeholders.

We remain committed to investing in the reliability and resilience of our IT systems and critical services that support all parts of our business. We do so to protect our customers, affiliates and counterparties, and to help ensure that we minimise any disruption to services that could result in reputational and regulatory consequences. We continue to operate in a challenging environment in which cyber threats are prevalent, and continue to invest in business and technical controls to defend against these threats.

We are continuing the implementation of our business transformation plans, ensuring that we are able to support growth and manage safely the risks, which include execution, operational, governance, reputational, conduct and financial risks.

Our top and emerging risks report identifies forward-looking risks so that they can be considered in determining whether any incremental action is needed to either prevent them from materialising or to limit their effect.

Top risks are those that may have a material impact on the financial results, reputation or business model of the group in the year ahead. Emerging risks are those that have large unknown components and may form beyond a one-year horizon. If any of these risks were to occur, they could have a material effect on the group.

Our suite of top and emerging risks are subject to regular review by senior governance forums. We continue to monitor closely the identified risks and ensure robust management actions are in place, as required.

Our current top and emerging risks are summarised below and discussed in more detail on pages 17 to 23 of the *Annual Report and Accounts 2020*.

Risk

Risk	Trend	Mitigants
Externally driven		
Geopolitical and macroeconomic risks	>	We continue to closely monitor emerging risks posed by an evolving geopolitical landscape, as well as macroeconomic risks, and adopt commensurate procedures and controls based on an assessment of the impacts these may have on our portfolios. In spite of a rapid economic recovery during the first half of 2021 in some of our markets and a reduced credit stress in our portfolios, we maintain heightened monitoring activities to identify sectors and customers experiencing financial difficulties as a result of the Covid-19 outbreak. In light of continued US-China political tensions, we continue to assess those sectors likely to be particularly impacted by a proliferation of laws and regulatory actions undertaken on both sides.
Cyber threat and unauthorised access to systems	>	We protect HSBC and our customers by strengthening our cyber defences, helping us to execute our business priorities safely and keep our customers' information secure. We focus on controls to prevent, detect and mitigate the impacts of persistent and increasingly advanced cyber threats with a specific emphasis on vulnerability management, malware defences, protections against unauthorised access and third-party risk. We closely monitor the continued dependency on wide spread remote working and online facilities.
Regulatory developments including conduct, with adverse impact on business model and profitability	>	We closely monitor for regulatory developments to ensure they are interpreted and implemented effectively and in a timely way. We also engage with regulators, policy makers and standard setters as appropriate, to help shape new regulatory requirements. Key themes currently driving the regulatory compliance agenda include: consumer protection and customer vulnerability; the impact of digital services and innovation; and environmental, social and governance matters, with a particular focus on climate risk.
Financial crime risk environment	>	We continue to support the business and our customers throughout the Covid-19 pandemic, while making improvements to our financial crime controls. We have updated and refreshed our fraud controls and continued to invest in advanced analytics and artificial intelligence as key elements of our next generation of tools to fight financial crime.
Interbank offered rate ('Ibor') transition	^	We remain focused on completing the provision of alternative near risk-free rate ('RFR') products, and the supporting processes and systems, to replace all outstanding Ibor-linked contracts that are on a demise path within the required timelines. Due to delays in market readiness, we are preparing for an increased risk that the transition of outstanding contracts will be concentrated in the latter part of 2021.
Climate-related risks	^	Within the Group, we have established a dedicated climate risk team to support our climate strategy and to respond to regulatory expectations, embedded responsibilities for climate risk management within our businesses and functions and are enhancing our capacity and capabilities to manage this. We have integrated climate risk into the Group risk management framework and enhanced our climate risk appetite statement with quantitative metrics. We are developing a climate risk training programme for all levels across the Group. We continue to roll out customer transition risk questionnaires, assess physical risk to our mortgage portfolio, and build scenario analysis capabilities in preparation for regulatory stress tests following pilot exercises.
Internally driven		
Risks arising from the receipt of services from third parties	>	The impacts of the Covid-19 pandemic on the delivery of services to the Group are being closely monitored, with businesses and functions taking appropriate action where needed. We have continued to enhance our third-party risk management programme to help ensure engagements comply with our third-party risk policy and required standards.
Data management	>	We continue to remediate the control environment for data-related risks with focused investments in data governance, data usage, data integrity, data privacy and information lifecycle management. In the first half of 2021, our data strategy was refreshed to align to three pillars: protect, connect and unlock.
IT systems infrastructure and resilience	>	We continue to monitor and improve IT systems and network resilience to minimise service disruption and improve customer experience. To support the business strategy, we strengthened our end-to-end service management, build and deployment controls and system monitoring capabilities.
Risks associated with workforce capability, capacity and environmental factors with potential impact on growth	>	We monitor workforce capacity and capability requirements in line with our published growth strategy. We have put in place measures to support our people to work safely during the Covid-19 outbreak, and to integrate them back into the workplace as government restrictions ease. We monitor people risks that may arise due to business transformation, and perform periodic risk assessments, including against strategies, to help ensure retention of key personnel to support growth.
Change execution risk	^	We continue to monitor and manage our change execution risk, including our capacity and resources to meet the increased levels of change for 2021 associated with the delivery of our strategic transformation and regulatory requirements. We are working to deliver sustainable change efficiently and safely, with a new change framework launched in May 2021.

^ Risk heightened during first half 2021.

> Risk remained at the same level as 2020.

Key developments in the first half of 2021

We continued to manage actively the risks resulting from the Covid-19 outbreak and its impacts on our customers and operations during the first half of 2021, as well as other key risks described in this section. In addition, we enhanced our risk management in the following areas:

- We streamlined the articulation of our risk appetite framework, providing further clarity on how risk appetite interacts with strategic planning and recovery planning processes.
- We continued to simplify our approach to non-financial risk management, with the implementation of more effective oversight tools and techniques to improve end-to-end identification and management of these risks.
- We accelerated the transformation of our approach to managing financial risks across the businesses and risk functions, including initiatives to enhance portfolio monitoring and analytics, credit risk, traded risk and treasury risk management, as well as the models used to manage financial risks.
- We continued to enhance our approach to portfolio and concentration risk management, through clearly defined roles and responsibilities; and improving our data and management information reporting capabilities.
- We appointed a Group Head of Climate Risk in support of our climate change strategy and to oversee the development of our climate risk management capabilities. Our climate risk programme will shape our approach to climate risk across four key pillars: governance and risk appetite; risk management; stress testing; and disclosures. We have made progress in the first half of 2021, including enhancing our risk appetite statement with quantitative climate risk metrics.
- We continued to improve the effectiveness of our financial crime controls with a targeted update of our fraud controls. We refreshed our financial crime policies, ensuring they remained up-to-date and addressed changing and emerging risks, and we continued to meet our regulatory obligations.
- We continue to have enhanced governance and oversight around model adjustments and related processes for HKFRS 9 and Sarbanes-Oxley controls.

Areas of special interest

During the first half of 2021, a number of areas were considered as part of our top and emerging risks because of the effect they have on the group. In this section we have focused on risks related to Covid-19, geopolitical and macroeconomic risk, and labor transition.

Risks related to Covid-19

The Covid-19 outbreak and its effect on the global economy have impacted our customers. The outbreak necessitated governments to respond at unprecedented levels to protect public health, and to support local economies and livelihoods. It affected countries and territories at different times and to varying degrees. Various government support measures and restrictions in response have added challenges, given the rapid pace of change and significant operational demands. The speed at which countries and territories are able to return to pre-Covid-19 levels of economic activity will vary based on the extent of continuing government support offered, infection rates and the ability to roll out vaccines. Renewed outbreaks emphasise the ongoing threat of Covid-19, as seen in India during the first half of 2021 following the outbreak of a new variant of the virus, and may again result in renewed tightening of government restrictions following recent relaxations.

Government restrictions imposed around the world to limit the spread of Covid-19 resulted in a sharp contraction in global economic activity during 2020. Our Central scenario used to calculate impairment assumes that economic activity will continue to recover over the course of 2021. In this scenario, recovery is supported by a successful roll-out of vaccination programmes

across our key markets, and the use of a variety of non-pharmacological measures to contain the virus. Governments and central banks are expected to continue to work together across many of our key markets to ensure that households and firms receive an appropriate level of financial support until restrictions on economic activity and mobility can be materially eased. There is a high degree of uncertainty associated with economic forecasts in the current environment and there are significant risks to our Central scenario. The degree of uncertainty varies by market, driven by country-specific trends in the evolution of the pandemic and associated policy responses. As a result, our Central scenario for impairment has not been assigned an equal likelihood of occurrence across our key markets. For further details of our Central and other scenarios, see 'Measurement uncertainty and sensitivity analysis of ECL estimates' on pages 14 to 18.

There is a material risk of a renewed drop in economic activity, particularly in countries with low vaccination rates. The economic fallout from the Covid-19 outbreak risks increasing inequality across markets that have already suffered from social unrest. It will likely take time before societies return to pre-pandemic levels of social interactions, meaning that increased inequalities in living standards within societies will continue to disrupt most markets in the medium term. This will leave the burden on governments and central banks to maintain or increase fiscal and monetary stimulus, possibly in a more targeted fashion than seen during 2020 and the first half of 2021. After financial markets suffered a sharp fall in the early phases of the spread of Covid-19, they rebounded but still remain volatile. Depending on the long-term impact on global economic growth, financial asset prices may suffer a further sharp fall.

