FINANCIAL REVIEW

Financial Performance

Income Analysis

Summary of financial performance

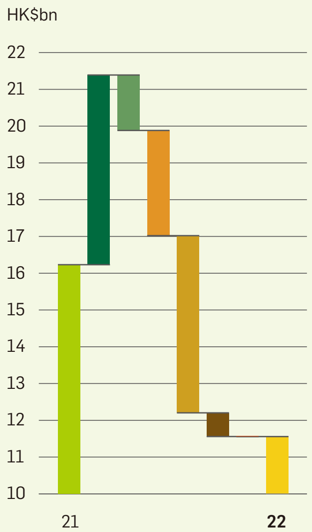
Figures in HK$m	2022	2021
Net operating income before change in expected credit losses and other credit impairment charges	**33,972**	33,182
Operating expenses	**14,778**	14,134
Operating profit	**11,557**	16,231
Profit before tax	**11,439**	16,385
Profit attributable to shareholders	**10,165**	13,960
Earnings per share (in HK$)	**4.95**	6.93

Operating conditions in 2022 were challenged by mounting macroeconomic and geopolitical uncertainties and market volatilities arising from pandemic outbreaks. Wealth management income was affected by the temporary branch closures due to pandemic in the first half and reduced investor activity, as well as the impact of market movements on the life insurance business investment portfolio. Developments in credit conditions for the mainland China commercial real estate sector led to an increase in impaired loans and related expected credit losses ('ECL') charges on our mainland China commercial real estate loan portfolios to reflect the higher risk level.

The Group's financial performance in the first half of 2022 ('1H22') was generally down when compared with the same period in 2021. Moving into the second half of 2022 ('2H22'), the Group captured opportunities to further grow its net interest income on the back of rising interest rates. With the gradual relaxation of travel and social-distancing restrictions, economic recovery continued at a modest pace despite weakened export growth. The Group gained growth momentum in 2H22 and achieved double-digit growth in net operating income before change in ECL compared with 1H22. These favourable results were partly offset by the notable increase in ECL charges in 2H22 for a number of mainland China commercial real estate developers.

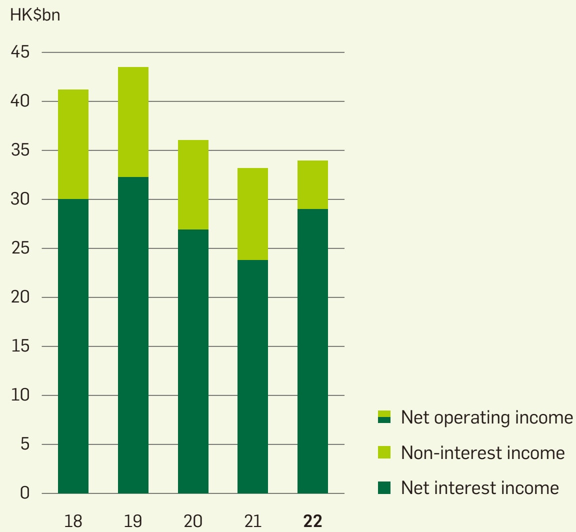
Net operating income before change in expected credit losses and other credit impairment charges was HK$33,972m, up 2%. In the difficult environment, the Group delivered a solid operating result. Net interest income rose by 22% as a result of rising interest rates. This was partly offset by the 47% reduction in non-interest income, reflecting the unfavourable impact of market movements on life insurance business and lower investment distribution revenue due to subdued investment activity. Operating expenses went up by 5% when compared with 2021, due to investment in people and technology to deliver operational efficiencies and enhanced customer experiences. Change in ECL increased by HK$4,819m to HK$7,626m, due mainly to the Group's exposure to the mainland China commercial real estate sector, which was experiencing more difficult credit conditions. We have downgraded certain corporates and made appropriate impairment allowances to reflect the higher risk from these exposures. This had an adverse impact on **operating profit**, which dropped by 29% to

Operating Profit Analysis



	HK$m
2021 Operating profit	16,231
Changes due to:	
Net interest income	**5,159**
Net fee income	**(1,508)**
Other operating income	**(2,861)**
Change in expected credit losses	**(4,819)**
Operating expenses	**(644)**
Impairment loss on intangible assets	**(1)**
2022 Operating profit	**11,557**

Net Operating Income
(Before change in expected credit losses and other credit impairment charges)



HK$11,557m. With investment property revaluation and share of associates' profits recording a deficit compared with a surplus for 2021, **profit before tax** dropped by 30% to HK$11,439m and **profit attributable to shareholders** was down by 27% at HK$10,165m.

Net interest income increased by HK$5,159m, or 22%, to HK$28,981m, supported by the 3% increase in average interest-earning assets and a 28-basis-points improvement in the net interest margin together with increased contribution from net-free funds amid rising interest rates. Average interest-earning assets grew by HK$46bn, or 3%, to HK$1,642bn, notably in financial investments and interbank placings. The growth in average interest-earning assets reflects the Bank's continuing efforts to strengthen its assets and liabilities and maintain a balanced growth strategy.

Net interest margin widened by 28 basis points to 1.77%, attributable mainly to the Group proactively managing its assets and liabilities amid global interest rate rises, which resulted in a widening of deposit spreads and an increase in net-free fund contribution. The net interest spread increased by 17 basis points to 1.59%. The contribution from net-free funds grew by 11 basis points to 0.18%, benefitting from the rising interest rates.

