The Hongkong and Shanghai Banking Corporation Limited

Interim Report 2023

HSBC

Contents

Certain defined terms

This document comprises the *Interim Report 2023* for The Hongkong and Shanghai Banking Corporation Limited ('the Bank') and its subsidiaries (together 'the group'). References to 'HSBC', 'the Group' or 'the HSBC Group' within this document mean HSBC Holdings plc together with its subsidiaries. Within this document the Hong Kong Special Administrative Region of the People's Republic of China is referred to as 'Hong Kong'. The abbreviations 'HK$m' and 'HK$bn' represent millions and billions (thousands of millions) of Hong Kong dollars respectively.

Cautionary statement regarding forward-looking statements

This *Interim Report 2023* contains certain forward-looking statements with respect to the financial condition, results of operations and business of the group.

Statements that are not historical facts, including statements about the group's beliefs and expectations, are forward-looking statements. Words such as 'expects', 'anticipates', 'intends', 'plans', 'believes', 'seeks', 'estimates', 'potential' and 'reasonably possible', variations of these words and similar expressions are intended to identify forward-looking statements. These statements are based on current plans, estimates and projections, and therefore undue reliance should not be placed on them.

Forward-looking statements speak only as of the date they are made. The Hongkong and Shanghai Banking Corporation Limited makes no commitment to revise or update any forward-looking statements to reflect events or circumstances occurring or existing after the date of any forward-looking statement.

Forward-looking statements involve inherent risks and uncertainties. Readers are cautioned that a number of factors could cause actual results to differ, in some instances materially, from those anticipated or implied in any forward-looking statement.

Additional detailed information concerning important factors, including but not limited to environmental, social and governance related factors, that could cause actual results to differ materially from those anticipated or implied in any forward-looking statement in this *Interim Report 2023* is available in our *Annual Report and Accounts 2022*.

Chinese translation

A Chinese translation of the *Interim Report 2023* is available upon request from: Communications (Asia), Level 32, HSBC Main Building, 1 Queen's Road Central, Hong Kong. The report is also available, in English and Chinese, on the Bank's website at www.hsbc.com.hk.

本《*2023年中期業績報告*》備有中譯本，如有需要可向下列部門索取：香港皇后大道中1號滙豐總行大廈32樓企業傳訊部（亞太區）。本報告之中英文本亦載於本行之網站www.hsbc.com.hk。

中英文本如有歧異，概以英文本為準。

Additional information

The *Banking Disclosure Statement at 30 June 2023*, which is prepared in accordance with the Banking (Disclosure) Rules made under section 60A of the Banking Ordinance and the Financial Institutions (Resolution) (Loss-absorbing Capacity Requirements – Banking Sector) Rules made under section 19(1) of the Financial Institutions (Resolution) Ordinance, will be published on our website at www.hsbc.com.hk.

Financial highlights

- Profit before tax up 95% to HK$83,210m (HK$42,772m in the first half of 2022).
- Attributable profit up 97% to HK$66,017m (HK$33,452m in the first half of 2022).
- Return on average ordinary shareholders' equity of 16.6% (8.6% in the first half of 2022).
- Total assets up 2% to HK$10,413bn (HK$10,198bn at the end of 2022).
- Common equity tier 1 ratio of 15.8% (15.3% at the end of 2022), total capital ratio of 19.6% (18.8% at the end of 2022).
- Cost efficiency ratio of 41.2% (59.0% for the first half of 2022).

From 1 January 2023, we adopted HKFRS 17 'Insurance Contracts', which replaced HKFRS 4 'Insurance Contracts'. Comparative data presented in the Financial Review, Risk and Financial Statements sections have been restated. For further details on our adoption of HKFRS 17, see Note 1 'Basis of preparation and material accounting policies' on page 36 to 39 and Note 12 'Effects of adoption of HKFRS 17' on page 48 to 51.

Media enquiries to: Aman Ullah Telephone no: + 852 3941 1120
Vinh Tran Telephone no: + 852 2822 4924

Financial review

Changes to presentation from 1 January 2023

HKFRS 17 ‘Insurance Contracts’

On 1 January 2023, the group adopted HKFRS 17 ‘Insurance Contracts’. As required by the standard, the group applied the requirements retrospectively with comparative data previously published under HKFRS 4 ‘Insurance Contracts’ restated from the 1 January 2022 transition date. Under HKFRS 17 there is no present value of in-force long-term insurance business (‘PVIF’) asset recognised up front. Instead the measurement of the insurance contract liability takes into account fulfilment cash flows and a contractual service margin representing the unearned profit. In contrast to the group’s previous HKFRS 4 accounting where profits are recognised up front, under HKFRS 17 they are deferred and systematically recognised in revenue as services are provided over the life of the contract. The contractual service margin also includes attributable cost, which had previously been expensed as incurred and which is now incorporated within the insurance liability measurement and recognised over the life of the contract.

In conjunction with the implementation of HKFRS 17 the group has made use of the option to re-designate to fair value through profit or loss assets that were previously held at amortised cost totalling HK$429,016m, and assets previously held at fair value through other comprehensive income totalling HK$6,366m. The re-designation of amortised cost assets generated a net increase to assets of HK$38,072m because the new fair value measurement on transition was higher than the previous amortised cost carrying amount. For further details, see Note 1 'Basis of preparation and material accounting policies' and Note 12 'Effects of adoption of HKFRS17'.

The impact of the transition was a reduction of HK$3,418m on the group’s first half 2022 reported revenue and a reduction of HK$1,621m to reported profit before tax in the first half 2022. The group’s total equity reduced by HK$75.4bn to HK$848.1bn on the transition at 1 January 2022.

Consolidated income statement and balance sheet data by reportable segments[1,2]

	Wealth and Personal Banking HK$m	Commercial Banking[3] HK$m	Global Banking[3] HK$m	Markets and Securities Services HK$m	Corporate Centre[4] HK$m	Other (GBM – other) HK$m	Total HK$m
Half-year to 30 Jun 2023							
Net interest income/(expense)	**38,850**	**30,084**	**11,680**	**2,384**	**(18,011)**	**840**	**65,827**
Net fee income	**10,078**	**5,674**	**2,696**	**1,418**	**160**	**—**	**20,026**
Net income from financial instruments measured at fair value through profit or loss	**30,249**	**2,491**	**102**	**13,535**	**17,828**	**337**	**64,542**
Gains less losses from financial investments	**(5)**	**9**	**—**	**—**	**—**	**7**	**11**
Insurance finance income/(expense)	**(26,662)**	**—**	**—**	**—**	**2**	**—**	**(26,660)**
Insurance service result	**3,113**	**—**	**—**	**—**	**8**	**—**	**3,121**
Other operating income/(expense)	**1,328**	**66**	**212**	**707**	**730**	**(314)**	**2,729**
Net operating income before change in expected credit losses and other credit impairment charges	**56,951**	**38,324**	**14,690**	**18,044**	**717**	**870**	**129,596**
– of which: external	***35,021***	***40,804***	***19,283***	***32,203***	***(8,732)***	***11,017***	***129,596***
inter-segment	***21,930***	***(2,480)***	***(4,593)***	***(14,159)***	***9,449***	***(10,147)***	***—***
Change in expected credit losses and other credit impairment charges	**(962)**	**(2,534)**	**(55)**	**(39)**	**(4)**	**23**	**(3,571)**
Net operating income	**55,989**	**35,790**	**14,635**	**18,005**	**713**	**893**	**126,025**
Operating expenses	**(24,386)**	**(10,595)**	**(5,314)**	**(7,454)**	**(4,465)**	**(1,160)**	**(53,374)**
Operating profit/(loss)	**31,603**	**25,195**	**9,321**	**10,551**	**(3,752)**	**(267)**	**72,651**
Share of profit in associates and joint ventures	**218**	**—**	**—**	**—**	**10,341**	**—**	**10,559**
Profit/(loss) before tax	**31,821**	**25,195**	**9,321**	**10,551**	**6,589**	**(267)**	**83,210**
Balance sheet data at 30 Jun 2023							
Loans and advances to customers (net)	**1,560,869**	**1,219,984**	**809,792**	**44,593**	**1,338**	**3,447**	**3,640,023**
Customer accounts	**3,466,037**	**1,656,191**	**750,569**	**202,614**	**29**	**556**	**6,075,996**

Consolidated income statement and balance sheet data by reportable segments[1,2] (continued)

	Wealth and Personal Banking HK$m	Commercial Banking[3] HK$m	Global Banking[3] HK$m	Markets and Securities Services HK$m	Corporate Centre[4] HK$m	Other (GBM – other) HK$m	Total HK$m
Half-year to 30 Jun 2022							
Net interest income/(expense)	20,058	16,036	8,029	1,909	(2,072)	1,166	45,126
Net fee income/(expense)	10,259	5,459	2,667	2,151	151	(55)	20,632
Net income/(expense) from financial instruments measured at fair value through profit or loss	(77,927)	1,959	(23)	11,828	1,994	273	(61,896)
Gains less losses from financial investments	(58)	(58)	—	—	—	(110)	(226)
Insurance finance income	80,217	—	—	—	16	—	80,233
Insurance service result	2,229	—	—	—	25	—	2,254
Other operating income	1,667	12	110	565	78	—	2,432
Net operating income before change in expected credit losses and other credit impairment charges	36,445	23,408	10,783	16,453	192	1,274	88,555
– of which: external	*34,349*	*24,164*	*10,612*	*17,400*	*(1,850)*	*3,880*	*88,555*
inter-segment	*2,096*	*(756)*	*171*	*(947)*	*2,042*	*(2,606)*	—
Change in expected credit losses and other credit impairment charges	(618)	(3,090)	(419)	16	—	(24)	(4,135)
Net operating income	35,827	20,318	10,364	16,469	192	1,250	84,420
Operating expenses	(23,972)	(10,348)	(5,251)	(7,342)	(4,060)	(1,250)	(52,223)
Operating profit/(loss)	11,855	9,970	5,113	9,127	(3,868)	—	32,197
Share of profit in associates and joint ventures	31	—	—	—	10,544	—	10,575
Profit before tax	11,886	9,970	5,113	9,127	6,676	—	42,772
Balance sheet data at 30 Jun 2022							
Loans and advances to customers (net)	1,542,659	1,333,398	914,045	48,029	1,460	14,736	3,854,327
Customer accounts	3,432,308	1,637,900	834,008	208,583	27	840	6,113,666

1 *The financial information included in this table forms part of the Interim condensed consolidated financial statements, which have been reviewed by PricewaterhouseCoopers.*
2 *From 1 January 2023, we adopted HKFRS 17 'Insurance Contracts', which replaced HKFRS 4 'Insurance Contracts'. Comparative data have been restated accordingly.*
3 *From 1 January 2023, we have transferred a portfolio of our Global Banking ('GB') customers within our entities in Australia and Indonesia from Global Banking to Commercial Banking ('CMB') for reporting purposes. Comparative data have not been re-presented.*
4 *Includes inter-segment elimination.*

Financial review

The commentary in this financial review compares the group's financial performance for the half-year ended 30 June 2023 with the half-year ended 30 June 2022 unless otherwise stated.

Result commentary

The group reported profit before tax of HK$83,210m, an increase of HK$40,438m, or 95%.

Net interest income increased by HK$20,701m, or 46%. Excluding the unfavourable foreign exchange impact, net interest income increased by HK$21,760m, or 49%, primarily driven by Hong Kong with wider customer deposit spreads and higher reinvestment yields as market interest rates increased. Net interest income in Singapore also increased, benefiting from higher market interest rates.

Net fee income decreased by HK$606m, or 3%. Excluding the unfavourable foreign exchange impact, net fee income decreased by HK$265m, or 1%, mainly in Hong Kong from securities brokerage income due to lower equities turnover, and to a lesser extent funds under management income. The decreases were partly offset by higher net payment and card service income in Hong Kong, mainly from increased consumer spending following the release of Covid-19 restrictions.

Net income from financial instruments measured at fair value through profit or loss increased by HK$126,438m, or 204%.

Net income from assets and liabilities of insurance business, including related derivatives, measured at fair value through profit or loss increased by HK$106,298m, or 134% primarily in Hong Kong and Singapore reflecting fair value gains on financial assets measured at fair value through profit or loss which back insurance and investment contracts. There is an offsetting impact within the associated insurance liability accounting reported in 'Insurance finance income/(expense)'.

Net income from financial instruments held for trading or managed on a fair value basis increased by HK$19,358m, or 109%, principally in Hong Kong from higher gains on derivatives benefiting from rising interest rates and foreign exchange movements.

Insurance finance income/(expense) reduced by HK$106,893m, or 133%, offsetting gains reported on underlying assets held to support insurance contract liabilities.

Insurance service result increased by HK$867m, or 38%, reflecting increases to the release of contractual service margin ('CSM') as a result of increases to the CSM balance from the effect of new business written, favourable experience variances, and updates to lapse rate assumptions impacting the CSM measurement, as well as the impact of higher interest rates on the CSM duration profile. It also reflected a reduction to onerous contracts notably in Hong Kong and Singapore.

Other operating income increased by HK$297m, or 12%, mainly driven by an increase in net income from reinsurance contracts, partly offset by a provisional gain of HK$556m of the acquisition of AXA Insurance Pte Limited ('AXA Singapore') in prior year.

Change in expected credit losses and other credit impairment charges decreased by HK$564m, or 14%. This was largely driven by a net release in mainland China of HK$190m, compared with a charge of HK$1,080m in 2022, reflecting concerns over continued Covid-19 restrictions in 2022, and improved economic forecasts in 2023. Expected credit losses ('ECL') in Hong Kong increased by HK$598m due to further downgrades in the offshore mainland China commercial real estate ('CRE') portfolio.

Total operating expenses increased by HK$1,151m, or 2%. Excluding the favourable foreign exchange impact, operating expenses increased by HK$1,944m, or 4%, primarily reflecting our continued investment in technology to support business growth.

Share of profit in associates and joint ventures decreased by HK$16m, or less than 1%. Excluding the unfavourable foreign exchange impact, share of profit in associates and joint ventures increased by HK$658m, mainly from Bank of Communication Co., Ltd ('BoCom').

Net interest income

	Half-year to	
	30 Jun 2023	30 Jun 2022
	HK$m	HK$m
Net interest income	**65,827**	45,126
Average interest-earning assets	**7,247,640**	7,102,937
	%	%
Net interest spread	**1.66**	1.24
Contribution from net free funds	**0.17**	0.04
Net interest margin	**1.83**	1.28

Net interest income ('NII') increased by HK$20,701m, or 46%. Excluding the unfavourable foreign exchange impact, net interest income increased by HK$21,760m, or 49%, primarily driven by Hong Kong with wider customer deposit spreads and higher reinvestment yields as market interest rates increased. Net interest income in Singapore also increased, benefiting from higher market interest rates.

Average interest-earning assets increased by HK$145bn, or 2%, driven by Hong Kong, from growth in financial investments.

Net interest margin ('NIM') increased by 55 basis points ('bps'), with increases noted across the region, including Hong Kong, Singapore, and Malaysia with higher market interest rates compared to the first half of 2022.

As a result, the NIM at the Bank's operations in Hong Kong increased by 48 bps to 1.30%, and at Hang Seng Bank, the NIM increased by 62 bps to 2.09%.

Net fee income

	Half-year to	
	30 Jun 2023	30 Jun 2022
	HK$m	HK$m
Funds under management	**3,566**	3,752
Unit trusts	**2,596**	2,743
Broking income	**1,794**	2,463
Cards	**4,588**	3,750
Global custody	**1,907**	2,135
Credit facilities	**1,610**	1,529
Imports/exports	**1,650**	1,591
Remittances	**1,477**	1,443
Account services	**1,178**	1,147
Underwriting	**416**	327
Insurance agency commission	**889**	866
Other	**4,609**	4,355
Fee income	**26,280**	26,101
Fee expense	**(6,254)**	(5,469)
Net fee income	**20,026**	20,632

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

	Half-year to	
	30 Jun 2023	30 Jun 2022
	HK$m	HK$m
Net income/(expense) arising on:		
Net trading activities	**40,416**	17,133
Other instruments managed on a fair value basis	**(3,266)**	659
Net income from financial instruments held for trading or managed on a fair value basis	**37,150**	17,792
Financial assets held to meet liabilities under insurance and investment contracts	**27,466**	(82,679)
Liabilities to customers under investment contracts	**(443)**	3,404
Net income/(expense) from assets and liabilities of insurance businesses, including related derivatives, measured at fair value through profit or loss	**27,023**	(79,275)
Changes in fair value of designated debts issued and related derivatives[1]	**213**	(447)
Changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	**156**	34
Net income/(expense) from financial instruments measured at fair value through profit or loss	**64,542**	(61,896)

1 *Includes debt instruments which are issued for funding purposes and are designated under the fair value option to reduce an accounting mismatch.*

Other operating income

	Half-year to	
	30 Jun 2023 HK$m	30 Jun 2022 HK$m
Gain on acquisition of subsidiary[1]	**—**	556
Gains/(losses) on investment properties	**37**	(57)
Other[2]	**2,692**	1,933
Other operating income	**2,729**	2,432

1 *Includes a provisional gain of HK$556m from the acquisition of AXA Insurance Pte Limited which the final adjustments were made in the second half of 2022.*
2 *Includes the recovery of operating expenses from other Group companies.*

Insurance manufacturing

The following table shows the results of our insurance manufacturing operations by income statement line item.

Results of insurance manufacturing operations

	Half-year to	
	30 Jun 2023 HK$m	30 Jun 2022 HK$m
Insurance manufacturing operations[1]		
Net interest income	**197**	392
Net fee income/(expense)	**(8)**	47
Other income	**4,608**	3,311
Insurance service result	**3,310**	2,261
– release of contractual service margin	**3,267**	2,666
– risk adjustment release	**72**	107
– experience variance and other	**(141)**	149
– gain/(loss) from onerous contracts	**112**	(661)
Net investment returns (excluding net interest income)	**295**	53
– insurance finance income/(expense)	**(26,661)**	80,254
– other investment income/(expense)	**26,956**	(80,201)
Other operating income	**1,003**	997
Net operating income before change in expected credit losses and other credit impairment charges	**4,797**	3,750
Change in expected credit losses and other credit impairment charges	**(48)**	2
Net operating income	**4,749**	3,752
Total operating expenses	**(1,720)**	(1,656)
Operating profit	**3,029**	2,096
Share of profit in associates and joint ventures	**218**	31
Profit before tax of insurance business operations	**3,247**	2,127
Annualised new business premiums of insurance manufacturing operations	**13,617**	8,658

1 *The results presented for insurance manufacturing operations are shown before elimination of intercompany transactions with the group's non-insurance operations.*

Profit before tax of insurance business operations increased by HK$1,120m, or 53%, compared with the first half of 2022. This was primarily driven by the increase in insurance service result of HK$1,049m, reflecting an increase to the release of CSM of HK$601m as a result of a higher closing CSM balance from the effect of new business written, favourable experience variances, and updates to lapse rate assumptions impacting the CSM measurement, as well as the impact of higher interest rates on the CSM duration profile. The improved insurance service result also reflected a reduction to losses from onerous contracts of HK$773m primarily in Hong Kong and Singapore in part due to improved economic conditions in the first half of 2023.

Net investment returns (excluding net interest income) increased by HK$242m, with improved asset returns in the first half of 2023 compared to losses in the prior period.

Change in expected credit losses and other credit impairment charges

	Half-year to	
	30 Jun 2023	30 Jun 2022
	HK$m	HK$m
Loans and advances to banks and customers	**3,840**	3,842
– new allowances net of releases	**4,231**	4,291
– recoveries of amounts previously written off	**(391)**	(449)
Loan commitments and guarantees	**(112)**	174
Other financial assets	**(157)**	119
Change in expected credit losses and other credit impairment charges	**3,571**	4,135

The annualised change in ECL as a percentage of average gross customer advances was 0.21% for the first half of 2023 (first half of 2022: 0.20%).

Operating expenses

	Half-year to	
	30 Jun 2023	30 Jun 2022
	HK$m	HK$m
Employee compensation and benefits	**18,971**	18,991
General and administrative expenses	**26,288**	25,852
Depreciation of property, plant and equipment	**4,654**	4,551
Amortisation and impairment of intangible assets	**3,461**	2,829
Operating expenses	**53,374**	52,223

Employee compensation and benefits decreased by HK$20m. Excluding the favourable foreign exchange impact, employee compensation and benefits increased by HK$402m, or 2%, mainly from the impact of rising inflation.

General and administrative expenses increased by HK$436m, or 2%, reflecting our continued investment in technology to support business growth.

Amortisation and impairment of intangible assets increased by HK$632m, or 22%, driven by increased capitalisation of technology software.

