OCBC Bank

Excel for Sustainable Growth.

Our Sustainable Future. Our Enduring Legacy.

Annual Report 2022

90 YEARS OF GIVING — SINCE 1932 —

Contents

Featured on our cover this year is the mangrove tree, which absorbs CO_2 at a prodigious rate. Four times as much carbon can be trapped and stored in mangrove forests and their surrounding mudflats and soil than in comparable tropical forests. For OCBC's 90th anniversary in 2022, we gifted two mangrove projects to the community – 9,000 trees at the OCBC Mangrove Park in Singapore and another 9,000 at the Tebuk Mendeleng mangrove project in Malaysia. These trees will absorb more than 30 million kg of CO_2 in their lifetimes. Mangroves also provide natural infrastructure for greater biodiversity as well as protection against erosion and storm surges. OCBC has been expanding nature-based carbon storage solutions to help fight climate change.

All figures in this Annual Report are in Singapore dollars unless otherwise specified.

Key Highlights

Record net profit of
$5.75 billion

$25 billion net new money inflows across Bank of Singapore and OCBC wealth management franchise

Uplifted Hong Kong hub capability to support ASEAN-Greater China trade and investment flows

Over $10 billion in new sustainable finance commitments to bring total commitments to $44 billion, on track to achieve $50 billion by 2025

Achieved **carbon neutrality** for emissions from banking operations

Over 500,000 man-hours in productivity improvement

Invested over **$250 million** in Phase One (2019 – 2022) of seven-year Digital Core Roadmap to accelerate digital transformation

Unveiled **OCBC Mangrove Park,** Singapore, part of a 18,000-mangrove tree contribution to fighting climate change

Over **65,000** staff volunteer hours logged in helping the disadvantaged in our communities

Message from Chairman & CEO

"It was a year of strong performance for OCBC. Despite economic challenges, we achieved our best-ever net profit. We executed our transformational strategic priorities to drive growth and doubled down on our sustainability efforts. We supported and made a difference to our stakeholders – customers, employees, communities and shareholders. We are confident that OCBC will grow from strength to strength for many years to come."

Dear Shareholders
2022 was the year OCBC celebrated its 90th anniversary. We delivered our best-ever net profit despite considerable global headwinds. We continued to achieve good progress in executing on our strategy, and made significant advancements in our commitment to our sustainability agenda. Our organisational capabilities were further enhanced. We stepped up investments in technology and our people which yielded positive outcomes, while wholeheartedly supporting the communities we serve. OCBC remains fully committed to deliver excellence and sustainable value for all our stakeholders.

With much of the world adapting to Covid, 2022 had initially started on a positive footing. Developed countries were gradually reopening, providing momentum for a global economic recovery. However, the start of the Russia-Ukraine crisis in February 2022 precipitated a spike in commodity and energy prices, disrupted supply chains and heightened volatilities in financial markets. Inflation turned out to be higher and more persistent than the initial expectations of many central banks. Monetary policies were tightened through a series of rapid interest rates hikes. In Greater China, ongoing pandemic-related restrictions during the year contributed to a slowdown in economic activities. The combination of these conditions curtailed global growth in 2022.

Despite these headwinds, OCBC delivered a record operating performance in 2022. Accordingly, we are pleased to raise our 2022 dividend to 68 cents, up 28% from the previous year.

Record Financial Performance

We achieved record high Group net profit, improved return on equity, better efficiency ratios and increased shareholder returns, whilst we maintained our strong capital position. Our diversified income streams across business lines and geographies enabled us to deliver well-balanced growth. Our results reflect the foundations we have laid in the previous years to grow our franchise, optimise our balance sheet and prudently manage our portfolio.

OCBC Group net profit rose 18% to $5.75 billion. Return on equity of 11.1% was 1.5 percentage points above 2021, while earnings per share rose 20 cents to $1.27. Total income increased 10% to $11.7 billion, largely driven by higher net interest income, which surpassed $7 billion for the first time, on the back of asset growth and net interest margin improvement. Our well-positioned balance sheet allowed us to benefit from a rising interest rate environment and net interest margin expanded 37-basis points to 1.91%, the highest level in over 10 years. Operating expenses rose less than income growth, as we maintained cost discipline and paced our ongoing investments to drive franchise growth, raise productivity and deliver operational

Strong Financial Performance

$11.7b ▲ 10%
Record Total Income

$5.75b ▲ 18%
Record Net Profit

$295b ▲ 2% ▲ 4.5% *(in constant currency terms)*
Customer Loans

$350b ▲ 2%
Customer Deposits

Creating Value for Shareholders

$1.27 ▲ 18%
Earnings Per Share

11.1% ▲ 1.5 percentage points
Return on Equity

1.25% ▲ 0.12 percentage points
Return on Assets

68 cents ▲ 28%
Higher Dividend Per Share

Progressing on Sustainability Agenda

$44b ▲ 30%
Sustainable Financing Commitments

>$3b ▲ >50%
SME Sustainable Financing Commitments

Net-Zero by 2050
1 of only 4 ASEAN Banks to Pledge Commitment

Carbon Neutrality
Achieved for Banking Operational Emissions

efficiencies. With a comparatively better credit environment in 2022, total allowances of $584 million were 33% lower.

Loans grew 4.5% on a constant currency basis to $295 billion while deposits were up 2% to $350 billion. With proactive monitoring and stress testing of our loan book, our portfolio quality remained resilient with the non-performing loan ratio declining to 1.2%. Our non-performing assets coverage ratio stood at 114%.

Our strong funding, liquidity and capital positions were maintained, with CET1 ratio at 15.2%. This provides us with continued flexibility to pursue growth opportunities and buffer for uncertainties. We are one of the world's most highly-rated banks with Aa1 credit rating from Moody's and AA- from both Fitch and S&P.

Dividends

The Board has recommended a final dividend of 40 cents per share, which brings the full year 2022 dividend to 68 cents, a 28% increase from the previous year's 53 cents. Barring unforeseen circumstances, we aim to deliver a dividend payout ratio of 50%. Full year 2022 payout ratio is at 53% against net profit, which exceeds 49% a year ago. The dividend increase demonstrates our strong capital position and confidence in OCBC's ability to generate earnings growth over the long-term.

Making Great Leaps Forward in Our Sustainability Journey

The firm commitment of the Board and Management to effective stewardship and corporate governance is the bedrock of our stakeholders' trust in us, and we continue to be recognised for our high standards of governance and responsible business practices. We adopt a robust and holistic approach to positive environmental, social and governance (ESG) factors. This is integrated across how we operate our business and manage our risks. Our ongoing efforts relating to sustainability have led us to earn an inaugural inclusion on the Steward Leadership 25 list, awarded by the Stewardship Asia Centre, as well as on the FTSE4Good Index. Further details are shared in our Sustainability Report which is separately published on our website.

Driving Transition to Low-Carbon Economy

We established a Board Sustainability Committee to give greater focus on our sustainability agenda, a key strategic pillar. In 2022, we achieved carbon neutrality for our banking operational emissions. We are one of only four banks in ASEAN to pledge our commitment towards achieving net-zero in our lending and investments businesses by 2050 as a signatory to the United Nations-convened, industry-led Net-Zero Banking Alliance. We have begun developing a systematic plan to achieve this goal and aim to unveil our sectoral financed emission targets by the first half of 2023. As part of our decarbonisation efforts, more than $25 million will be deployed in energy-efficient technology across the Group in Singapore, Malaysia and Greater China. We sponsored two large-scale mangrove restoration projects in Singapore and Malaysia in commemoration of our 90th anniversary. In Singapore, $3 million will be contributed to the OCBC Mangrove Park to help grow 9,000 mangrove trees. Across neighbouring Malaysia, another 9,000 trees will also be grown at the Tebuk Mendeleng mangrove project in the state of Selangor.