Figures in HK$m	2022	2021
Net interest income/(expense) arising from:		
– financial assets and liabilities that are not at fair value through profit or loss	**30,085**	24,719
– trading assets and liabilities	**177**	130
– financial instruments designated and otherwise mandatorily measured at fair value through profit or loss	**(1,281)**	(1,027)
	28,981	23,822
Average interest-earning assets	**1,641,898**	1,595,483
Net interest spread	**1.59%**	1.42%
Net interest margin	**1.77%**	1.49%

The HSBC Group reports interest income and interest expense arising from financial assets and financial liabilities held for trading and income arising from financial instruments designated at fair value through profit and loss as 'Net income/(loss) from financial instruments measured at fair value through profit or loss' (other than for debt securities in issue and subordinated liabilities, together with derivatives managed in conjunction with them).

The table below presents the net interest income of Hang Seng Bank, as included in the HSBC Group accounts:

Figures in HK$m	2022	2021
Net interest income and expense reported as 'Net interest income'		
– Interest income	**39,316**	28,030
– Interest expense	**(9,231)**	(3,315)
– Net interest income	**30,085**	24,715
Net interest income and expense reported as 'Net income from financial instruments measured at fair value through profit or loss'	**(1,104)**	(893)
Average interest-earning assets	**1,595,258**	1,556,663
Net interest spread	**1.70%**	1.52%
Net interest margin	**1.89%**	1.59%

Net fee income dropped by HK$1,508m, or 23%, to HK$5,069m, due mainly to reduced demand for wealth management products, as a result of muted investor sentiment and the impact of the fifth COVID wave in Hong Kong, which resulted in the temporary closure of parts of the Bank's branch network during 1H22. The volatility in global equity markets and the unfavourable investment climate dampened investor activity, leading to a 41% drop in fee income from retail investment funds. With lower stock turnover volumes, stockbroking and related services income was down by 30%. Card services income fell by 3%, due mainly to lower card spending and merchant sales with the persistence of the pandemic in Hong Kong especially in 1H22. Credit facilities fees was down by 32%, due to lower new corporate lending activities. Import and export fee income dropped by 16%. Insurance business fee income was down by 4%. These unfavourable factors were partly offset by higher fee income from account services and remittances, which were up by 8% and 4% respectively.

Net income/(loss) from financial instruments measured at fair value through profit or loss recorded a loss of HK$429m compared with a gain of HK$4,346m in 2021.

Net income/(loss) from assets and liabilities of insurance businesses measured at fair value through profit or loss recorded a loss of HK$2,049m compared with a gain of HK$2,610m in 2021. Investment returns on financial assets supporting insurance contract liabilities were adversely affected by unfavourable movements in the equity markets.

To the extent that these investment returns were attributable to policyholders, there was an offsetting effect in 'Net insurance claims and benefits paid and movement in liabilities to policyholders' or 'movement in present value of in-force long-term insurance business ('PVIF')' under other operating income/(loss).

Net trading income and net income from financial instruments designated at fair value through profit or loss together decreased by HK$128m, or 7%, to HK$1,611m, with higher revenue from funding swap transactions more than offset by the losses of equity-linked derivatives products in life insurance business investment portfolio and lower debt securities trading income.

Change in expected credit losses and other credit impairment charges increased by HK$4,819m, or 172%, to HK$7,626m.

Figures in HK$m	2022	2021
Loans and advances to banks and customers	7,669	2,844
– new allowances net of allowance releases	7,367	2,983
– recoveries of amounts previously written off	(131)	(167)
– other movements	433	28
Loan commitments and guarantees	(8)	(43)
Other financial assets	(35)	6
	7,626	2,807

In the fourth quarter of 2021, a number of mainland China property developers faced liquidity issues as a result of developments in the mainland China property market. The Bank updated its outlook for the mainland China commercial real estate sector, and took early actions to actively manage its portfolio and make higher provisions for ECL throughout 2021. In light of the ongoing refinancing risk facing the mainland China commercial property sector in 2022, the Bank has made further ECL charges on certain sizable corporations in the sector. The Bank will continue to proactively manage its portfolio in order to minimise further adverse impacts and maintain overall quality. Change in ECL for stage 1 and stage 2 unimpaired credit exposures recorded a net charge of HK$1,282m compared with HK$1,065m in 2021. This is a net impact of additional charges made during the year mainly in the mainland China commercial real estate sector and increase in ECL from the update of the economic outlook to reflect heightened economic uncertainty, inflation and rising interest rates, partly offset by the migration of previously provided stage 2 allowances to stage 3 allowances. Wealth and Personal Banking ('WPB') recorded a net ECL release in stage 1 and 2 of HK$3m, compared with a net release of HK$179m for 2021. Commercial Banking ('CMB') and Global Banking ('GB') together recorded net ECL charges in stage 1 and 2 for both years, with a collective increase of HK$38m to HK$1,280m in 2022 when compared with 2021.