Governments and central banks in major economies have deployed extensive measures to support their local populations. Central banks in developed markets are expected to maintain record low interest rates for a considerable period of time, but some of their emerging markets counterparts have begun to increase their interest rates to contain rising inflation or counter the risk of capital outflows. Government debt has risen in most advanced economies, and is expected to remain high into the medium term. This could eventually pose a dilemma for central banks, as they face the conflicting aims of keeping debt servicing costs contained while preventing a steep rise in inflation.

We continue to support our personal and business customers through market-specific measures initiated during the Covid-19 outbreak, and by supporting national government schemes that focus on the parts of the economy most impacted by the pandemic. For further details of our customer relief programmes, see page 19.

The rapid introduction and varying nature of the government support schemes introduced throughout the Covid-19 pandemic has led to increased operational risks, including complex conduct considerations, increased reputational risk and increased risk of fraud. These risks are likely to be heightened further as and when those government support schemes are unwound. Central bank and government actions and support measures, and our responses to those, have also led to increased litigation risk.

The impact of the pandemic on the long-term prospects of businesses in the most vulnerable sectors of the economy – such as retail, hospitality and commercial real estate – remains uncertain and may lead to significant credit losses on specific exposures, which may not be fully captured in ECL estimates. In addition, in times of stress, fraudulent activity is often more prevalent, leading to potentially significant credit or operational losses.

As economic conditions improve, and government support measures come to an end, there is a risk that the outputs of HKFRS 9 models may have a tendency to fail to accurately predict loan losses. Model outputs and management adjustments are closely monitored and independently reviewed at the group and country level for reliability and appropriateness prior to inclusion in the financial results. There is also work in progress to redevelop the models used to calculate capital levels and drive business decisions. These include those related to credit and traded risk to

Risk

address new and changing regulatory requirements to internal ratings-based methodologies, Ibor replacement and the fundamental review of the trading book.

The operational support functions on which the group relies are based in a number of countries worldwide, some of which, notably India, have been particularly affected by the Covid-19 outbreak and have recently experienced a significant increase in infection rates. As a result of the Covid-19 outbreak, business continuity responses have been implemented, with no significant impacts to service delivery in locations where the group operates. We continue to monitor the situation, in particular, in those countries and territories where the level of Covid-19 infections is most prevalent.

Despite the ongoing economic recovery, significant uncertainties remain in assessing the duration and impact of the Covid-19 outbreak, including whether any subsequent outbreaks result in a reimposition of government restrictions. There is a risk that economic activity remains below pre-pandemic levels for a prolonged period. We continue to monitor the situation closely, and given the novel and prolonged nature of the outbreak, additional mitigating actions may be required.

Geopolitical and macroeconomic risk

Our operations and portfolios are exposed to risks associated with political instability, civil unrest and military conflict, which could lead to disruption of our operations, physical risk to our staff and/or physical damage to our assets.

Global tensions over trade, technology and ideology are manifesting themselves in divergent regulatory standards and compliance regimes, presenting long-term strategic challenges for multinational businesses.

The Covid-19 outbreak, including its perceived origins and responses, has also heightened geopolitical tensions, which could have potential ramifications for the group and its customers. Developments in Hong Kong, the US approach to strategic competition with China, supply chain restrictions, claims of human rights violations, diplomatic tensions between China and the UK, the EU, India and other countries, and other potential areas of tension may affect the group by creating regulatory, reputational and market risks. Some of these tensions have manifested themselves through actions taken by governments in 2020 and during the first half of 2021.

The US-China relationship in particular remains complex, with divisions over a number of issues. The US has imposed a range of sanctions and trade restrictions on Chinese individuals and companies. These include sanctions and trade restrictions on those individuals and companies that the US considers to be involved in human rights violations, the erosion of Hong Kong's autonomy, China's military-industrial complex, and technology and telecommunications that implicate US national security.

Certain measures are of particular relevance. The US Hong Kong Autonomy Act authorises the imposition of secondary sanctions against non-US financial institutions found to be knowingly engaged in significant transactions with individuals and entities subject to US sanctions for engaging in certain activities that undermine Hong Kong's autonomy. In addition, the US has imposed restrictions on US persons' ability to purchase or sell certain publicly traded securities linked to a number of prominent Chinese companies.

There are also increasing discussions between the US and other governments on multilateral efforts to address certain issues with China, which are likely to create a more complex operating environment for the group and its customers. Notably, the US has increasingly instituted sanctions with its traditional allies including the EU, UK, and Canada, primarily in response to allegations of human rights violations in Xinjiang.

In response, over the last year, China announced a number of its own sanctions and trade restrictions that target or provide authority to target foreign individuals and companies, which have been primarily imposed against certain public officials associated with the implementation of foreign sanctions against China. More

generally, China has promulgated new laws that provide a legal framework for further imposing such sanctions, prohibit implementing or complying with foreign sanctions against China and create private rights of action in Chinese courts for damages caused by third parties implementing foreign sanctions or other discriminatory measures. To date, no financial institution has been targeted for action under these measures. However, it should be noted that the scope and application of the recent Chinese laws remain uncertain. These and any future measures and countermeasures that may be taken by the US, China and other countries may affect the group, its customers, and the markets in which we operate.

Expanding data privacy and cybersecurity laws in a number of markets, such as China, could pose potential challenges to intra-group data sharing. These developments could increase financial institutions' compliance burdens in respect of cross-border transfers of personal information.

As geopolitical tensions rise, compliance by multinational corporations with their legal or regulatory obligations in one jurisdiction may be seen as supporting the law or policy objectives of that jurisdiction over another, creating additional compliance, reputational and political risks for the group. We maintain an open dialogue with our regulators on the impact of legal and regulatory obligations on HSBC's business and customers.

Multilateral institutions have mobilised support for emerging and frontier economies, with the International Monetary Fund expected to approve a US\$650bn increase in reserve assets in August 2021. Much of this is anticipated to go towards countering the effects of the pandemic on the countries that have most suffered. Developed markets are expected to continue recovering from the economic crisis, as macroeconomic policies remain highly accommodative. However, permanent business closures and job losses in some sectors will likely prevent some developed markets from achieving pre-crisis activity levels in the near term. These countries and territories should be able to manage the higher public deficits and debts necessary to offset private sector weaknesses, given that debt servicing costs are likely to remain low for the foreseeable future. Nevertheless, renewed government restrictions in response to new waves of infections could once again put pressure on these economies.

Central bank interest rates remain at historically low levels, although a vaccine-led economic recovery and rising inflation indicators contributed to an increase in interest rate yields and a steepening of yield curves in some countries in the first half of 2021. Against a backdrop of high and rising asset valuations, monetary policies remained very accommodative during this period, but rising inflation is posing a policy dilemma for some central banks. We continue to monitor our risk profile closely in the context of a possible tightening in monetary policy.

Potential changes to tax legislation and tax rates in the countries and territories in which we operate could increase the group's effective tax rate in future periods as governments in many countries seek revenue sources to pay for the Covid-19 support packages that they have implemented. In June 2021, the finance ministers of G7 countries reached agreement on the key principles with respect to the introduction of a global minimum tax rate. This was followed in July 2021 by confirmation from the Organisation for Economic Co-operation and Development of agreement across 130 countries (including all of the G20 countries) to the key components of the proposed rules and commitment to implement the global minimum tax rate by 2023. The financial impact on the group will depend significantly on the minimum tax rate, which is proposed by the G7 and G20 to be at least 15%, as well as finalisation of several key aspects of the calculations. It is expected that the rules will be finalised during the second half of 2021. Given the uncertainty of both the application of these proposed tax rules (and any further implications on related tax requirements) and the future mix of profits earned by geography, we are not able to reliably estimate the potential impact at this stage.

Ibor transition

Ibors are used to set interest rates on hundreds of trillions of US dollars of different types of financial transactions and are used extensively for valuation purposes, risk measurement and performance benchmarking.

The UK's Financial Conduct Authority ('FCA') announced in July 2017 that it would no longer continue to persuade or require panel banks to submit rates for the London interbank offered rate ('Libor') after 2021. In addition, the 2016 EU Benchmark Regulation, which aims to ensure the accuracy, robustness and integrity of interest rate benchmarks, has resulted in other regulatory bodies reassessing their national benchmarks. As a result, HSBC is participating in industry-led national working groups, which are discussing the mechanisms for an orderly transition of five Libor currencies, four Asia-Pacific benchmarks that reference US dollar Libor, the Euro Overnight Index Average ('Eonia'), and the Singapore interbank offered rate ('Sibor'), to their chosen replacement rates.

Furthermore, the FCA and the administrator of Libor, Intercontinental Exchange Benchmark Administration ('IBA'), announced on 5 March 2021 that publication of 24 of the 35 main Libor currency interest rate benchmark settings would cease at the end of 2021. Additionally, the FCA and IBA confirmed that the publication of the most widely used US dollar Libor settings will be extended until 30 June 2023, and that consultation will occur for continuing three sterling and three Japanese yen settings under a 'synthetic' calculation methodology. As a result, HSBC's transition programme continued its efforts to provide RFR and alternative rate products and is currently focused on actively transitioning clients away from those contracts that reference Ibors demising at the end of 2021.

Provision of RFR and alternative rate product capabilities

During 2020 and the first half of 2021, all of our global businesses developed and implemented system, modelling, and operational capabilities for the majority of RFR products and alternative rates, with only a limited number of non-standard or lower priority products requiring completion in the second half of 2021 or 2022. Our product readiness and increased market liquidity enabled most new transactions to be undertaken in RFR and alternative rate products.