Achievements

One of the World's Best Banks (Singapore)
Awarded by Forbes

One of the Strongest Banks in Asia Pacific
Awarded by The Asian Banker

Best Managed Board above $1b in market cap (Bronze)
Awarded by Singapore Corporate Awards

Most Transparent Company Award, Runner Up
Awarded by the Securities Investors Association (Singapore)

Included on the **FTSE4Good Index**

Helping Our Customers to Decarbonise

Our total sustainable financing commitments grew to $44 billion in 2022, which is well on-track towards our stated target of $50 billion by 2025. We funded green buildings and projects that generate clean energy such as wind and solar farms. This included nearly 70 labelled large sustainable financing transactions, which saw OCBC advising and participating in the first healthcare social bond and corporate green retail notes issued in Singapore. Our SME sustainable financing commitments grew more than 50% to over $3 billion. Our SME Sustainable Finance Framework, first launched in Singapore in 2020, was expanded to Malaysia, Indonesia and Hong Kong.

OCBC's 'Eco-Care' car, home, renovation and solar panel loans encourage retail customers to go green through incentives like promotional interest rates. We listed Lion-OCBC Securities Singapore Low Carbon ETF, Singapore's first ETF that focuses on the top 50 Singapore companies with a lower carbon footprint.

Executing Well on Our Strategic Priorities

Our optimism for OCBC's future is driven by the many strengths we possess, which stem from our diversified regional franchise, solid financial position and committed employees. Our unique and highly-interconnected franchise is generating good business momentum. We have a robust balance sheet, strong capital base and high levels of liquidity, supported by a comprehensive risk management framework. Through the use of cutting-edge technology, our innovative digital solutions have sharpened our competitive position, driven meaningful insights and brought convenience for our customers.

Supporting Regional Business Activities

One of our key strategic priorities is to support growing ASEAN-Greater China trade and investment flows along the regional corridor. We are focused on enhancing our wholesale banking capabilities to better serve corporates and government-related entities, some of which are set out in the section above on sustainability. We are boosting the

Head of Global Consumer Financial Services Sunny Quek, Group Chief Executive Officer Helen Wong and Head of Personal and Premier Banking Singapore Bob Ng at the official opening of the Wisma Atria branch on 25 November 2022, OCBC Bank's largest integrated lifestyle and banking branch in Singapore.

onshore-offshore connectivity between our Singapore-ASEAN-Greater China network – to be the bank of choice for both China and Hong Kong SAR corporates venturing into ASEAN, and for our network customers expanding into Greater China. We have expanded our Greater China Business Office coverage beyond Singapore, Malaysia and Thailand, to include Indonesia. We strengthened our product and transaction banking capabilities in Hong Kong to deepen our position as a regional hub. We are the first bank in Singapore to leverage highly-secured digital passport authentication for foreign business owners of Singapore-incorporated SMEs seeking to open their first business banking account. We are ranked the top two and top three for loan syndication in Singapore and Malaysia respectively and maintained our top three ranking for Singapore dollar bonds origination.

Expanding into New Economy & High-Growth Industries

We are building new partnerships and integrating ecosystems beyond conventional banking channels, playing a broader and more entrenched role across value chains. We formed new partnerships in areas such as digital trade finance, mobility, environment, and food and agriculture, and these set the foundations for us to unlock long-term value from these emerging sectors.

Capturing Asian Wealth Flows

We have built a deeper and broader value equation for our customers across our wealth management business. We raised our private banking presence in the region to serve ultra-high and high net worth customers, such as setting up BOS Wealth Management Malaysia, and offering onshore private banking services in China through OCBC Wing Hang. Our private banking net new money fresh funds in 2022 reached the highest in five years. To serve OCBC's Premier Private Client (PPC) and Premier Banking customers, we strengthened our regional proposition in our key markets through capitalising on our strong network. We expanded the suite of products and services on our core Group Wealth Platform (GWP). First launched for Bank of Singapore, GWP was rolled out to OCBC's PPC and Premier Banking customers in Singapore and Malaysia in 2022, allowing us to deliver superior offerings and advisory services with unified investment views on one platform. Customers can also now open premier banking accounts in Singapore and Hong Kong together in a single application, providing a seamless regional onboarding experience. In addition, OCBC Wing Hang launched the Northbound Wealth Management Connect Service to provide new investment channels and broad asset allocation options for customers. Our highly successful collaboration with our insurance subsidiary, Great Eastern Holdings, has enabled us to consistently be amongst the top two in bancassurance sales in Singapore over the years, with this strong partnership also extended in Malaysia and Indonesia.

Driving Group-Wide Collaboration

Central to all of these is aligning ourselves internally to serve our customers as a single relationship across markets as they expand globally. We forged a "One Group" integrated approach to work seamlessly and propel group-wide collaboration across our highly-interconnected business franchise. We augmented our organisational structure in 2022 by strengthening and expanding the scope of our Group Customer Experience Office and establishing the Global Wholesale Bank Sustainability Office. These complement some of the changes we made in the previous year when we implemented a tighter group-wide matrix reporting structure, appointed a Group Chief Operating Officer and established a Group Data Office.

Fostering a High Performance Workforce

Our commitment to attracting, developing and retaining talent is key to achieving our long-term goals. We are intensifying our efforts in talent growth and development, upskilling our workforce and enhancing the overall employee experience. We made significant investments in helping our employees develop to their greatest potential and be future-ready. In 2022, we made a number of key management appointments as part of our succession planning and ongoing commitment to groom the next generation of leaders for OCBC. They include the Group Chief Financial Officer, Group Chief Risk Officer, Head of Global Wholesale Banking, Head of Global Consumer Financial Services, Head of Group Human Resources and CEO of OCBC Bank Malaysia.

New Chairman of the Board

Mr Ooi Sang Kuang retired as Chairman and Director of the Board on 31 January 2023 and was succeeded by Mr Andrew Lee on 1 February 2023. Mr Lee was first appointed to the Board on 18 February 2022. He has more than 30 years of consumer banking and insurance experience in Singapore and elsewhere in South-East Asia. He joined the Group in 1999 and during his 18-year tenure up to 2017, held key executive and leadership appointments at OCBC Bank and Great Eastern. Prior to his distinguished career at the Group, Mr Lee held senior executive positions at Standard Chartered Bank.

During Mr Ooi's nine-year tenure as Chairman, he led the Board in crafting the Group's strategic vision of creating a strong Greater China platform, and sharpening the corporate structure and operating model to support the growth of our core markets. He ushered in a refreshed set of corporate values in 2019 and also steered OCBC during the Covid crisis to emerge stronger. On behalf of the Board, we would like to convey our deep appreciation to Mr Ooi for his invaluable leadership and wise counsel. We would also like to take this opportunity to wish him all the best ahead.

Outlook

The global economy is expected to face continued challenges in the year ahead as the near-term outlook remains uncertain. There is rising recession worries in major economies, which are expected to see slower growth from elevated inflation, rising interest rates, lower consumer spending and reduced industrial production. As central banks in advanced economies prolong their contractionary monetary policies to bring inflation under control, this raises fears of a potential situation where growth and inflation outcomes diverge. The further escalation of geopolitical tensions could further destabilise world markets and complicate the business landscape. We may also need to navigate through ambiguity as more supply chain shocks, whether due to geopolitical or climate complications, cannot be ruled out. However, these could also spur supply chain diversification and wealth flows, as well as, drive sustainability efforts that would present opportunities for ASEAN economies.