Associates and joint ventures

At 30 June 2023, 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. Impairment, if determined, would be recognised in the income statement. The impact on group's common equity tier 1 ratio is expected to be minimal in the event of an impairment, as the adverse impact on common equity tier 1 capital from the impairment would be partly offset by the favourable impact from a lower carrying amount. 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 the income statement. An impairment review would continue to be performed at each subsequent reporting period, with the carrying amount and income statement adjusted accordingly.

Risk

Principal risks and uncertainties

The group continuously monitors and identifies risks. Our principal risks are credit risk, treasury risk, traded 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 29 to 30 and pages 20 to 22 in the 'Risk' section of the *Annual Report and Accounts 2022.*

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

During the first half of 2023, there was an improvement in the economic outlook compared with 31 December 2022, for most markets, however a number of key macroeconomic, trade and regulatory issues remain.

The relationship between China and several countries, including the UK and the US, remains complex. Efforts have been undertaken to decrease vulnerabilities to geopolitical shocks through de-risking supply chains. The UK, the US, the EU and other countries have imposed various sanctions and trade restrictions on Chinese persons and companies. In response, China has imposed sanctions and introduced new laws and trade restrictions. Collectively, these actions could impact the group and its customers. Further sanctions or counter-sanctions, whether in connection with Russia or China, may affect the group and its customers by creating regulatory, reputational and market risks.

The Russia-Ukraine war has continued to have far-reaching geopolitical implications. It has resulted in the imposition of significant sanctions and trade restrictions. The war's economic impact has stabilised as the global economy has adapted to the sanctions regime.

However, the continuation of – or any further escalation in – the Russia-Ukraine war, could have additional economic, social and political consequences. These include further sanctions and trade restrictions, longer-term changes in the macroeconomic environment with the risk of higher and sustained inflation, and a continued increase in energy prices.

Central banks in both developed markets and emerging markets continued to tighten monetary policy in the first half of 2023, and with further tightening expected in the second half. Accumulated policy tightening has increased recession and financial stability risks, but while inflation has started to fall, many developed markets central banks are expected to sustain higher interest rates to address persistent underlying inflation pressures through to mid-2024.

Fiscal policies are likely to remain relatively generous in both developed and emerging markets, as demand increases for public spending on items including social welfare, defence and decarbonisation against a backdrop of slower growth, volatile energy prices and high interest rates. This could increase the strains on highly indebted sovereigns, corporates and households in both emerging and developed markets.

The mainland China commercial real estate market showed signs of recovery and stabilisation in early 2023, but recent market data remains mixed, suggesting both an uncertain and protracted recovery. Chinese government policy measures introduced in late 2022 have resulted in improved financial support for onshore borrowers, although offshore financial market conditions remain challenged with a continued shortage of liquidity. Corporates operating in this sector are likely to face continued challenges and the risk of further credit deterioration through the remainder of 2023.

We continue to consider the impact of the increasing cost of living on our retail customers. We are engaging closely with our key regulators to help ensure we continue to meet their expectations of financial institutions' activities during times of market volatility.

For HKFRS 9, our approach to macroeconomic scenarios remained unchanged in the first half of 2023. Management adjustments to ECL were applied to reflect persisting uncertainty in certain sectors driven by inflation, interest rate volatility and other macroeconomic risks, which were not fully captured by our models.

We continue to monitor, and seek to manage, the potential implications of all the above developments on our customers and our business.

While the financial performance of our operations varied in different geographies, the balance sheet and liquidity of the group remained strong.

We remain committed to investing in the reliability and resilience of our IT systems and critical services, including those provided by third parties, 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, legal and regulatory consequences. In our approach to defending against these threats, we invest in business and technical controls to help us detect, manage and recover from issues, including data loss, in a timely manner.

We continue to focus on improving the quality and timeliness of the data used to inform management decisions, through prudent active management of our risk appetite, and ensuring regular communication with our Board and key stakeholders.

We continue to make progress with the implementation of our business transformation plans. We seek to manage change execution risk so we can prioritise, manage and deliver change initiatives effectively and safely, and at the scale, complexity and pace required.

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 have the potential to have a material adverse impact on the financial results, reputation or business model of the group. We actively manage and take actions to mitigate our top risks. Emerging risks are those that, while they could have a material impact on our risk profile were they to occur, are not considered immediate and are not under active management. Our suite of top and emerging risks is subject to regular review by senior governance forums. We continue to monitor closely the identified risks and ensure management actions are in place, as required.

For further details on our Top and Emerging risks see those set out on the 'Risk management' section on pages 23 to 28 of the Annual Report and Accounts 2022.

Risk	Trend	Description
Externally driven		
Geopolitical and macroeconomic risks	▲	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. Geopolitical tensions remain high, although global supply chain disruptions have abated. High global interest rates and uncertain outlook for China are nevertheless prompting a global slowdown that may affect our credit portfolio.
Technology and cyber security risk	▶	We face a risk of service disruption or loss of data resulting from technology failures or malicious activities by internal or external threats. We continue to monitor ongoing geopolitical events and changes to the threat landscape. We operate a continuous improvement programme to help protect our technology operations and to counter a fast-evolving cyber threat environment.
Financial crime risk	▲	We are exposed to financial crime risk from our customers, staff and third-parties engaging in criminal activity. The financial crime risk environment continues to evolve, due to increasingly complex geopolitical challenges, the macroeconomic outlook, evolving sanctions regulations, rapid technological developments, an increasing number of data nationalisation initiatives and the increasing sophistication of fraud. As a result, we will continue to face the possibility of regulatory enforcement and reputational risk.
Interbank offered rate ('Ibor') transition risk	▼	We remain exposed to regulatory compliance, legal and resilience risks as contracts transition away from the remaining demising Ibor benchmarks to new reference rates. We continue to consider the fairness of client outcomes, our compliance with regulatory expectations and the operation of our systems and processes. The key risks have diminished as the majority of contracts in the remaining demising Ibors, specifically US dollar Libor, have been successfully transitioned.
Environmental, social and governance ('ESG') risks	▲	We are subject to ESG risks relating to climate change, nature and human rights. These risks have increased owing to the pace and volume of regulatory developments globally, and due to stakeholders placing more emphasis on financial institutions' actions and investment decisions in respect of ESG matters, with particular focus on the creditability of ESG-related targets and performance at the firm-wide, product and client levels. Failure to meet these evolving expectations may result in financial and non-financial costs, including potential adverse reputational consequences.
Digitalisation and technological advances risk	▲	Developments in technology and changes in regulations have enabled new entrants to the banking industry and new products and services offered by competitors. Along with opportunities, new technology can introduce new risks. This challenges us to continue to innovate in order to take advantage of new digital capabilities to best serve our customers by adapting our products, and to attract and retain customers and employee talent, while ensuring that the risks are understood and managed with appropriate controls.
Internally driven		
Risks arising from the receipt of services from third parties	▶	We procure services and goods from a range of third parties, who we recognise may be impacted by the same external markets factors as us. It is critical that we have appropriate risk management policies and processes to select and govern third parties, including third parties' supply networks, particularly for key activities that could affect our operational resilience. Any deficiency in the management of risks associated with our third parties could affect our ability to support our customers and meet regulatory expectations.
Model risk	▲	Model risk arises whenever business decision making includes reliance on models. We use models in both financial and non-financial contexts, as well as in a range of business applications such as customer selections, product pricing, financial crime transaction monitoring, creditworthiness evaluation and financial reporting. Evolving regulatory requirements are driving material changes to the way model risk is managed across the banking industry, with particular focus on capital models. The rapidly changing technology environment including generative artificial intelligence ('AI') and large language models utilising AI are impacting the need for enhanced model risk controls.
Data risk	▶	We use data to serve our customers and run our operations, often in real-time within digital experiences and processes. If this data is not accurate and timely, our ability to serve customers, operate with resilience or meet regulatory requirements could be impacted. We need to ensure that non-public data is kept confidential, and that we comply with the growing number of regulations that govern data privacy and cross-border movement of data.
Change execution risk	▶	Failure to effectively prioritise, manage and/or deliver transformation across the organisation impacts our ability to achieve our strategic objectives. We aim to monitor, manage and oversee change execution risk to ensure our change portfolios and initiatives continue to deliver the right outcomes for our customers, people, investors and communities.

▲ *Risk heightened during the first half of 2023*

▶ *Risk remained at the same level as 2022.*

▼ *Risk decreased during the first half of 2023.*

Risk Management

We recognise that the primary role of risk management is to protect our customers, business, colleagues, shareholders and the communities that we serve, while ensuring we are able to support our strategy and provide sustainable growth.

All our people are responsible for the management of risk, with the ultimate accountability residing with the Board. Our group Risk function, led by the group Chief Risk Officer, plays an important role in reinforcing our culture and values. We are focused on creating an environment that encourages our people to speak up and do the right thing.

The group Risk function is independent from the global businesses, including our sales and trading functions, to provide challenge, oversight and appropriate balance in risk/reward decisions.

The implementation of our business strategy, which includes our business transformation plans, remains a key focus. As we implement change initiatives, we actively manage the execution risks.

We aim to use a comprehensive risk management approach across the organisation and across all risk types, underpinned by our culture and values. This is outlined in our risk management framework, including the key principles and practices that we employ in managing material risks, both financial and non-financial. The framework fosters continual monitoring, promotes risk awareness and encourages sound operational and strategic decision making. It also supports a consistent approach to identifying, assessing, managing and reporting the risks we accept and incur in our activities. We continue to actively review and develop our risk management framework and enhance our approach to managing risk through our activities with regard to: people and capabilities; governance; reporting and management information; credit risk management models; and data.

Our risk appetite

Our risk appetite defines our desired forward-looking risk profile and informs the strategic and financial planning process. It provides an objective baseline to guide strategic decision making, helping to ensure that planned business activities provide an appropriate balance of return for the risk assumed, while remaining within acceptable risk levels. Risk appetite supports senior management in allocating capital, funding and liquidity optimally to finance growth, while monitoring exposure to non-financial risks.

At 30 June 2023, our CET1 ratio was within the defined risk appetite threshold. Monitoring of measures against our risk appetite remains a key focus. During the first half of 2023, we enhanced the coverage of interest rate risk in the banking book within the group's appetite statement.

Climate risk

Climate risk relates to the financial and non-financial impacts that may arise as a result of climate change and the move to a greener economy. Climate risk can impact us either directly or through our relationships with our clients. This includes potential risks arising as a result of the Group's net zero ambition, which could lead to reputational concerns, and potential legal and/or regulatory action if we are perceived to mislead stakeholders on our business activities or if we fail to achieve the Group's stated net zero targets. Our most material exposure to climate risk relates to corporate client financing activities and retail mortgages within our banking portfolio. We also have responsibilities in relation to managing the associated risks in relation to asset ownership by our insurance business and asset management business.

We seek to manage climate risk across all our businesses in line with our Group-wide risk management framework, and are incorporating climate considerations within our existing risk types.

For further details of our approach to climate risk management, see 'Climate risk' on pages 61 to 64 of our Annual Report and Accounts 2022.

For further details of our TCFD disclosures, see the 'ESG review' on pages 9 to 15 of our Annual Report and Accounts 2022.

Key developments in the first half of 2023

We actively managed the risks related to macroeconomic uncertainties including inflation, fiscal and monetary policy, geopolitical uncertainties, the Russia-Ukraine war, as well as other key risks described in this section. In addition, we sought to enhance our risk management in the following areas:

- We enhanced our management of concentration risk at country and single customer group levels by implementing new frameworks to strengthen our control of risk tolerance and appetite.
- We continued to strengthen our third-party risk policy and enhanced the way third party risk is overseen and managed across all non-financial risks. Our processes, framework and reporting capabilities have been enhanced to improve control and oversight of our material third parties to help maintain our operational resilience and meet new and evolving regulatory requirements.
- We continued to make progress with our comprehensive regulatory reporting programme to strengthen our global processes, improve consistency, and enhance controls.
- We continued our programme to enhance our framework for managing the risks associated with machine learning and AI.
- Through our climate risk programme, we continued to embed climate considerations throughout the organisation, including enhancing our approach to assessing the impact of climate on capital, and continued the development of risk metrics to manage our exposure to climate risk.

Areas of special interest

During the first half of 2023, 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 geopolitical and macroeconomic risk and Ibor transition.

Geopolitical and macroeconomic risk

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 US-China relationship remains complex. To date, the UK, the US, the EU and other countries have imposed various sanctions and trade restrictions on Chinese persons and entities. There is a continued risk of additional sanctions and trade restrictions being imposed by the US and other governments in relation to human rights, technology, and other issues with China, and this could create a more complex operating environment for the group and its customers.

China has in turn announced a number of its own sanctions and trade restrictions that target, or provide authority to target, foreign individuals and companies. 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 the group operates.

As the geopolitical landscape evolves, 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 dialogue with our regulators in various jurisdictions on the impact of legal and regulatory obligations on our business and customers.

It remains the group's policy to comply with all applicable laws and regulations of all jurisdictions in which it operates, however geopolitical risks and tensions, and potential ambiguities in the group's compliance obligations, will continue to present challenges and risks for the group. These could have a material adverse impact on the group's business, financial condition, results of operations, prospects and strategy, as well as on the group's customers.

Expanding data privacy, national security and cybersecurity laws in a number of markets could pose potential challenges to intra-group data sharing. These developments could increase financial institutions' compliance obligations in respect of cross-border transfers of personal information, which may affect our ability to share and transfer data in support of our holistic management of financial crime risks across markets.

The Russia-Ukraine war has had far-reaching geopolitical and economic implications. The group is monitoring the impacts of the war and continues to respond to the further economic sanctions and trade restrictions that have been imposed on Russia. In particular, significant sanctions and trade restrictions imposed against Russia have been put in place by the UK, the US and the EU, as well as other countries. Russia has implemented certain countermeasures in response. The war's economic impact has reduced as the global economy has largely adapted to the sanctions regime. Nevertheless, further sanctions-related matter including sanctions evasion by third countries and Russian countermeasures may adversely impact the group, its customers and the markets in which the group operates by creating regulatory, reputational and market risks.

Global supply chain disruptions caused by the war in Ukraine have eased, although inflation is likely to remain high in several regions as the demand for services remains relatively strong. This has prompted central banks to continue tightening monetary policies. Since the beginning of 2023, the US Federal Reserve Board has delivered a cumulative 75 basis point ('bps') increase in the Federal Funds rate. A number of Central banks across Asia-Pacific, including the Hong Kong Monetary Authority, have also tightened policy rates ranging from 50 bps to 100 bps over the same period. This may change if inflation moderates more significantly than expected, or if recession concerns elevate. Some central banks in emerging markets have already begun easing cycles and are expected to lead their developed market counterparts in this respect.

Fiscal policies are likely to remain relatively generous in coming years as demand increases for public spending on items including social welfare, defence and decarbonisation. This may increasingly happen against a backdrop of slower growth, volatile energy prices and high interest rates. Financial markets are showing a degree of forbearance, with long-term yields relatively contained. However, this will be tested by the acceleration in coming months of central bank sales of government securities accumulated over several years of quantitative easing. Sovereigns with high public debt burdens could come under renewed focus as investors question the sustainability of that debt. We continue to monitor our risk profile closely in the context of uncertainty over global macroeconomic policies.

Higher inflation and interest rate expectations around the world – and the resulting economic uncertainty – have had an impact on expected credit losses and other credit impairment charges ('ECL') during the first half of 2023. In certain markets the combined pressure of higher inflation and interest rates may impact the ability of our customers to repay debt. Our Central scenario, which has the highest probability weighting in our HKFRS 9 'Financial Instruments' calculations of ECL, assumes low growth and a higher inflation environment across our key markets.

The Central scenario has been assigned a standard weighting to Hong Kong and mainland China reflecting narrowing forecast dispersion, reduced uncertainty and a view that forecasts now sufficiently capture the weak growth outlook. Our approach to macroeconomic scenarios remained unchanged in the first half of 2023. There remains continued uncertainty with respect to the relationship between the economic drivers and the historical loss experience, which has required adjustments to modelled ECL in cases where we determined that the model was unable to capture the material underlying risks.

For retail portfolios where models do not sufficiently capture the interest rate and inflation risks, there has been a globally consistent approach developed. This is utilised for assessing the affordability pressure on potentially affected customers and the consequential impact this would have on ECL. This is incorporated into ECL via management judgemental adjustments.

For further details of our Central and other scenarios, see 'Measurement uncertainty and sensitivity analysis of ECL estimates' on pages 17 to 19.

Given that key sectors of the global economy such as trade and manufacturing are underperforming, and the risk of recessions remains, the demand for Chinese exports may also diminish. While the mainland China commercial real estate market showed signs of recovery and stabilisation in early 2023, recent market data remains mixed, suggesting both an uncertain and protracted recovery. Chinese government policy measures relating to the commercial real estate sector introduced in late 2022 have resulted in improved financial support for onshore borrowers, however, offshore financial market conditions remain challenged with a continued shortage of liquidity. Corporates operating in this sector are therefore facing continued challenges and are becoming increasingly divided, with state owned enterprises and certain privately owned enterprises likely to see some improvement in performance and allocation of investments and liquidity, while other entities may still remain subject to performance uncertainty and material market pressure. We will continue to monitor the sector closely, notably the risk of further credit migration and idiosyncratic defaults.

Ibor transition

Previously, interbank offered rates ('Ibors') were used extensively to set interest rates on different types of financial transactions and for valuation purposes, risk measurement and performance benchmarking.

Following the UK's Financial Conduct Authority ('FCA') announcement 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, we have been actively working to transition legacy contracts from Ibors to products linked to near risk-free replacement rates ('RFRs') or alternative reference rates.

The publication of sterling, Swiss franc, euro and Japanese yen Libor interest rate benchmarks, as well as Euro Overnight Index Average ('Eonia'), and two US dollar Libor settings ceased from the end of 2021. Following this, the publication of all remaining settings of US dollar Libor ceased from 30 June 2023, along with certain regional rates that included US dollar Libor in their calculation ('USD Libor Linked Asian Rates'). To support any remaining contracts referencing Libor, the FCA has compelled the ICE Benchmark Administration Limited to publish the three-month sterling Libor setting using an alternative 'synthetic' methodology until 31 March 2024, and one-month, three-month and six-month US dollar Libor settings until 30 September 2024. We continue to support our customers in the transition of the limited number of outstanding contracts relying on the synthetic Libor benchmarks in line with these dates.

Our Ibor transition programme – which is tasked with the development of RFR products and the transition of legacy Ibor products – has implemented the required processes, technology and RFR product capabilities in support of the benchmark cessation events. As a result, the transition of the majority of legacy contracts has been undertaken successfully through the first half of 2023 with the remaining population of USD Libor and USD Libor Linked Asian Rates linked contracts expected to largely complete in the third quarter of 2023. Specifically, our derivatives portfolio has been largely transitioned via clearing house conversion mechanisms, and use of industry legal fallback provisions at cessation, leaving a limited number of trades that continue to be discussed with customers. Our Wholesale and Private Bank lending portfolios for both uncommitted and committed facilities have been repapered with client consent, albeit a small number of Wholesale contracts will continue repapering activities through until their first interest rate fixing date after cessation. In respect of the group's non-capital loss absorbing capacity ('LAC') instruments that include references to legacy Ibors (including indirect references) in their terms that have not been transitioned, the group expects to be able to remediate or mitigate these risks by the relevant calculation dates, which may occur post cessation of the relevant Ibor. The group remains committed to seeking to remediate or mitigate relevant risks relating to Ibor-demise, as appropriate.

While the majority of our legacy contracts referencing demised Ibors have been transitioned, as a result of other demising benchmarks or remaining contracts, there remain other demising Asian rates. These include certain regional benchmarks already confirmed as demising, or expected to be so, and fallbacks for two of the USD Libor Linked Asian Rates that are themselves demising. We continue to be exposed to, and actively monitor, risks including:

- regulatory compliance and conduct risks, as the use of 'synthetic' Libor rates, transition of legacy contracts to RFRs or alternative rates, or sales of products referencing RFRs, may not deliver fair client outcomes; and
- legal risk, as issues arising from the use of legislative solutions and from legacy contracts that the group is unable to transition may result in unintended or unfavourable outcomes for clients and market participants, which could potentially increase the risk of disputes.

While the level of risk has diminished in line with our process implementation and continued transition of contracts, we will monitor these risks through the remainder of the transition of legacy contracts. Throughout 2023, we plan to continue to engage with our clients and investors to complete an orderly transition of contracts that reference the remaining demising Libors and USD Libor Linked Asian Rates. We have commenced activities to transition other confirmed demising rates, for which demise is at a later date. Additionally, plans and policies are in place to help us to react to any future regulatory notification of the intention to demise an interest rate benchmark.