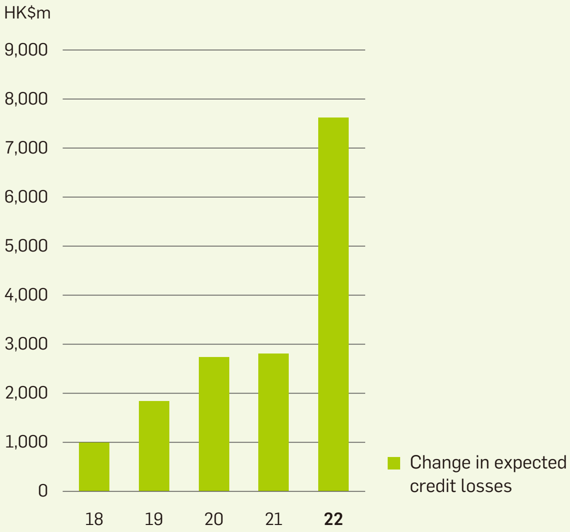
Change in ECL for stage 3 and purchased or originated credit-impaired exposures ('impaired credit exposures') increased by HK$4,602m to HK$6,344m when compared with 2021, driven primarily by an increase in ECL charges related to developments in the mainland China commercial real estate sector. WPB's position remained intact with a net charge of HK$500m for 2022. ECL charges for mainly CMB and GB increased by HK$4,595m to HK$5,844m, related primarily to the mainland China commercial real estate sector portfolio.

Gross impaired loans and advances increased by HK$13.8bn, to HK$24.2bn, against 2021 year-end. Certain impaired corporate loans were downgraded during the year to reflect the latest developments in the mainland China commercial real estate sector. Taking into account the provided collaterals and allowances for ECL, the Group considers that the current provision level is adequate. Gross impaired loans and advances as a percentage of gross loans and advances to customers stood at 2.56% as at 31 December 2022, compared 1.92% at 30 June 2022 and 1.04% at 31 December 2021. Overall credit quality remained robust.

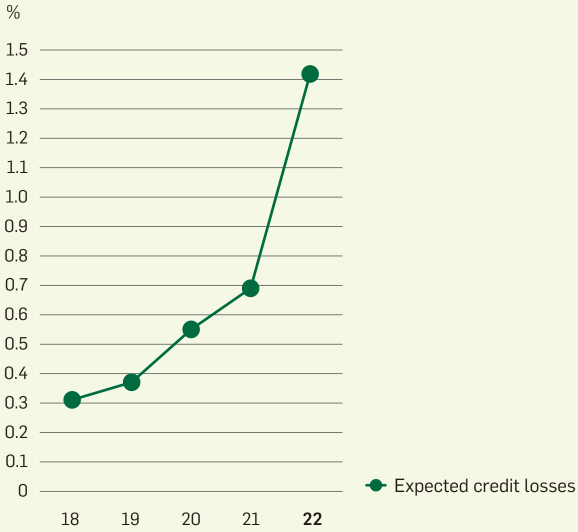
Expected credit losses and gross impaired loans and advances as a percentage of gross loans and advances to customers are as follow:

	At 31 December 2022	At 31 December 2021
Expected credit losses as a percentage of gross loans and advances to customers	1.42%	0.69%
Gross impaired loans and advances as a percentage of gross loans and advances to customers	2.56%	1.04%

Change in expected credit losses and other credit impairment charges



Expected credit losses as a percentage of gross loans and advances to customers



Net insurance premium income increased by HK$6,468m, or 46%, to HK$20,551m, contributed mainly from strong sales of the Bank's new whole-life product, especially single-pay payment mode, for the high-net-worth customer segment. Correspondingly, there was also an increase in **'Net insurance claims and benefits paid and movement in liabilities to policyholders'** which rose by HK$2,876m, or 18%, to HK$19,226m.

Other operating income/(loss) registered a loss of HK$1,274m compared with a profit of HK$322m for 2021, due mainly to the change in the movement in PVIF. The negative adjustment to PVIF has moved from HK$188m in 2021 to HK$1,743m in 2022, reflecting the combined effects of several factors. Negative adjustment to PVIF arising from actuarial assumption updates along with the unfavourable discounting impact of interest rate rises in the valuation of PVIF, offset by positive adjustment to PVIF to account for the sharing of unfavourable investment returns attributable to policyholders.

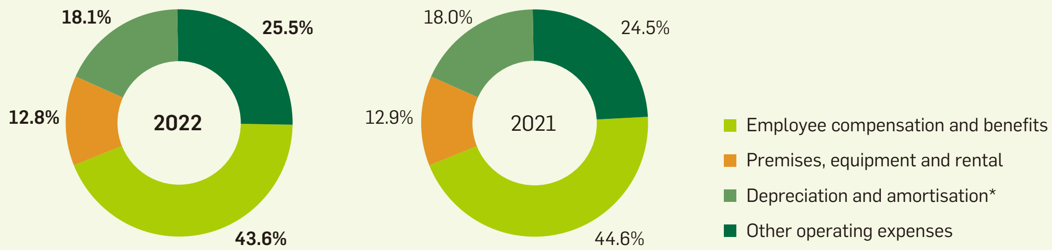
Operating expenses increased by HK$644m, or 5%, to HK$14,778m. This reflects an increase in investments, mainly IT-related costs to enhance our digital capabilities, as well as amortisation of intangible assets and staff costs.

Staff costs increased by 2%, mainly in wages and salaries, partly offset by lower performance-related pay and reduction in headcount. Depreciation charges were down by 4%. Amortisation of intangible assets increased by 49%, related mainly to capitalised IT systems development costs to support business growth within the Group. General and administrative expenses were up by 7%, reflecting continued investment in digital capabilities across all business segments and higher marketing and advertising expenses.

The cost efficiency ratio rose by 0.9 percentage points to 43.5%, as the increase in costs slightly outpaced the increase in total revenue.