It is encouraging to note that despite these challenges, there is cautious optimism on the resiliency of our key markets in Asia, which are mostly expected to outpace the global average GDP growth in 2023. Singapore's labour situation remains firm and the return of travellers continues to benefit the aviation, tourism-related and hospitality sectors. Malaysia and Indonesia's path of steady recovery is also expected to extend through this year on the back of domestic and tourism demand. In China and Hong Kong SAR, the normalisation of Covid restrictions and supportive government measures could provide a conducive environment for growth to pick up from a low base, and help spur regional activities.

OCBC has a highly-trusted brand, strong business franchises, and an established regional network. Our robust balance sheet, prudent risk management and talented workforce allow us to be well-poised to support our customers and pursue growth opportunities. We enter the new year with confidence as we excel for sustainable growth and deliver enduring value to our stakeholders.

Acknowledgements

We would like to express our deep appreciation to our fellow Board members for their invaluable insights, vision and excellent counsel. We welcome Ms Helen Wong, Group CEO, to the Board and bid farewell to three Directors. They are Mr Tan Ngiap Joo and Mr Wee Joo Yeow who have each served nine years on the Board, and Mr Koh Beng Seng who served more than three years. We thank them for their highly valuable contributions to the Group and wish them well.

To the management team and all our employees, we are grateful for your dedication, hard work and teamwork in making 2022 an outstanding year.

Finally, our heartfelt thanks goes to all our customers, shareholders and the communities we serve in for your continuing support to OCBC.

Mr Andrew Lee
Chairman

Ms Helen Wong
Group Chief Executive Officer

February 2023

Excel For Sustainable Growth

With a broad geographical footprint in North and Southeast Asia and a diversified business, OCBC is well-positioned as a leading financial services partner for a sustainable Asia. With our refreshed three-year strategy, we aim to excel for sustainable growth so as to continue creating long-term value for our stakeholders.

Our Purpose

We help individuals and businesses across communities achieve their aspirations by providing innovative financial services that meet their needs.

Our Values

Lasting Value

Integrity

Forward-looking

Respect

Responsibility

How We Create Sustainable Value

3-year strategy refresh to drive growth and reinforce core strengths

Drive Growth

Banking on four growth priorities to capture regional trade, investment and wealth flows	2022 Key Achievements	
Capture rising **Asian wealth** with our Singapore – Hong Kong hubs and digital propositions	• $25 billion net new money inflows across Bank of Singapore and OCBC wealth management franchise	• More than 60% increase in the number of client advisors to serve offshore clients with investable assets of at least $1 million
Support increasing ASEAN-Greater China **trade and investment flows**	• Expanded Greater China Business Office coverage beyond Singapore, Malaysia, and Thailand to include Indonesia to better support Greater China corporates investing in ASEAN	• Uplifted Hong Kong hub capability to support ASEAN-Greater China trade and investment flows
Unlock value from **New Economy** and high-growth industries	• Launched embedded finance proposition through six ecosystem partnerships, enabling SMEs in Singapore, Malaysia and Indonesia to access their financing needs more efficiently	• Launched the global OCBC Sustainability Innovation Challenge with Asia's leading provider of food solutions and gateway services, SATS, to pilot waste management and reduction solutions
Drive transition to a **sustainable** low-carbon world	• Joined the Net-Zero Banking Alliance and achieved carbon neutrality for OCBC's banking operational emissions	• $44 billion in sustainable financing committed by December 2022, on track to achieve target of $50 billion by 2025

Reinforce Strengths

Accelerating investments in transformation, digitalisation and people assets	2022 Key Achievements	
Forge a **"One Group"** integrated customer experience approach	• Increased collaboration across the Group, with 29% rise in cross-border income	• Established Global Wholesale Banking Sustainability Office to accelerate Group-wide decarbonisation efforts for businesses
Invest in accelerating **Transformation and Digitalisation**	• Achieved over 500,000 hours of productivity improvement through the streamlining of close to 150 processes across the Group	• Completed Phase One of a seven-year digital core roadmap supported by a $250 million investment to accelerate digital transformation
Strengthen our **people assets** and culture	• Partnered eight reputable Institutes of Higher Learning to roll out 14 new sustainability certification programmes	• Continued to support the reskilling and transformation needs of our people via OCBC Future Smart Programme. A total of 221 programmes were conducted in 2022, of which 66 were newly curated
Build on our **capital and risk management strengths**	• Achieved strong investment-grade credit ratings of Aa1 by Moody's and AA- by both Fitch and S&P	• Augmented the bank's climate scenario analysis methodology to better understand the risks and opportunities associated with climate change

Who We Create Value For

Shareholders

Customers

Employees

Community

Environment

Financial Highlights

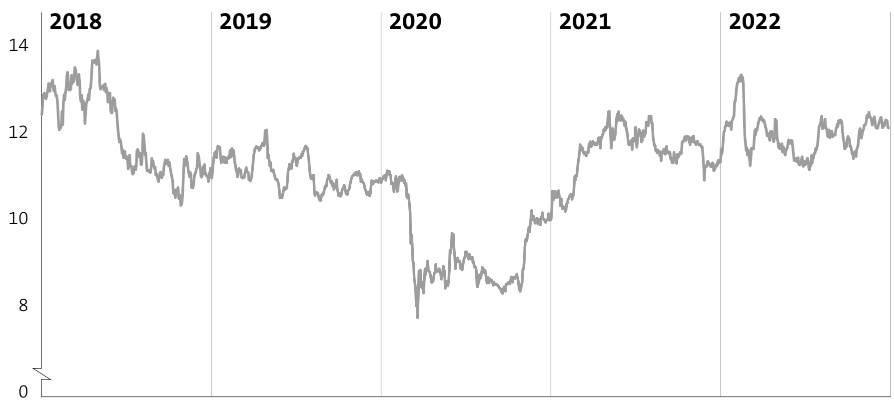
Group Five-Year Summary

	2022	2021	2020	2019	2018
Selected Income Statement Items ($ million)					
Total income	**11,675**	10,596	10,139	10,871	9,701
Operating expenses	**5,026**	4,764	4,439	4,644	4,214
Operating profit before allowances and amortisation	**6,649**	5,832	5,700	6,227	5,487
Amortisation of intangible assets	**104**	103	104	103	102
Allowances for loans and other assets	**584**	873	2,043	890	288
Profit before income tax	**6,939**	5,680	4,165	5,800	5,552
Net profit attributable to equity holders of the Bank	**5,748**	4,858	3,586	4,869	4,492
Cash basis net profit attributable to equity holders of the Bank (1)	**5,852**	4,961	3,690	4,972	4,594
Selected Balance Sheet Items ($ million)					
Net loans to customers	**291,467**	286,281	263,538	262,348	255,502
Deposits of non-bank customers	**350,081**	342,395	314,907	302,851	295,412
Total assets	**559,956**	542,187	521,395	491,691	467,543
Assets excluding life insurance fund investment securities and other assets	**461,961**	442,091	424,327	404,353	390,676
Total liabilities	**505,288**	487,849	470,219	443,088	424,151
Ordinary equity	**51,387**	51,463	48,422	45,662	40,637
Equity attributable to equity holders of the Bank	**53,087**	52,663	49,622	47,162	42,137
Per Ordinary Share ($)					
Basic earnings	**1.27**	1.07	0.80	1.12	1.06
Dividend (cents)	**68.0**	53.0	31.8	53.0	43.0
Net asset value	**11.43**	11.46	10.82	10.38	9.56
Ratios (%)					
Return on equity	**11.1**	9.6	7.6	11.2	11.5
Return on assets (2)	**1.25**	1.13	0.85	1.23	1.17
Dividend cover (times)	**1.86**	2.02	2.50	2.08	2.46
Cost-to-income	**43.0**	45.0	43.8	42.7	43.4
Capital adequacy ratios (3)					
Common Equity Tier 1	**15.2**	15.5	15.2	14.9	14.0
Tier 1	**15.9**	16.0	15.8	15.6	14.8
Total	**17.7**	17.6	17.9	16.8	16.4

(1) Excludes amortisation of intangible assets.
(2) Computation of return on assets excludes life insurance fund investment securities and other assets.
(3) The Group's capital adequacy ratios were computed based on MAS' fully phased-in Basel III rules.