However, given the extension of the publication of US dollar Libor for the most widely used settings and the low take-up of RFR products in Asia-Pacific, the market activity for the Secured Overnight Financing Rate ('SOFR'), the Tokyo Overnight Average ('TONA') rate and other demising rate replacements continue to develop at a slow pace. We are currently monitoring other industry developments, including related to term SOFR and the Tokyo Term Risk Free Rate ('TORF'), and are supporting market initiatives to increase the volume of activity in the RFR derivative markets. We will also continue to develop additional products for our clients and in support of transition from US dollar Libor and other demising rates.

Transition legacy contracts

For benchmarks demising in 2021, we plan to transition all viable legacy Ibor contracts in advance of the end of the year, or earlier where this is in line with the relevant RFR working group guidelines. However, we remain dependent on our clients' decisions and the market to meet these targets, particularly with respect to Japanese yen Libor replacements. In support of our plans, we had commenced customer outreach for these contracts in the first half of 2021, but this continues due to low liquidity and market readiness in respective markets. We approached clients in a structured manner, based on product and market readiness for replacement rates and client prioritisation, with our transition progress being tracked using internal targets. In prioritising our client engagement, we also took into account our clients' adherence to the fallback provisions for derivatives within the ISDA protocol, implemented in January 2021, and loan contractual fallback language within legacy loan contracts. We placed greater emphasis on engaging with our clients who do not have adequate

fallback provisions and products for which replacement rates may not be appropriate or need to be agreed, under the current fallback language.

Following our transition discussions with clients, we will be led by their decisions on timing and their level of readiness to transition. We are tracking client decisions to adequately plan for operational activities that need to occur in the second half of 2021. However, given the continued impact of Covid-19 on our customers and the market, there is a risk that our clients are not operationally ready to transition their Ibor contracts. This could potentially result in delays to transition, with the transition activities being further concentrated into the latter part of 2021, increasing the regulatory compliance, legal, resilience and operational risks.

While operational risks could be increased, contractual repapering and rebooking activities will be managed accordingly through bilateral and bulk transition processes. However, we may need to rely on some jurisdictional legislative solutions to allow for a smooth transition of all contracts, such as the proposed 'synthetic'-based Libor methodology under UK law. Adequate contract continuity provisions will be critical to the successful implementation of such solutions.

Our transition efforts are one of the ways the group manages its Ibor derivatives, loan and bond exposures maturing beyond 2021.

For derivatives exposures, new sterling Libor transactions for linear derivatives are only undertaken for risk management purposes since the first quarter 2021 cessation milestone. Sterling interest rate derivative volumes remain low in the group. Second quarter industry milestones for cessation of sterling non-linear derivatives and reduction in derivative exposures to the Singapore Swap Offer Rate ('SOR') have been adhered to and this is expected to result in a further reduction in exposure.

For HSBC's loan book, all loan contracts referencing 2021 demising Ibors that require refinancing are being offered on an RFR or alternative rates basis. The group has adhered to the first quarter cessation milestone for issuance of new sterling Libor loans and the second quarter cessation milestone for issuance of new SOR loans, and continues to support and engage its clients in transitioning to a suitable RFR or alternative rate product, prior to the relevant Ibor cessation date. For syndicated loans, we are actively engaging with agents and participants, as appropriate, but will be reliant on all syndicate members to transition.

With respect to HSBC's legacy bond issuances referencing Ibors that are subject to demise, the group continue to work on plans to transition such bond issuances into suitable alternatives in line with Ibor cessation dates. The success of these transition plans will, to a certain extent, also depend on the participation and engagement of third-party market participants. This dependency is also true for those bonds where HSBC is the paying agent, and paying agents are reliant on the timing set out by third-party market participants in the transition process of their issued debt. We have identified and engaged with issuers as appropriate to aid in this transition.

Financial instruments impacted by lbor reform

	Financial instruments yet to transition to alternative benchmarks, by main benchmark				
	USD Libor HK\$m	JPY Libor HK\$m	Sibor HK\$m	GBP Libor HK\$m	Others ¹ HK\$m
At 30 Jun 2021					
Non-derivative financial assets²	161,795	2,580	61,350	37,117	5,645
Non-derivative financial liabilities	137,825	11,393	–	–	3,176
Derivative notional contract amount	6,013,153	3,117,147	–	95,439	707,385
At 31 Dec 2020					
Non-derivative financial assets ²	253,239	2,688	63,100	33,797	15,724
Non-derivative financial liabilities	119,269	12,192	–	–	4,125
Derivative notional contract amount	6,252,168	3,281,539	299	82,902	1,383,582

1 Comprises financial instruments referencing other significant benchmark rates yet to transition to alternative benchmarks (EUR Libor, CHF Libor, Eonia, SOR and THBFX).

2 Gross carrying amount excluding allowances for expected credit losses.

The amounts in the above table relate to the group's main operating entities where the group has material exposures impacted by lbor reform, including in Hong Kong, Singapore, Australia, Japan and Thailand. The amounts provide an indication of the extent of the Group's exposure to the lbor benchmarks that are due to be replaced. Amounts are in respect of financial instruments that:

- contractually reference an interest rate benchmark that is planned to transition to an alternative benchmark;
- have a contractual maturity date beyond the date by which the reference interest rate benchmark is expected to cease; and
- are recognised on the group's consolidated balance sheet.

In March 2021, the administrator of Libor, IBA, announced that the publication date of most US dollar Libor tenors is extended from 31 December 2021 to 30 June 2023. Publication of one-week and two-month tenors will cease after 31 December 2021. This change, together with the extended publication dates of Sibor, SOR and THBFX, reduce the amounts presented at 30 June 2021 in the above table as some financial instruments included at 31 December 2020 will reach their contractual maturity date prior to the extended publication dates. Comparative data have not been re-presented.

Credit risk

Overview

Credit risk is the risk of financial loss if a customer or counterparty fails to meet an obligation under a contract. Credit risk arises principally from direct lending, trade finance and leasing business, but also from other products, such as guarantees and credit derivatives.

During the first half of 2021, due to the unique market conditions in the Covid-19 crisis, we continued to provide expanded operational practices to provide short-term support to customers under the current policy framework. For further details of market-specific measures to support our personal and business customers, see page 19. There have been no material changes to credit risk policy.

For the wholesale and retail mentioned in the credit risk section, wholesale mainly refers to Commercial Banking and Global Banking and Markets, whereas retail primarily consists of exposures to individuals under Wealth and Personal Banking.

A summary of our current policies and practices for the management of credit risk is set out in 'Credit risk management' on pages 27 to 28 of the Annual Report and Accounts 2020.

Summary of credit risk

The following table provides an overview of the group's credit risk by stage and industry, and the associated ECL coverage. The financial assets recorded in each stage have the following characteristics:

- Stage 1: These financial assets are unimpaired and without significant increase in credit risk on which a 12-month allowance for ECL is recognised.
- Stage 2: A significant increase in credit risk has been experienced on these financial assets since initial recognition for which a lifetime ECL is recognised.
- Stage 3: There is objective evidence of impairment and the financial assets are therefore considered to be in default or otherwise credit impaired on which a lifetime ECL is recognised.
- POCI: Financial assets that are purchased or originated at a deep discount are seen to reflect the incurred credit losses on which a lifetime ECL is recognised.

Summary of credit risk (excluding debt instruments measured at fair value through other comprehensive income ('FVOCI')) by stage distribution and ECL coverage by industry sector³

	Gross carrying/nominal amount					Allowance for ECL					ECL coverage %				
	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total
	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	%	%	%	%	%
Loans and advances to customers	3,313,775	575,481	40,033	725	3,930,014	(2,940)	(6,144)	(19,446)	(352)	(28,882)	0.1	1.1	48.6	48.6	0.7
– personal	1,492,995	73,201	10,481	–	1,576,677	(1,216)	(3,071)	(1,963)	–	(6,250)	0.1	4.2	18.7	–	0.4
– corporate ¹	1,554,487	461,737	29,395	723	2,046,342	(1,600)	(2,954)	(17,432)	(350)	(22,336)	0.1	0.6	59.3	48.4	1.1
– financial institutions ²	266,293	40,543	157	2	306,995	(124)	(119)	(51)	(2)	(296)	0.0	0.3	32.5	100.0	0.1
Loans and advances to banks	453,272	1,454	–	–	454,726	(31)	(2)	–	–	(33)	0.0	0.1	–	–	0.0
Other financial assets	2,011,990	21,945	244	1	2,034,180	(570)	(145)	(63)	–	(778)	0.0	0.7	25.8	–	0.0
Loan and other credit-related commitments	1,736,765	61,913	242	–	1,798,920	(295)	(262)	(41)	–	(598)	0.0	0.4	16.9	–	0.0
– personal	1,218,012	7,821	121	–	1,225,954	–	–	–	–	–	–	–	–	–	–
– corporate ¹	372,119	47,041	121	–	419,281	(269)	(241)	(41)	–	(551)	0.1	0.5	33.9	–	0.1
– financial institutions ²	146,634	7,051	–	–	153,685	(26)	(21)	–	–	(47)	0.0	0.3	–	–	0.0
Financial guarantee	27,460	5,200	46	–	32,706	(17)	(24)	(7)	–	(48)	0.1	0.5	15.2	–	0.1
– personal	4,170	–	3	–	4,173	–	–	(3)	–	(3)	–	–	100.0	–	0.1
– corporate ¹	21,260	5,126	43	–	26,429	(16)	(24)	(4)	–	(44)	0.1	0.5	9.3	–	0.2
– financial institutions ²	2,030	74	–	–	2,104	(1)	–	–	–	(1)	0.0	–	–	–	0.0
At 30 Jun 2021	7,543,262	665,993	40,565	726	8,250,546	(3,853)	(6,577)	(19,557)	(352)	(30,339)	0.1	1.0	48.2	48.5	0.4