Financial instruments impacted by Ibor reform

	Financial instruments yet to transition to alternative benchmarks, by main benchmark				
	USD Libor	Japanese yen Libor	Sibor	GBP Libor	Others[1]
At 30 Jun 2023	**HK$m**	**HK$m**	**HK$m**	**HK$m**	**HK$m**
Non-derivative financial assets[2]	**95,050**	**—**	**20,971**	**—**	**3,040**
Non-derivative financial liabilities	**107,089**	**8,610**	**—**	**—**	**—**
Derivative notional contract amount	**4,651,553**	**—**	**—**	**—**	**275,023**
At 31 Dec 2022					
Non-derivative financial assets[2]	172,370	—	30,338	938	4,474
Non-derivative financial liabilities	120,096	9,192	—	—	264
Derivative notional contract amount	8,506,925	—	—	—	435,263

1 *Comprises financial instruments referencing other significant benchmark rates yet to transition to alternative benchmarks (Mumbai Interbank Forward Offer Rate ('MIFOR'), SGD Swap Offer Rate ('SOR'), Thai Baht Interest Rate Fixing ('THBFIX'), Canadian Dollar Offered Rate ('CDOR') and Mexican Interbank Equilibrium Interest Rate ('TIIE')).*
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 Ibor reform, including Hong Kong, Singapore, Thailand, Australia, India and Japan. The amounts provide an indication of the extent of the group's exposure to the Ibor 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.

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.

There were no material changes to credit risk policy in the first half of 2023.

For the wholesale and retail exposures mentioned in the credit risk section, wholesale exposures mainly refers to exposures to Commercial Banking, Global Banking and Markets and Securities Services, whereas retail exposures 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 31 to 33 of the Annual Report and Accounts 2022*.*

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 sector[4]

	Gross carrying/nominal amount[1]					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	3,236,602	377,583	65,170	430	3,679,785	(2,651)	(8,271)	(28,671)	(169)	(39,762)	0.1	2.2	44.0	39.3	1.1
– personal	1,483,304	62,586	7,509	—	1,553,399	(1,099)	(2,980)	(1,271)	—	(5,350)	0.1	4.8	16.9	—	0.3
– corporate[2]	1,446,413	303,117	56,408	430	1,806,368	(1,289)	(5,253)	(27,175)	(169)	(33,886)	0.1	1.7	48.2	39.3	1.9
– financial institutions[3]	306,885	11,880	1,253	—	320,018	(263)	(38)	(225)	—	(526)	0.1	0.3	18.0	—	0.2
Loans and advances to banks	494,116	878	—	—	494,994	(42)	(4)	—	—	(46)	0.0	0.5	—	—	0.0
Other financial assets	2,280,821	10,001	553	1	2,291,376	(185)	(30)	(78)	—	(293)	0.0	0.3	14.1	—	0.0
Loan and other credit-related commitments	1,870,745	59,203	7,250	—	1,937,198	(381)	(280)	(53)	—	(714)	0.0	0.5	0.7	—	0.0
– personal	1,364,535	30,594	6,844	—	1,401,973	(20)	(1)	—	—	(21)	—	—	—	—	—
– corporate[2]	375,430	27,746	406	—	403,582	(343)	(276)	(51)	—	(670)	0.1	1.0	12.6	—	0.2
– financial institutions[3]	130,780	863	—	—	131,643	(18)	(3)	(2)	—	(23)	0.0	0.3	—	—	0.0
Financial guarantee	33,057	3,927	131	—	37,115	(17)	(11)	(32)	—	(60)	0.0	0.3	24.4	—	0.2
– personal	4,684	6	—	—	4,690	—	—	—	—	—	—	—	—	—	0.0
– corporate[2]	24,789	3,855	131	—	28,775	(17)	(11)	(32)	—	(60)	0.1	0.3	24.4	—	0.2
– financial institutions[3]	3,584	66	—	—	3,650	—	—	—	—	—	—	—	—	—	—
At 30 Jun 2023	7,915,341	451,592	73,104	431	8,440,468	(3,276)	(8,596)	(28,834)	(169)	(40,875)	0.0	1.9	39.4	39.2	0.5

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

	Gross carrying/nominal amount[1]					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	3,209,940	461,665	62,760	622	3,734,987	(2,726)	(11,186)	(25,816)	(191)	(39,919)	0.1	2.4	41.1	30.7	1.1
– personal	1,447,852	67,809	8,705	—	1,524,366	(1,076)	(2,822)	(1,456)	—	(5,354)	0.1	4.2	16.7	—	0.4
– corporate[2]	1,484,030	369,973	53,141	620	1,907,764	(1,389)	(8,039)	(24,352)	(189)	(33,969)	0.1	2.2	45.8	30.5	1.8
– financial institutions[3]	278,058	23,883	914	2	302,857	(261)	(325)	(8)	(2)	(596)	0.1	1.4	0.9	100.0	0.2
Loans and advances to banks	514,442	1,449	—	—	515,891	(39)	(5)	—	—	(44)	0.0	0.3	—	—	0.0
Other financial assets	2,288,776	14,414	464	1	2,303,655	(163)	(40)	(59)	—	(262)	0.0	0.3	12.7	—	0.0
Loan and other credit-related commitments	1,821,355	65,288	5,758	—	1,892,401	(427)	(397)	(40)	—	(864)	0.0	0.6	0.7	—	0.0
– personal	1,321,908	22,721	4,940	—	1,349,569	(18)	(1)	—	—	(19)	—	—	—	—	—
– corporate[2]	383,717	39,191	818	—	423,726	(394)	(389)	(40)	—	(823)	0.1	1.0	4.9	—	0.2
– financial institutions[3]	115,730	3,376	—	—	119,106	(15)	(7)	—	—	(22)	0.0	0.2	—	—	0.0
Financial guarantee	30,738	4,840	68	—	35,646	(18)	(17)	(28)	—	(63)	0.0	0.4	41.2	—	0.2
– personal	4,176	6	1	—	4,183	—	—	—	—	—	—	—	—	—	0.0
– corporate[2]	24,093	4,483	67	—	28,643	(18)	(17)	(28)	—	(63)	0.1	0.4	41.8	—	0.2
– financial institutions[3]	2,469	351	—	—	2,820	—	—	—	—	—	—	—	—	—	—
At 31 Dec 2022	7,865,251	547,656	69,050	623	8,482,580	(3,373)	(11,645)	(25,943)	(191)	(41,152)	0.0	2.1	37.6	30.7	0.5

The above tables do not include balances due from Group companies.

1 *Represents the maximum amount at risk should the contracts be fully drawn upon and clients default. In addition, comparative data have been restated to reflect the implementation of HKFRS 17 'Insurance Contracts'.*
2 *Includes corporate and commercial customers.*
3 *Includes non-bank financial institutions.*
4 *The financial information included in this table forms part of the Interim condensed consolidated financial statements, which have been reviewed by PricewaterhouseCoopers.*

Mainland China commercial real estate

The following table presents the group's total exposure to borrowers classified in the mainland China commercial real estate ('CRE') sector where the ultimate parent is based in mainland China, as well as all CRE exposures booked on mainland China balance sheets. The exposures at 30 June 2023 are split by country/territory and credit quality including allowances for ECL by stage.

Mainland China CRE exposure

	At 30 Jun 2023			
	Hong Kong (reviewed)[1]	Mainland China (reviewed)[1]	Rest of Asia-Pacific (not reviewed)[1]	Total (not reviewed)[1]
	HK$m	HK$m	HK$m	HK$m
Loans and advances to customers[2]	61,262	36,830	3,662	101,754
Guarantees issued and others[3]	1,891	3,635	118	5,644
Total mainland China CRE exposure	63,153	40,465	3,780	107,398
Distribution of mainland China CRE exposure by credit quality				
– Strong	9,100	14,385	687	24,172
– Good	5,853	7,114	2,571	15,538
– Satisfactory	7,622	13,762	124	21,508
– Sub-standard	14,815	3,574	297	18,686
– Credit Impaired	25,763	1,630	101	27,494
	63,153	40,465	3,780	107,398
Allowance for ECL by credit quality				
– Strong	—	(13)	—	(13)
– Good	(3)	(20)	(9)	(32)
– Satisfactory	(18)	(685)	(1)	(704)
– Sub-standard	(1,605)	(130)	(13)	(1,748)
– Credit Impaired	(13,897)	(639)	—	(14,536)
	(15,523)	(1,487)	(23)	(17,033)
Allowance for ECL				
ECL Stage 1	(8)	(43)	(8)	(59)
ECL Stage 2	(1,618)	(805)	(15)	(2,438)
ECL Stage 3	(13,897)	(639)	—	(14,536)
	(15,523)	(1,487)	(23)	(17,033)
ECL coverage %	24.6	3.7	0.6	15.9

	At 31 Dec 2022			
	Hong Kong	Mainland China	Rest of Asia-Pacific	Total
	HK$m	HK$m	HK$m	HK$m
Loans and advances to customers[2]	71,148	44,843	3,570	119,561
Guarantees issued and others[3]	1,957	5,884	268	8,109
Total mainland China CRE exposure	73,105	50,727	3,838	127,670
Distribution of mainland China CRE exposure by credit quality				
– Strong	11,105	16,510	638	28,253
– Good	5,431	8,475	2,543	16,449
– Satisfactory	9,896	17,521	168	27,585
– Sub-standard	22,509	6,072	349	28,930
– Credit Impaired	24,164	2,149	140	26,453
	73,105	50,727	3,838	127,670
Allowance for ECL by credit quality				
– Strong	—	(39)	—	(39)
– Good	(2)	(60)	(5)	(67)
– Satisfactory	(153)	(637)	(3)	(793)
– Sub-standard	(3,570)	(326)	(14)	(3,910)
– Credit Impaired	(9,884)	(816)	—	(10,700)
	(13,609)	(1,878)	(22)	(15,509)
Allowance for ECL				
ECL Stage 1	(6)	(69)	(4)	(79)
ECL Stage 2	(3,719)	(993)	(18)	(4,730)
ECL Stage 3	(9,884)	(816)	—	(10,700)
	(13,609)	(1,878)	(22)	(15,509)
ECL coverage %	18.6	3.7	0.6	12.1

1 *The financial information included in columns 'Hong Kong' and 'Mainland China' form part of the Interim condensed consolidated financial statements, which have been reviewed by PricewaterhouseCoopers.*
2 *Amounts represent gross carrying amount.*
3 *Amounts represent nominal amount for guarantees and other contingent liabilities.*

CRE financing refers to lending that focuses on commercial development and investment in real estate and covers commercial, residential and industrial assets. CRE financing can also be provided to a corporate or financial entity for the purchase or financing of a property which supports the overall operations of the business. The exposures in the table are related to companies whose primary activities are focused on residential, commercial and mixed-use real estate activities. Lending is generally focused on tier 1 and 2 cities.

The table above shows 57% of total exposure with a credit quality of 'satisfactory' or above, which was unchanged compared with 31 December 2022. Total 'credit impaired' exposures have nevertheless increased to 26% (31 December 2022: 21%) reflecting sustained stress in the China CRE market, including weakness in both property market fundamentals and financing conditions for borrowers operating in this sector.

Allowances for ECL are substantially against unsecured exposures. For secured exposures, allowances for ECL are minimal reflecting the nature and value of the security held.

Facilities booked in Hong Kong continue to represent the largest proportion of mainland China CRE exposures although total exposures reduced to HK$63,153m, down HK$9,952m since 31 December 2022 as a result of de-risking measures and repayments. This portfolio remains relatively higher risk, with 36% (31 December 2022: 36%) of exposure booked with a credit quality of 'satisfactory' or above and 41% 'credit impaired' (31 December 2022: 33%). This reflected a further credit deterioration during the first half of the year. At 30 June 2023, the group had allowances for ECL of HK$15,523m (31 December 2022: HK$13,609m) held against mainland China commercial real estate exposures booked in Hong Kong. Approximately half of the unimpaired exposure in the Hong Kong portfolio is lending to state-owned enterprises and relatively strong private-owned enterprises. This is reflected in the relatively low ECL allowance in this part of the portfolio.

Market conditions are likely to remain stressed with a protracted and uncertain recovery as sentiment and domestic residential demand remain weak. There is potential for a further deterioration in credit conditions during the second half of the year given the heightened uncertainty around liquidity support and ongoing weakness in property market fundamentals.

The group has additional exposures to mainland China CRE as a result of lending to multinational corporates booked outside of mainland China. These are not incorporated in the table above.

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. Management judgemental adjustments are used to address late-breaking events, data and model limitations, model deficiencies and expert credit judgements.

At 30 June 2023, management recognised an improvement of the economic outlook and a reduction in uncertainty in most markets which consequently reverted weightings of the Central scenario to the standard 75%.

Methodology

At 30 June 2023, four economic scenarios were used to capture the current economic environment and to articulate management's view of the range of potential outcomes. Each scenario is updated with new forecasts and estimates each quarter.

The upside, central and downside scenario are drawn from consensus forecasts and distributional estimates. The Central scenario is constructed from a consensus of external forecasts. It remains subject to uncertainty and error that has been made worse in recent quarters by the environment of high inflation and rapidly changing policy expectations.

The Upside and Downside scenarios are constructed with reference to forecast probability distributions, published by major Central Banks.

The fourth scenario, the Downside 2, represents management's view of severe downside risks.

Economic scenarios produced to calculate ECL are aligned to the group's top and emerging risks.

Description of economic scenarios

In the Central scenario, global economic forecasts have improved. In Western Europe and north America, GDP and employment have proved resilient to higher inflation and interest rates, as well as the failure of several US banks. In Hong Kong and mainland China, the post-pandemic re-opening has led to a faster than expected improvement in growth and expectations, which has now been reflected in forecasts.

Stronger than expected growth means that inflation has declined at a slower pace than projected. For many markets, forecast inflation has been raised. Further monetary tightening is also expected, although interest rates are, in most markets, thought to be at, or close to, their peak. The UK and China are key exceptions.

The Upside and Downside scenarios are designed to encompass the potential crystallisation of a number of key macro-financial risks. Higher inflation, tighter monetary policy and financial conditions, and an escalation of geopolitical risks, pose key downside risks to the outlook. To the upside, a swifter decline in inflation, a cut to interest rates and greater co-operation between the US and China on trade and investment are assumed to drive faster economic growth.

The scenarios used to calculate ECL in the *Interim Report 2023* are described below.

The consensus Central scenario

HSBC's Central scenario features a slowdown in GDP growth in 2023 relative to 2022 and a rise in unemployment across our major markets, with the exception of Hong Kong and mainland China.

GDP forecasts have been raised in recent quarters, due to stronger-than-expected growth in the first quarter of 2023, underpinned by resilience in household consumption. Nevertheless, the outlook for the remainder of 2023 and the beginning of 2024 remains subdued as high inflation continues to erode disposable income and curtail investment. In Hong Kong and mainland China, higher growth expectations reflect the removal of pandemic-related restrictions.

The Central scenario assumes that inflation gradually declines through 2023 and only reverts to central bank target ranges in 2025.

Global GDP is expected to grow by 2.0% in 2023 in the Central scenario. The average rate of global GDP growth is expected to be 2.6% over the forecast period, slightly below the average growth rate over the five-year period prior to the onset of the pandemic (of 2.8%).

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

- GDP growth in mainland China is expected to continue at a rate above the official target of 5%, with policy stimulus to offset headwinds from a weak property sector and lower external demand. In Hong Kong, the resumption of international travel and tourism, and recovery in mainland China is expected to sustain a rapid recovery in GDP, led by the services sector and high employment.
- Unemployment is forecast to fall in mainland China and Hong Kong as the economic recovery continues.
- Inflation is expected to remain above most developed market Central Banks' target in 2023 as core inflation and food prices remain high. Inflation is subsequently expected to converge back to central bank targets over the next two years of the forecast. China is an exception as inflation remains low throughout the forecast horizon.
- Policy interest rates in key markets are expected to peak later this this year following rapid tightening cycles over the past 18 months to bring inflation back towards their targets. Thereafter, they are expected to fall slowly and remain at higher levels than they were pre-pandemic.

- The Brent crude oil price is expected to average US$77 per barrel in 2023, before dropping back as demand weakens. Over the entire projection the oil price is expected to average US$69 per barrel.

The Central scenario was created from consensus forecasts available in May, and market based projections updated in June.

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

Central scenario

	Hong Kong	Mainland China
	%	%
GDP (annual average growth rate)		
2023	**4.5**	**5.4**
2024	**3.2**	**4.9**
2025	**2.7**	**4.7**
2026	**2.6**	**4.6**
2027	**2.5**	**4.3**
5-year average	**3.1**	**4.6**
Unemployment rate (%)		
2023	**3.3**	**5.2**
2024	**3.2**	**5.1**
2025	**3.3**	**5.1**
2026	**3.2**	**5.1**
2027	**3.3**	**5.0**
5-year average	**3.3**	**5.1**
House price (annual average growth rate)		
2023	**(6.4)**	**(2.0)**
2024	**0.4**	**5.5**
2025	**1.8**	**3.8**
2026	**3.0**	**2.9**
2027	**3.3**	**3.6**
5-year average	**1.8**	**3.5**
Inflation (annual average growth rate)		
2023	**2.4**	**1.8**
2024	**2.3**	**2.3**
2025	**2.1**	**2.1**
2026	**2.2**	**2.1**
2027	**2.3**	**2.0**
5-year average	**2.3**	**2.1**
Probability	**75**	**75**

Note: The 5-year average is calculated over 20-quarter projection period covering 3Q2023 to 2Q2028.

The consensus Upside scenario

The scenario features stronger growth, lower unemployment and a faster fall in inflation compared with the Central scenario. Asset prices, including housing also rise more quickly. This is consistent with a number of key upside risk themes, including falling energy and commodity prices and easing wage growth, which allow central banks to lower interest rates; a de-escalation in geopolitical tensions; and looser financial conditions.

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

Consensus Upside scenario (2023Q3 – 2028Q2)

	Hong Kong	Mainland China
	%	%
GDP growth (%, Start-to-peak)	**22.5 (2Q28)**	**33.3 (2Q28)**
Unemployment rate (%, Min)	**2.5 (2Q24)**	**4.6 (1Q24)**
House price index (%, Start-to-peak)	**17.2 (2Q28)**	**27.2 (2Q28)**
Inflation rate (YoY % change, Min)	**0.4 (2Q24)**	**0.6 (3Q24)**
Probability	**10**	**10**

Note: Growth (%, start-to-peak)" is the percentage change to the highest level of the series during the 20-quarter projection. "(%, min)" is the lowest projected unemployment rate in the scenario. "(YoY % change, min)" is the lowest projected year-on-year percentage change in inflation in the scenario.

Downside scenarios

Downside scenarios explore the intensification and crystallisation of a number of key economic and financial risks.

High inflation and the monetary policy response remain key concerns for global growth. While supply chain disruptions, caused by the Covid-19 pandemic and the Russia-Ukraine war, are easing, helping to reduce headline price inflation across many markets, core inflation remains high. This reflects tight labour markets, which is putting upward pressure on wages, and resilience in demand. In turn, it raises the risk of a more forceful policy response from central banks, encompassing a steeper trajectory for interest rates and ultimately, economic recession.

The rapid increase in interest rates has already led to a repricing of asset valuations, as corporate and household borrowers face steep increases in debt service levels. Policymakers have also raised concerns that, following the collapse of several US regional banks, financial conditions could tighten further, acting as another constraint on activity. Insolvencies and default rates could rise sharply as businesses find it difficult to refinance and cash buffers diminish amid weaker demand.

The consensus Downside scenario

In the consensus Downside scenario, economic activity is considerably weaker compared with the Central scenario, driven by an intensification of geopolitical risks that aggravate supply chain disruptions and cause energy and other commodity prices to rise. In this scenario, economies experience moderate recession, unemployment rates increase, and asset prices fall.

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

Consensus Downside scenario (2023Q3 – 2028Q2)

	Hong Kong	Mainland China
	%	%
GDP growth (%, Start-to-trough)	**(2.4) (1Q24)**	**(1.2) (4Q23)**
Unemployment rate (%, Max)	**5.0 (2Q25)**	**6.3 (4Q24)**
House price index (%, Start-to-trough)	**(2.9) (4Q23)**	**1.0 (3Q23)**
Inflation rate (YoY % change, Max)	**4.0 (2Q24)**	**4.3 (1Q24)**
Probability	**10**	**10**

Note: Growth (%, start-to-trough)" is the percentage change to the lowest level of the series during the 20-quarter projection. "(%, max)" is the highest projected unemployment rate in the scenario. "(YoY % change, max)" is the highest projected year-on-year percentage change in inflation in the scenario.