Creating Investor Value

OCBC Share Price ($)



Source: Bloomberg

Five-Year Share Performance

	2018	2019	2020	2021	2022
Share Price ($) [1]					
Highest	13.96	12.14	11.20	12.57	**13.41**
Lowest	10.40	10.51	7.81	10.06	**11.22**
Average	12.05	11.16	9.38	11.62	**12.04**
Last Done	11.26	10.98	10.06	11.40	**12.18**
Market Capitalisation ($ billion)					
(based on last done price) [1]	47.9	48.3	45.0	51.2	**54.7**
Ratios [2]					
Price-to-earnings ratio	11.37	9.96	11.72	10.86	**9.48**
Price-to-earnings ratio (based on core earnings)	11.37	9.79	11.72	10.86	**9.48**
Price-to-NAV (number of times)	1.26	1.08	0.87	1.01	**1.05**
Dividend yield (%)	3.57	4.75	3.39	4.56	**5.65**

(1) Share prices and market capitalisation information are from Bloomberg.
(2) Price ratios and dividend yield are based on average share prices.

Proactive Engagement with Our Investment Community

Close to **600 engagements** with investors, analysts and rating agencies

Coverage by **over 20** research analysts

Conducted **quarterly** results briefings for the media and the investment community

Annual General Meeting held in April 2022 with all **resolutions passed**

Strong **investment-grade** credit ratings

AA-	Aa1	AA-
S&P	Moody's	Fitch

2022 Investor Relations Calendar

The following were key events to engage the investment community in 2022. These were complemented by group and one-on-one meetings throughout the year.

First Quarter	Second Quarter	Third Quarter	Fourth Quarter
4Q and FY21 Results Briefing and Live Webcast Credit Suisse Asian Investment Conference SGX-Goldman Sachs Virtual Singapore Corporate Day	2022 Annual General Meeting 1Q22 Results Briefing Post Results Meeting with Investors Non-Deal Fixed Income Roadshow in Australia ANZ Debt Conference BofA APAC Financial, Real Estate Equity and Credit Conference Citi Annual Pan-Asia Regional Investor Conference Morgan Stanley Virtual ASEAN Conference UBS OneASEAN Conference	2Q and 1H22 Results Briefing and Live Webcast Post Results Meeting with Investors Non-Deal Equity Roadshow in United Kingdom Jefferies Asia Forum Macquarie ASEAN Conference	3Q and 9M22 Results Briefing Post Results Meeting with Investors BofA Asian Credit Conference Morgan Stanley Annual Asia Pacific Summit

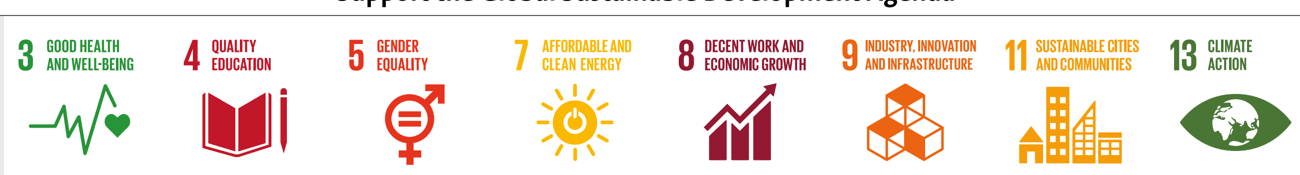
A Leading Sustainable Bank in the Region

We are committed to creating sustainable and long-lasting value for our stakeholders by embedding responsible and sustainable business practices in everything we do.

Our Sustainability Strategy

Our refreshed Sustainability Strategy reinforces our aspiration to create a positive social, environmental, and economic impact for all stakeholders through the three sustainability pillars:

	Purpose and Values	
	Sustainability Governance	
	Three Sustainability Pillars	
Build a Low-Carbon Future Taking climate action by managing climate change risks and seizing opportunities, as well as reducing our own environmental footprint.	**Create Positive Impact for Society** Driving socio-economic initiatives to promote diversity, equity, inclusion and wellbeing of our customers, employees, communities and wider society.	**Act with Integrity** Embedding responsible business practices to safeguard trust and protect the value for our stakeholders.
	13 material ESG Factors	
• Climate Action • Responsible Financing • Sustainable Financing and Investing	• Financial Inclusion • Employee Health, Safety and Wellbeing • Diversity, Equity and Inclusion • Talent Management • Community Development • Economic Contributions	• Strong Governance • Fair Dealing • Financial Crimes Prevention • Cyber Security
	Support the Global Sustainable Development Agenda	



The Board provides oversight for the overall sustainability agenda and strategy at OCBC and is supported by the Board Sustainability Committee. The Board determines the material Environmental, Social and Governance (ESG) factors and considers sustainability issues as part of the Bank's business and strategy. This includes providing oversight of the effective management and monitoring of our material ESG factors, as well as opportunities and risks associated with sustainability issues such as climate and environmental matters.

Chaired by the Group Chief Executive Officer, the Sustainability Council oversees and approves our Sustainability Strategy as well as key strategic initiatives relating to sustainability. The Council also monitors and manages our material ESG factors, as well as approves the Bank's Sustainability Report.

Our Sustainability Strategy contributes to the global sustainable development agenda through the eight selected United Nations Sustainable Development Goals (UN SDGs) where we can make the greatest positive impact in our core markets and create long-term value for our stakeholders.

Please refer to our Sustainability Report for more information by scanning the QR code.

Pillar 1:

Build a Low-Carbon Future

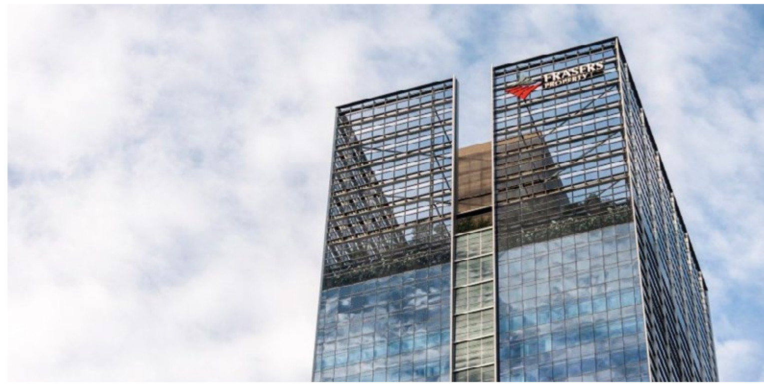
Taking climate action by managing climate change risks and seizing opportunities, as well as reducing our own environmental footprint.