	2022	2021
Cost efficiency ratio	**43.5%**	42.6%

Operating Expenses



* Included depreciation of right-of-use assets of HK$514m in 2022 (2021: HK$574m)

Full-time equivalent staff numbers by region	**At 31 December 2022**	At 31 December 2021
Hong Kong and others	**7,101**	7,708
Mainland China	**1,607**	1,688
	8,708	9,396

Reflecting the unfavourable property market as compared with 2021, **net surplus/(deficit) on property revaluation** recorded a net deficit of HK$108m compared with a net surplus of HK$82m in 2021. **Share of profits of associates** recorded a net deficit of HK$10m, compared with a net surplus of HK$72m in 2021, mainly reflecting the revaluation deficit of a property investment company.

Analysis of income from wealth management business

Figures in HK$m	**2022**	2021
Investment services income[1]:		
- retail investment funds	**903**	1,552
- structured investment products	**453**	390
- securities broking and related services	**1,411**	2,005
- margin trading and others	**65**	71
	2,832	4,018
Insurance income:		
– life insurance:		
– net interest income	**4,542**	4,273
– non-interest income/(expense)	**(81)**	(40)
– investment returns on life insurance funds (including share of associate's profits/(losses), net surplus/(deficit) on property revaluation backing insurance contracts and change in expected credit losses and other credit impairment charges)	**(2,399)**	2,879
– net insurance premium income	**20,551**	14,083
– net insurance claims and benefits paid and movement in liabilities to policyholders	**(19,226)**	(16,350)
claims, benefits and surrenders paid/payable	***(11,923)***	*(11,037)*
movement in liabilities to policyholders	***(7,303)***	*(5,313)*
– movement in present value of in-force long-term insurance business	**(1,743)**	(188)
	1,644	4,657
– general insurance and others	**243**	278
	1,887	4,935
	4,719	8,953
Of which: Market impacts	**(3,149)**	69

[1] Income from retail investment funds and securities broking and related services are net of fee expenses. Income from structured investment products includes income reported under net fee income on the sales of third-party structured investment products. It also includes profits generated from the selling of structured investment products in issue, reported under net income/(loss) from financial instruments measured at fair value through profit or loss.

Wealth management business income decreased by HK$4,234m, or 47%, to HK$4,719m, mainly due to the net adverse movements in market impacts in life insurance manufacturing, reflecting unfavourable movement in equity markets and discounting impact on PVIF. Investment distribution revenue, notably in retail investment funds and securities broking and related services, fell by HK$1,186m, or 30%, to HK$2,832m as muted customer sentiment led to lower activity in equity markets when compared with a more favourable investment sentiment in 2021.

Income from insurance business (included under 'net interest income', 'net fee income', 'net income/(loss) from financial instruments measured at fair value through profit or loss', 'net insurance premium income', 'movement in present value of in-force long-term insurance business' and 'others' within 'other operating income/(loss)', 'share of profits/(losses) of associates' and after deducting 'net insurance claims and benefits paid and movement in liabilities to policyholders' and 'change in expected credit losses and other credit impairment charges') decreased by HK$3,048m, or 62%, to HK$1,887m. This has included the market impacts with a loss of HK$3,149m compared with a gain of HK$69m in 2021.

Net insurance premium income increased by HK$6,468m, or 46%, to HK$20,551m, contributed from overwhelming sales of our new whole life product (combining the feature of asset accumulation with enhanced guaranteed cash value, legacy planning and whole-life protection in one single product), especially single pay payment mode, in the high net worth customer segment. Correspondingly, there was also an increase in 'Net insurance claims and benefits paid and movement in liabilities to policyholders'.

The market impact represents the total profit or loss impact on deviations of economic parameters (e.g. yield curve movement and investment return) at the start of the year or against the valuation assumptions, in coming up the income from insurance business. The deterioration in market impact was mainly due to the net effect of unfavourable discounting impact from interest rate increase in valuation of present value of in-force, coupled with the unfavourable investment performance in 2022; as compared with the market impacts dominated by favourable investment performance in 2021. In general, if the high interest rate is sustained, it should be beneficial to life insurance business in long run.

To the extent that the investment returns were attributable to policyholders, there was an offsetting effect in 'net insurance claims and benefits paid and movement in liabilities to policyholders' and 'movement in PVIF' under 'other operating income/(loss)'.

The negative adjustment to PVIF movement has moved from HK$188m in 2021 to HK$1,743m in 2022, reflecting the combined effect of several factors. Negative adjustment to PVIF arising from net impact from actuarial assumption updates along with unfavourable discounting impact of interest rate rises in the valuation of PVIF, offset by positive adjustment to PVIF to account for the sharing of unfavourable investment returns attributable to policyholders.

General insurance income and others decreased by HK$35m, or 13%, to HK$243m compared with 2021, mainly due to lower MPF commission income arising from the unfavourable fund performance, which aligned with major equities index movements in the markets.

2H22 compared with 1H22

Despite difficult operating conditions in 1H22, we used our competitive strength to serve the diverse financial needs of customers and maintain business momentum to deliver a strong performance in 2H22, with double-digit growth in net operating income before changes in ECL and profit attributable to shareholders.