Downside 2 scenario

The Downside 2 scenario features a deep global recession and reflects management's view of the tail of the economic risk distribution. It incorporates the simultaneous crystallisation of a number of risks. The narrative features an escalation in geopolitical tensions, which leads to further disruptions to supply chains. This creates additional upward pressure on inflation, prompting central banks to keep interest rates higher than in the Central scenario. However, demand subsequently falls sharply and unemployment rises before inflation pressures begin to subside.

The following table describes key macroeconomic variables and the probabilities assigned in the Downside 2 scenario.

Downside 2 scenario (2023Q3 – 2028Q2)

	Hong Kong %	Mainland China %
GDP growth (%, Start-to-trough)	**(6.9) (3Q24)**	**(8.3) (2Q24)**
Unemployment rate (%, Max)	**6.3 (2Q24)**	**6.8 (2Q25)**
House price index (%, Start-to-trough)	**(16.1) (4Q26)**	**(21.4) (2Q25)**
Inflation rate (YoY % change, Max)	**4.5 (2Q24)**	**5.3 (1Q24)**
Probability	**5**	**5**

Note: Growth (%, start-to-trough)" is the percentage change to the lowest level of the series during the 20-quarter projection. "(%, max)" is the highest projected unemployment rate in the scenario. "(YoY % change, max)" is the highest projected year-on-year percentage change in inflation in the scenario.

Scenario weightings

In reviewing the economic situation, the level of uncertainty and risk, 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.

In the first half of 2023, the level of certainty attached to the Central scenario was assessed to have increased. It was noted that:

- the dispersion of external economic forecasts have narrowed.
- the stabilisation of a number of key risk drivers. For example, the economic implications of the Russia-Ukraine war have diminished.
- the current Central scenario forecasts are sufficiently reflective of weak GDP growth prospects.

Consequently, probability weights assigned to the Central scenario have reverted back to the standard weight of 75% for Hong Kong and mainland China and they are now aligned to the consensus probability distribution.

Critical accounting estimates and judgements

The calculation of ECL under HKFRS 9 involves significant judgements, assumptions and estimates at 30 June 2023. These include:

- the selection of economic scenarios, given rapidly changing economic conditions and a wide distribution of economic forecasts and;
- estimating the economic effects of those scenarios on ECL, particularly the effect of interest and inflationary pressures in specific sectors.

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 on page 37 of the *Annual Report and Accounts 2022*. Models are used to reflect economic scenarios on ECL estimates. These models are based largely on historical observations and correlations with default.

Management judgemental adjustments

In the context of HKFRS 9, management judgemental adjustments are typically increases or decreases to the modelled ECL at either a customer, segment, or portfolio level, to account for late-breaking events, model and data limitations and deficiencies, and expert credit judgment applied during management review and challenge. This includes refining model inputs and outputs and using adjustments to ECL based on management judgment and higher level quantitative analysis for impacts that are difficult to model. The effects of management judgmental adjustments are considered for both balances and ECL, and will consider any changes to stage allocation where appropriate. This is in accordance with the internal adjustments framework.

The wholesale and retail management judgemental adjustments are presented as part of the internal review and challenge committees and are subject to a further second line review, where significant. This is in line with the governance process for HKFRS 9 as set out on page 31 of the *Annual Report and Accounts 2022*. 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. The drivers of management judgmental adjustments continue to evolve with the economic environment as new risks emerge.

At 30 June 2023, management judgemental adjustments reduced by HK$2.4bn compared with 31 December 2022. Adjustments mostly reflected portfolio and sector uncertainty and operational limitations.

Management judgemental adjustments to ECL at 30 June 2023[1]

	Retail HK$bn	Wholesale HK$bn	Total HK$bn
Banks, sovereigns and government entities and low-risk counterparties	**–**	**(0.7)**	**(0.7)**
Corporate lending adjustments	**–**	**1.3**	**1.3**
Retail lending Inflation-related adjustments	**0.1**	**–**	**0.1**
Other macroeconomic-related adjustments	**0.5**	**–**	**0.5**
Other retail lending adjustments	**0.3**	**–**	**0.3**
Total	**0.9**	**0.6**	**1.5**

Management judgemental adjustments to ECL at 31 December 2022[1]

	Retail HK$bn	Wholesale HK$bn	Total HK$bn
Banks, sovereigns and government entities and low-risk counterparties	(0.2)	0.2	—
Corporate lending adjustments		3.1	3.1
Retail lending Inflation-related adjustments	0.1	—	0.1
Other macroeconomic-related adjustments	0.4	—	0.4
Other retail lending adjustments	0.3		0.3
Total	0.6	3.3	3.9

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

In the wholesale portfolio, management judgemental adjustments were an increase to modelled ECL of HK$0.6bn (31 December 2022: HK$3.3bn increase):

- Adjustments to sovereigns, government entities and low risk counterparties were a decrease to modelled ECL of HK$0.7bn at 30 June 2023 (31 December 2022: HK$0.2bn increase) mostly due to operational adjustments.
- Adjustments to corporate exposures increased modelled ECL by HK$1.3bn at 30 June 2023 (31 December 2022: HK$3.1bn increase). These included management judgments to reflect heightened uncertainty in some sectors.

In the retail portfolio, management judgemental adjustments were an ECL increase of HK$0.9bn at 30 June 2023 (31 December 2022: HK$0.6bn increase).

- Retail lending Inflation-related adjustments increased ECL by HK$0.1bn (31 December 2022: HK$0.1bn increase). These adjustments address where country-specific inflation risks were not fully captured by the modelled output.
- Other macroeconomic-related adjustments increased ECL by HK$0.5bn (31 December 2022: HK$0.4bn increase). These adjustments were primarily in relation to country-specific risks related to future macroeconomic conditions.
- Other retail lending adjustments increased ECL by HK$0.3bn (31 December 2022: HK$0.3bn increase) reflecting 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 at the balance sheet date.

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 (stage 3) obligors. It is generally impracticable to separate the effect of macroeconomic factors in individual assessments of obligors in default. The measurement of stage 3 ECL is relatively more sensitive to credit factors specific to the obligor than future economic scenarios, and loans to defaulted obligors are a small portion of the overall wholesale lending exposure, even if representing the majority of the allowance for ECL. Therefore, the sensitivity analysis to macroeconomic scenarios does not capture the residual estimation risk arising from wholesale stage 3 exposures. Due to the range and specificity of the credit factors to which the ECL is sensitive, it is not possible to provide a meaningful alternative sensitivity analysis for a consistent set of risks across all defaulted obligors.

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 and scope of sensitivity. The results tables exclude portfolios held by the insurance business, private banking and small portfolios, and as such cannot be directly compared with personal and wholesale lending presented in other credit risk tables. In both the wholesale and retail analysis, the comparative period results for Downside 2 scenarios are also not directly comparable with the current period, because they reflect different risks relative to the consensus scenarios for the period end.

Wholesale analysis

HKFRS 9 ECL sensitivity to future economic conditions[1]

	Hong Kong	Mainland China
ECL of loans and advances to customers at 30 June 2023[2]	**HK$m**	**HK$m**
Reported ECL	**4,770**	**1,849**
Central scenario ECL	**4,427**	**1,471**
Upside scenario ECL	**3,090**	**833**
Downside scenario ECL	**6,784**	**2,716**
Downside 2 scenario ECL	**10,376**	**9,910**
ECL of loans and advances to customers at 31 December 2022[2]		
Reported ECL	7,211	2,302
Central scenario ECL	6,386	1,887
Upside scenario ECL	4,616	1,123
Downside scenario ECL	10,252	3,235
Downside 2 scenario ECL	16,852	9,572

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

In Hong Kong, the reduction in Downside 2 ECL impact reflects the crystallisation of defaults for certain high risk names and reduction of the associated downside uncertainty.

Retail analysis

HKFRS 9 ECL sensitivity to future economic conditions[1]

	Hong Kong
ECL of loans and advances to customers at 30 June 2023[2]	**HK$m**
Reported ECL	**2,847**
Central scenario ECL	**2,714**
Upside scenario ECL	**2,319**
Downside scenario ECL	**3,881**
Downside 2 scenario ECL	**4,902**
ECL of loans and advances to customers at 31 December 2022[2]	
Reported ECL	2,702
Central scenario ECL	2,406
Upside scenario ECL	1,985
Downside scenario ECL	4,037
Downside 2 scenario ECL	6,014

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

At 30 June 2023, the most significant level of ECL sensitivity was observed in Hong Kong driven by the relative size of the portfolio.

Treasury risk

Overview

Treasury risk is the risk of having insufficient capital, liquidity or funding resources to meet financial obligations and satisfy regulatory requirements, as well as the risk to our earnings or capital due to structural and transactional foreign exchange exposures and changes in market interest rates, together with pension and insurance risk.

Approach and policy

Our objective in the management of treasury risk is to maintain appropriate levels of capital, liquidity, funding, foreign exchange and market risk to support our business strategy and meet our regulatory and stress testing-related requirements.

Our approach to treasury management is driven by our strategic and organisational requirements, taking into account the regulatory, economic and commercial environment. We aim to maintain a strong capital and liquidity base to support the risks inherent in our business and invest in accordance with our strategy, meeting both consolidated and local regulatory requirements at all times.

Our policy is underpinned by our risk management framework, our internal capital adequacy assessment process ('ICAAP') and our internal liquidity adequacy assessment process ('ILAAP'). The risk framework incorporates a number of measures aligned to our assessment of risks for both internal and regulatory purposes. These risks include credit, market, operational, pensions, structural and transactional foreign exchange risk, and interest rate risk in the banking book.

Capital risk

Overview

Our approach to capital management is driven by our strategic and organisational requirements, taking into account the regulatory, economic and commercial environment in which we operate.

It is our objective to maintain a strong capital base to support the risks inherent in our business, to invest in accordance with our strategy and to meet regulatory capital requirements at all times. To achieve this, our policy is to hold capital in a range of different forms and all capital raising is agreed with major subsidiaries as part of their individual and the group's capital management processes.

Framework

The policy on capital management is underpinned by a capital management framework and our ICAAP. The framework incorporates key capital risk appetites for CET1, Tier1, Total Capital, Loss Absorbing Capacity ('LAC') and Leverage Ratio, which enables us to manage our capital in a consistent manner. Regulatory capital and economic capital are the two primary measures used for the management and control of capital.

Regulatory capital is the capital which we are required to hold in accordance with the rules established by regulators and economic capital is the internally calculated capital requirement to support risks to which we are exposed and forms a core part of the ICAAP.

ICAAP is an assessment of the group's capital position, outlining both regulatory and internal capital resources and requirements resulting from our business model, strategy, risk profile, performance and planning, and the findings arising from stress testing. Our assessment of capital adequacy is driven by an assessment of risks that include credit, market, operational, pension, insurance, structural foreign exchange and interest rate risk in the banking book. Climate risk is also considered as part of the ICAAP, and we are continuing to develop our approach for climate risk management.

The group's ICAAP supports the determination of the capital risk appetite and target ratios, as well as enables the assessment and determination of capital requirements by regulators. Banking subsidiaries prepare ICAAPs in line with global guidance, while considering their local regulatory regimes to determine their own risk appetites and ratios.

Our capital management process is articulated in our annual capital plan which is approved by the Board. The plan is drawn up with the objective of maintaining both an appropriate amount of capital and an optimal mix between the different components of capital. Capital and Risk-Weighted Assets ('RWAs') are monitored and managed against the plan, with capital forecasts reported to relevant governance committees. Each subsidiary manages its own capital to support its planned business growth and meet its local regulatory requirements within the context of the approved annual group capital plan. In accordance with our capital management objectives, capital generated by subsidiaries in excess of planned requirements is returned to the Bank, normally by way of dividends.

The Bank is the primary provider of capital to its subsidiaries and these investments are substantially funded by the Bank's own capital issuance and profit retention. As part of its capital management process, the Bank seeks to maintain a prudent balance between the composition of its capital and that of its investment in subsidiaries.

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

Capital ratios and RWAs

	At	
	30 Jun 2023	31 Dec 2022
	%	%
Capital ratios		
Common equity tier 1 ('CET1') ratio	**15.8**	15.3
Tier 1 capital ratio	**17.5**	16.9
Total capital ratio	**19.6**	18.8
	HK$m	HK$m
RWAs	**3,166,612**	3,222,168

The following table sets out the composition of the group's capital base under Basel III at 30 June 2023.

Capital base

	At 30 Jun 2023 HK$m	At 31 Dec 2022 HK$m
Common equity tier 1 ('CET1') capital		
Shareholders' equity	**740,598**	727,880
– shareholders' equity per balance sheet	**819,658**	807,552
– revaluation reserve capitalisation issue	**(1,454)**	(1,454)
– other equity instruments	**(52,465)**	(52,386)
– unconsolidated subsidiaries	**(25,141)**	(25,832)
Non-controlling interests	**28,830**	30,106
– non-controlling interests per balance sheet	**58,244**	56,828
– non-controlling interests in unconsolidated subsidiaries	**(2,714)**	(2,250)
– surplus non-controlling interests disallowed in CET1	**(26,700)**	(24,472)
Regulatory deductions to CET1 capital	**(270,132)**	(266,424)
– valuation adjustments	**(2,414)**	(2,376)
– goodwill and intangible assets	**(32,563)**	(32,064)
– deferred tax assets net of deferred tax liabilities	**(3,697)**	(3,688)
– cash flow hedging reserve	**586**	233
– changes in own credit risk on fair valued liabilities	**169**	(3,494)
– defined benefit pension fund assets	**(55)**	(27)
– significant loss-absorbing capacity ('LAC') investments in unconsolidated financial sector entities	**(144,745)**	(140,987)
– property revaluation reserves[1]	**(68,335)**	(67,608)
– regulatory reserve	**(19,078)**	(16,413)
Total CET1 capital	**499,296**	491,562
Additional tier 1 ('AT1') capital		
Total AT1 capital before regulatory deductions	**53,853**	54,019
– perpetual subordinated loans	**52,465**	52,386
– allowable non-controlling interests in AT1 capital	**1,388**	1,633
Regulatory deductions to AT1 capital	**(54)**	(9)
– significant LAC investments in unconsolidated financial sector entities	**(54)**	(9)
Total AT1 capital	**53,799**	54,010
Total tier 1 capital	**553,095**	545,572
Tier 2 capital		
Total tier 2 capital before regulatory deductions	**71,767**	68,118
– term subordinated debt	**25,249**	19,505
– property revaluation reserves[1]	**31,405**	31,078
– impairment allowances and regulatory reserve eligible for inclusion in tier 2 capital	**14,023**	16,008
– allowable non-controlling interests in tier 2 capital	**1,090**	1,527
Regulatory deductions to tier 2 capital	**(5,755)**	(6,378)
– significant LAC investments in unconsolidated financial sector entities	**(5,755)**	(6,378)
Total tier 2 capital	**66,012**	61,740
Total capital	**619,107**	607,312

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.*

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 has comprehensive policies, metrics and controls to manage liquidity and funding risk. The group manages liquidity and funding risk at an operating entity level to make sure 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. These requirements are assessed through the ILAAP, which ensures that operating entities have robust strategies, policies, processes and systems for the identification, measurement, management and monitoring of liquidity risk over an appropriate set of time horizons, including intra-day. The ILAAP supports determination of liquidity and funding risk appetite and also assesses the capability to manage liquidity and funding effectively in each major entity.

Framework

The Global Treasury sub-function is responsible for the application of policies and controls at a local operating entity level. The elements of liquidity and funding risk management framework are underpinned by a robust governance framework, with the two major elements being:

- Asset and Liability Management Committees ('ALCOs') at the group and entity level; and
- annual ILAAP support determination of risk appetite.

All operating entities are required to prepare an ILAAP document at appropriate frequency. Compliance with liquidity and funding requirements is monitored and reported to ALCO, RMM and the Executive Committee on a regular basis.

Liquidity and Funding Risk management processes include:

- 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.

Management of liquidity and funding risk

Funding and liquidity plans form part of the financial resource plan that is approved by the Board. The Board-level appetite measures are the liquidity coverage ratio ('LCR'), internal liquidity metric ('ILM') 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 ILM requirement;
- a legal entity depositor concentration limit;
- cumulative term funding maturity concentrations limit;
- liquidity metrics to monitor minimum 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 and term deposits. 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

Group policy requires all operating entities to manage currency mismatch risks for material currencies. 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 International Swaps and Derivatives Association ('ISDA') compliant credit support annex ('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 2023

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 2023	31 Dec 2022
	%	%
Average LCR	**158.0**	157.8

The 3-month average LCR increased marginally by 0.2 percentage points from 157.8% for the quarter ended 31 December 2022 to 158.0% for the quarter ended 30 June 2023.

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	31 Dec
	2023	2022
	HK$m	HK$m
Level 1 assets	**1,808,955**	1,744,471
Level 2A assets	**85,515**	80,348
Level 2B assets	**57,036**	61,184
Total	**1,951,506**	1,886,003

The NSFR of the group for the period is as follows:

	At	
	30 Jun	31 Dec
	2023	2022
	%	%
Net stable funding ratio	**150.4**	152.3

The NSFR decreased by 1.9 percentage points from 152.3% as at 31 December 2022 to 150.4% as at 30 June 2023.

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 2023.*

Market Risk

Overview

Market risk is the risk of adverse financial impact on trading activities arising from changes in market parameters such as interest rates, foreign exchange rates, asset prices, volatilities, correlations and credit spreads.

A summary of our current policies and practices for the management of market risk is set out in 'Market risk management' on pages 59 to 61 of the Annual Report and Accounts 2022.

Market risk in the first half of 2023

During the first half of 2023, global financial markets continued to be driven by the inflation outlook, expectations of monetary policy tightening and recession risks, coupled with banking distress during March and negotiations over the U.S. debt ceiling in May-June. Major central banks maintained their restrictive monetary policies throughout the first half of 2023, while falling headline inflation in the U.S. led the Fed to signal that it may be approaching the end of its tightening cycle. Rates markets saw key short-term yields rise over the second quarter of 2023, after falling rapidly in the wake of the banking crisis in March. Global equity markets sentiment was driven by resilient corporate earnings and changes in the monetary policy outlook. In foreign exchange markets, the US dollar fluctuated against most other major currencies, in line with the Fed policy and bond yields expectations. Investor sentiment remained mostly resilient in credit markets. High-yield and investment-grade credit spreads tended to narrow as the banking sector stabilized and likelihood of a US debt downgrade receded.

We continued to manage market risk prudently in the first half of 2023. Key sensitivity exposures and VaR remained within risk appetite as the business pursue its core market-making activity in support of our customers. Market risk was managed using complementary set of risk measures and limits including stress test and scenario analysis.

Trading portfolios

Value at risk of the trading portfolios

Trading value at risk (‘VaR’) was predominately 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 2023, compared to 31 December 2022, mainly due to increase in interest rate risk exposures and volatilities. Equity VaR was notably higher during the first half of year, mainly driven from the growth in the Prime Finance business, with product coverage in index and sector products, market access, portfolio swaps and securities borrowing and lending.

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

Trading value at risk, 99% 1 day[1]

	Foreign exchange and commodity	**Interest rate**	**Equity**	**Credit spread**	**Portfolio diversification[2]**	**Total[3]**
	HK$m	**HK$m**	**HK$m**	**HK$m**	**HK$m**	**HK$m**
Half-year to 30 Jun 2023						
Period end	**55**	**270**	**145**	**15**	**(154)**	**331**
Average	**72**	**221**	**90**	**28**		**247**
Maximum	**118**	**291**	**145**	**36**		**352**
Half-year to 30 Jun 2022						
Period end	41	158	52	35	(110)	176
Average	44	171	56	28		203
Maximum	78	217	80	43		259
Half-year to 31 Dec 2022						
Period end	95	195	48	18	(154)	202
Average	66	174	54	20		214
Maximum	99	272	98	34		357

1 *Trading portfolios comprise positions arising from the market-making and warehousing of customer-derived positions.*
2 *Portfolio diversification is the market risk dispersion effect of holding a portfolio containing different risk types. It represents the reduction in unsystematic market risk that occurs when combining a number of different risk types, for example, interest rate, equity and foreign exchange, together in one portfolio. It is measured as the difference between the sum of the VaR by individual risk type and the combined total VaR. A negative number represents the benefit of portfolio diversification. As the maximum and minimum occur on different days for different risk types, it is not meaningful to calculate a portfolio diversification benefit for these measures.*
3 *The total VaR is non-additive across risk types due to diversification effects.*

Insurance manufacturing operations risk management

Overview

The key risks for our insurance manufacturing operations are market risks, in particular interest rate, growth asset, and credit risks, as well as insurance underwriting and operational risks. Liquidity risk, while significant for other parts of the group, is relatively minor for our insurance operations.