Achieved $44 billion
in sustainable finance commitments, on track to achieving our $50 billion by 2025 target

$3 million contribution to OCBC Mangrove Park to expand carbon sequestration capacity
through partnership with NParks in Singapore's first large-scale ecological mangrove conservation project

Net-Zero Banking Alliance Signatory
reinforcing our commitment towards achieving a net-zero economy

Carbon Neutrality
achieved for our banking operational emissions



Singapore's First Corporate Green Retail Notes with Frasers Property Limited

Sustainability is a key priority for Frasers Property Limited, who has committed to achieving net-zero carbon by 2050. To support its commitment, Frasers Property launched Singapore's first corporate green retail notes in September 2022. The proceeds from the retail notes will go towards financing or refinancing new and existing green projects in accordance with the issuer's Green Finance Framework. OCBC acted as the Sole Green Finance Advisor and a Joint Lead Manager and Bookrunner of the offer.

Hong Kong's First Sustainability-Linked Loan in the Logistics Industry with Kerry Logistics

OCBC Hong Kong successfully issued the city's first sustainability-linked financing in the logistics industry, reinforcing the Bank's strategy of innovating and supporting diversified industries on their ESG journeys. The Bank acted as the sole lender and sustainability advisor to Kerry Logistics Network (KLN), the largest international logistics company listed on the Hong Kong Stock Exchange (HKEX). By achieving predetermined ESG targets, including reduction in energy consumption intensity and water consumption intensity, KLN will be incentivised with interest savings for their HK$980 million loan (equivalent to $165 million).

Pillar 2:

Create Positive Impact for Society

Driving socio-economic initiatives to promote diversity, equity, inclusion and wellbeing for our customers, employees, communities and wider society.

Donated $2.39 million and contributed over 65,000 volunteering hours
to address gaps in society

Upskilling of 400 elderly customers within a year
at heartland branches to educate them on digital banking and scam awareness

First community urban farm in central business district
that is expected to produce 140 kg of vegetables annually to support Singapore's "30 by 30" goal

Launched the Eco-versity certificate programme
in partnership with reputable Institutes of Higher Learning that lead in sustainability thought leadership to upskill employees on sustainability topics

Supporting the Needs of Society with Innovative and Accessible Financial Solutions

With an increasing focus on personal health and wellbeing, Kydra, a local activewear brand, thrived, with a turnover in the millions. However, the need for financing increased in order to keep up with the growing customer demands amid the lengthy production lead time.

To meet Kydra's growing financing needs, OCBC provided invoice financing at a competitive rate. This allows Kydra to unlock valuable capital tied up in unpaid invoices and improve its business cash flow.

Skills-based Volunteering for Lasting Impact

Skills-based volunteering leverages our employees' unique skills to serve the community. Though it requires more planning and development work than one-off projects, skills-based volunteering generates greater and longer-lasting impact. Imparting skills like digital literacy, entrepreneurship and personal management will go a long way in helping individuals and families to succeed.

Our completed projects include teaching seniors to draft wills and lasting power of attorney documents, organising activities to teach special needs youths financial literacy, and helping a food charity utilise data to track demand and stock sufficient supplies for low-income families while minimising waste.

Pillar 3:

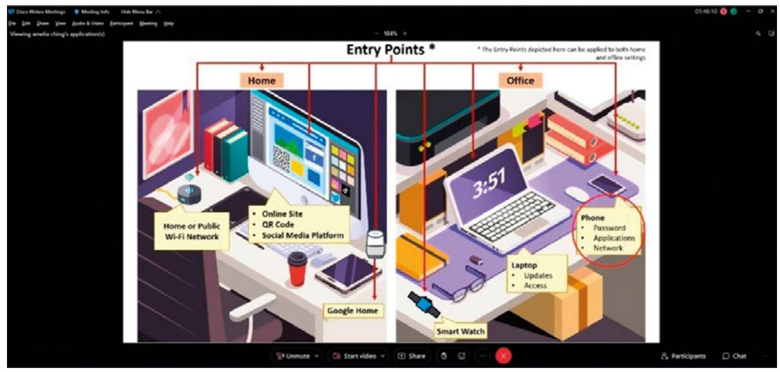
Act with Integrity

Embedding responsible business practices to safeguard and protect the value for our stakeholders.

Formed an Anti-Scam unit
in collaboration with more than 80 institutions to co-locate their staff within the Singapore Police Force's new Anti-Scam Command Office which operates 24/7 to enable a timely response in the case of a scam incident

Launched our Best Execution Policy
to ensure legal compliance and fair dealing when employees execute orders for specific financial instruments

An emergency kill switch for financial scams
was introduced to enable customers to swiftly suspend their accounts via ATMs, the OCBC helpline or the OCBC Digital app



OCBC Cyber Smart Programme: Uplifting Employees' Cyber Vigilance and Competencies

The OCBC Cyber Smart Programme is a strategic initiative to hone employees' knowledge, skills and demonstrated behaviour in managing risks associated with social engineering, data loss and cyber security.

As part of the Cyber Smart Programme, OCBC held a Cyber Resilience Webinar that drew over 500 participants. The aim of the webinar was to educate employees on how to become more cyber resilient and to mitigate the risks of falling prey to cyber-attacks. External speakers were invited to share their insights on cyber threats targeting individuals and how criminals take advantage of victims' emotions and mindsets. The webinar also included a panel session for the panellists to share their knowledge and experience in cyber resilience.

We also held our first Cyber Escape Room Online Competition to enhance employees' cyber competencies. Over 150 participants from various entities and locations across the Group were divided into 38 teams. The participants were given one hour to crack a series of puzzles, failing which 'sensitive information' would be released resulting in damage to a fictional company. The intent was to enhance employees' cyber competencies.

Strengthening Anti-Fraud Detection and Prevention Measures

Given the increasing importance to safeguard against frauds and scams, OCBC works together with key stakeholders to bolster the security of digital banking. For instance, together with ABS and MAS, we continuously collaborate with the industry to review and strengthen our fraud detection and prevention measures. We have also worked alongside the Singapore Police Force (SPF) to reinforce our anti-scam measures, and have formed an Anti-Scam unit within the SPF's new Anti-Scam Command Office which operates 24/7 to enable a timely response in the case of a scam incident.

Additionally, we have enhanced our Fraud Management System to better manage incidents in real time, including the ability to reject transactions and suspend suspect accounts, sending automated email and SMS notifications to warn customers of potential frauds, and refining the Bank's flexibility in creating and amending fraud rules to better protect our customers against financial crimes.

Creating Positive Impact for Society

OCBC Staff Volunteers

Through our #OCBCCares Programme, we provide targeted financial and volunteer support to help underserved communities across our core markets.