Net operating income before change in expected credit losses and other credit impairment charges grew by HK$4,084m, or 27%, to HK$19,028m, driven by the 35% growth in net interest income, partly offset by the 7% drop in non-interest income. With the 2% increase in operating expenses and notable provisions made on ECL charges, **operating profit** increased by HK$491m, or 9%. **Profit attributable to shareholders** increased by HK$757m, or 16%, when compared with 1H22.

Net interest income was up HK$4,269m, or 35%, driven by a stronger net interest margin as the Group proactively managed its assets and liabilities on the back of rising interest rates. The net interest margin improved by 48 basis points to 2.00%, reflecting widened deposit spreads and increased contribution from net-free funds. However, the increasing competition for time deposits resulting in a change in less favourable deposit mix from current and savings account deposits ('CASA') to time deposits and will place downward pressure on deposit spreads.

Non-interest income fell by HK$185m, or 7%, mainly reflecting lower levels of customer activity across the Group's fee-generating business, notably in stockbroking, retail investment funds and credit facilities fee income, partly offset by the increase in card services income.

Operating expenses increased by HK$152m, or 2%, driven mainly by higher general and administrative expenses with increases in marketing and advertising costs, consultancy fees, data-processing fees and IT-related investment. The Group will continue to actively manage operating expenses to facilitate the continued direction of resources towards further optimising its digital capabilities and customer experience. The cost efficiency ratio improved by 9.7 percentage points to 39.2%, as revenue grew at a faster pace than the increase in operating expenses in 2H22. The Group achieved a positive jaw of 25.2% when compared with 1H22.

The Group continued to make significant provisions to its ECL in 2H22 in response to the challenges faced by the mainland China commercial real estate developers. Total **ECL charges** increased by HK$3,434m to HK$5,530m, due to higher impairment charges under stage 3 impaired credit exposures. Stage 1 and 2 ECL charges recorded a net charge of HK$2,077m in 2H22 due to higher ECL made against the mainland China commercial real estate sector. This compared with a net release of HK$795m in 1H22, due to the migration of previously provided stage 2 allowances to stage 3 allowances on mainland China commercial real estate sector. Stage 3 ECL charges increased by HK$562m when compared with 1H22 to HK$3,453m, reflecting the downgrade of certain corporate customers related to mainland China commercial real estate sector.

Net deficit on property revaluation was broadly the same when compared with 1H22. **Share of profits/(losses) of associates** recorded a profit compared with a loss in 1H22, mainly reflecting the property revaluation movement of a property investment company.

Segmental Analysis

The table below sets out the profit before tax contributed by the business segments.

Figures in HK$m	Wealth and Personal Banking	Commercial Banking	Global Banking	Global Markets	Other	Total
Year ended 31 December 2022						
Profit/(loss) before tax	**8,697**	**775**	**380**	**2,024**	**(437)**	**11,439**
Share of profit/(loss) before tax	**76.0%**	**6.8%**	**3.3%**	**17.7%**	**(3.8)%**	**100.0%**
Year ended 31 December 2021 (re-presented)						
Profit/(loss) before tax	9,682	4,147	962	2,003	(409)	16,385
Share of profit/(loss) before tax	59.1%	25.3%	5.9%	12.2%	(2.5)%	100.0%

Wealth and Personal Banking (‘WPB’) recorded a 1% year-on-year decrease in net operating income before change in ECL and other credit impairment charges to HK$18,287m. Operating profit and profit before tax dropped by 9% to HK$8,707m and by 10% to HK$8,697m respectively.

WPB remained resilient against the backdrop of the fifth COVID wave in Hong Kong and increased volatility in investment markets. Net operating income before change in ECL and other credit impairment charges fell by HK$219m year-on-year which was driven by the adverse impact of financial market movements on life insurance manufacturing of HK$3,084m. This was partly offset by the 32% growth in net interest income, particularly in 2H22, riding on the interest rate hike cycle. Net interest income grew by 53% in 2H22 compared with 1H22.

Our balance sheet remains strong. In 2H22, intensified market competition in retail deposits accelerated the shift of funds from current/savings accounts to time deposits. Despite the headwinds, we deepened customer relationships and increased our customer deposits by 6% year-on-year. Gross loans and advances to customers grew by 2% and we sustained market position in various areas, including mortgage registrations, card receivables and personal loans. To meet our customers’ needs for sustainable solutions, we introduced Green Mortgages and Electric Vehicle Loans.

Growth in our strategic customer segments further strengthened our robust foundation for the long-term expansion of our business. Supported by enhanced customer propositions and journeys, and modern messaging platform into personalised product service offering, we deepened existing customer relationships and attracted new clients. We achieved a 16% year-on-year increase in key segments, including high-net-worth and mass & emerging affluent customers.

Our insurance business remained resilient, despite the unfavourable macroeconomic environment and the disruptive effects of the pandemic. Enhancements to our savings/protection products further strengthening our retirement and legacy planning proposition and helped us to capture growth in strategic customer segments. We grew net insurance premiums income by 44% year-on-year. We continued to invest in service innovations and advanced our strategic imperatives. We maintained a top 3 market position in digital insurance, supported in part by the 135% year-on-year increase in the number of digital insurance policies sold.

Our wholly owned subsidiary, Hang Seng Investment Management Limited ('HSVM'), was named the new manager of the Tracker Fund of Hong Kong, the largest exchange-traded fund ('ETF') in Hong Kong. Due in part to taking up this new role, which further strengthens our leadership in the local asset management market, our asset management business grew by 75% year-on-year. In February 2022, HSVM launched the first Hong Kong-listed ESG ETF based on the Hang Seng Index to further enrich product choice in meeting the different needs of investors.