Risk

Summary of credit risk (excluding debt instruments measured at FVOCI) by stage distribution and ECL coverage by industry sector (continued)

	Gross carrying/nominal amount					Allowance for ECL					ECL coverage %				
	Stage 1 HK\$m	Stage 2 HK\$m	Stage 3 HK\$m	POCI HK\$m	Total HK\$m	Stage 1 HK\$m	Stage 2 HK\$m	Stage 3 HK\$m	POCI HK\$m	Total HK\$m	Stage 1 %	Stage 2 %	Stage 3 %	POCI %	Total %
Loans and advances to customers	3,150,921	510,040	35,752	855	3,697,568	(4,393)	(6,438)	(17,694)	(362)	(28,887)	0.1	1.3	49.5	42.3	0.8
– personal	1,381,495	61,790	9,062	–	1,452,347	(1,809)	(3,463)	(1,872)	–	(7,144)	0.1	5.6	20.7	–	0.5
– corporate ¹	1,580,976	391,635	26,514	853	1,999,978	(2,428)	(2,897)	(15,763)	(360)	(21,448)	0.2	0.7	59.5	42.2	1.1
– financial institutions ²	188,450	56,615	176	2	245,243	(156)	(78)	(59)	(2)	(295)	0.1	0.1	33.5	100.0	0.1
Loans and advances to banks	401,256	2,652	–	–	403,908	(19)	(5)	–	–	(24)	0.0	0.2	–	–	0.0
Other financial assets	1,854,154	14,834	279	1	1,869,268	(452)	(221)	(40)	–	(713)	0.0	1.5	14.3	–	0.0
Loan and other credit-related commitments	1,677,242	48,538	183	–	1,725,963	(514)	(281)	(30)	–	(825)	0.0	0.6	16.4	–	0.0
– personal	1,205,969	6,129	79	–	1,212,177	(1)	–	–	–	(1)	0.0	–	–	–	0.0
– corporate ¹	388,833	34,095	104	–	423,032	(492)	(266)	(30)	–	(788)	0.1	0.8	28.8	–	0.2
– financial institutions ²	82,440	8,314	–	–	90,754	(21)	(15)	–	–	(36)	0.0	0.2	–	–	0.0
Financial guarantee	25,786	6,522	50	–	32,358	(51)	(56)	(17)	–	(124)	0.2	0.9	34.0	–	0.4
– personal	4,043	2	6	–	4,051	–	–	(1)	–	(1)	–	–	16.7	–	0.0
– corporate ¹	20,737	6,241	44	–	27,022	(51)	(56)	(16)	–	(123)	0.2	0.9	36.4	–	0.5
– financial institutions ²	1,006	279	–	–	1,285	–	–	–	–	–	–	–	–	–	–
At 31 Dec 2020	7,109,359	582,586	36,264	856	7,729,065	(5,429)	(7,001)	(17,781)	(362)	(30,573)	0.1	1.2	49.0	42.3	0.4

The above table does not include balances due from Group companies.

1 Includes corporate and commercial.

2 Includes non-bank financial institutions.

3 The financial information included in this table forms part of the Interim condensed consolidated financial statements, which have been reviewed by PricewaterhouseCoopers.

Measurement uncertainty and sensitivity analysis of ECL estimates

(Reviewed by PricewaterhouseCoopers)

The recognition and measurement of ECL involves the use of significant judgement and estimation. We form multiple economic scenarios based on economic forecasts, apply these assumptions to credit risk models to estimate future credit losses, and probability-weight the results to determine an unbiased ECL estimate.

Methodology

Four economic scenarios have been used to capture the exceptional nature of the current economic environment and to articulate management's view of the range of potential outcomes. Scenarios produced to calculate ECL are aligned to HSBC's top and emerging risks. Three of these scenarios are drawn from consensus forecasts and distributional estimates. The Central scenario is deemed the 'most likely' scenario, and usually attracts the largest probability weighting, while the outer scenarios represent the tails of the distribution, which are less likely to occur. The Central scenario is created using the average of a panel of external forecasters, while consensus Upside and Downside scenarios are created with reference to distributions for select markets that capture forecasters' views of the entire range of outcomes. Management has chosen to use an additional scenario to represent its view of severe downside risks. The use of an additional scenario is in line with HSBC's forward economic guidance methodology and has been regularly used over the course of 2021 and in the past. Management may include additional scenarios if it feels that the consensus scenarios do not adequately capture the top and emerging risks. Unlike the consensus scenarios, these additional scenarios are driven by narrative assumptions, could be country-specific and may result in shocks that drive economic activity permanently away from trend.

Description of consensus economic scenarios

The economic assumptions presented in this section have been formed by HSBC with reference to external forecasts specifically for the purpose of calculating ECL.

Global economic growth is experiencing a recovery in 2021, following an unprecedented contraction in 2020. Restrictions to mobility have started to ease across our key markets, aided in some cases by the successful roll-out of vaccination programmes. Data from vaccinated groups suggests vaccines provide a high level of immunity against the Covid-19 virus despite the emergence of more transmissible variants. To date, vaccinations have shown their effectiveness in lowering hospitalisations and deaths. A rapid roll-out of vaccination programmes has been a key factor enabling economies to reopen and some resumption of travel. The emergence of new variants that reduce the efficacy of vaccines remains a risk.

Economic forecasts are subject to a high degree of uncertainty in the current environment. While risks to the economic outlook are dominated by the progression and management of the pandemic and vaccine roll-out, geopolitical risks also present downside threats. These geopolitical risks include continued differences between the US and China over a range of issues and dampened business sentiment in Hong Kong. Four global scenarios have been used for the purpose of calculating ECL at 30 June 2021. These are the consensus Central scenario, the consensus Upside scenario, the consensus Downside scenario and an additional Downside scenario.

The scenarios used to calculate ECL in the *Interim Report 2021* are described below.

The consensus Central scenario

Following a severe and unprecedented drop in global economic activity in 2020, HSBC's Central scenario features a sharp recovery in 2021, followed by a subsequent normalisation of growth. The V-shape in activity over the course of 2020 and 2021 reflects the impact of the pandemic on the key markets, with restrictions to mobility and reduction in activity resulting in a strong contraction in 2020, while an increase in mobility and resumption in activity in 2021 signalling a recovery.

The Central scenario further assumes that the stringent restrictions on activity, employed across several countries and territories in 2020 and the first half of 2021 will not be repeated. This will allow economic activity to first rebound and then revert to more normal long-run trend rates of growth. Minimal long-term damage to economic prospects is expected. Cross-region differences in the speed and scale of recovery across the forecast horizon reflect timing differences in the progression of the Covid-19 outbreak, different speeds of roll-out of vaccination programmes, national level differences in restrictions imposed and the scale of support measures.

Global GDP is expected to grow by 5.3% in 2021 in the Central scenario. The average rate of global GDP growth is expected to be 3.3% over the forecast period, which is higher than the average growth rate over the five-year period prior to the onset of the pandemic.

The unique circumstances surrounding the current fall in economic activity make it difficult to compare current prospects for global economic activity with previous recessions. However, we note that the depth of the contraction in economic activity and the subsequent recovery are both expected to be sharper than experienced during the last global economic downturn of 2008–2009 across our key markets.

Across the key markets, the Central scenario assumes the following:

- Economic growth is expected to increase sharply in 2021 as governments ease restrictions to mobility, encouraging consumers and firms to spend and invest. GDP is expected to grow across all our major markets in 2021. Country-specific measures aimed at supporting labour markets as economies reopen will affect the rate at which unemployment will decline.
- Inflation is expected to rise in 2021 in line with the economic recovery, before gradually converging back to central bank targets over the forecast period.
- Fiscal deficits are expected to reduce gradually over the course of the projection period from their peak in 2020, following a period where governments, in several of our key markets, provided extensive support to households and corporates. Sovereign indebtedness is expected to remain at high levels.
- Interest rate policy is expected to be highly accommodative over the projection horizon, after major central banks lowered their main policy interest rates, implemented emergency support measures for funding markets, and either restarted or increased quantitative easing programmes, in order to support economies and the financial system.
- The West Texas Intermediate oil price is forecast to average US\$58 per barrel over the projection period.

The Central scenario was first created with forecasts available in May, and subsequently updated in June to reflect significant changes to forecasts. Probability weights assigned to the Central scenario reflect both the higher level of uncertainty in the current global economic environment and relative differences across markets. Weights assigned to the Central scenario vary from 70% to 80%.

The following table describes key macroeconomic variables and the probabilities assigned in the consensus Central scenario.

Central scenario (2021 Q3 – 2026 Q2)

	Hong Kong	Mainland China
	%	%
GDP growth		
2021: Annual average growth rate	5.2	8.5
2022: Annual average growth rate	3.2	5.5
2023: Annual average growth rate	2.7	5.3
5-year average	2.6	5.0
Unemployment rate		
2021: Annual average rate	6.2	3.9
2022: Annual average rate	4.6	3.8
2023: Annual average rate	3.9	3.8
5-year average	4.0	3.8
House price growth		
2021: Annual average growth rate	2.6	4.3
2022: Annual average growth rate	3.9	6.0
2023: Annual average growth rate	2.5	5.4
5-year average	2.9	4.9
Short-term interest rate		
2021: Annual average rate	0.9	3.4
2022: Annual average rate	1.2	3.4
2023: Annual average rate	1.6	3.5
5-year average	1.9	3.5
Probability	70	80

The consensus Upside scenario

Compared with the consensus Central scenario, the consensus Upside scenario features a faster recovery in economic activity during the first two years, before converging to long-run trends.