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 67 to 68 of the Annual Report and Accounts 2022.

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 2022.*

Insurance manufacturing operations risk profile in the first half of 2023

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.

The economic capital basis for the Hong Kong based manufacturing entities is largely aligned to the draft Hong Kong risk-based capital regulations. 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 manage their market, liquidity, credit, underwriting and non-financial risk exposures to Board-approved risk appetite limits.

Equity values, which are a key risk driver for the financial strength of the insurance operations, in general rose slightly during the first half of the year. The financial strength of the insurance operations was also improved by the impact of rising interest rates. Overall, at 30 June 2023, the majority of the capital risk positions of our insurance operations were within risk appetite. We continue to monitor these risks closely in the current volatile economic climate.

The table below shows the composition of assets and liabilities by contract type and 88% (2022: 88%) of both assets and liabilities are derived from Hong Kong.

Balance sheet of insurance manufacturing subsidiaries by type of contract[4]

	Life direct participating and investment DPF contracts	Life other[1]	Other contracts[2]	Shareholders' assets and liabilities	Total
	HK$m	HK$m	HK$m	HK$m	HK$m
At 30 Jun 2023					
Financial assets	652,970	30,364	33,639	39,993	756,966
– financial assets designated and otherwise mandatorily measured at fair value	626,313	27,853	21,283	2,074	677,523
– derivatives	940	50	—	4	994
– financial investments measured at amortised cost	7,167	685	9,384	33,803	51,039
– financial investments measured at fair value through other comprehensive income	—	—	23	498	521
– other financial assets[3]	18,550	1,776	2,949	3,614	26,889
Insurance contract assets	38	525	—	—	563
Reinsurance contract assets	—	37,351	—	—	37,351
Other assets and investment properties	13,738	497	240	9,807	24,282
Total assets	666,746	68,737	33,879	49,800	819,162
Liabilities under investment contracts designated at fair value	—	—	30,613	—	30,613
Insurance contract liabilities	670,941	24,937	—	—	695,878
Reinsurance contract liabilities	—	5,813	—	—	5,813
Deferred tax	191	10	—	—	201
Other liabilities	—	—	—	38,344	38,344
Total liabilities	671,132	30,760	30,613	38,344	770,849
Total equity	—	—	—	48,313	48,313
Total equity and liabilities	671,132	30,760	30,613	86,657	819,162

Balance sheet of insurance manufacturing subsidiaries by type of contract[4] (continued)

	Life direct participating and investment DPF contracts	Life other[1]	Other contracts[2]	Shareholders' assets and liabilities	Total
	HK$m	HK$m	HK$m	HK$m	HK$m
At 31 Dec 2022					
Financial assets	608,004	30,170	40,806	39,717	718,697
– financial assets designated and otherwise mandatorily measured at fair value	588,743	26,714	28,076	1,569	645,102
– derivatives	1,189	75	162	12	1,438
– financial investments measured at amortised cost	4,736	1,395	9,487	36,125	51,743
– financial investments measured at fair value through other comprehensive income	—	—	—	—	—
– other financial assets[3]	13,336	1,986	3,081	2,011	20,414
Insurance contract assets	35	301	—	—	336
Reinsurance contract assets	—	33,274	—	—	33,274
Other assets and investment properties	12,214	326	244	11,079	23,863
Total assets	620,253	64,071	41,050	50,796	776,170
Liabilities under investment contracts designated at fair value	—	—	33,031	—	33,031
Insurance contract liabilities	626,424	24,982	—	—	651,406
Reinsurance contract liabilities	—	5,518	—	—	5,518
Deferred tax	179	—	—	17	196
Other liabilities	—	—	—	40,877	40,877
Total liabilities	626,603	30,500	33,031	40,894	731,028
Total equity	—	—	—	45,142	45,142
Total equity and liabilities	626,603	30,500	33,031	86,036	776,170

1 *'Life other' mainly includes protection insurance contracts as well as reinsurance contracts. The reinsurance contracts primarily provide diversification benefits over the life participating and investment discretionary participation feature ('DPF') contracts.*
2 *'Other contracts' includes investment contracts for which HSBC does not bear significant insurance risk.*
3 *Comprise mainly loans and advances to banks, cash and inter-company balances with other non-insurance legal entities.*
4 *Balance sheet of insurance manufacturing operations is shown before elimination of inter-company transactions with HSBC non-insurance operations.*

Statement of Directors' responsibilities

The Directors, the names of whom are set out below, confirm to the best of their knowledge that:

- the Interim condensed consolidated financial statements of the group have been prepared in accordance with Hong Kong Accounting Standard ('HKAS') 34 'Interim Financial Reporting' as issued by the Hong Kong Institute of Certified Public Accountants; and
- the Interim Report includes a fair review of the information required by DTR 4.2.7R of the Disclosure Guidance and Transparency Rules sourcebook of the UK's Financial Conduct Authority, being an indication of important events that have occurred during the first six months of the financial year ending 31 December 2023 and their impact on the Interim condensed consolidated financial statements; and a description of the principal risks and uncertainties for the remaining six months of the financial year.

Dr 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)

Paul Jeremy BROUGH*

Edward Wai Sun CHENG*, GBS, JP

Sonia Chi Man CHENG*

Yiu Kwan CHOI*

Andrea Lisa DELLA MATTEA*

Rajnish KUMAR*

Beau Khoon Chen KUOK*

Irene Yun-lien LEE*

Annabelle Yu LONG*

Kevin Anthony WESTLEY*, BBS

* independent non-executive Director

\# non-executive Director

On behalf of the Board

Peter Wong

Chairman

1 August 2023

Independent review report by PricewaterhouseCoopers

Report on Review of the Interim condensed consolidated financial statements To the Board of Directors of The Hongkong and Shanghai Banking Corporation Limited

(incorporated in Hong Kong with limited liability)

Introduction

We have reviewed the Interim condensed consolidated financial statements set out on pages 29 to 52, which comprise the consolidated balance sheet of The Hongkong and Shanghai Banking Corporation Limited (the 'Bank') and its subsidiaries (together, the 'group') as at 30 June 2023 and the consolidated income statement, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the six-month period then ended, and notes, comprising material accounting policies and other explanatory information[1]. The directors of the Bank are responsible for the preparation and presentation of the Interim condensed consolidated financial statements in accordance with Hong Kong Accounting Standard 34 'Interim Financial Reporting' issued by the Hong Kong Institute of Certified Public Accountants and the Disclosure Guidance and Transparency Rules sourcebook of the United Kingdom's Financial Conduct Authority. Our responsibility is to express a conclusion on these Interim condensed consolidated financial statements based on our review and to report our conclusion solely to you, as a body, in accordance with our agreed terms of engagement and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report.

1 *Certain required disclosures as described in Note 1(g) on the Interim condensed consolidated financial statements have been presented elsewhere in the* Interim Report 2023, *rather than in the notes on the Interim condensed consolidated financial statements. These are cross-referenced from the Interim condensed consolidated financial statements and are identified as reviewed.*

Scope of Review

We conducted our review in accordance with International Standard on Review Engagements (UK) 2410, 'Review of Interim Financial Information Performed by the Independent Auditor of the Entity' issued by the United Kingdom's Financial Reporting Council. A review of interim financial information consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing (UK) and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Conclusion

Based on our review, nothing has come to our attention that causes us to believe that the Interim condensed consolidated financial statements of the group are not prepared, in all material respects, in accordance with Hong Kong Accounting Standard 34 'Interim Financial Reporting' and the Disclosure Guidance and Transparency Rules sourcebook of the United Kingdom's Financial Conduct Authority.

PricewaterhouseCoopers
Certified Public Accountants

Hong Kong
1 August 2023

Interim condensed consolidated financial statements

Consolidated income statement

	Half-year to	
	30 Jun 2023 HK$m	30 Jun 2022 HK$m (restated)[1]
Net interest income	**65,827**	45,126
– interest income	**137,949**	59,331
– interest expense	**(72,122)**	(14,205)
Net fee income	**20,026**	20,632
– fee income	**26,280**	26,101
– fee expense	**(6,254)**	(5,469)
Net income from financial instruments held for trading or managed on a fair value basis	**37,150**	17,792
Net income/(expense) from assets and liabilities of insurance businesses, including related derivatives, measured at fair value through profit or loss	**27,023**	(79,275)
Changes in fair value of designated debts issued and related derivatives	**213**	(447)
Changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	**156**	34
Gains less losses from financial investments	**11**	(226)
Insurance finance income/(expense)	**(26,660)**	80,233
Insurance service result	**3,121**	2,254
– Insurance revenue	**5,854**	5,460
– Insurance service expense	**(2,733)**	(3,206)
Other operating income	**2,729**	2,432
Net operating income before change in expected credit losses and other credit impairment charges	**129,596**	88,555
Change in expected credit losses and other credit impairment charges	**(3,571)**	(4,135)
Net operating income	**126,025**	84,420
Employee compensation and benefits	**(18,971)**	(18,991)
General and administrative expenses	**(26,288)**	(25,852)
Depreciation and impairment of property, plant and equipment	**(4,654)**	(4,551)
Amortisation and impairment of intangible assets	**(3,461)**	(2,829)
Total operating expenses	**(53,374)**	(52,223)
Operating profit	**72,651**	32,197
Share of profit in associates and joint ventures	**10,559**	10,575
Profit before tax	**83,210**	42,772
Tax expense	**(13,455)**	(7,230)
Profit for the period	**69,755**	35,542
Attributable to:		
– ordinary shareholders of the parent company	**63,620**	31,599
– other equity holders	**2,397**	1,853
– non-controlling interests	**3,738**	2,090
Profit for the period	**69,755**	35,542

1 *From 1 January 2023, we adopted HKFRS 17 'Insurance Contracts', which replaced HKFRS 4 'Insurance Contracts'. Comparative data have been restated accordingly.*

Consolidated statement of comprehensive income

	Half-year to	
	30 Jun 2023 HK$m	30 Jun 2022 HK$m (restated)[1]
Profit for the period	**69,755**	35,542
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	**938**	(12,831)
– fair value gain/(losses)	**1,517**	(16,382)
– fair value (gains)/losses transferred to the income statement	**(5)**	196
– expected credit (recoveries)/losses recognised in the income statement	**(231)**	157
– income taxes	**(343)**	3,198
Cash flow hedges	**(219)**	(1,576)
– fair value gains	**5,290**	6,099
– fair value gains reclassified to the income statement	**(5,576)**	(8,001)
– income taxes	**67**	326
Share of other comprehensive income/(expense) of associates and joint ventures	**367**	(787)
Exchange differences	**(16,158)**	(21,988)
Items that will not be reclassified subsequently to profit or loss:		
Property revaluation	**2,863**	1,672
– fair value gains	**3,430**	2,013
– income taxes	**(567)**	(341)
Equity instruments designated at fair value through other comprehensive income	**74**	1,268
– fair value gains	**77**	1,270
– income taxes	**(3)**	(2)
Changes in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk	**(3,443)**	5,656
– before income taxes	**(4,109)**	6,766
– income taxes	**666**	(1,110)
Remeasurement of defined benefit asset/liability	**139**	146
– before income taxes	**170**	179
– income taxes	**(31)**	(33)
Other comprehensive expense for the period, net of tax	**(15,439)**	(28,440)
Total comprehensive income for the period	**54,316**	7,102
Attributable to:		
– ordinary shareholders of the parent company	**48,183**	3,763
– other equity holders	**2,397**	1,853
– non-controlling interests	**3,736**	1,486
Total comprehensive income for the period	**54,316**	7,102

1 *From 1 January 2023, we adopted HKFRS 17 'Insurance Contracts', which replaced HKFRS 4 'Insurance Contracts'. Comparative data have been restated accordingly.*

Consolidated balance sheet

	Notes	At 30 Jun 2023 HK$m	31 Dec 2022 HK$m (restated)[1]
Assets			
Cash and balances at central banks		**209,456**	232,740
Items in the course of collection from other banks		**45,538**	28,557
Hong Kong Government certificates of indebtedness		**332,284**	341,354
Trading assets		**822,701**	699,805
Derivatives		**499,401**	502,877
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss		**684,651**	653,030
Reverse repurchase agreements – non-trading		**853,141**	927,976
Loans and advances to banks		**494,948**	515,847
Loans and advances to customers	3	**3,640,023**	3,695,068
Financial investments	4	**1,881,938**	1,749,707
Amounts due from Group companies		**193,664**	140,485
Interests in associates and joint ventures	5	**187,298**	185,898
Goodwill and intangible assets		**37,744**	36,863
Property, plant and equipment		**130,470**	130,926
Deferred tax assets		**7,751**	7,582
Prepayments, accrued income and other assets		**391,867**	349,128
Total assets		**10,412,875**	10,197,843
Liabilities			
Hong Kong currency notes in circulation		**332,284**	341,354
Items in the course of transmission to other banks		**51,531**	33,073
Repurchase agreements – non-trading		**497,762**	351,093
Deposits by banks		**155,648**	198,908
Customer accounts	6	**6,075,996**	6,113,709
Trading liabilities		**126,474**	142,453
Derivatives		**495,006**	551,729
Financial liabilities designated at fair value		**179,178**	167,743
Debt securities in issue		**92,736**	100,909
Retirement benefit liabilities		**1,523**	1,655
Amounts due to Group companies		**485,960**	398,261
Accruals and deferred income, other liabilities and provisions		**303,885**	246,614
Insurance contract liabilities		**700,074**	654,922
Current tax liabilities		**11,343**	6,009
Deferred tax liabilities		**22,439**	21,912
Subordinated liabilities[2]		**3,134**	3,119
Total liabilities		**9,534,973**	9,333,463
Equity			
Share capital		**180,181**	180,181
Other equity instruments		**52,465**	52,386
Other reserves		**96,339**	108,837
Retained earnings		**490,673**	466,148
Total shareholders' equity		**819,658**	807,552
Non-controlling interests		**58,244**	56,828
Total equity		**877,902**	864,380
Total liabilities and equity		**10,412,875**	10,197,843

1 *From 1 January 2023, we adopted HKFRS 17 'Insurance Contracts', which replaced HKFRS 4 'Insurance Contracts'. Comparative data have been restated accordingly.*
2 *On 31 July 2023, subordinated liabilities of US$400m undated floating rate primary capital notes were redeemed and repaid at par.*

Consolidated statement of changes in equity

	Half-year to 30 Jun 2023										
				Other reserves							
	Share capital[1]	Other equity instruments	Retained earnings	Property revaluation reserve	Financial assets at FVOCI reserve	Cash flow hedge reserve	Foreign exchange reserve	Other[4]	Total share-holders' equity	Non-controlling interests	Total equity
	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 2023	**180,181**	**52,386**	**466,148**	**65,148**	**(11,186)**	**(1,487)**	**(38,470)**	**94,832**	**807,552**	**56,828**	**864,380**
Profit for the period	—	—	66,017	—	—	—	—	—	66,017	3,738	69,755
Other comprehensive income/(expense) (net of tax)	—	—	(3,343)	2,665	1,492	(336)	(15,844)	(71)	(15,437)	(2)	(15,439)
– debt instruments at fair value through other comprehensive income	—	—	—	—	927	—	—	—	927	11	938
– equity instruments designated at fair value through other comprehensive income	—	—	—	—	128	—	—	—	128	(54)	74
– cash flow hedges	—	—	—	—	—	(336)	—	—	(336)	117	(219)
– changes in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk	—	—	(3,447)	—	—	—	—	—	(3,447)	4	(3,443)
– property revaluation	—	—	—	2,665	—	—	—	—	2,665	198	2,863
– remeasurement of defined benefit asset/ liability	—	—	103	—	—	—	—	—	103	36	139
– share of other comprehensive income/(expense) of associates and joint ventures	—	—	1	—	437	—	—	(71)	367	—	367
– exchange differences	—	—	—	—	—	—	(15,844)	—	(15,844)	(314)	(16,158)
Total comprehensive income/(expense) for the period	—	—	62,674	2,665	1,492	(336)	(15,844)	(71)	50,580	3,736	54,316
Other equity instruments issued[2]	—	7,850	—	—	—	—	—	—	7,850	—	7,850
Other equity instruments redeemed[3]	—	(7,771)	—	—	—	—	—	—	(7,771)	—	(7,771)
Dividends to shareholders[5]	—	—	(37,897)		—	—	—	—	(37,897)	(2,251)	(40,148)
Movement in respect of share-based payment arrangements	—	—	(53)		—	—	—	(82)	(135)	6	(129)
Transfers and other movements[6]	—	—	(199)	(1,902)	19		—	1,561	(521)	(75)	(596)
At 30 Jun 2023	**180,181**	**52,465**	**490,673**	**65,911**	**(9,675)**	**(1,823)**	**(54,314)**	**96,240**	**819,658**	**58,244**	**877,902**

Consolidated statement of changes in equity (continued)

	Half-year to 30 Jun 2022 (restated)[7]										
				Other reserves							
	Share capital[1]	Other equity instruments	Retained earnings	Property revaluation reserve	Financial assets at FVOCI reserve	Cash flow hedge reserve	Foreign exchange reserve	Other[4]	Total share-holders' equity	Non-controlling interests	Total equity
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
At 31 Dec 2021	172,335	44,615	488,055	64,990	3,869	153	(7,130)	89,922	856,809	66,702	923,511
Impact on transition to HKFRS17	—	—	(65,593)	—	(294)	—	—	—	(65,887)	(9,546)	(75,433)
At 1 Jan 2022	172,335	44,615	422,462	64,990	3,575	153	(7,130)	89,922	790,922	57,156	848,078
Profit for the period	—	—	33,452	—	—	—	—	—	33,452	2,090	35,542
Other comprehensive income/(expense) (net of tax)	—	—	5,828	1,572	(12,385)	(1,351)	(21,663)	163	(27,836)	(604)	(28,440)
– debt instruments at fair value through other comprehensive income	—	—	—	—	(12,414)	—	—	—	(12,414)	(417)	(12,831)
– equity instruments designated at fair value through other comprehensive income	—	—	—	—	975	—	—	—	975	293	1,268
– cash flow hedges	—	—	—	—	—	(1,351)	—	—	(1,351)	(225)	(1,576)
– changes in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk	—	—	5,655	—	—	—	—	—	5,655	1	5,656
– property revaluation	—	—	—	1,572	—	—	—	—	1,572	100	1,672
– remeasurement of defined benefit asset/ liability	—	—	177	—	—	—	—	—	177	(31)	146
– share of other comprehensive income of associates and joint ventures	—	—	(4)	—	(946)	—	—	163	(787)	—	(787)
– exchange differences	—	—	—	—	—	—	(21,663)	—	(21,663)	(325)	(21,988)
Total comprehensive income/(expense) for the period	—	—	39,280	1,572	(12,385)	(1,351)	(21,663)	163	5,616	1,486	7,102
Shares issued[1]	7,846	—	—	—	—	—	—	—	7,846	—	7,846
Other equity instruments issued[2]	—	7,771	—	—	—	—	—	—	7,771	—	7,771
Dividends to shareholders[5]	—	—	(20,198)	—	—	—	—	—	(20,198)	(1,832)	(22,030)
Movement in respect of share-based payment arrangements	—	—	39	—	—	—	—	(83)	(44)	6	(38)
Transfers and other movements[6]	—	—	(342)	(1,691)	44	—	—	1,107	(882)	(605)	(1,487)
At 30 Jun 2022	180,181	52,386	441,241	64,871	(8,766)	(1,198)	(28,793)	91,109	791,031	56,211	847,242

Consolidated statement of changes in equity (continued)

	Half-year to 31 Dec 2022 (restated)[7]										
				Other reserves							
	Share capital[1]	Other equity instruments	Retained earnings	Property revaluation reserve	Financial assets at FVOCI reserve	Cash flow hedge reserve	Foreign exchange reserve	Other[4]	Total share-holders' equity	Non-controlling interests	Total equity
	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 2022	180,181	52,386	441,241	64,871	(8,766)	(1,198)	(28,793)	91,109	791,031	56,211	847,242
Profit for the period	—	—	42,949	—	—	—	—	—	42,949	2,200	45,149
Other comprehensive income/(expense) (net of tax)	—	—	(1,056)	2,074	(2,419)	(288)	(9,677)	37	(11,329)	(404)	(11,733)
– debt instruments at fair value through other comprehensive income	—	—	—	—	(980)	—	—	—	(980)	106	(874)
– equity instruments designated at fair value through other comprehensive income	—	—	—	—	(230)	—	—	—	(230)	(173)	(403)
– cash flow hedges	—	—	—	—	—	(288)	—	—	(288)	(101)	(389)
– changes in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk	—	—	(1,065)	—	—	—	—	—	(1,065)	(3)	(1,068)
– property revaluation	—	—	—	2,074	—	—	—	—	2,074	117	2,191
– remeasurement of defined benefit asset/liability	—	—	14	—	—	—	—	—	14	25	39
– share of other comprehensive income of associates and joint ventures	—	—	(5)	—	(1,209)	—	—	37	(1,177)	—	(1,177)
– exchange differences	—	—	—	—	—	—	(9,677)	—	(9,677)	(375)	(10,052)
Total comprehensive income/(expense) for the period	—	—	41,893	2,074	(2,419)	(288)	(9,677)	37	31,620	1,796	33,416
Dividends to shareholders[5]	—	—	(14,623)	—	—	—	—	—	(14,623)	(1,013)	(15,636)
Movement in respect of share-based payment arrangements	—	—	96	—	—	—	—	(54)	42	7	49
Transfers and other movements[6]	—	—	(2,459)	(1,797)	(1)	(1)	—	3,740	(518)	(173)	(691)
At 31 Dec 2022	180,181	52,386	466,148	65,148	(11,186)	(1,487)	(38,470)	94,832	807,552	56,828	864,380