Our broad spectrum of foreign exchange investment products provided a variety of options for customers looking to capture opportunities in the volatile market conditions. We recorded a 166% year-on-year increase in foreign exchange investment customers and the solid sales performance of our Capital Protected Investment deposit ('CPI') has achieved a record growth. We enriched our fixed-income offerings with the relaunching of certificates of deposit, and extended fixed-income trading to our digital channel. This latter development is a major digital service milestone, with all our investment product offerings now available on our digital platform. The fixed-income customer base increased significantly, and sales turnover of fixed-income products grew by 291% year-on-year.

Digital transformation remains a core part of our strategy. We successfully delivered over 460 new digital innovations and enhancements in 2022. Our first-in-market services in Hong Kong include Mobile Cheque Deposit, a Green Receipt (transaction e-Advice) service at branches and the introduction of US equity-linked investments on both mobile and online banking platforms.

Other digital developments include a securities profit and loss tracking service, and an omni-channel shopping cart and document centre function that allows for the offline-to-online completion of investment fund transactions and the convenience of reviewing investment documents online. Customers can also now enjoy the flexibility and convenience of online instalment payment services with instant approval when making card purchases or bill payments online.

We introduced a new Relationship Management platform and have equipped all our Prestige Relationship Managers with 'Prestige RM Connect', which enables them to more easily engage with our customers. Supported by all these innovations and enhancements, we recorded an 11% year-on-year increase in the number of monthly mobile active customers and our digital transaction count for deposits, foreign exchange and loans rose by 98% year-on-year.

We introduced our digital influencer, Hazel, who is Hong Kong's first digital influencer in the banking sector. Riding on our 'Green Moments' campaign, we also launched our first non-fungible token ('NFT'), co-created with local Hong Kong artists.

Our initiatives have been well recognised throughout the year with a number of industry awards from different organisations, including 'The Asian Banker Hong Kong Awards 2022 – Best Mobile Banking Service Award' and 'Capital Outstanding eCommerce Awards 2021/22 – Outstanding Digital Banking Service'.

To further drive innovation, we have entered into strategic alliances with various business partners, including to develop an immersive experience for our customers in the Sandbox. We are also continuing to work with the various stakeholders, including fintech partners, to help support central bank digital currency development in Hong Kong.

Commercial Banking ('CMB') recorded an 8% increase in net operating income before change in ECL and other credit impairment charges to HK$9,625m. Operating profit and profit before tax both dropped by 81% to HK$775m.

We achieved good growth in net interest income, which increased by 16% year-on-year. Continuous efforts to acquire new quality customers helped enhance our portfolio and amplify the positive impacts of interest rates hikes.

Non-interest income fell by 22% year-on-year, with external factors such as Hong Kong's fifth COVID wave, signs of weakness in the global economy and increased market volatility having an adverse impact on commercial activity and trade flows. The movements in the financial markets also unfavourably affected our insurance business.

As we moved into the second-half of 2022 with the increasing market interest rate and the relaxation of social distancing restriction, net operating income before change in ECL increased 17% against first half of 2022. We continued to provide tailor-made solutions to meet the specific needs of our customers. Sales of keyperson insurance recorded strong growth.

We moved forward with digital transformation to keep pace with the rapidly evolving financial services ecosystem and to fulfil customer expectations for seamless and simplified bank experiences. We are one of the first batch of banks to use the Commercial Data Interchange, a next-generation financial data exchange platform built by Hong Kong Monetary Authority ('HKMA') to enhance decision-making and shorten loan application times for SMEs. We enhanced our online foreign exchange service with real-time rate quotes to allow customers manage their foreign currency cash flows more effectively.

To better serve customers' daily operations, we revamped our trade platform to improve processing efficiency. This is enabling us to capture new structured trade opportunities in the GBA. The introduction of digital receivables finance has significantly shortened onboarding times. Our new Virtual Card payment service allows customers to handle each transaction with a unique card number for safer online business and easier reconciliation.

We have also prioritised our resources in supporting customers with their sustainability performance and the transition to the low-carbon economy. Our new Wan Chai Business Banking Centre has an ESG-focused service concept and an eco-aware design. ESG specialists at the Centre have completed specialised training in order to provide customers with suggestions and tips for integrating sustainability elements into their business operations.

Green loans and sustainability-linked finance approvals in Hong Kong increased year-on-year. We also launched a Green Deposit service, which provides customers with one way to support greater sustainability, with deposits only being lent to borrowers to finance green and sustainability initiatives.

Quality new customer acquisition remains a key focus. Supported by improved customer experiences in onboarding journey, as well as strategic partnerships with local industry associations and organisations, the number of new customers acquired grew 38% year-on-year.

We increased our ECL provisions in response to the further deterioration in credit conditions in the mainland China commercial real estate sector. Overall, our asset quality remains healthy. We will continue to closely monitor our mainland China commercial real estate sector portfolio.

Global Banking ('GB') maintained net operating income before change in ECL and other credit impairment charges broadly in line with 2021 at HK$2,756m. Operating profit and profit before tax both dropped by 60% to HK$380m.

Net interest income grew by 2% to HK$2,411m compared with 2021. Our customer deposit balance increased by 5% year-on-year, which supported the 5% growth in deposit interest income. We took steps to enhance our loan portfolio, focusing greater diversification. We are also placing more emphasis on trade financing to support our customers' business operation.