Donation breakdown by category:

47%
Environment

53%
Community
(supporting vulnerable seniors, low income families, children and youths, people with special needs)

Impacted **238,974** individuals

13,068 volunteers

65,155 hours contributed

Awards

Singapore

Champion of Good Award 2022, National Volunteering and Philanthropy Centre, for exemplary action in doing good, and being a multiplier in engaging partners and stakeholders to do good

Outstanding Corporate Award, Thye Hua Kwan Moral Charities, for volunteer contributions during the Covid pandemic

Malaysia

Excellence in CSR Strategy (Silver), Human Resources Online HR Excellence Awards 2022

Hong Kong

Named Caring Company for 20th consecutive year, Hong Kong Council of Social Service, for good corporate citizenship and contribution towards creating an inclusive society

Helped **1,096,266** vulnerable individuals as at end 2022 – ahead of target of 1 million by 2023, counting from 2017

10% increase in volunteer hours despite limited face-to-face volunteering opportunities in some markets

2-fold increase in community projects involving staff volunteers' contribution of skills and expertise, for greater and long-lasting impact

Contributed **2,654** hours of skills-based volunteering, a **47%** increase over target of 1,800 hours

Allaying anxiety and depression among vulnerable seniors

Organised face-to-face activities for more than 3,300 seniors across Singapore, Malaysia, Hong Kong and China who faced loneliness during the pandemic due to isolation and disruption in daily routines

Skills-based volunteering for lasting impact

- Created a supermarket simulation programme to teach students with special needs money management skills
- Taught seniors to draft wills and lasting power of attorney documents
- Helped a food charity partner tap on data to track demand for food items and stock sufficient supplies

Supporting inclusiveness for those with special needs

- Empowered physically-challenged beneficiaries in Macau in giving back as they flexed motor skills to make towel flowers and bears for seniors at a Home
- Organised a private movie viewing session in Singapore for adults with special needs, allowing them to move about freely during the show without affecting other viewers

Building resilience to withstand unexpected life events

- Conducted financial literacy workshops for more than 2,800 individuals in Singapore, Malaysia and Indonesia to help alleviate financial stress and anxiety
- 67 volunteers in China raised funds to help high-performing high school students who were unable to complete their studies because of family circumstances

Connecting with the Community Through Sports

OCBC Cycle Singapore 2022

Supporting key sporting activities like cycling and swimming is one way to connect with the community. Besides breaking down social and cultural barriers and providing opportunities to learn life skills, such activities can enhance mental wellbeing.

OCBC Cycle

Singapore

OCBC Cycle has become Singapore's marquee cycling event since we started the programme in 2009. Synonymous with family and friendship bonding, the event also conveys the message of sustainability, to encourage the community to commute by cycling as contribution towards a low carbon world.

After a two-year hiatus due to the pandemic, OCBC Cycle Singapore 2022 brought back an in-person component by gathering 2,000 cyclists for its City Ride. There was also a virtual leg where 6,100 cyclists participated in five categories ranging in distance from 5 to 200 km, an almost 30% increase in participants from 2020.

OCBC-KL Car-Free Morning

We returned as title sponsor of this popular activity following its hiatus since 2020 due to the pandemic. For two hours every Sunday, a 7-kilometre stretch of road will be closed for anyone to walk, run, skate or cycle.

Total number of cyclists
6123

Youngest participant
2 years old

Oldest participant
82 years old

Total distance cycled
328,000km

Macau

In Macau, we held our second Charity Virtual Cycle event from November to December 2022 to encourage the community to reduce their carbon footprint by cycling more. 178 individuals participated in the 100km and 50km challenges while 36 children participated in the 2-5km Youth Group category. In total, the participants clocked 16,432 km. The registration fees amounting to $6,500 were donated to Caritas Macau, a social welfare services provider.

Total number of cyclists	Youngest participant
214	**5 years old**
Oldest participant	Total distance cycled
74 years old	**16,432km**

The virtual cycling event in Macau helped promote awareness to reduce carbon footprint.

OCBC Aquatics

We collaborated with the Singapore Swimming Association to pilot the inaugural OCBC Aquatics event, enabling participants to try out aquatic sports like aquatic dancing, flippa ball and diving. Close to 120 employees, family members, staff volunteers and beneficiaries from the Movement for the Intellectually Disabled of Singapore (MINDS) and the Singapore Children's Society attended the event. Besides building water confidence, this helps to impart a life skill to the disadvantaged segments of our community who may otherwise not have the chance to learn because of their family circumstances.

Following the positive response from participants, we plan to expand the event to involve more segments of the community in the following year.

The OCBC Aquatics event was held at the OCBC Aquatics Centre, Singapore Sports Hub.

With encouragement from OCBC staff volunteers, our beneficiaries were prepared to try different aquatic activities.

Fighting Climate Change in the Community

Restoration work at the OCBC Mangrove Park will be completed by 2026.

Reducing carbon emissions continues to underpin our climate change efforts. We partner various stakeholders, including government bodies, advocates and the community to achieve sustainable outcomes.

Expanding Capacity for Carbon Storage

We initiated two new carbon storage projects which involve the planting of 9,000 mangrove trees at the OCBC Mangrove Park, located at Pulau Ubin, Singapore, and another 9,000 mangrove trees at Tebuk Mendeleng, Malaysia. Mangrove ecosystems can store up to four times more carbon than terrestrial ecosystems. These 18,000 trees can absorb more than 30 million kg of CO_2 in their lifetimes.

Our carbon sequestration capacity, after including these two new projects, has been expanded to more than 111 million kg of CO_2 absorbed through forestation efforts across all markets.

Expanded carbon sequestration capacity to absorb more than **111 million kg of CO_2**

- OCBC Habitat Enhancement Programme, Coney Island, 2017 – 2021
- OCBC Arboretum, since 2019
- OCBC Mangrove Park, since 2022
- Tebuk Mendeleng project, since 2022

Ms Helen Wong, Group CEO of OCBC Bank, and from (left) Professor Leo Tan, Chairman of Garden City Fund, Mr Kenneth Er, CEO of NParks and Mr Desmond Lee, Minister for National Development planted mangrove trees to mark the start of the OCBC Mangrove Park project.

The endangered horseshoe crab is valued for its contribution to science and research.

Conserving Ecosystems

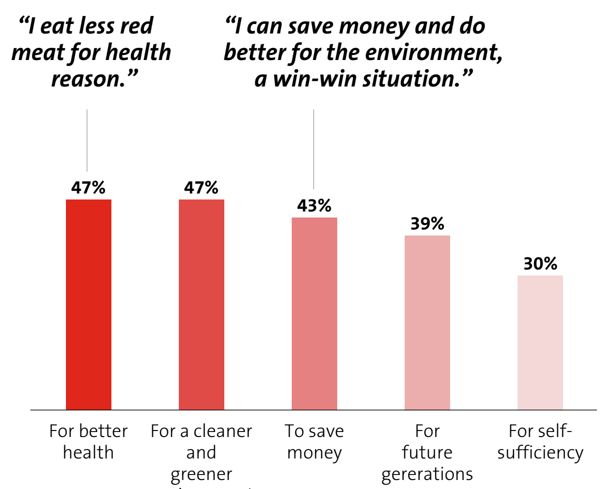
We partnered Hong Kong's Ocean Park Conservation Foundation, Hong Kong to reverse the decline of juvenile horseshoe crabs, valued for their medical contributions to biomedical research and applications. Over a 90-day period, our staff volunteers learnt to care for this endangered species before releasing them into the wild.

Promoting Awareness and Green Practices through the OCBC Climate Index

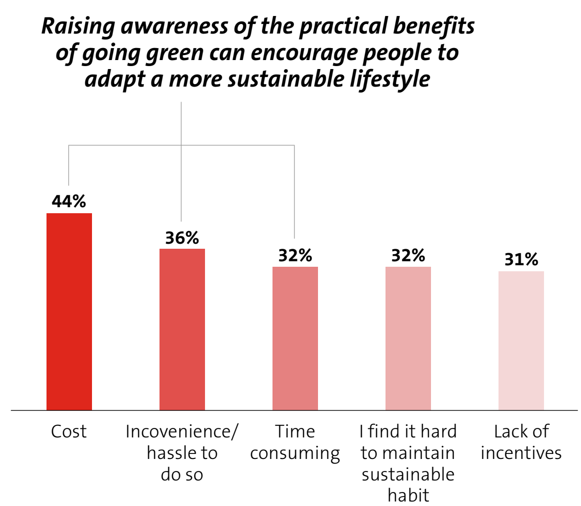
Partnering Eco-Business, we conducted the second edition of the OCBC Climate Index, which measures the levels of environmental sustainability awareness and action among Singaporeans. This is based on a survey that covered three pillars – Awareness, Adoption and Advocacy – across four themes: Transport, Food, Home and Goods.