The scenario is consistent with a number of key upside risk themes. These include the orderly and rapid global abatement of Covid-19 via successful containment and prompt deployment of vaccines; de-escalation of tensions between the US and China; de-escalation of political tensions in Hong Kong; and continued support from fiscal and monetary policy.

The following table describes key macroeconomic variables and the probabilities assigned in the consensus Upside scenario.

Consensus Upside scenario best outcome

	Hong Kong	Mainland China
	%	%
GDP growth rate	10.0 (2Q22)	13.5 (2Q22)
Unemployment rate	3.2 (2Q23)	3.6 (3Q22)
House price growth	8.9 (4Q21)	13.9 (2Q22)
Short-term interest rate	1.2 (3Q21)	3.4 (3Q21)
Probability	5	10

Note: Extreme point in the consensus Upside is 'best outcome' in the scenario, for example the highest GDP growth and the lowest unemployment rate, in the first two years of the scenario.

The consensus Downside scenario

In the consensus Downside scenario, economic recovery is considerably weaker compared with the Central scenario. GDP growth remains weak, unemployment rates stay elevated and asset and commodity prices fall before gradually recovering towards their long-run trends.

The scenario is consistent with the key downside risks articulated above. Further outbreaks of Covid-19, coupled with delays in vaccination programmes, lead to longer-lasting restrictions on economic activity in this scenario. Other global risks also increase and drive increased risk-aversion in asset markets.

Risk

The following table describes key macroeconomic variables and the probabilities assigned in the consensus Downside scenario.

Consensus Downside scenario worst outcome

	Hong Kong	Mainland China
	%	%
GDP growth rate	(6.0) (1Q22)	(0.7) (4Q21)
Unemployment rate	7.1 (3Q21)	4.1 (4Q21)
House price growth	(8.0) (2Q22)	0.8 (2Q22)
Short-term interest rate	1.2 (2Q23)	3.1 (3Q21)
Probability	20	8

Note: Extreme point in the consensus Downside is 'worst outcome' in the scenario, for example the lowest GDP growth and the highest unemployment rate, in the first two years of the scenario.

Additional Downside scenario

An additional Downside scenario that features a global recession has been created to reflect management's view of severe risks. Such a scenario has been in use since the second quarter of 2021. In this scenario, infections rise over the second half of 2021, with setbacks to vaccine programmes such that it takes until the end of 2022 for the pandemic to come to an end. The scenario also assumes governments and central banks are unable to significantly increase fiscal and monetary programmes, which results in a rise in unemployment and a fall in asset prices. In Hong Kong, the impacts on the unemployment rate are similar to those in the consensus Downside scenario, reflective of recent historical experiences.

The following table describes key macroeconomic variables and the probabilities assigned in the Additional Downside scenario.

Additional Downside scenario worst outcome

	Hong Kong	Mainland China
	%	%
GDP growth rate	(10.6) (1Q22)	(7.4) (2Q22)
Unemployment rate	7.1 (3Q21)	5.7 (1Q23)
House price growth	(17.0) (2Q22)	(20.7) (2Q22)
Short-term interest rate	2.1 (3Q21)	4.8 (4Q21)
Probability	5	2

Note: Extreme point in the additional Downside is 'worst outcome' in the scenario, for example the lowest GDP growth and the highest unemployment rate, in the first two years of the scenario.

In considering economic uncertainty and assigning probabilities to scenarios, management has considered both global and country-specific factors. This has led management to assigning scenario probabilities that are tailored to its view of uncertainty in individual markets.

To inform its view, management has considered trends in the progression of the virus in individual countries, the expected reach and efficacy of vaccine roll-outs over the course of 2021, the size and effectiveness of future government support schemes and the connectivity with other countries. Management has also been guided by the actual response to the Covid-19 outbreak and by the economic experience across countries in 2020. China's visible success at containing the virus and its repeated rapid response to localised outbreaks, coupled with government support programmes and clear signs of economic recovery, have led management to conclude that the economic outlook for mainland China is the least volatile out of all our top markets. The Central scenario for mainland China has an 80% probability while a total of 10% has been assigned to the two Downside scenarios. In Hong Kong, the combination of recurrent outbreaks in the recent past, and the evidence of vaccine hesitancy which has delayed the original target of reaching herd immunity by the end of the third quarter this year, in addition to the other risks outlined above, have led management to assign 25% weight to the two Downside scenarios.

Critical accounting estimates and judgements

The calculation of ECL under HKFRS 9 involves significant judgements, assumptions and estimates, as set out in the *Annual Report and Accounts 2020* under 'Critical accounting estimates and judgements'. The level of estimation uncertainty and judgement has remained high since 31 December 2020 as a result of the economic effects of the Covid-19 outbreak, including judgements relating to:

- the selection and weighting of economic scenarios, given rapidly changing economic conditions in an unprecedented manner, uncertainty as to the effect of government and central bank support measures designed to alleviate adverse economic impacts, and a wide distribution of economic forecasts. There is judgement in making assumptions about the length of time and severity of the economic effects of the pandemic and the shape of recovery;
- estimating the economic effects of those scenarios on ECL, when the volatility of economic changes associated with the pandemic are outside the observable historical trends that can be reflected in the models. Modelled assumptions and linkages between economic factors and credit losses may underestimate or overestimate ECL in these conditions, including the effect of real estate prices on modelled ECL outcomes; and
- the identification of customers experiencing significant increases in credit risk and credit impairment, where judgements are made about the extent to which government support programmes have deferred or mitigated the risk of defaults, and the effects once support levels are reduced, particularly in relation to lending in high-risk and vulnerable sectors. Where customers have accepted payment deferrals and other reliefs designed to address short-term liquidity issues, or have extended those deferrals, judgements include the extent to which they are able to meet their financial obligations on returning to their original terms. The use of segmentation techniques for indicators of significant increases in credit risk for retail customers involves estimation uncertainty.

How economic scenarios are reflected in ECL calculations

The methodologies for the application of forward economic guidance into the calculation of ECL for wholesale and retail loans and portfolios are set out in page 35 of the *Annual Report and Accounts 2020*. Models are used to reflect economic scenarios on ECL estimates. These models are based largely on historical observations and correlations with default rates.

We continue to observe volatility in macroeconomic variables as a result of the Covid-19 pandemic, which – together with significant governmental support programmes, forbearance and payment holidays – have impacted model performance and historical correlations between macroeconomic variables and defaults. As economic forecasts begin to improve, the level and speed of economic recovery remains outside the range of historical experience used to calibrate the models, and the timing of defaults has considerably shifted from the modelled assumptions. Management judgements have been used to overcome the limitations in the model generated outcome, increasing the ECL.

Management judgemental adjustments arise when data and model limitations are addressed in the short term using in-model and post-model adjustments. This includes refining model inputs and outputs and using post-model adjustments based on management judgement and higher level quantitative analysis for impacts that are difficult to model.

Management judgemental adjustments

In the context of HKFRS 9, management judgemental adjustments are typically short-term increases or decreases to the ECL at either a customer or portfolio level to account for late breaking events, model deficiencies and other assessments applied during management review and challenge.

At 30 June 2021, management judgements were applied to reflect credit risk dynamics not captured by our models. The drivers of the management judgemental adjustments continue to evolve with the economic environment. We have internal governance in place to monitor management judgemental adjustments regularly and, where possible, to reduce the reliance on these through model recalibration or redevelopment, as appropriate.

Wider-ranging model changes will take time to develop and need observable loss data on which models can be developed. Models will be revisited over time once the longer-term impacts of the Covid-19 outbreak are observed. Therefore, we continue to anticipate significant management judgemental adjustments for the foreseeable future.

Some management judgemental adjustments could cease once macroeconomic forecasts have stabilised and move within the range of historical experience, portfolio impacts due to unwinding of government schemes become visible and the uncertainty due to Covid-19 reduces.

Management judgemental adjustments made in estimating the reported ECL at 30 June 2021 are set out in the following table. The table includes adjustments in relation to data and model limitations resulting from the pandemic, and as a result of the regular process of model development and implementation. It shows the adjustments applicable to the scenario-weighted ECL numbers.

Management judgemental adjustments to ECL at 30 June 2021¹

	Retail HK\$bn	Wholesale HK\$bn	Total HK\$bn
Low-risk counterparties (banks, sovereigns and government entities)	0.33	(0.18)	0.15
Corporate lending adjustments	–	3.02	3.02
Macroeconomic-related adjustments	0.67	–	0.67
Other retail lending adjustments	0.44	–	0.44
Total	1.44	2.84	4.28

¹ Management judgemental adjustments presented in the table reflect increases or (decreases) to ECL, respectively.

In the wholesale portfolio, the adjustments relating to low-credit-risk exposures were mainly to highly rated banks and sovereigns, where modelled credit factors did not fully reflect the underlying fundamentals of these entities.

Adjustments to corporate exposures principally reflected the outcome of management judgements for high-risk and vulnerable sectors in some of our key markets, supported by credit experts' input, quantitative analyses and benchmarks. Considerations included potential default suppression in some sectors due to continued government intervention and late-breaking idiosyncratic developments. The adjustment was broadly flat compared with 31 December 2020.

In the retail portfolio, management judgemental adjustments mainly relate to macroeconomic conditions and customer support programmes.

The retail model default suppression adjustments were removed during the period given the improvement in macroeconomic forecasts and the unwinding in a number of markets as customer relief and government support concludes. Retail models are reliant on the assumption that as macroeconomic conditions deteriorate, defaults will crystallise. We will monitor the continuation of customer relief and government support programmes that have stabilised macroeconomic conditions and therefore suppressed retail model defaults.