1 *Ordinary share capital includes preference shares which have been redeemed or bought back via payments out of distributable profits in previous years. During the first half of 2022, there were 3,138.4m new ordinary shares issued at an issue price of HK$2.5 each.*
2 *During the first half of 2023, an additional tier 1 capital instrument amounting to US$1,000m was issued for which there were no issuance costs. During the first half of 2022, an additional tier 1 capital instrument amounting to US$1,000m was issued for which there were US$10m issuance costs.*
3 *During the first half of 2023, an additional tier 1 capital instrument was redeemed at fair value (US$1,041m).*
4 *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.*
5 *Including distributions paid on perpetual subordinated loans classified as equity under HKFRS.*
6 *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.*
7 *From 1 January 2023, we adopted HKFRS 17 'Insurance Contracts', which replaced HKFRS 4 'Insurance Contracts'. Comparative data have been restated accordingly.*

Consolidated statement of cash flows

	Half-year to	
	30 Jun 2023 HK$m	30 Jun 2022 HK$m (restated)[1]
Profit before tax	**83,210**	42,772
Adjustments for non-cash items:		
Depreciation and amortisation	**8,115**	7,380
Net (gain)/loss from investing activities	**(52)**	306
Share of profits in associates and joint ventures	**(10,559)**	(10,575)
Gain on disposal of subsidiaries, businesses, associates and joint ventures	**(4)**	(1)
Gain on acquisition of subsidiary	**—**	(556)
Change in expected credit losses gross of recoveries and other credit impairment charges	**3,962**	4,584
Provisions	**132**	105
Share-based payment expense	**469**	378
Other non-cash items included in profit before tax	**(10,975)**	506
Change in operating assets	**(53,561)**	(153,439)
Change in operating liabilities	**160,402**	288,073
Elimination of exchange differences	**5,957**	32,493
Dividends received from associates	**65**	70
Contributions paid to defined benefit plans	**(141)**	(146)
Tax paid	**(7,167)**	(4,431)
Net cash from operating activities	**179,853**	207,519
Purchase of financial investments	**(1,900,337)**	(1,666,410)
Proceeds from the sale and maturity of financial investments	**1,737,785**	1,551,481
Purchase of property, plant and equipment	**(832)**	(1,313)
Proceeds from sale of property, plant and equipment and assets held for sale	**51**	121
Proceeds from disposal of customer loan portfolios	**717**	601
Net investment in intangible assets	**(4,492)**	(5,413)
Proceeds from disposal of associate	**4**	—
Net cash outflow on purchase of subsidiaries	**—**	(4,166)
Net cash from investing activities	**(167,104)**	(125,099)
Issue of ordinary share capital and other equity instruments	**7,850**	15,617
Purchase of non-controlling interest	**—**	(1,548)
Redemption of other equity instruments	**(7,771)**	—
Subordinated loan capital issued[2]	**48,531**	57,351
Subordinated loan capital repaid[2]	**(34,889)**	(13,701)
Dividends paid to shareholders of the parent company and non-controlling interests	**(40,148)**	(22,030)
Net cash from financing activities	**(26,427)**	35,689
Net increase/(decrease) in cash and cash equivalents	**(13,678)**	118,109
Cash and cash equivalents at 1 Jan	**1,121,695**	1,055,084
Exchange differences in respect of cash and cash equivalents	**(18,215)**	(54,150)
Cash and cash equivalents at 30 Jun[3]	**1,089,802**	1,119,043

Interest received in the first half of 2023 was HK$140,115m (first half of 2022: HK$71,487m), interest paid in the first half of 2023 was HK$69,310m (first half of 2022: HK$15,406m) and dividends received in the first half of 2023 was HK$3,156m (first half of 2022: HK$2,927m).

1 *Comparatives have been restated reflecting the implementation of HKFRS 17. In addition, certain debt instruments have been voluntarily re-presented in the comparative period, between investing and operating activities, to better align with other HSBC Group entities. This re-presentation does not impact the net change in cash and cash equivalents during the reporting periods.*

2 *Changes in subordinated liabilities (including those issued to Group companies) during the first half of the year included amounts from issuance and repayments as presented above, and non-cash changes from foreign exchange loss of HK$577m in the first half of 2023 (first half of 2022: loss of HK$1,209m) and fair value gain after hedging of HK$3,164m in the first half of 2023 (first half of 2022: fair value loss of HK$20,926m).*

3 *At 30 June 2023, HK$162,113m (2022: HK$147,072m) was not available for use by the group due to a range of restrictions, including currency exchange and other restrictions.*

Notes on the Interim condensed consolidated financial statements

1 Basis of preparation and material 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 2022* and the information about the application of HKFRS 17 'Insurance Contracts' and the new policies as set out below.

Standards applied during the half-year to 30 June 2023

HKFRS 17 'Insurance Contracts'

On 1 January 2023, the group adopted the requirements of HKFRS 17 'Insurance Contracts' retrospectively with comparatives restated from the transition date, 1 January 2022. These include comparative data presented in the primary financial statements, Note 3 'Loans and advances to customers', Note 4 'Financial investments', Note 7 'Fair values of financial instruments carried at fair value', Note 8 'Fair values of financial instruments not carried at fair value' and Note 10 'Segmental analysis'. At transition, the group's total equity reduced by HK$75,433m. For further details, see Note 12 'Effects of adoption of HKFRS 17'.

On adoption of HKFRS 17, balances based on HKFRS 4, including the present value of in-force long-term insurance business ('PVIF') asset in relation to the upfront recognition of future profits of in-force insurance contracts, were derecognised. Insurance contract liabilities have been remeasured under HKFRS 17 based on groups of insurance contracts, which include the fulfilment cash flows comprising the best estimate of the present value of the future cash flows (for example premiums and payouts for claims, benefits, and expenses), together with a risk adjustment for non-financial risk, as well as the contractual service margin ('CSM'). The CSM represents the unearned profits that will be released and systematically recognised in Insurance revenue as services are provided over the expected coverage period.

In addition, the group has made use of the option under the standard to re-designate certain eligible financial assets held to support insurance contract liabilities, which were predominantly measured at amortised cost, as financial assets measured at fair value through profit of loss, with comparatives restated from the transition date.

Summary of material accounting policies

In the financial statements of the *Annual Report and Accounts 2023*, the following policies will substantially replace the policies disclosed in section 1.2 (j) 'Insurance contracts' in the financial statements of the *Annual Report and Accounts 2022*.

There were no other new standards or amendments to standards that had an effect on these Interim condensed consolidated financial statements.

(j) Insurance contracts

HKFRS 17 sets out the requirements that the group applies in accounting for insurance contracts it issues, reinsurance contracts it holds and investment contracts with discretionary participation features it issues.

An insurance contract is a contract under which the group accepts significant insurance risk from another party by agreeing to compensate that party if it is adversely affected by a specified uncertain future event.

Aggregation of insurance contracts

Individual insurance contracts that are managed together and subject to similar risks are identified as a portfolio. Contracts that are managed together usually belong to the same product group, and have similar characteristics such as being subject to a similar pricing framework or similar product management, and are issued by the same legal entity. If a contract is exposed to more than one risk, the dominant risk of the contract is used to assess whether the contract features similar risks. Each portfolio is further separated by profitability group and issue date, with contracts the group issues after the transition date being grouped into calendar quarter cohorts. For multi-currency groups of contracts, the group considers its groups of contracts as being denominated in a single currency.

The measurement of the insurance contract liability is based on groups of insurance contracts as established at initial recognition, and will include fulfilment cash flows as well as the CSM representing the unearned profit. The group has elected to update the estimates used in the measurement on a year-to-date basis.

Fulfilment cash flows

The fulfilment cash flows comprise the following:

(i) Best estimates of future cash flows

These cash flows include amounts expected to be collected from premiums and payouts for claims, benefits and expenses, and are projected using a range of scenarios and assumptions in an unbiased way based on the group's demographic and operating experience along with external mortality data where the group's own experience data is not sufficiently large in size to be credible.

(ii) Adjustment for the time value of money (i.e. discounting) and financial risks associated with the future cash flows

The estimates of future cash flows are adjusted to reflect the time value of money and the financial risks to derive an expected present value. The group generally makes use of stochastic modelling techniques in the estimation for products with options and guarantees.

A bottom-up approach is used to determine the discount rate to be applied to a given set of expected future cash flows. This is derived as the sum of the risk-free yield and an illiquidity premium. The risk-free yield is determined based on observable market data, where such markets are considered to be deep, liquid and transparent. When information is not available, management judgement is applied to determine the appropriate risk-free yield. Illiquidity premiums reflect the liquidity characteristics of the associated insurance contracts.

(iii) Risk adjustment for non-financial risk

The risk adjustment reflects the compensation required for bearing the uncertainty about the amount and timing of future cash flows that arises from non-financial risk. It is calculated as a 75th percentile level of stress over a one year period. The level of the stress is determined with reference to external regulatory stresses and internal economic capital stresses.

The group does not disaggregate changes in the risk adjustment between insurance service result (comprising insurance revenue and insurance service expense) and insurance finance income or expenses. All changes are included in insurance service result.

Measurement models

The variable fee approach ('VFA') measurement model is used for most of the contracts issued by the group, which is mandatory upon meeting the following eligibility criteria at inception:

a. the contractual terms specify that the policyholder participates in a share of a clearly identified pool of underlying items;
b. the group expects to pay to the policyholder a substantial share of the fair value returns on the underlying items. The group considers that a substantial share is a majority of returns; and
c. the group expects a substantial proportion of any change in the amounts to be paid to the policyholder to vary with the change in fair value of the underlying items. The group considers that a substantial proportion is a majority proportion of change on a present value probability-weighted average of all scenarios.

The risk mitigation option is used for a number of economic offsets against the instruments that meet specific requirements.

The remaining contracts issued and the reinsurance contracts held are accounted for under the general measurement model ('GMM').

CSM and coverage units

The CSM represents the unearned profit and results in no income or expense at initial recognition when the group of contracts is profitable. The CSM is adjusted at each subsequent reporting period for changes in fulfilment cash flows relating to future service (e.g. changes in non-economic assumptions, including mortality and morbidity rates). For initial recognition of onerous groups of contracts and when groups of contracts become onerous subsequently, losses are recognised in insurance service expense immediately.

For groups of contracts measured using the VFA, changes in the group's share of the underlying items, and economic experience and economic assumption changes adjust the CSM, whereas these changes do not adjust the CSM under the GMM, but are recognised in profit or loss as they arise. However, under the risk mitigation option for VFA contracts, the changes in the fulfilment cash flows and the changes in the group's share in the fair value return on underlying items that the instruments mitigate are not adjusted in CSM but recognised in profit or loss.

The CSM is systematically recognised in insurance revenue to reflect the insurance contract services provided, based on the coverage units of the group of contracts. Coverage units are determined by the quantity of benefits and the expected coverage period of the contracts.

The group identifies the quantity of the benefits provided as follows:

– For insurance coverage - based on the expected net policyholder insurance benefit at each period after allowance for decrements, where net policyholder insurance benefit refers to the amount of sum assured less the fund value or surrender value.
– For investment services (including both investment-return service and investment-related service) - based on a constant measure basis which reflects the provision of access for the policyholder to the facility.

For contracts that provide both insurance coverage and investment services, coverage units are weighted according to the expected present value of the future cash outflows for each service.

Insurance service result

Insurance revenue reflects the consideration to which the group expects to be entitled in exchange for the provision of coverage and other insurance contract services (excluding any investment components). Insurance service expenses comprise the incurred claims and other incurred insurance service expenses (excluding any investment components), and losses on onerous groups of contracts and reversals of such losses.

Insurance finance income and expenses

Insurance finance income or expenses comprise the change in the carrying amount of the group of insurance contracts arising from the effects of the time value of money, financial risk and changes therein. For VFA contracts, changes in the fair value of underlying items (excluding additions and withdrawals) are recognised in insurance finance income or expenses.

Key differences between HKFRS 4 and HKFRS 17

	HKFRS 4	HKFRS 17
Balance sheet	– Insurance contract liabilities for non-linked life insurance contracts are calculated by local actuarial principles. Liabilities under unit-linked life insurance contracts are at least equivalent to the surrender or transfer value, by reference to the value of the relevant underlying funds or indices. Grouping requirements follow local regulations. – An intangible asset for the PVIF is recognised, representing the upfront recognition of future profits associated with in-force insurance contracts.	– Insurance contract liabilities are measured for groups of insurance contracts at current value, comprising the fulfilment cash flows and the CSM. – The fulfilment cash flows comprise the best estimate of the present value of the future cash flows, together with a risk adjustment for non-financial risk. – The CSM represents the unearned profit.
Profit emergence / recognition	– The value of new business is reported as revenue on Day 1 as an increase in PVIF. – The impact of the majority of assumption changes is recognised immediately in the income statement. – Variances between actual and expected cash flows are recognised in the period they arise.	– The CSM is systematically recognised in revenue as services are provided over the expected coverage period of the group of contracts (i.e. no Day 1 profit). – Contracts are measured using the GMM or the VFA model for insurance contracts with direct participation features upon meeting the eligibility criteria. Under the VFA model, the group's share of the investment experience and assumption changes are absorbed by the CSM and released over time to profit or loss. For contracts measured under GMM, the group's share of the investment volatility is recorded in profit or loss as it arises. – Losses from onerous contracts are recognised in the income statement immediately.
Investment return assumptions (discount rate)	– PVIF is calculated based on long-term investment return assumptions based on assets held. It therefore includes investment margins expected to be earned in future.	– Under the market consistent approach, expected future investment spreads are not included in the investment return assumption. Instead, the discount rate includes an illiquidity premium that reflects the nature of the associated insurance contract liabilities.
Expenses	– Total expenses to acquire and maintain the contract over its lifetime are included in the PVIF calculation. – Expenses are recognised across operating expenses and fee expense as incurred and the allowances for those costs released from the PVIF simultaneously.	– Projected lifetime expenses that are directly attributable costs are included in the insurance contract liabilities and recognised in the insurance service result. – Non-attributable costs are reported in operating expenses.

Transition

In applying HKFRS 17 for insurance contracts retrospectively, the full retrospective approach ('FRA') has been used unless it is impracticable. When the FRA is impracticable such as when there is a lack of sufficient and reliable data, an entity has an accounting policy choice to use either the modified retrospective approach ('MRA') or the fair value approach ('FVA'). The group has applied the FRA for new business from 2018 at the earliest, subject to practicability, and the FVA for which the FRA is impracticable.

Under the FVA, the valuation of insurance liabilities on transition is based on the applicable requirements of HKFRS 13 'Fair Value Measurement'. This requires consideration of the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (an exit price). The CSM is calculated as the difference between what a market participant would demand for assuming the unexpired risk associated with insurance contracts, including required profit, and the fulfilment cash flows that are determined using HKFRS 17 principles.

In determining the fair value, the group considered the estimated profit margin that a market participant would demand in return for assuming the insurance liabilities with the consideration of the level of capital that a market participant would be required to hold, and the discount rate with an allowance for an illiquidity premium that takes into account the level of 'matching' between the group's assets and related liabilities. These assumptions were set taking into account the assumptions that a hypothetical market participant operating in each local jurisdiction would consider.

(b) Use of estimates and judgements

Management believes that the critical accounting estimates and judgements applicable to the group are those that relate to the impairment of amortised cost and FVOCI debt financial assets, the valuation of financial instruments, interests in associates and insurance contract liabilities. The implementation of HKFRS 17 has resulted in a change to the assessment of the critical accounting estimates and judgements as summarised below.

The VFA measurement model is used for most of the contracts issued by the group. In applying the VFA eligibility criteria as described above under the accounting policies for insurance contracts, the group determined that for criterion (b) a substantial share is a majority of the returns, and for criterion (c) a substantial proportion is a majority proportion of the change on a present value probability-weighted average of all scenarios.

The CSM is systematically recognised in insurance revenue based on the coverage units of the group of contracts. The group determined that the coverage unit basis that best reflects the provision of investment services is the availability of the facility over time, and therefore the quantity of benefit selected is a constant measure. The coverage units are reviewed and updated at each reporting date.

There were no other changes in the current period to the critical accounting estimates and judgements applied in 2022, which are stated in Note 1 of the *Annual Report and Accounts 2022*.

(c) Composition of the group

There were no material changes in the composition of the group in the half-year to 30 June 2023.

(d) Future accounting developments

The HKICPA has published a number of minor amendments to HKFRSs that are effective from 1 January 2024. The group expects they have or will have an insignificant effect, when adopted, on the Consolidated Financial Statements.

(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, as well as considering potential impacts from other top and emerging risks, and the related impact on profitability, capital and liquidity.

(f) Accounting policies

Except as described above, 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 2022*, 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 2023* as follows:

- Consolidated income statement and balance sheet data by reportable segments are included in the 'Financial Review' on page 3 to 4.
- '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 14 to 15.
- Certain information of 'Mainland China commercial real estate' included in 'Risk' section on pages 16 to 17.
- 'Measurement uncertainty and sensitivity analysis of ECL estimates' included in 'Risk' section on pages 17 to 20.

2 Dividends

Dividends to shareholders of the parent company

	Half-year to			
	30 Jun 2023		30 Jun 2022	
	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	**0.27**	**13,500**	0.23	10,584
– first interim dividend paid	**0.44**	**22,000**	0.17	7,761
Total	**0.71**	**35,500**	0.40	18,345
Total coupons on other equity instruments		**2,397**		1,853
Dividends to shareholders		**37,897**		20,198

The Directors declared a second interim dividend in respect of the half-year ended 30 June 2023 of HK$0.43 per ordinary share (HK$21,500m) (half-year ended 30 June 2022 of HK$0.12 per ordinary share (HK$5,887m)) and a special dividend for 2023 of HK$0.16 per ordinary share (HK$7,800m).

Total coupons on other equity instruments

	Half-year to	
	30 Jun 2023	30 Jun 2022
	HK$m	HK$m
US$1,000m Fixed rate perpetual subordinated loan (interest rate fixed at 6.090%)	**478**	477
US$1,200m Fixed rate perpetual subordinated loans (interest rate fixed at 6.172%)	**581**	580
US$600m Fixed rate perpetual subordinated loan (interest rate fixed at 5.910%)	**277**	278
US$1,100m Fixed rate perpetual subordinated loan (interest rate fixed at 6.000%)	**516**	518
US$1,000m Floating rate perpetual subordinated loan (Interest rate at compounded SOFR plus 5.090%.)	**545**	—
Total	**2,397**	1,853

3 Loans and advances to customers

	At	
	30 Jun 2023	31 Dec 2022
	HK$m	HK$m
Gross loans and advances to customers	**3,679,785**	3,734,987
Expected credit loss allowances	**(39,762)**	(39,919)
	3,640,023	3,695,068

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

Analysis of gross loans and advances to customers

	At 30 Jun 2023 HK$m	At 31 Dec 2022 HK$m
Residential mortgages	**1,212,890**	1,177,615
Credit card advances	**90,060**	92,023
Other personal	**250,449**	254,729
Total personal	**1,553,399**	1,524,367
Real estate	**512,504**	569,842
Wholesale and retail trade	**368,530**	377,326
Manufacturing	**359,493**	371,718
Transportation and storage	**107,848**	104,933
Other	**457,993**	483,944
Total corporate and commercial	**1,806,368**	1,907,763
Non-bank financial institutions	**320,018**	302,857
	3,679,785	3,734,987
By geography[1]		
Hong Kong	**2,291,926**	2,322,684
Rest of Asia-Pacific	**1,387,859**	1,412,303

1 *The geographical information shown above is classified by the location of the principal operations of the subsidiary or the branch responsible for advancing the funds.*

Gross loans and advances to customers decreased by HK$55bn, or 1.5%, which included unfavourable foreign exchange translation effects of HK$28bn. Excluding this impact, the underlying decrease of HK$27bn was driven by a decline in corporate and commercial lending of HK$85bn, mainly in Hong Kong, partly offset by an increase in residential mortgage lending of HK$42bn in Hong Kong.