With the impact of the fifth wave of COVID in Hong Kong and the slowdown in the global economy, reduced business activity in the market resulted in an 11% year-on-year drop in non-interest income to HK$345m.

We proactively developed new solutions to meet our customers' current and future needs. With our in-depth market knowledge and understanding of our clients' businesses, we used our corporate Application Programming Interface ('API') solution to help them streamline cash management by integrating the process more deeply into their day-to-day business operations.

Year-on-year, we increased our trade loan balance by 41% to HK$22bn which boost up the related net interest income by 75%. Trade related non-interest income also achieved a 15% growth.

Leveraging our strong customer relationships, we continue to develop and diversify our income stream, particularly through our newly established Bond Management team. To further broaden our sources of non-interest income, we proactively expanded our insurance business by offering keyperson insurance to senior executives of our corporate customers.

We continued to support the sustainability agenda with strong growth recorded in newly approved green and sustainability-linked loans in Hong Kong. We also launched a Green Deposit service to corporate customers, enabling them to enjoy deposit returns and support greater sustainability in the business community.

In close collaboration with the Global Market team, we were captured more business providing hedging solutions in the high interest rate environment.

Global Markets ('GM') maintained net operating income before change in ECL and other credit impairment charges largely in line with last year at HK$2,671m. Operating profit and profit before tax both increased by 1% to HK$2,024m.

Net interest income decreased by 15% to HK$1,524m, due to the rapid tightening of global financial conditions in 2022, with rising interest rates challenging the net interest margin. The Markets Treasury team continued to actively seek good market opportunities, and take actions to enhance and diversify the portfolio, while upholding appropriate risk management standards.

Non-interest income increased by 31% to HK$1,147m. The increase is mainly due to strong revenue growth in sales and trading. We successfully captured opportunities in the volatile foreign exchange markets, with revenue from foreign exchange and option trading recording significant growth compared with 2021. We made further good progress with enhancing our service capabilities by implementing new digital solutions to support business growth.

Achievements in the further diversification of our revenue base include the expansion of our Repo business' portfolio by 40% year-on-year. We enhanced our hedging capacity in equity derivatives by including Hong Kong listed equity index futures in the fourth quarter of 2022. We continued with initiatives to deepen GM product penetration among Bank customers through close collaboration with the WPB, CMB and GB teams. In particular, we promoted Hang Seng certificates of deposit ('CD') through collaboration with the CMB Wealth Management team to offer incentives for promoting CD.

We continued with actions to support the development of the green and social bond secondary market.

Balance sheet Analysis

Assets

Total assets increased by HK$74bn, or 4%, to HK$1,894bn compared with 2021 year-end, with the Group maintaining resilient business momentum and progressing with its strategy of enhancing long-term profitability through sustainable growth.

Cash and balances at central banks increased by HK$1bn, or 4%, to HK$18bn. Trading assets and financial assets designated at fair value were down by HK$3bn, or 3%, to HK$76bn.

Customer loans and advances (net of allowances for ECL) decreased by HK$66bn, or 7%, to HK$931bn. Loan growth was muted, partly reflecting the adverse impact of the fifth COVID wave in Hong Kong and disruptions to the global supply chain, as well as the Group's risk mitigation efforts. Loans for use in Hong Kong decreased by 4%. Lending to industrial, commercial and financial sectors decreased by 9%. Lending for property development and property investment was down by 11%. There was increased lending to information technology and financial concerns sectors, but these were more than offset by the decline in loans outstanding from the wholesale and retail trade, manufacturing, transport and transport equipment and 'Others' sectors. Lending to individuals grew by 3%.

With a less active property market, residential mortgages and Government Home Ownership Scheme/Private Sector Participation Scheme/Tenants Purchase Scheme lending grew by 4% and 1% respectively. Credit card advances grew by 1% while other personal lending dropped by 2%.

Trade finance lending decreased by 15%, due mainly to the slowdown of global trade volumes and loan repayment during the year.

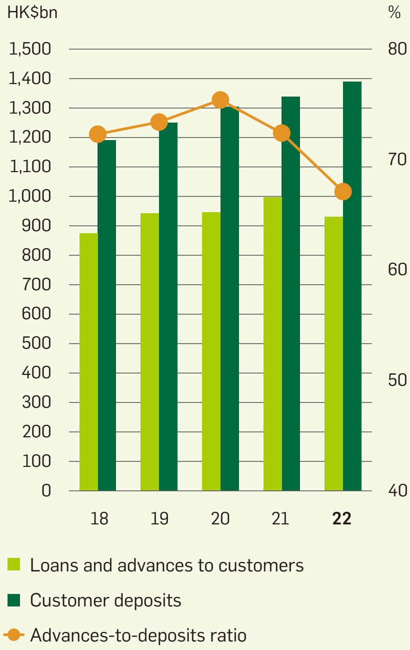
Loans for use outside Hong Kong were down by 12%, due mainly to decreased lending by the Group's mainland banking subsidiary and loans for use outside Hong Kong granted by the Hong Kong office, reflecting the Group's risk mitigation efforts.

Whilst customer lending was sluggish, financial investments grew by HK$122bn, or 24%, to HK$623bn, reflecting the partial redeployment of the commercial surplus and yields enhancement.