Other macroeconomic related adjustments were applied to reflect credit experts' input, quantitative analyses and benchmarks on increased levels of risk. This was applied in consideration of the volatility between the improved macroeconomic forecasts and the level of uncertainty in relation to the Covid-19 outbreak which has increased during the period.

Other retail lending adjustments were applied reflecting those who remain in or have recently exited customer support programmes and all other data and model adjustments.

Economic scenarios sensitivity analysis of ECL estimates

Management considered the sensitivity of the ECL outcome against the economic forecasts as part of the ECL governance process by recalculating the ECL under each scenario described above for selected portfolios, applying a 100% weighting to each scenario in turn. The weighting is reflected in both the determination of a significant increase in credit risk and the measurement of the resulting ECL.

The ECL calculated for the Upside and Downside scenarios should not be taken to represent the upper and lower limits of possible ECL outcomes. The impact of defaults that might occur in the future under different economic scenarios is captured by recalculating ECL for loans in stages 1 and 2 at the balance sheet date. The population of stage 3 loans (in default) at the balance sheet date is unchanged in these sensitivity calculations. Stage 3 ECL would only be sensitive to changes in forecasts of future economic conditions if the loss given default of a particular portfolio was sensitive to these changes.

There is a particularly high degree of estimation uncertainty in numbers representing tail risk scenarios when assigned a 100% weighting.

For wholesale credit risk exposures, the sensitivity analysis excludes ECL and financial instruments related to defaulted obligors because the measurement of ECL is relatively more sensitive to credit factors specific to the obligor than future economic scenarios. Therefore, it is impracticable to separate the effect of macroeconomic factors in individual assessments.

For retail credit risk exposures, the sensitivity analysis includes ECL for loans and advances to customers related to defaulted obligors. This is because the retail ECL for secured mortgage portfolios, including loans in all stages is sensitive to macroeconomic variables.

Wholesale and Retail sensitivity

The wholesale and retail sensitivity analysis is stated inclusive of management judgemental adjustments, as appropriate to each scenario. The results tables exclude portfolios held by the insurance business and small portfolios, and as such cannot be directly compared with personal and wholesale lending presented in other credit risk tables. Additionally in both the wholesale and retail analysis, the comparative period results for additional/alternative Downside scenarios are also not directly comparable with the current period, because they reflect different risk profiles relative to the consensus scenarios for the period end.

Risk

Wholesale analysis

HKFRS 9 ECL sensitivity to future economic conditions¹

ECL of loans and advances to customers at 30 June 2021 ²	Hong Kong	Mainland China
	HK\$m	HK\$m
Reported ECL	3,330	764
Central scenario ECL	2,925	584
Upside scenario ECL	1,639	122
Downside scenario ECL	4,326	1,740
Additional Downside scenario ECL	6,925	9,254

- ECL sensitivities exclude portfolios utilising less complex modelling approaches.*
- ECL sensitivity includes off-balance sheet financial instruments that are subject to significant measurement uncertainty.*

At 30 June 2021, the additional Downside scenario reflects the most significant level of ECL sensitivity in Hong Kong and mainland China due to the combination of potential for deterioration of the credit quality on those markets and level of exposure.

ECL sensitivities demonstrated a decrease from year end 2020, primarily due to the improvement of economic forecasts under all scenarios.

The higher ECL sensitivities can all be observed for the additional Downside scenario, which represents a prolonged recovery period and sharper impact, comparative to other scenarios.

Retail analysis

HKFRS 9 ECL sensitivity to future economic conditions¹

ECL of loans and advances to customers at 30 June 2021 ²	Hong Kong	Malaysia	Singapore	Australia
	HK\$m	HK\$m	HK\$m	HK\$m
Reported ECL	2,689	674	310	335
Central scenario ECL	2,540	633	305	297
Upside scenario ECL	2,348	581	300	291
Downside scenario ECL	3,013	683	323	311
Additional Downside scenario ECL	4,079	789	391	1,256

- ECL sensitivities exclude portfolios utilising less complex modelling approaches.*
- ECL sensitivity includes only on-balance sheet financial instruments to which HKFRS 9 impairment requirements are applied.*

At 30 June 2021, the most significant level of ECL sensitivity was observed in Hong Kong. Mortgages reflected the lowest level of ECL sensitivity across most markets as collateral values remain resilient. Hong Kong mortgages had low levels of reported ECL due to the credit quality of the portfolio, and so presented sensitivity was negligible. Credit cards and other unsecured lending are more sensitive to economic forecasts, which have reflected improvements during the first half of 2021.

Customer relief programmes

In response to the Covid-19 pandemic, governments around the world have introduced a number of support measures for both personal and wholesale customers. The following table presents

the number of personal accounts/wholesale customers and the associated drawn loan values of customers under these schemes and schemes independently implemented by the group at 30 June 2021.

Personal lending

		30 Jun 2021			31 Dec 2020		
		Hong Kong	Other markets ¹	Total	Hong Kong	Other markets ¹	Total
Market-wide schemes							
Number of accounts in mortgage customer relief	000s	—	4	4	—	6	6
Drawn loan value of accounts in mortgage customer relief	HK\$m	—	2,229	2,229	—	7,518	7,518
Number of accounts in other personal lending customer relief	000s	—	25	25	—	37	37
Drawn loan value of accounts in other personal lending customer relief	HK\$m	—	1,307	1,307	—	2,818	2,818
HSBC-specific measures							
Number of accounts in mortgage customer relief	000s	1	—	1	3	—	3
Drawn loan value of accounts in mortgage customer relief	HK\$m	2,075	66	2,141	8,713	128	8,841
Number of accounts in other personal lending customer relief	000s	—	4	4	1	5	6
Drawn loan value of accounts in other personal lending customer relief	HK\$m	403	75	478	582	196	778
Total personal lending under market-wide schemes and HSBC-specific measures							
Number of accounts in mortgage customer relief	000s	1	4	5	3	6	9
Drawn loan value of accounts in mortgage customer relief	HK\$m	2,075	2,295	4,370	8,713	7,646	16,359
Number of accounts in other personal lending customer relief	000s	—	29	29	1	42	43
Drawn loan value of accounts in other personal lending customer relief	HK\$m	403	1,382	1,785	582	3,014	3,596
Market-wide schemes and HSBC-specific measures – mortgage relief as a proportion of total mortgages	%	0.3	0.6	0.4	1.2	2.0	1.5
Market-wide schemes and HSBC-specific measures – other personal lending relief as a proportion of total other personal lending loans and advance	%	0.1	1.3	0.4	0.2	2.7	1.0

Wholesale lending

		30 Jun 2021			31 Dec 2020		
		Hong Kong	Other markets	Total	Hong Kong	Other markets	Total
Market-wide schemes							
Number of customers under market-wide measures	000s	2	—	2	3	—	3
Drawn loan value of customers under market-wide schemes	HK\$m	37,164	4,061	41,225	82,356	5,178	87,534
HSBC-specific measures							
Number of customers under HSBC-specific measures	000s	—	—	—	—	—	—
Drawn loan value of customers under HSBC-specific measures	HK\$m	—	3,468	3,468	1	4,295	4,296
Total wholesale lending under market-wide schemes and HSBC-specific measures							
Number of customers	000s	2	—	2	3	—	3
Drawn loan values	HK\$m	37,164	7,529	44,693	82,357	9,473	91,830
Market-wide schemes and HSBC-specific measures as a proportion of total wholesale lending loans and advances	%	2.5	0.9	1.9	5.9	1.1	4.1

Number of accounts/customers below 500 is rounded to zero in the above table.

¹ Other markets in personal lending mainly represent Singapore, Malaysia and Australia.

The initial granting of customer relief does not automatically trigger a migration to stage 2 or 3. However, information provided by payment deferrals is considered in the context of other reasonable and supportable information, as part of the overall assessment for significant increase in credit risk and for credit impairment, to identify loans for which lifetime ECL is appropriate. An extension in payment deferral does not automatically result in stage 2 or stage 3. The key accounting and credit risk judgement to ascertain whether a significant increase in credit risk has occurred is whether the economic effects of Covid-19 on the customer are likely to be temporary over the lifetime of the loan, and do not indicate that a concession is being made in respect of financial difficulty that would be consistent with stage 3.

Hong Kong

Wholesale

On 4 March and 15 July 2021, the Hong Kong Monetary Authority, together with the Banking Sector SME Lending Coordination Mechanism, announced that the Pre-approved Principal Payment Holiday Scheme for corporate customers and for trade loans will be extended for another six months and 90 days respectively.

Retail

The relief measure of Hong Kong mortgages with deferred principal repayment of up to 12 months has ended on 30 April 2021 and the prevailing forbearance policy will be applied to assist customers who are in financial difficulty.

Malaysia

Retail

In September 2020, the Malaysia Government has mandated an extension of targeted relief assistance, comprising of a 3-month payment moratorium for unemployed or a reduction in monthly payment corresponding to reduction in income. Given the deteriorating Covid-19 situation, the government mandated a further extension of relief assistance from 7 July 2021 onwards. The extended relief assistance is allowed based on customers' declaration for either a 6-month payment moratorium or 50% reduction in monthly payment. Repeated enrolments are allowed.

Risk

Treasury risk

Capital

The following tables show the capital ratios, risk-weighted assets ('RWAs') and capital base on a consolidated basis, in accordance with the Banking (Capital) Rules:

Capital ratios and RWAs

	At	
	30 Jun 2021 %	31 Dec 2020 %
Capital ratios		
Common equity tier 1 ('CET1') ratio	15.7	17.2
Tier 1 ratio	17.2	18.8
Total capital ratio	19.1	20.8
	HK\$m	HK\$m
RWAs	3,117,666	2,956,993

The following table sets out the composition of the group's capital base under Basel III at 30 June 2021.