4 Financial investments

Carrying amounts of financial investments

	At 30 Jun 2023 HK$m	At 31 Dec 2022 HK$m
Financial investments measured at fair value through other comprehensive income	**1,323,735**	1,239,941
– treasury and other eligible bills	**699,838**	612,990
– debt securities	**616,937**	619,826
– equity securities	**6,960**	7,125
Debt instruments measured at amortised cost	**558,203**	509,766
– treasury and other eligible bills	**83,783**	129,174
– debt securities	**474,420**	380,592
	1,881,938	1,749,707

5 Interests in associates and joint ventures

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

The group's investment in Bank of Communications Co., Limited ('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 2023, the fair value of the group's investment in BoCom had been below the carrying amount for approximately 11 years. As a result, the group performed an impairment test on the carrying amount, which confirmed that there was no impairment at 30 June 2023 as the recoverable amount as determined by a value-in-use ('VIU') calculation was higher than the carrying value.

	At 30 Jun 2023			At 31 Dec 2022		
	VIU HK$bn	**Carrying value HK$bn**	**Fair value HK$bn**	VIU HK$bn	Carrying value HK$bn	Fair value HK$bn
BoCom	**187.3**	**183.4**	**73.4**	183.0	182.3	63.5

The headroom, which is defined as the extent to which the VIU exceeds the carrying value, increased by HK$3.2bn compared with 31 December 2022. The increase in headroom was principally due to the movement in discount rate which was market driven, partly offset by revisions to management's best estimates of BoCom's future earnings in the short to medium term.

In future periods, the VIU may increase or decrease depending on the effect of changes to model inputs. The main model inputs are described below and are based on factors observed at period-end. The factors that could result in a change in the VIU and an impairment include a short-term underperformance by BoCom, a change in regulatory capital requirements, or an increase in uncertainty regarding the future performance of BoCom resulting in a downgrade of the forecast of future asset growth or profitability. An increase in the discount rate could also result in a reduction of VIU and an impairment.

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. Forecast earnings growth over the short to medium term are lower than recent (within the last five years) historical actual growth and reflect the uncertainty arising from the current economic outlook. Reflecting management's intent to continue to retain its investment, 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, meaning that CMC is deducted when arriving at management's estimate of future earnings available to ordinary shareholders. The principal inputs to the CMC calculation include estimates of asset growth, the ratio of risk-weighted assets to total assets, and the expected capital requirements. An increase in the CMC as a result of a change to these principal inputs would reduce VIU. Additionally, management considers other qualitative factors, to ensure that the inputs to the VIU calculation remain appropriate.

Key assumptions in value-in-use calculation

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

- Long-term profit growth rate: 3% (31 December 2022: 3%) for periods after 2026, which does not exceed forecast GDP growth in mainland China and is similar to forecasts by external analysts.
- Long-term asset growth rate: 3% (31 December 2022: 3%) for periods after 2026, which is the rate that assets are expected to grow to achieve long-term profit growth of 3%.
- Discount rate: 9.80% (31 December 2022: 10.04%), which is based on a capital asset pricing model ('CAPM'), using market data. The discount rate used is within the range of 8.0% to 9.8% (31 December 2022: 8.4% to 10.4%) indicated by the CAPM, and decreased as a consequence of a market driven reduction in beta. While the CAPM range sits at the lower end of the range adopted by selected external analysts of 8.8% to 13.5% (31 December 2022: 8.8% to 13.5%), we continue to regard the CAPM range as the most appropriate basis for determining this assumption.
- Expected credit losses ('ECL') as a percentage of customer advances: ranges from 0.87% to 0.94% (31 December 2022: 0.99% to 1.05%) in the short to medium term, reflecting reported credit experience through the recovery from Covid-19 pandemic in mainland China. For periods after 2026, the ratio is 0.97% (31 December 2022: 0.97%), which is higher than BoCom's average ECL as a percentage of customer advances in recent years prior to the pandemic.
- Risk-weighted assets as a percentage of total assets: ranges from 61.0% to 63.7% (31 December 2022: 61.0% to 64.4%) in the short to medium term, reflecting higher risk-weights in the short term followed by an expected reversion to recent historical levels. For periods after 2026, the ratio is 61.0% (31 December 2022: 61.0%), which is similar to BoCom's actual results in recent years.
- Operating income growth rate: ranges from 1.7% to 9.4% (31 December 2022: 1.9% to 7.7%) in the short to medium term, which is similar to BoCom's actual results in recent years, and is heavily influenced by projections of Net Interest Income in future periods. This reflects BoCom's most recent actual results, global trade tensions and industry developments in mainland China.
- Cost-income ratio: ranges from 35.5% to 36.8% (31 December 2022: 35.5% to 36.3%) in the short to medium term. These ratios are similar to BoCom's actual results in recent years and forecasts disclosed by external analysts.
- Effective tax rate: ranges from 5.3% to 15.0% (31 December 2022: 4.4% to 15.0%) 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 2026, the rate is 15.0% (31 December 2022: 15.0%), which is higher than the recent historical average, and aligned to the minimum tax rate as proposed by the OECD/G20 Inclusive Framework on Base Erosion and Profit Shifting.
- Capital requirements: capital adequacy ratio of 12.5% (31 December 2022: 12.5%) and tier 1 capital adequacy ratio of 9.5% (31 December 2022: 9.5%), based on BoCom's capital risk appetite and capital requirements respectively.

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 11 basis points
– Long-term asset growth rate	– Increase by 9 basis points
– Discount rate	– Increase by 15 basis points
– Expected credit losses as a percentage of customer advances	– Increase by 2 basis points
– Risk-weighted assets as a percentage of total assets	– Increase by 79 basis points
– Operating income growth rate	– Decrease by 21 basis points
– Cost-income ratio	– Increase by 47 basis points
– Long-term effective tax rate	– Increase by 134 basis points
– Capital requirements – capital adequacy ratio	– Increase by 16 basis points
– Capital requirements – tier 1 capital adequacy ratio	– Increase by 160 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 based on external analysts' forecasts, statutory requirements and other relevant external data sources, which can change period to period.

	Favourable change			Unfavourable change		
		Increase in VIU	VIU		Decrease in VIU	VIU
	bps	HK$bn	HK$bn	bps	HK$bn	HK$bn
At 30 June 2023						
Long-term profit growth rate[1]	**+62**	**24.6**	**211.9**	**-72**	**(23.2)**	**164.1**
Long-term asset growth rate[1]	**-72**	**26.8**	**214.1**	**+62**	**(28.0)**	**159.3**
Discount rate	**-180**	**64.3**	**251.6**	**+210**	**(41.7)**	**145.6**
Expected credit losses as a percentage of customer advances	**2023 to 2026: 83 2027 onwards: 91**	**15.3**	**202.6**	**2023 to 2026: 120 2027 onwards: 104**	**(28.2)**	**159.1**
Risk-weighted assets as a percentage of total assets	**-77**	**0.7**	**188.0**	**+280**	**(17.6)**	**169.7**
Operating income growth rate	**+56**	**11.1**	**198.4**	**-116**	**(22.8)**	**164.5**
Cost-income ratio	**-131**	**6.9**	**194.2**	**+164**	**(17.9)**	**169.4**
Long-term effective tax rate	**-426**	**12.4**	**199.7**	**+1,000**	**(28.9)**	**158.4**
Capital requirements – capital adequacy ratio	**—**	**—**	**187.3**	**+229**	**(60.9)**	**126.4**
Capital requirements – tier 1 capital adequacy ratio	**—**	**—**	**187.3**	**+257**	**(30.8)**	**156.5**
At 31 December 2022						
Long-term profit growth rate[1]	+75	28.1	211.1	-71	(21.1)	161.9
Long-term asset growth rate[1]	-71	24.2	207.2	+75	(31.8)	151.2
Discount rate	-164	54.3	237.3	+136	(28.7)	154.3
Expected credit losses as a percentage of customer advances	2022 to 2026: 95 2027 onwards: 91	14.9	197.9	2022 to 2026: 120 2027 onwards: 104	(22.5)	160.5
Risk-weighted assets as a percentage of total assets	-118	0.6	183.6	+239	(17.5)	165.5
Operating income growth rate	+44	10.5	193.5	-83	(19.3)	163.7
Cost-income ratio	-122	8.1	191.1	+174	(16.5)	166.5
Long-term effective tax rate	-426	11.8	194.8	+1,000	(27.7)	155.3
Capital requirements – capital adequacy ratio	—	—	183.0	+191	(48.8)	134.2
Capital requirements – tier 1 capital adequacy ratio	—	—	183.0	+266	(24.8)	158.2

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$126.9bn to HK$229.8bn (31 December 2022: HK$131.9bn to HK$223.9bn). The range is based on impacts set out in the table above arising from the favourable/unfavourable change in the earnings in the short to medium term, the long-term expected credit losses as a percentage of customer advances and a 50bps increase/decrease in the discount rate. All other long-term assumptions and the basis of the CMC have been kept unchanged when determining the reasonably possible range of the VIU. Impairment, if determined, would be recognised in the income statement.

6 Customer accounts

Customer accounts by country/territory

	At	
	30 Jun	31 Dec
	2023	2022
	HK$m	HK$m
Hong Kong	**4,149,553**	4,229,531
Singapore	**534,308**	479,241
Mainland China	**421,828**	443,954
Australia	**220,879**	222,222
India	**189,209**	176,466
Malaysia	**117,727**	124,792
Taiwan	**119,253**	119,400
Indonesia	**44,884**	45,529
Other	**278,355**	272,574
	6,075,996	6,113,709

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 2023 are consistent with those applied for the *Annual Report and Accounts 2022.*

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

	Fair value hierarchy					
	Level 1	Level 2	Level 3	Third-party total	Inter-company[2]	Total
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
At 30 Jun 2023						
Assets[1]						
Trading assets	**568,137**	**248,377**	**6,187**	**822,701**	**—**	**822,701**
Derivatives	**820**	**338,487**	**1,765**	**341,072**	**158,329**	**499,401**
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	**172,431**	**401,414**	**110,806**	**684,651**	**—**	**684,651**
Financial investments	**1,013,710**	**305,357**	**4,668**	**1,323,735**	**—**	**1,323,735**
Liabilities[1]						
Trading liabilities	**66,774**	**59,694**	**6**	**126,474**	**—**	**126,474**
Derivatives	**2,841**	**333,466**	**1,632**	**337,939**	**157,067**	**495,006**
Financial liabilities designated at fair value	**—**	**147,613**	**31,565**	**179,178**	**—**	**179,178**
At 31 Dec 2022						
Assets[1]						
Trading assets	486,547	203,975	9,283	699,805	—	699,805
Derivatives	1,018	330,356	3,301	334,675	168,202	502,877
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	155,276	395,935	101,819	653,030	—	653,030
Financial investments	959,318	276,315	4,308	1,239,941	—	1,239,941
Liabilities[1]						
Trading liabilities	74,201	68,246	6	142,453	—	142,453
Derivatives	2,422	393,444	1,712	397,578	154,151	551,729
Financial liabilities designated at fair value	—	133,009	34,734	167,743	—	167,743

1 *These balances exclude HK$1,242m Level 2 assets (2022: HK$2,333m) and HK$227,847m Level 2 liabilities (2022: HK$183,821m) held with HSBC Group entities.*
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	Trading assets	Designated and otherwise mandatorily measured at fair value	Derivatives	Trading liabilities	Designated at fair value	Derivatives
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
1 Jan to 30 Jun 2023							
Transfers from Level 1 to Level 2	**42,883**	**31,117**	**6,286**	**—**	**284**	**—**	**—**
Transfers from Level 2 to Level 1	**15,015**	**17,021**	**9,382**	**—**	**1,103**	**—**	**—**
1 Jan to 31 Dec 2022							
Transfers from Level 1 to Level 2	29,781	23,312	20,020	—	132	—	—
Transfers from Level 2 to Level 1	60,104	36,025	26,053	—	1,443	—	—

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

Fair value valuation bases

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

	Assets					Liabilities			
	Financial investments	Trading assets	Designated and otherwise mandatorily measured at fair value through profit or loss	Derivatives	Total	Trading liabilities	Designated at fair value	Derivatives	Total
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
Private equity and related investments	**4,054**	**6**	**98,951**	**—**	**103,011**	**5**	**—**	**—**	**5**
Structured notes	**—**	**—**	**24**	**—**	**24**	**—**	**31,565**	**—**	**31,565**
Others	**614**	**6,181**	**11,831**	**1,765**	**20,391**	**1**	**—**	**1,632**	**1,633**
At 30 Jun 2023	**4,668**	**6,187**	**110,806**	**1,765**	**123,426**	**6**	**31,565**	**1,632**	**33,203**
Private equity and related investments	3,742	16	90,773	—	94,531	6	—	—	6
Structured notes	—	—	—	—	—	—	34,734	—	34,734
Others	566	9,267	11,046	3,301	24,180	—	—	1,712	1,712
At 31 Dec 2022	4,308	9,283	101,819	3,301	118,711	6	34,734	1,712	36,452

The basis for determining the fair value of the financial instruments in the table above is explained on page 130 of the *Annual Report and Accounts 2022.*

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

Movement in Level 3 financial instruments

	Assets				Liabilities		
	Financial investments	Trading assets	Designated and otherwise mandatorily measured at fair value through profit or loss	Derivatives	Trading liabilities	Designated at fair value	Derivatives
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
At 1 Jan 2023	**4,308**	**9,283**	**101,819**	**3,301**	**6**	**34,734**	**1,712**
Total gains/(losses) recognised in profit or loss	**—**	**(173)**	**4,946**	**(1,450)**	**(11)**	**(358)**	**108**
– net income/(losses) from financial instruments held for trading or managed on a fair value basis	**—**	**(173)**	**—**	**(1,450)**	**(11)**	**—**	**108**
– changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	**—**	**—**	**4,946**	**—**	**—**	**(358)**	**—**
Total gains/(losses) recognised in other comprehensive income ('OCI')	**300**	**(176)**	**3**	**10**	**1**	**(404)**	**(13)**
– financial investments: fair value changes	**375**	**—**	**—**	**—**	**—**	**12**	**—**
– exchange differences	**(75)**	**(176)**	**3**	**10**	**1**	**(416)**	**(13)**
Purchases	**1,119**	**1,759**	**11,946**	**—**	**—**		**—**
New issuances	**—**	**—**	**—**	**—**	**—**	**3,354**	**—**
Sales	**—**	**(1,698)**	**(18)**	**—**	**—**	**—**	**—**
Settlements	**(1,059)**	**(3,012)**	**(7,890)**	**34**	**5**	**296**	**(327)**
Transfers out	**—**	**(1,043)**	**—**	**(142)**	**(3)**	**(6,915)**	**(96)**
Transfers in	**—**	**1,247**	**—**	**12**	**8**	**858**	**248**
At 30 Jun 2023	**4,668**	**6,187**	**110,806**	**1,765**	**6**	**31,565**	**1,632**
Unrealised gains/(losses) recognised in profit or loss relating to assets and liabilities held at 30 Jun 2023	**—**	**(393)**	**2,360**	**989**	**—**	**(20)**	**(241)**
– net income/(losses) from financial instruments held for trading or managed on a fair value basis	**—**	**(393)**	**—**	**989**	**—**	**—**	**(241)**
– changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	**—**	**—**	**2,360**	**—**	**—**	**(20)**	**—**

Movement in Level 3 financial instruments (continued)

	Assets				Liabilities		
	Financial investments	Trading assets	Designated and otherwise mandatorily measured at fair value through profit or loss	Derivatives	Trading liabilities	Designated at fair value	Derivatives
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
At 31 Dec 2021	3,674	3,246	74,652	3,294	—	20,449	2,130
Impact on transition to HKFRS17	—	—	11,352	—	—	—	—
At 1 Jan 2022	3,674	3,246	86,004	3,294	—	20,449	2,130
Total gains/(losses) recognised in profit or loss	—	(515)	1,646	989	—	(770)	372
– net income/(losses) from financial instruments held for trading or managed on a fair value basis	—	(515)	—	989	—	—	372
– changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	—	—	1,646	—	—	(770)	—
Total gains/(losses) recognised in other comprehensive income	796	17	(25)	9	—	(529)	(36)
– financial investments: fair value changes	825	—	—	—	—	(5)	—
– exchange differences	(29)	17	(25)	9	—	(524)	(36)
Purchases	705	1,459	10,438	—	—	—	—
New issuances	—	—	—	—	—	3,568	—
Sales	(50)	(424)	(143)	—	—	—	—
Settlements	(697)	(2,025)	(4,560)	(284)	—	(344)	(464)
Transfers out	—	(766)	(285)	(347)	—	(1,156)	(96)
Transfers in	—	2,791	96	77	3	447	81
At 30 Jun 2022	4,428	3,783	93,171	3,738	3	21,665	1,987
Unrealised gains/(losses) recognised in profit or loss relating to assets and liabilities held at 30 Jun 2022	—	(291)	1,760	3,011	—	55	(830)
– net income/(losses) from financial instruments held for trading or managed on a fair value basis	—	(291)	—	3,011	—	—	(830)
– changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	—	—	1,760	—	—	55	—

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

Effect of changes in significant unobservable assumptions to reasonably possible alternatives

The following table shows the sensitivity of Level 3 fair values to reasonably possible alternative assumptions:

Sensitivity of fair values to reasonably possible alternative assumptions

	At 30 Jun 2023				At 31 Dec 2022			
	Reflected in profit or loss		**Reflected in OCI**		Reflected in profit or loss		Reflected in OCI	
	Favourable changes	**Un-favourable changes**	**Favourable changes**	**Un-favourable changes**	Favourable changes	Un-favourable changes	Favourable changes	Un-favourable changes
	HK$m	**HK$m**	**HK$m**	**HK$m**	HK$m	HK$m	HK$m	HK$m
Derivatives, trading assets and trading liabilities[1]	**196**	**(220)**	**—**	**—**	242	(308)	—	—
Financial assets and liabilities designated and otherwise mandatorily measured at fair value through profit or loss	**5,559**	**(5,559)**	**—**	**—**	5,101	(5,101)	—	—
Financial investments	**—**	**—**	**203**	**(203)**	—	—	187	(187)
Total	**5,755**	**(5,779)**	**203**	**(203)**	5,343	(5,409)	187	(187)

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

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

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

Key unobservable inputs to Level 3 financial instruments

The following table lists key unobservable inputs to Level 3 financial instruments and provides the range of those inputs at 30 June 2023.

There has been no change to the key unobservable inputs to Level 3 financial instruments and inter-relationships therein, which are detailed on page 132 of the *Annual Report and Accounts 2022*.

Quantitative information about significant unobservable inputs in Level 3 valuations

	Fair value				30 Jun 2023		31 Dec 2022	
	Assets	Liabilities	Valuation	Key unobservable	Full range of inputs		Full range of inputs	
	HK$m	HK$m	techniques	inputs	Lower	Higher	Lower	Higher
Private equity and related investments	103,011	5	See footnote 1	See footnote 1				
Structured notes	24	31,565						
– equity-linked notes	24	7,779	Model – Option model	Equity volatility	6%	82%	6%	142%
			Model – Option model	Equity correlation	22%	98%	38%	98%
– FX-linked notes	—	21,650	Model – Option model	FX volatility	2%	36%	4%	37%
– other	—	2,136						
Others[2]	20,391	1,633						
At 30 Jun 2023	123,426	33,203						

1 *Given the bespoke nature of the analysis in respect of each private equity holding, it is not practical to quote a range of key unobservable inputs.*
2 *'Others' includes a range of smaller holdings.*

8 Fair values of financial instruments not carried at fair value

	At			
	30 Jun 2023		31 Dec 2022	
	Carrying amount	Fair value	Carrying amount	Fair value
	HK$m	HK$m	HK$m	HK$m
Assets[1]				
Reverse repurchase agreements – non-trading	853,141	852,940	927,976	927,190
Loans and advances to banks	494,948	494,964	515,847	515,625
Loans and advances to customers	3,640,023	3,621,148	3,695,068	3,675,601
Financial investments – at amortised cost	558,203	544,134	509,766	498,642
Liabilities[1]				
Repurchase agreements – non-trading	497,762	497,887	351,093	349,133
Deposits by banks	155,648	155,643	198,908	198,905
Customer accounts	6,075,996	6,075,550	6,113,709	6,114,290
Debt securities in issue	92,736	93,108	100,909	101,414
Subordinated liabilities	3,134	3,136	3,119	2,191

1 *Amounts with HSBC Group entities are not included here.*

The fair values above are stated at a specific date and may be significantly different from the amounts which will actually be paid on the maturity or settlement dates of the instruments. In many cases, it would not be possible to realise immediately the estimated fair values given the size of the portfolios measured. Accordingly, these fair values do not represent the value of these financial instruments to the group as a going concern.