Singaporeans Who Adopt Sustainable Habits Are Primarily Motivated by Personal Practical Benefits and Not Concern for the Environment.

Motivation for wanting to live a sustainable life



Reason for not adopting climate action



#OCBCCares Environment Fund Supports Ground-up Projects

The #OCBCCares Environment Fund supported the implementation of four new ground-up projects ranging from reducing plastic bottle use at vending machines to rallying communities to adopt environmentally-responsible practices. Costing over $62,000 in total, these projects were chosen from entries submitted under the Sustainability Exchange programme. This is a youth-professional mentorship initiative to motivate youths to develop solutions for real-world issues, organised by EB Impact – the non-profit sister arm of Eco-Business. To date, the #OCBCCares Environment Fund, which was introduced in 2017, has funded 18 projects totaling $323,150.

Board of Directors

Mr Andrew Lee
Chairman,
Non-Executive and Independent Director

Ms Chong Chuan Neo
Non-Executive and Independent Director

Mr Chua Kim Chiu
Non-Executive and Independent Director

Dr Andrew Khoo
Non-Executive and Independent Director

Dr Lee Tih Shih
Non-Executive and Non-Independent Director

Ms Christina Ong
Non-Executive and Independent Director

Mr Pramukti Surjaudaja
Non-Executive and Non-Independent Director

Ms Tan Yen Yen
Non-Executive and Independent Director

Ms Helen Wong
Group Chief Executive Officer,
Executive and Non-Independent Director

The OCBC Board is fully committed to upholding the highest standards of corporate governance. It ensures that OCBC is managed in the best interests of the Bank as a whole while taking into account the interests of shareholders, customers and other stakeholders. Various Board Committees have been established to assist the Board in discharging its duties more effectively with clearly defined terms of reference.

Board Committees

Executive Committee

Dr Lee Tih Shih, Chairman
Mr Andrew Lee
Dr Andrew Khoo

Nominating Committee

Dr Andrew Khoo, Chairman
Mr Andrew Lee
Ms Christina Ong
Mr Pramukti Surjaudaja
Ms Tan Yen Yen

Remuneration Committee

Ms Christina Ong, Chairman
Mr Andrew Lee
Dr Andrew Khoo
Mr Pramukti Surjaudaja

Audit Committee

Mr Chua Kim Chiu, Chairman
Ms Chong Chuan Neo
Ms Tan Yen Yen
Observer: Mr Andrew Lee

Risk Management Committee

Mr Andrew Lee, Chairman
Mr Chua Kim Chiu
Ms Tan Yen Yen
Ms Helen Wong

Ethics and Conduct Committee

Ms Christina Ong, Chairman
Mr Andrew Lee
Ms Chong Chuan Neo

Board Sustainability Committee

Ms Chong Chuan Neo, Chairman
Mr Andrew Lee
Ms Helen Wong

Management Committee

Ms Helen Wong
Group Chief Executive Officer

Ms Goh Chin Yee
Group Chief Financial Officer

Mr Noel Gerald DCruz
Group Chief Risk Officer

Mr Lim Khiang Tong
Group Chief Operating Officer

Mr Kenneth Lai
Global Treasury

Mr Tan Teck Long
Global Wholesale Banking

Mr Sunny Quek
Global Consumer Financial Services

Mr Tan Wing Ming
Greater China

Mr Tan Chor Sen
CEO, OCBC Bank Malaysia

Ms Parwati Surjaudaja
President Director and CEO,
Bank OCBC NISP

Ms Ivy Au-Yeung
CEO, OCBC Wing Hang Bank

Mr Wang Ke
CEO, OCBC Wing Hang Bank (China)

Mr Linus Goh
Global Commercial Banking

Ms Elaine Lam
Global Corporate Banking

Mr Jason Moo
CEO, Bank of Singapore

Mr Gan Kok Kim
Global Investment Banking

Mr Melvyn Low
Global Transaction Banking

Ms Lee Hwee Boon
Group Human Resources

Mr Praveen Raina
Group Operations and Technology

Ms Loretta Yuen
Group Legal and Compliance

Ms Koh Ching Ching
Group Brand and Communications

Mr Harry Lim
Group Audit

Ms Sylvia Ng
Strategic Planning Office

Upfront with

Helen

Group Chief Executive Officer

"We celebrated our 90th anniversary in 2022 – a milestone for OCBC. I am confident that, guided by our values and strong management, we will thrive for another 90 years and beyond."

You unveiled the Corporate Strategy to Excel for Sustainable Growth in 2022. In which areas of the strategy have you seen the most progress?

As the name of the strategy suggests, it is about growing OCBC sustainably and achieving excellence in the way we operate and run the business. The emphasis here is on 'long-term'. OCBC has navigated various crises and challenging times. We have always emerged stronger.

Tapping on our collective strength as OCBC Group is important. By **building on our comprehensive regional franchise under "One Group"**, we expect collaboration across various products and business groups to play a bigger role in driving income.

We have made some structural changes to our franchise in Hong Kong. Since OCBC Bank acquired Wing Hang Bank in 2014, Hong Kong branch and the renamed OCBC Wing Hang remained separate entities. In December 2021, we reached a significant milestone with the integrated platform of Hong Kong branch and OCBC Wing Hang. Doing so enabled us to use our talent, capital, liquidity and other resources more efficiently and effectively. We can also scope business opportunities better and support a full spectrum of customers with the strength of one consolidated Hong Kong team.

This change was foundational for us given the importance of Hong Kong. Together with Singapore as the nexus of ASEAN, and Hong Kong as the gateway to Greater China, we have successfully **captured the increasing ASEAN-Greater China trade and investment flows**.

Such flows often result from the China Plus One strategy adopted by corporates including China State-Owned Enterprises (SOEs) and companies. They want to establish an additional manufacturing base in ASEAN to complement their China operations and build resilience, especially in the wake of global supply chain disruptions. By tapping on different business units' expertise and our presence in different markets, we can offer them the breadth of products and services that they need, from lending to treasury, foreign exchange, and cash management. To further facilitate the capture of these flows, we have expanded our Greater China Business Office network last year, adding Indonesia to our existing offices in Thailand, Malaysia and Singapore.

We have also fared well in **leveraging our twin wealth hubs and digital propositions to capture rising Asia wealth flows**. Even though 2022 was challenging for wealth management in general, we attracted net new money inflows.

We continued to improve on our Group Wealth Platform – a collaboration between OCBC Bank and Bank of Singapore – for our high net worth and ultra-high net worth customers to provide superior advisory and unified investment views on one platform. In February 2022, OCBC Wing Hang China and OCBC Wing Hang Macau jointly launched the Northbound Wealth Management Connect Service to provide more diversified investment opportunities and richer asset allocation options.

Our investments in digitalisation have shown good results too. In Singapore, 98% of SME accounts and practically all of our consumer accounts are opened digitally. 96% of consumer financial transactions are done online and 90% of business financial transactions are conducted digitally. We made progress in the new economy and high-growth industries spaces too. For instance, we launched embedded finance propositions on five platforms in Singapore, Malaysia and Indonesia, thereby enabling small and medium-sized enterprises to access financing more efficiently.