Capital base

	At	
	30 Jun 2021 HK\$m	31 Dec 2020 HK\$m
Common equity tier 1 ('CET1') capital		
Shareholders' equity	707,905	712,119
– shareholders' equity per balance sheet	847,037	845,353
– revaluation reserve capitalisation issue	(1,454)	(1,454)
– other equity instruments	(44,615)	(44,615)
– unconsolidated subsidiaries	(93,063)	(87,165)
Non-controlling interests	28,983	27,907
– non-controlling interests per balance sheet	66,456	66,178
– non-controlling interests in unconsolidated subsidiaries	(11,545)	(10,801)
– surplus non-controlling interests disallowed in CET1	(25,928)	(27,470)
Regulatory deductions to CET1 capital	(247,991)	(230,574)
– valuation adjustments	(1,913)	(1,648)
– goodwill and intangible assets	(24,813)	(23,276)
– deferred tax assets net of deferred tax liabilities	(3,517)	(3,273)
– cash flow hedging reserve	(20)	(33)
– changes in own credit risk on fair valued liabilities	2,237	1,814
– defined benefit pension fund assets	(22)	(12)
– significant Loss-absorbing capacity ('LAC') investments in unconsolidated financial sector entities	(132,745)	(119,868)
– property revaluation reserves ¹	(67,101)	(66,215)
– regulatory reserve	(20,097)	(18,063)
Total CET1 capital	488,897	509,452
Additional tier 1 ('AT1') capital		
Total AT1 capital before regulatory deductions	46,165	46,101
– perpetual subordinated loans	44,615	44,615
– allowable non-controlling interests in AT1 capital	1,550	1,486
Regulatory deductions to AT1 capital	(2)	–
– significant LAC investments in unconsolidated financial sector entities	(2)	–
Total AT1 capital	46,163	46,101
Total tier 1 capital	535,060	555,553
Tier 2 capital		
Total tier 2 capital before regulatory deductions	68,076	66,717
– perpetual subordinated debt ²	3,106	3,101
– term subordinated debt	15,345	15,698
– property revaluation reserves ¹	30,850	30,451
– impairment allowances and regulatory reserve eligible for inclusion in tier 2 capital	17,633	16,451
– allowable non-controlling interests in tier 2 capital	1,142	1,016
Regulatory deductions to tier 2 capital	(7,762)	(7,725)
– significant LAC investments in unconsolidated financial sector entities	(7,762)	(7,725)
Total tier 2 capital	60,314	58,992
Total capital	595,374	614,545

¹ Includes the revaluation surplus on investment properties which is reported as part of retained earnings and adjustments made in accordance with the Banking (Capital) Rules issued by the HKMA.

² This tier 2 capital instrument is grandfathered under Basel III and will be phased out in full after 31 December 2021.

Liquidity and funding risk

Overview

Liquidity risk is the risk that we do not have sufficient financial resources to meet our obligations as they fall due. Liquidity risk arises from mismatches in the timing of cash flows.

Funding risk is the risk that we cannot raise funding or can only do so at excessive cost.

The Group maintains a comprehensive liquidity and funding risk management framework ('LFRF'), which aims to allow us to withstand severe but plausible liquidity stresses. It is based on global policies that are designed to be adaptable to different business models, markets and regulations. The LFRF comprises policies, metrics and controls designed to ensure that group and entity management has oversight of our liquidity and funding risks in order to manage them appropriately.

The Group manages liquidity and funding risk at an operating entity (as defined in LFRF) level to ensure that obligations can be met in the jurisdiction where they fall due, generally without reliance on other parts of the group. Operating entities are required to meet internal minimum requirements and any applicable regulatory requirements at all times.

Structure and organisation

Asset, Liability and Capital Management ('ALCM') teams are responsible for the application of the LFRF at a local operating entity level. The elements of the LFRF are underpinned by a robust governance framework, the two major elements of which are:

- Asset and Liability Management Committees ('ALCOs') at the group and entity level; and
- annual individual liquidity adequacy assessment ('ILAA') used to validate risk tolerance and set risk appetite.

All operating entities are required to prepare an ILAA document at appropriate frequency. The final objective of the ILAA, approved by the relevant ALCOs, is to verify that the entity and subsidiaries maintain liquidity resources which are adequate in both amount and quality at all times, there is no significant risk that its liabilities cannot be met as they fall due, and a prudent funding profile is maintained.

The Board is ultimately responsible for determining the types and magnitude of liquidity risk that the group is able to take and ensuring that there is an appropriate organisation structure for managing this risk. Under authorities delegated by the Board, the group ALCO is responsible for managing all ALCM issues including liquidity and funding risk management. The group ALCO delegates to the group Tactical Asset and Liability Management Committee ('TALCO') the task of reviewing and monitoring operating entities' liquidity and funding positions.

Compliance with liquidity and funding requirements is monitored by local ALCO who report to the RMM and Executive Committee on a regular basis. This process includes:

- maintaining compliance with relevant regulatory requirements of the operating entity;
- projecting cash flows under various stress scenarios and considering the level of liquid assets necessary in relation thereto;
- monitoring liquidity and funding ratios against internal and regulatory requirements;
- maintaining a diverse range of funding sources with adequate back-up facilities;
- managing the concentration and profile of term funding;
- managing contingent liquidity commitment exposures within pre-determined limits;
- maintaining debt financing plans;
- monitoring of depositor concentration in order to avoid undue reliance on large individual depositors and ensuring a satisfactory overall funding mix; and

- maintaining liquidity and funding contingency plans. These plans identify early indicators of stress conditions and describe actions to be taken in the event of difficulties arising from systemic or other crises, while minimising adverse long-term implications for the business.

Governance

ALCM teams apply the LFRF at both an individual entity and group level, and are responsible for the implementation of Group-wide and local regulatory policy at a legal entity level. Markets Treasury has responsibility for cash and liquidity management.

Treasury Risk Management carry out independent review, challenge and assurance of the appropriateness of the risk management activities undertaken by ALCM and Markets Treasury. Their work includes setting control standards and advice on policy implementation.

Internal Audit provide independent assurance that risk is managed effectively.

Management of liquidity and funding risk

Funding and liquidity plans form part of the annual operating plan that is approved by the Board. The critical Board risk appetite measures are the liquidity coverage ratio ('LCR') and net stable funding ratio ('NSFR'). An appropriate funding and liquidity profile is managed through a wider set of measures:

- a minimum LCR requirement;
- a minimum NSFR requirement or other appropriate metric;
- an internal liquidity metric ('ILM');
- a legal entity depositor concentration limit;
- three-month and 12-month cumulative rolling term contractual maturity limits covering deposits from banks, deposits from non-bank financial institutions and securities issued;
- a minimum LCR requirement by currency;
- intra-day liquidity;
- the application of liquidity funds transfer pricing; and
- forward-looking funding assessments.

Sources of funding

Our primary sources of funding are customer current accounts and customer savings deposits payable on demand or at short notice. We issue wholesale securities (secured and unsecured) to supplement our customer deposits and change the currency mix, maturity profile or location of our liabilities.

Currency mismatch in the LCR

The LFRF requires all operating entities to monitor material single currency LCR. Limits are set to ensure that outflows can be met, given assumptions on stressed capacity in the FX swap markets.

Additional collateral obligations

Under the terms of our current collateral obligations of derivative contracts (which are ISDA compliant CSA contracts), the additional collateral required to post in the event of one-notch and two-notch downgrade in credit ratings is immaterial.

Liquidity and funding risk in the first half of 2021

The group is required to calculate its LCR and NSFR on a consolidated basis in accordance with rule 11(1) of The Banking (Liquidity) Rules ('BLR'), and is required to maintain both LCR and NSFR of not less than 100%.

The average LCR of the group for the period is as follows:

	Quarter ended	
	30 Jun 2021	31 Dec 2020
	%	%
Average LCR	157.9	172.1

Risk

The liquidity position of the group remained strong in the first half of 2021. The average LCR decreased by 14.2 percentage points from 172.1% for the quarter ended 31 December 2020 to 157.9% for the quarter ended 30 June 2021, mainly as a result of the growth in loans and advances to customers.

The majority of high quality liquid assets ('HQLA') included in the LCR are Level 1 assets as defined in the BLR, which consist mainly of government debt securities.

The total weighted amount of HQLA of the group for the period are as follows:

	Weighted amount (average value) at quarter ended	
	30 Jun 2021 HK\$m	31 Dec 2020 HK\$m
Level 1 assets	1,826,258	1,870,016
Level 2A assets	81,840	78,515
Level 2B assets	42,509	34,468
Total	1,950,607	1,982,999

The NSFR of the group for the period as follows:

	Quarter ended	
	30 Jun 2021 %	31 Dec 2020 %
Net stable funding ratio	150.3	159.3

The funding position of the group remained robust in the first half of 2021, highlighting a surplus of stable funding available relative to stable funding requirement. The NSFR decreased by 9 percentage points from 159.3% for the quarter ended 31 December 2020 to 150.3% for the quarter ended 30 June 2021, mainly as a result of the growth in loans and advances to customers.

Interdependent assets and liabilities included in the group's NSFR are certificates of indebtedness held and legal tender notes issued.

Further details of the group's liquidity information disclosures can be viewed in the *Banking Disclosure Statement at 30 June 2021*.

Market Risk

Overview

Market risk is the risk that movements in market factors, such as foreign exchange rates, interest rates, credit spreads, equity prices and commodity prices, will reduce our income or the value of our portfolios.