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. They include cash and balances at central banks, items in the course of collection from and transmission to other banks, Hong Kong Government certificates of indebtedness, Hong Kong currency notes in circulation, other financial assets and other financial liabilities, all of which are measured at amortised cost.

9 Contingent liabilities, contractual commitments and guarantees

	At	
	30 Jun 2023	31 Dec 2022
	HK$m	HK$m
Guarantees and contingent liabilities	411,228	398,007
Commitments[1]	3,297,060	3,191,864
	3,708,288	3,589,871

1 *Includes HK$1,937,198m of commitments at 30 June 2023 (31 December 2022: HK$1,892,401m) to which the impairment requirements in HKFRS 9 are applied where the group has become party to an irrevocable commitment.*

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 2023 included amounts in relation to legal and regulatory matters as set out in Note 13.

10 Segmental analysis

The Executive Committee ('EXCO') is considered the Chief Operating Decision Maker ('CODM') for the purpose of identifying the group's operating segments. Operating segment results are assessed by the CODM on the basis of performance measured in accordance with HKFRSs. The basis of identifying operating segments is set out in Note 31 'Segmental analysis' in the *Annual Report and Accounts 2022,* and the segmental analysis is presented based on reportable segments as assessed under HKFRS 8 'Operating Segments'.

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 operational business lines and geographical regions. While such allocations have been made on a systematic and consistent basis, they necessarily involve a degree of subjectivity. Costs which are not allocated to other operating segments are included in the '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 operating segments are presented in the 'Corporate Centre'.

Our global businesses and reportable segments

The group provides a comprehensive range of banking and related financial services to its customers in our global businesses: Wealth and Personal Banking ('WPB'), Commercial Banking ('CMB') and Global Banking and Markets ('GBM'). The products and services offered to customers are organised by these global businesses.

- 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.
- 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), and investments. CMB also offers its customers access to products and services offered by other global businesses, such as GBM, which include foreign exchange products, raising capital on debt and equity markets and advisory services.
- GBM comprises of two separate reportable segments: Global Banking ('GB') and Markets and Securities Services ('MSS'). GB provides tailored financial solutions to major government, corporate and institutional clients and private investors worldwide. The client-focused business lines deliver a full range of banking capabilities including financing, advisory and transaction services. MSS provides services in credit, rates, foreign exchange, equities, money markets and securities services, and principal investment activities.
- Corporate Centre includes strategic investments such as our investment in BoCom, Central Treasury revenue, and costs which are not allocated to global businesses, mainly in relation to investments in technology.
- Other (GBM-other) mainly comprises other business activities which are jointly managed by GB and MSS.

Financial performance by reportable segments is presented in the Financial Review on page 3 to 4, which forms part of the Interim condensed consolidated financial statements.

Geographical regions

	Hong Kong	Rest of Asia-Pacific	Intra-segment elimination	Total
	HK$m	HK$m	HK$m	HK$m
Half-year to 30 Jun 2023				
Net operating income before change in expected credit losses and other credit impairment charges	**80,374**	**49,290**	**(68)**	**129,596**
Profit before tax	**44,940**	**38,270**	**—**	**83,210**
At 30 Jun 2023				
Total assets	**7,503,687**	**3,914,238**	**(1,005,050)**	**10,412,875**
Total liabilities	**7,080,273**	**3,459,750**	**(1,005,050)**	**9,534,973**
Credit commitments and contingent liabilities (contract amounts)	**1,954,764**	**1,753,524**	**—**	**3,708,288**
Half-year to 30 Jun 2022				
Net operating income before change in expected credit losses and other credit impairment charges	49,120	38,991	444	88,555
Profit before tax	15,244	27,528	—	42,772
At 30 Jun 2022				
Total assets	7,311,759	3,883,003	(947,342)	10,247,420
Total liabilities	6,898,555	3,448,965	(947,342)	9,400,178
Credit commitments and contingent liabilities (contract amounts)	1,825,271	1,642,493	—	3,467,764

11 Related party transactions

There were no changes in the related party transactions as described in the *Annual Report and Accounts 2022* that have had a material effect on the financial position or performance of the group in the half-year to 30 June 2023. All related party transactions that took place in the half-year to 30 June 2023 were similar in nature to those described in the *Annual Report and Accounts 2022*.

12 Effects of adoption of HKFRS 17

On 1 January 2023 the group adopted HKFRS 17 'Insurance Contracts' and as required by the standard applied the requirements retrospectively with comparatives restated from the transition date, 1 January 2022. The tables below provide the transition restatement impact on the group's consolidated balance sheet as at 1 January 2022, as well as the group consolidated income statement and the group consolidated statement of comprehensive income for the 6 month period ended 30 June 2022.

Further information about the effect of adoption of HKFRS 17 is provided in Note 1 Basis of preparation and material accounting policies on page 36 to 39.

HKFRS 17 transition impact on the group consolidated balance sheet at 1 January 2022

	HKFRS 4	Removal of PVIF and HKFRS 4 balances	Remeasure-ment effect of HKFRS 9 re-designations	HKFRS 17 fulfilment cash flows	HKFRS 17 CSM	Tax effect	HKFRS 17	Total movements
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
Assets								
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	202,399	—	473,454	—	—	—	675,853	473,454
Loans and advances to banks	432,247	—	(4,436)	—	—	—	427,811	(4,436)
Loans and advances to customers	3,840,939	—	(9,983)	—	—	—	3,830,956	(9,983)
Financial investments	2,051,575	—	(420,963)	—	—	—	1,630,612	(420,963)
Goodwill and intangible assets	95,181	(63,765)	—	—	—	—	31,416	(63,765)
Deferred tax assets	3,353	—	—	—	—	4,091	7,444	4,091
All other assets	3,277,699	(34,272)	—	31,213	(316)	—	3,274,324	(3,375)
Total assets	9,903,393	(98,037)	38,072	31,213	(316)	4,091	9,878,416	(24,977)
Liabilities and equity								
Liabilities								
Insurance contract liabilities	638,145	(638,145)	—	624,056	66,935	—	690,991	52,846
Deferred tax liabilities	32,522	—	—	—	—	(10,479)	22,043	(10,479)
All other liabilities	8,309,215	431	—	7,908	(250)	—	8,317,304	8,089
Total liabilities	8,979,882	(637,714)	—	631,964	66,685	(10,479)	9,030,338	50,456
Total shareholders' equity	856,809	492,823	35,612	(548,755)	(58,262)	12,695	790,922	(65,887)
Non-controlling interests	66,702	46,854	2,460	(51,996)	(8,739)	1,875	57,156	(9,546)
Total equity	923,511	539,677	38,072	(600,751)	(67,001)	14,570	848,078	(75,433)
Total liabilities and equity	9,903,393	(98,037)	38,072	31,213	(316)	4,091	9,878,416	(24,977)

Transition drivers

Removal of PVIF and HKFRS 4 balances

The PVIF intangible asset of HK$63,765m previously reported under HKFRS 4 within 'Goodwill and intangible assets' arose from the upfront recognition of future profits associated with in-force insurance contracts. The PVIF intangible asset is no longer reported following the transition to HKFRS 17, as future profits are deferred within the CSM. Other HKFRS 4 insurance contract assets (shown above within 'All other assets') and insurance contract liabilities are removed on transition, to be replaced with HKFRS 17 balances.

HKFRS 9 asset re-designation

Loans and advances and debt securities supporting associated insurance liabilities of HK$429,016m were re-designated from an amortised cost classification to fair value through profit and loss, and HK$6,366m from fair value through other comprehensive income to fair value through profit or loss. The re-designations were made in order to more closely align the asset accounting with the valuation of the associated insurance liabilities. The re-designation of amortised cost assets generated a net increase to assets of HK$38,072m because the fair value measurement on transition was higher than the previous amortised cost carrying amount.

Recognition of the HKFRS 17 fulfilment cash flows

The measurement of the insurance contracts liabilities under HKFRS 17 is based on groups of insurance contracts and includes a liability for fulfilling the insurance contract, such as premiums, expenses, insurance benefits and claims including policyholder returns and the cost of guarantees. These are recorded within the fulfilment cash flow component of the insurance contract liability, together with the risk adjustment for non-financial risk.

Recognition of the HKFRS 17 CSM

The CSM is a component of the insurance contract liability and represents the future unearned profit associated with insurance contracts which will be released to the profit and loss over the expected coverage period.

Tax effect

The removal of deferred tax liabilities primarily results from the removal of the associated PVIF intangible asset, and new deferred tax assets are reported, where appropriate, on temporary differences between the new HKFRS 17 accounting balances and their associated tax bases.

HKFRS 17 transition impact on the reported group consolidated income statement for the 6 months ended 30 June 2022

	HKFRS 4	Removal of PVIF and HKFRS 4 items	Remeasure-ment effect of HKFRS 9 re-designations	Insurance finance income/ (expense)	HKFRS 17 CSM	Onerous contracts	Experience variance and other	Attribut-able expenses	Tax effect	HKFRS 17
	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m	HK$m
Net interest income	53,253	—	(8,127)	—	—	—	—	—	—	45,126
Net fee income	19,640	—	—	—	—	—	—	992	—	20,632
Net income from financial instruments held for trading or managed on a fair value basis	17,855	—	(63)	—	—	—	—	—	—	17,792
Net expense from assets and liabilities of insurance businesses, including related derivatives, measured at fair value through profit or loss	(10,601)	—	(68,674)	—	—	—	—	—	—	(79,275)
Changes in fair value of designated debts issued and related derivatives	(447)	—	—	—	—	—	—	—	—	(447)
Changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	31	—	3	—	—	—	—	—	—	34
Gains less losses from financial investments	(232)	—	6	—	—	—	—	—	—	(226)
Net insurance premium income	48,059	(48,059)	—	—	—	—	—	—	—	—
Insurance finance income/ (expense)	—	—	—	80,233	—	—	—	—	—	80,233
Insurance service result	—	—	—	—	2,890	(807)	171	—	—	2,254
– insurance revenue	—	—	—	—	2,890	—	2,570	—	—	5,460
– insurance service expense	—	—	—	—	—	(807)	(2,399)	—	—	(3,206)
Other operating income/(loss)	7,671	(5,349)	—	326	—	—	(216)	—	—	2,432
Total operating income	**135,229**	**(53,408)**	**(76,855)**	**80,559**	**2,890**	**(807)**	**(45)**	**992**	**—**	**88,555**
Net insurance claims and benefits paid and movement in liabilities to policyholders	(43,256)	43,256	—	—	—	—	—	—	—	—
Net operating income before change in expected credit losses and other credit impairment charges	**91,973**	**(10,152)**	**(76,855)**	**80,559**	**2,890**	**(807)**	**(45)**	**992**	**—**	**88,555**
Change in expected credit losses and other credit impairment charges	(4,144)	—	9	—	—	—	—	—	—	(4,135)
Net operating income	**87,829**	**(10,152)**	**(76,846)**	**80,559**	**2,890**	**(807)**	**(45)**	**992**	**—**	**84,420**
Total operating expenses	(54,011)	—	—	—	—	—	—	1,788	—	(52,223)
Operating profit	**33,818**	**(10,152)**	**(76,846)**	**80,559**	**2,890**	**(807)**	**(45)**	**2,780**	**—**	**32,197**
Share of profit in associates and joint ventures	10,575	—	—	—	—	—	—	—	—	10,575
Profit before tax	**44,393**	**(10,152)**	**(76,846)**	**80,559**	**2,890**	**(807)**	**(45)**	**2,780**	**—**	**42,772**
Tax expense	(7,512)	—	—	—	—	—	—	—	282	(7,230)
Profit for the period	**36,881**	**(10,152)**	**(76,846)**	**80,559**	**2,890**	**(807)**	**(45)**	**2,780**	**282**	**35,542**

Transition drivers

Removal of HKFRS 4 based revenue items

As a result of the removal of the PVIF intangible asset, the associated revenue of HK$5,600m in the first half 2022 that was previously reported within 'Other operating income' is no longer reported under HKFRS 17. This includes the removal of the value of new business and changes to PVIF intangible asset from valuation adjustments and experience variances.

On the implementation of HKFRS 17 new income statement line items associated with insurance contract accounting were introduced. Consequently, the previously reported HKFRS 4 line items 'Net insurance premium income', and 'Net insurance claims and benefits paid and movement in liabilities to policyholders' were also removed.

HKFRS 9 re-designations

Following the re-designation of financial assets supporting associated insurance liabilities to fair value through profit or loss classification, the related income statement reporting also changed. Under our previous HKFRS 4 based reporting convention, these assets generated interest income of HK$8,127m in the first half 2022, which is no longer reported in 'Net interest income' under HKFRS 17. To the extent that this interest income was shared with policyholders, the corresponding policyholder sharing obligation was previously included within the 'Net insurance claims and benefits paid and movement in liabilities to policyholders' line.
Following re-designation to fair value through profit or loss, gains and losses from changes in the fair value of underlying assets, together with interest income earned, are both reported within 'Net expense from assets and liabilities of insurance businesses, including related derivatives, measured at fair value through profit or loss'. Similar to an HKFRS 4 basis, HKFRS 17 accounting provides for an offset. While this offset was reported within the claims line under HKFRS 4, under HKFRS 17 it is reported within the 'Insurance finance income/(expense)' line described below.

Introduction of HKFRS 17 income statement

Insurance finance income/(expense)

'Insurance finance income' of HK$80,233m in the first half 2022 represents the change in the carrying amount of insurance contracts arising from the effect of, and changes in, the time value of money and financial risk. For VFA contracts, which represent more than 95% of insurance contracts, the 'insurance finance income/(expense)' includes the changes in the fair value of underlying items (excluding additions and withdrawals). It therefore has an offsetting impact to investment income earned on underlying assets supporting insurance contracts. This includes an offsetting impact to the gains and losses on assets re-designated on transition to fair value through profit or loss, and which is now included in 'Net expense from assets and liabilities of insurance businesses, including related derivatives, measured at fair value through profit or loss'.

CSM

Revenue is recognised for the release of the CSM associated with the in-force business, which was allocated at a rate of approximately 8.5% during the first half 2022. The CSM release is largely impacted by the constant measure allocation approach for investment services, but may vary over time primarily due to changes in the total amount of CSM reported on the balance sheet from factors such as new business written, changes to levels of actual returns earned on underlying assets, or changes to assumptions.

Onerous contracts

Losses on onerous contracts are taken to the income statement as incurred.

Experience variance and other

Experience variance and other represents the expected expenses, claims and recovery of acquisition cash flows which are reported as part of the insurance service revenue. This is offset with the actual expenses and claims incurred in the period and amortisation of acquisition cash flows which are reported as part of insurance service expense.

Attributable expenses

Directly attributable expenses are the costs associated with originating and fulfilling an identified portfolio of insurance contracts. These costs include distribution fees paid to third parties as part of originating insurance contracts together with appropriate allocations of fixed and variable overheads which are included within the fulfilment cash flows and are no longer shown on the operating expenses line.

HKFRS 17 transition impact on the group consolidated statement of comprehensive income

	Half year to		Half year to	
	31 Dec 2022	31 Dec 2022	30 Jun 2022	30 Jun 2022
	HKFRS 17	HKFRS 4	HKFRS 17	HKFRS 4
	HK$m	HK$m	HK$m	HK$m
Opening total equity for the period	**847,242**	**923,902**	**848,078**	**923,511**
of which:				
– Retained earnings	***441,241***	***508,541***	***422,462***	***488,055***
– Financial assets at FVOCI reserve	***(8,766)***	***(8,442)***	***3,575***	***3,869***
Profit for the period	**45,149**	**45,223**	**35,542**	**36,881**
Debt instruments at fair value through other comprehensive income	**(874)**	**(874)**	**(12,831)**	**(12,801)**
Equity instruments designated at fair value through other comprehensive income	**(403)**	**(403)**	**1,268**	**1,268**
Other comprehensive expense for the period, net of tax	**(10,456)**	**(10,343)**	**(16,877)**	**(17,001)**
Total comprehensive (expense)/income for the period	**33,416**	**33,603**	**7,102**	**8,347**
Other movements	**(16,278)**	**(16,242)**	**(7,938)**	**(7,956)**
Closing total equity for the period	**864,380**	**941,263**	**847,242**	**923,902**

The group's consolidated balance sheet as at transition date and at 31 December 2022

	HKFRS 17		HKFRS 4	
	31 Dec 2022 HK$m	1 Jan 2022 HK$m	**31 Dec 2022 HK$m**	31 Dec 2021 HK$m
Assets				
Cash and balances at central banks	**232,740**	276,857	**232,740**	276,857
Items in the course of collection from other banks	**28,557**	21,632	**28,557**	21,632
Hong Kong Government certificates of indebtedness	**341,354**	332,044	**341,354**	332,044
Trading assets	**699,805**	777,450	**699,805**	777,450
Derivatives	**502,877**	365,167	**502,771**	365,167
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	**653,030**	675,853	**226,451**	202,399
Reverse repurchase agreements – non-trading	**927,976**	803,775	**927,976**	803,775
Loans and advances to banks	**515,847**	427,811	**519,024**	432,247
Loans and advances to customers	**3,695,068**	3,830,956	**3,705,149**	3,840,939
Financial investments	**1,749,707**	1,630,612	**2,221,361**	2,051,575
Amounts due from Group companies	**140,485**	112,621	**140,546**	112,719
Interests in associates and joint ventures	**185,898**	188,485	**185,898**	188,485
Goodwill and intangible assets	**36,863**	31,416	**102,419**	95,181
Property, plant and equipment	**130,926**	129,827	**130,926**	129,827
Deferred tax assets	**7,582**	7,444	**3,856**	3,353
Prepayments, accrued income and other assets	**349,128**	266,466	**355,319**	269,743
Total assets	**10,197,843**	9,878,416	**10,324,152**	9,903,393
Liabilities				
Hong Kong currency notes in circulation	**341,354**	332,044	**341,354**	332,044
Items in the course of transmission to other banks	**33,073**	25,701	**33,073**	25,701
Repurchase agreements – non-trading	**351,093**	255,374	**351,093**	255,374
Deposits by banks	**198,908**	280,310	**198,908**	280,310
Customer accounts	**6,113,709**	6,177,182	**6,113,709**	6,177,182
Trading liabilities	**142,453**	92,723	**142,453**	92,723
Derivatives	**551,729**	355,791	**551,745**	355,791
Financial liabilities designated at fair value	**167,743**	138,965	**167,743**	138,965
Debt securities in issue	**100,909**	67,364	**100,909**	67,364
Retirement benefit liabilities	**1,655**	1,890	**1,655**	1,890
Amounts due to Group companies	**398,261**	356,277	**398,705**	356,233
Accruals and deferred income, other liabilities and provisions	**246,614**	227,245	**238,726**	219,206
Insurance contract liabilities	**654,922**	690,991	**700,758**	638,145
Current tax liabilities	**6,009**	2,385	**6,002**	2,378
Deferred tax liabilities	**21,912**	22,043	**32,937**	32,522
Subordinated liabilities	**3,119**	4,053	**3,119**	4,054
Total liabilities	**9,333,463**	9,030,338	**9,382,889**	8,979,882
Equity				
Share capital	**180,181**	172,335	**180,181**	172,335
Other equity instruments	**52,386**	44,615	**52,386**	44,615
Other reserves	**108,837**	151,509	**109,235**	151,804
Retained earnings	**466,148**	422,463	**533,518**	488,055
Total shareholders' equity	**807,552**	790,922	**875,320**	856,809
Non-controlling interests	**56,828**	57,156	**65,943**	66,702
Total equity	**864,380**	848,078	**941,263**	923,511
Total liabilities and equity	**10,197,843**	9,878,416	**10,324,152**	9,903,393

13 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 2022*. 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 2023. 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.

The Bank and/or certain of its affiliates are subject to a number of 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 various countries 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 the pending matters, which could be significant.

14 Interim Report 2023 and statutory accounts

The information in this *Interim Report 2023* is unaudited and does not constitute statutory accounts. The *Interim Report 2023* was approved by the Board of Directors on 1 August 2023. The Bank's statutory annual consolidated accounts for the year ended 31 December 2022 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 21 February 2023. 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).

15 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.

The Hongkong and Shanghai Banking Corporation Limited

HSBC Main Building
1 Queen's Road Central, Hong Kong
Telephone: (852) 2822 1111
www.hsbc.com.hk