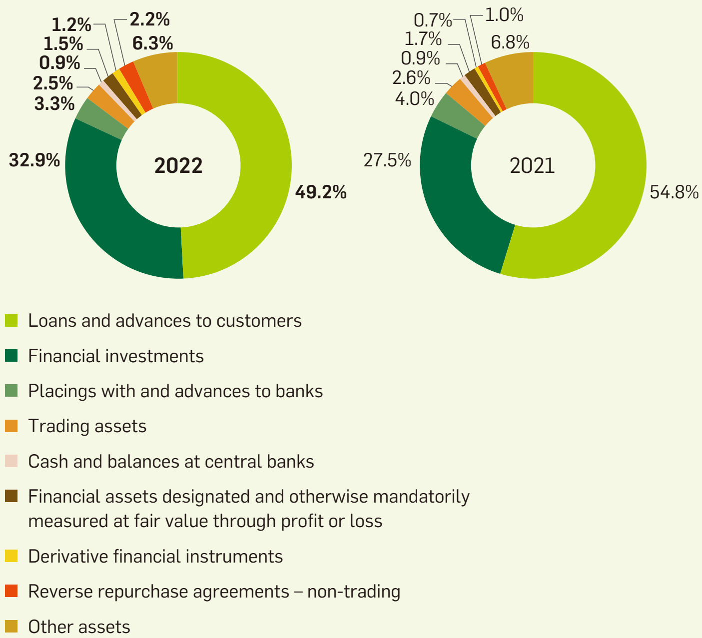
Assets Deployment

Figures in HK$m	At 31 December 2022	%	At 31 December 2021	%
Cash and balances at central banks	**17,609**	**0.9**	16,896	0.9
Trading assets	**47,373**	**2.5**	47,433	2.6
Derivative financial instruments	**22,761**	**1.2**	13,224	0.7
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	**28,861**	**1.5**	31,326	1.7
Reverse repurchase agreements – non-trading	**42,364**	**2.2**	18,821	1.0
Placings with and advances to banks	**62,326**	**3.3**	72,493	4.0
Loans and advances to customers	**931,334**	**49.2**	997,397	54.8
Financial investments	**622,616**	**32.9**	500,386	27.5
Other assets	**118,561**	**6.3**	122,209	6.8
Total assets	**1,893,805**	**100.0**	1,820,185	100.0
Return on average total assets	**0.5%**		0.8%	

Loans and Advances to Customers and Customer Deposits



Assets Deployment

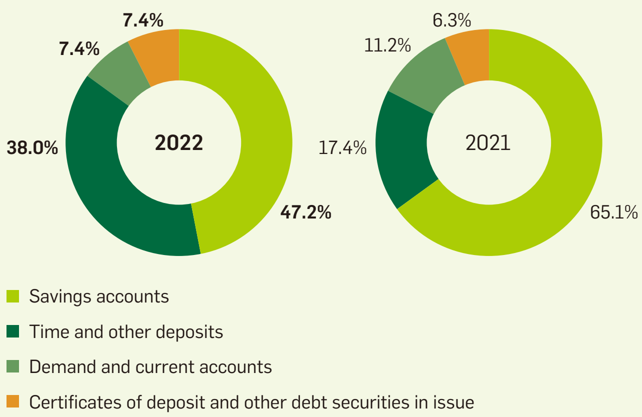


Liabilities and equity

Customer deposits, including certificates of deposit and other debt securities in issue, increased by HK$50bn, or 4%, to HK$1,389bn against the end of 2021. Growth in time deposits in response to rising interest rates was partly offset by the decrease in CASA. CASA as a percentage of total customer deposits fell from 76% at year-end 2021 to 55% at year-end 2022. At 31 December 2022, the advances-to-deposits ratio was 67.1%, compared with 74.5% at 31 December 2021.

Figures in HK$m	At 31 December 2022	At 31 December 2021
Customer loans and advances (net of allowances for ECL)	**931,334**	997,397
Customer deposits, including certificates of deposit and other debt securities in issue	**1,388,841**	1,338,800
Advances-to-deposits ratio	**67.1%**	74.5%

Customer Deposits



Shareholders' equity

Figures in HK$m	At 31 December 2022	At 31 December 2021
Share capital	**9,658**	9,658
Retained profits	**142,680**	140,100
Other equity instruments	**11,744**	11,744
Premises revaluation reserve	**18,338**	18,428
Cash flow hedging reserve	**(816)**	46
Financial assets at fair value through other comprehensive income reserve	**1,737**	2,499
Other reserves	**555**	1,857
Total reserves	**174,238**	174,674
Total shareholders' equity	**183,896**	184,332
Return on average ordinary shareholders' equity	**5.5%**	7.7%

At 31 December 2022, shareholders' equity was HK$184bn, broadly the same level as at the end of 2021. Retained profits increased by HK$2.6bn, or 2%, reflecting profit accumulation after the appropriation of dividends paid during the year. Financial assets at fair value through other comprehensive income reserve decreased by HK$0.8bn, or 30%, mainly reflecting the fair value movement of the Group's investments in financial assets measured at fair value through other comprehensive income. Other reserves dropped by HK$1.3bn, or 70%, mainly reflecting the decrease in the foreign currency exchange reserve as a result of the depreciation of the RMB currency. The cash flow hedging reserve recorded a negative reserve of HK$0.8bn, compared with a positive reserve of HK$46m at the end of 2021, mainly reflecting the interest rate movements of hedging derivatives during the year.