Trading value at risk, 99% 1 day

	Foreign exchange and commodity HK\$m	Interest rate HK\$m	Equity HK\$m	Credit spread HK\$m	Portfolio diversification ¹ HK\$m	Total HK\$m
Half-year to 30 Jun 2021						
Period end	50	179	77	29	(154)	181
Average	52	148	72	31		159
Maximum	77	212	107	62		213
Half-year to 31 Dec 2020						
Period end	50	130	62	45	(143)	144
Average	48	136	48	46		160
Maximum	75	218	73	106		248

¹ When VaR is calculated at a portfolio level, natural offsets in risk can occur when compared with aggregating VaR at the asset class level. This difference is called portfolio diversification. The asset class VaR maxima and minima reported in the table occurred on the different dates within the reporting period. For this reason, we do not report an implied portfolio diversification measure between the maximum (minimum) asset class VaR measures and the maximum (minimum) total VaR measures in this table.

A summary of our current policies and practices for the management of market risk is set out in 'Market risk management' on pages 54 to 55 of the Annual Report and Accounts 2020.

Market risk in the first half of 2021

There were no material changes to our policies and practices for the management of market risk in the first half of 2021.

Financial markets remained resilient during the first half of 2021, against the backdrop of loose financial conditions, continued fiscal support and acceleration in the rollout of Covid-19 vaccination programmes to the general population. As the reopening of major economies progressed in the first quarter of 2021, rising concerns of inflationary pressures and expectations that the Fed could raise interest rates earlier than previously anticipated led to a temporary increase in long-term government bond yields and a pause in the stock market rally. During the second quarter of 2021, while the path of monetary policies remained uncertain, central banks continued to provide liquidity, remaining cautious and highlighting the potentially transitory nature of higher inflation. This provided continued support to risk assets valuations and led to interest rates retracing from the March highs, while volatilities remained subdued. In June 2021, major equity markets reached new record highs and credit markets remained strong, with credit spreads benchmarks for investment-grade and high-yield debt close to pre-pandemic levels.

We continued to manage market risk prudently in the first half of 2021. Sensitivity exposures and VaR mostly remained within appetite as the business pursued its core market-making activity in support of our customers. Market risk was managed using a complementary set of risk measures and limits, including stress and scenario analysis.

Trading portfolios

Value at risk of the trading portfolios

Trading value at risk ('VaR') was predominantly generated by Markets & Securities Services. Interest rate risks from market-making activities were the main drivers of trading VaR. Total trading VaR was higher as at 30 June 2021 compared to 31 December 2020 mainly due to the increase in risk sensitivity exposures across fixed income and interest rates products including cash bonds and derivative instruments in Asian markets.

The trading VaR for the period is shown in the table below.

Insurance manufacturing operations risk management

Overview

The majority of the risk in our insurance business derives from manufacturing activities and can be categorised as financial risk and insurance risk. Financial risks include market risk, credit risk and liquidity risk. Insurance risk is the risk, other than financial risk, of loss transferred from the holder of the insurance contract to HSBC, the issuer. The cost of claims and benefits can be influenced by many factors, including mortality and morbidity experience, as well as lapses and surrender rates.

A summary of our policies and practices regarding the risk management of insurance operations, our insurance model and the main contracts we manufacture is provided on pages 59 to 60 of the Annual Report and Accounts 2020.

There have been no material changes to the policies and practices for the management of risks arising in our insurance operations described in the *Annual Report and Accounts 2020*.

Insurance manufacturing operations risk profile in the first half of 2021

The risk profile of our insurance manufacturing operations is assessed in the group's ICAAP based on their financial capacity to support the risks which they are exposed to. Capital adequacy is assessed on both the Group's economic capital basis, and the

relevant local insurance regulatory basis. Risk appetite buffers are set to ensure that the operations are able to remain solvent on both bases allowing for business-as-usual volatility and extreme but plausible stress events. In addition, the insurance manufacturing operations also manage their market, liquidity, credit, underwriting and non-financial risk exposures to Board-approved risk appetite limits.

Interest rates and equity values, which are the key risk drivers for the financial strength of the insurance operations, in general rose during the first half of the year. This had a favourable impact on capital positions and financial risk exposures. As a result, at 30 June 2021 the majority of the capital and financial risk positions of our insurance operations were within risk appetite. However, we continue to monitor these risks closely, as lower interest rates impact on margins and increase profit sensitivity on our insurance products.

Insurance entities in the group manage their economic capital cover ratios against their appetite and tolerance as approved by their respective Boards. The table below shows the composition of assets and liabilities by contract type and 92% (2020: 93%) of both assets and liabilities are derived from Hong Kong.

Balance sheet of insurance manufacturing subsidiaries by type of contract

	Non-linked HK\$m	Unit-linked HK\$m	Shareholders' assets and liabilities HK\$m	Total HK\$m
At 30 Jun 2021				
Financial assets	615,665	41,886	42,249	699,800
– financial assets designated and otherwise mandatorily measured at fair value	150,311	39,851	341	190,503
– derivatives	793	10	6	809
– financial investments measured at amortised cost	423,846	717	33,798	458,361
– financial investments measured at fair value through other comprehensive income	5,590	–	543	6,133
– other financial assets ¹	35,125	1,308	7,561	43,994
Reinsurance assets	28,254	5	–	28,259
PVIF ²	–	–	63,526	63,526
Other assets and investment properties	13,346	14	4,845	18,205
Total assets	657,265	41,905	110,620	809,790
Liabilities under investment contracts designated at fair value	30,657	7,773	–	38,430
Liabilities under insurance contracts	580,133	33,389	–	613,522
Deferred tax ³	8	–	10,425	10,433
Other liabilities	–	–	38,625	38,625
Total liabilities	610,798	41,162	49,050	701,010
Total equity	–	–	108,780	108,780
Total equity and liabilities	610,798	41,162	157,830	809,790

At 31 Dec 2020

Financial assets	577,666	42,621	40,776	661,063
– financial assets designated and otherwise mandatorily measured at fair value	129,597	41,366	384	171,347
– derivatives	1,323	20	3	1,346
– financial investments measured at amortised cost	410,169	222	34,824	445,215
– financial investments measured at fair value through other comprehensive income	4,971	–	502	5,473
– other financial assets ¹	31,606	1,013	5,063	37,682
Reinsurance assets	27,299	6	–	27,305
PVIF ²	–	–	65,052	65,052
Other assets and investment properties	13,422	1	4,652	18,075
Total assets	618,387	42,628	110,480	771,495
Liabilities under investment contracts designated at fair value	31,786	7,732	–	39,518
Liabilities under insurance contracts	547,128	34,348	–	581,476
Deferred tax ³	9	–	10,436	10,445
Other liabilities	–	–	37,220	37,220
Total liabilities	578,923	42,080	47,656	668,659
Total equity	–	–	102,836	102,836
Total equity and liabilities	578,923	42,080	150,492	771,495

¹ Comprise mainly loans and advances to banks, cash and inter-company balances with other non-insurance legal entities.

² Present value of in-force long-term insurance business.

³ 'Deferred tax' includes the deferred tax liabilities arising on recognition of PVIF.

Market risk

Description and exposure

Market risk is the risk of changes in market factors affecting capital or profit. Market factors include interest rates, equity and growth assets and foreign exchange rates.

Our exposure varies depending on the type of contract issued. Our most significant life insurance products are contracts with discretionary participating features ('DPF') issued in Hong Kong. These products typically include some form of capital guarantee or guaranteed return on the sums invested by the policyholders, to which discretionary bonuses are added if allowed by the overall performance of the funds. These funds are primarily invested in bonds, with a proportion allocated to other asset classes to provide customers with the potential for enhanced returns.

DPF products expose the group to the risk of variation in asset returns, which will impact our participation in the investment performance. In addition, in some scenarios the asset returns can become insufficient to cover the policyholders' financial guarantees, in which case the shortfall has to be met by the group. Reserves are held against the cost of such guarantees, calculated by stochastic modelling.

Where local rules require, these reserves are held as part of liabilities under insurance contracts. Any remainder is accounted for as a deduction from PVIF on the relevant product.

For unit-linked contracts, market risk is substantially borne by the policyholders, but some market risk exposure typically remains as fees earned are related to the market value of the linked assets.

Sensitivities

Where appropriate, the effects of the sensitivity tests on profit after tax and total equity incorporate the impact of the stress on the PVIF. The relationship between the profit and total equity, and the risk factors is non-linear; therefore the results disclosed should not be extrapolated to measure sensitivities to different levels of stress. For the same reason, the impact of the stress is not symmetrical on the upside and downside. The sensitivities reflect the established risk sharing mechanism with policyholders for participating products, and are stated before allowance for management actions which may mitigate the effect of changes in the market environment. The sensitivities presented allow for adverse changes in policyholders' behaviour that may arise in response to changes in market rates. The following table illustrates the effects of selected interest rate, equity price and foreign exchange rate scenarios on our profit for the period and the total equity of our insurance manufacturing subsidiaries.

Sensitivity of the group's insurance manufacturing subsidiaries to market risk factors

	30 Jun 2021		31 Dec 2020	
	Effect on profit after tax HK\$m	Effect on total equity HK\$m	Effect on profit after tax HK\$m	Effect on total equity HK\$m
+100 basis points parallel shift in yield curves	(1,303)	(2,006)	(1,673)	(2,283)
-100 basis points parallel shift in yield curves	1,400	2,103	1,613	2,223
10% increase in equity prices	2,401	2,401	2,167	2,167
10% decrease in equity prices	(2,433)	(2,433)	(2,183)	(2,183)
10% increase in USD exchange rate compared to all currencies	103	103	673	673
10% decrease in USD exchange rate compared to all currencies	(103)	(103)	(673)	(673)

Issuer

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