2022 was a significant year for OCBC in the area of sustainability. I will talk more about it later in this section.

What are you most optimistic about for 2023, and what are some of your concerns?

2023 will hopefully be the year where we can put Covid firmly in our rear-view mirror. China's faster-than-expected reopening and policy stimulus has made this more of a possibility, barring any setbacks. Trade and investment flows between Greater China and ASEAN will pick up as a result and we expect wealth flows to increase as well.

The groundwork that we have conscientiously and consistently been working on has put us in a good position to seize these opportunities. We are already seeing the fruits of our labour.

In the area of Wealth Management, we will continue strengthening our hub capabilities across Singapore, Hong Kong, Dubai and London and enlarge Bank of Singapore's dedicated Family Office Advisory Unit. We will also expand our offshore OCBC Premier Private Client and OCBC Premier Banking propositions in key Asian markets.

Achievements

Group net profit rose **18%** to a record high of $5.75 billion

$25 billion net new money inflows across Bank of Singapore and OCBC wealth management franchise

Became a signatory to the **Net-Zero Banking Alliance**

Achieved **carbon neutrality** for banking operational emissions in 2022

Top 10 Strongest Banks in Asia Pacific
Awarded by The Asian Banker

Partnerships can assist in developing a better understanding of sustainability. Together with the National University of Singapore, we embarked on a study on how to best nudge Singaporeans towards the adoption of electric vehicles. (L-R) Ms Helen Wong, Ms Grace Fu, Minister for Sustainability and the Environment and Associate Professor Alberto Salvo from the Department of Economics at the NUS Faculty of Arts and Social Sciences launched this partnership at OCBC Centre in August 2022.

Of course, 2023 will have its challenges. The volatility that we saw in 2022 has carried into 2023. This could be the story for the entire first half of the year, although we do believe that it will ease in the second half. The volatility may create headwinds for Wealth Management but our diversified business, with the three pillars of Banking, Wealth Management and Insurance, provides stability, whatever the season.

Our reshaped balance sheet allowed us to capture the benefits from the series of rate hikes by the Fed in 2022 as seen in increases in net interest income and net interest margins. In 2023, we must once again be well-prepared – but this time, with an eye on interest rates coming down.

The bank has made big strides in its environmental sustainability efforts. What is next?

2022 was significant for us. We achieved carbon neutrality for our operational emissions through key carbon reduction measures such as space optimisation and adopting innovative cooling technologies, while supporting carbon offset projects in the region. We also expanded our carbon sequestration efforts through two mangrove restoration projects in 2022 – the OCBC Mangrove Park in Singapore and another project in Tebuk Mendeleng, Malaysia.

In addition, we became the second Singapore bank to join the United Nations-convened, industry-led Net-Zero Banking Alliance. This reflects our commitment to achieving net-zero not just in our operations but also in our lending and investments businesses. The next step to this would be to unveil our sectoral financed emission targets, which we will do by the first half of 2023.

While we are working on formalising these targets, we are already supporting our customers in their transitions to net-zero with utmost urgency. This is reflected in the continued expansion of our sustainable finance commitments which currently stands at $44 billion. At this rate, we are likely to reach our $50 billion target ahead of our 2025 schedule.

Given the urgency of the climate agenda, we are constantly looking for new ways to support the movement. Last year, we launched the OCBC Sustainability Innovation Challenge. Our inaugural partner on this challenge was our corporate customer SATS, and working together, we were able to conduct a worldwide search for solutions to waste management and reduction challenges. We will continue this challenge with other likeminded customers from key industries and also find other partnership opportunities.

I have summarised steward leadership for sustainability in 4Cs:

- **Commit**: We will commit to making policy and process changes and invest in people development.
- **Collaborate**: Collaboration must flourish in our interactions with other organisations and the community.
- **Catalyse**: We must play a catalytic role by enabling and encouraging the transition towards decarbonisation.
- **Courage**: Oftentimes, someone just needs to tip the first domino and set things in motion. We have done that in the past. We were the first bank in Southeast Asia to say we would stop funding new coal-fired power plants and to announce a target for sustainable finance. Bank of Singapore was the first in Asia to incorporate ESG factors in assessing investment funding. We will continue to play this leadership role.

What is your management philosophy and vision for your leadership team?

To me, it is very important to lead – and live – by the OCBC corporate values: **L**asting Value, **I**ntegrity, **F**orward-looking, **R**espect and **R**esponsibility. LIFRR, as we call it, is an important part of our culture. It is the foundation for everything we do. That is true not just for the leadership team, but also everyone in the Group.

Being future-oriented is especially important and this has been the impetus for a lot of what I have done since becoming CEO two years ago. In an increasingly competitive landscape, there is an urgency to collaborate even better as One Group.

We institutionalised this regionally with an enhanced reporting structure at the end of 2021 and continued to build on it in 2022. New teams like our Group Data Office and the Global Wholesale Banking Sustainability Office were also formed as part of an organisation refresh.

With the retirement of some of our senior leaders, there have been new members joining our senior leadership team. These additions came from both our internal talent base as well as external hires. Together, we have the right mix of experience and perspectives in the senior leadership team to be able to deliver on our Corporate Strategy and drive sustainable growth.

We celebrated our 90th anniversary last year – a milestone for OCBC. I am confident that, guided by our values and strong management, we will thrive for another 90 years and beyond.

90 Years and Beyond

We commemorated our 90th anniversary by launching two mangrove restoration projects in 2022: OCBC Mangrove Park at Pulau Ubin in Singapore and Tebuk Mendeleng in Malaysia. 18,000 mangrove trees are expected to take root by 2026. These trees can absorb more than 30 million kg of CO_2 in their lifetimes and protect shorelines against erosion and storm surges. These gifts to the community are in line with the theme "90 years of giving" and show how our LIFRR values are translated into action.

Volunteers from OCBC Malaysia planting a mangrove tree at Tebuk Mendeleng, Malaysia.

Upfront with

Chin Yee

Group Chief Financial Officer

"I will strengthen our capital management and optimise the utilisation of capital resources. This will allow us to deliver long-term shareholder value, while leaving us with sufficient room to drive franchise growth and to explore opportunities for inorganic growth as they arise."

Having assumed the role of Group CFO in November 2022, what is your vision for Group Finance?

My immediate focus is to take stock of Group Finance as a whole and work out how we can play an effective strategic role in our refreshed Corporate Strategy to Excel for Sustainable Growth. There are three focal areas of priority.

Firstly, I would like to look at how Group Finance can reinforce our strengths, especially in our business analytics capabilities to better provide business insights and advisory to our colleagues across the bank. This is an important enabler to drive more efficient resource allocations (including people, technology and capital), and support all eight pillars of our Corporate Strategy to drive growth.

Secondly, I will strengthen our capital management and optimise the utilisation of capital resources. This will allow us to deliver long-term shareholder value, while leaving us with sufficient room to drive franchise growth and to explore opportunities for inorganic growth as they arise.

Last but not least, building up our people assets is important. That, of course, includes developing individual talents. But to really support our Corporate Strategy's "One Group" approach, we need to first reinforce collaboration within our Division by finding ways to optimise our collective talents as "One Group Finance". By doing so, we can better scale our expertise and foster innovation to be an enabler for the Group in achieving our Corporate Strategy.

OCBC reported record profits in 2022. How can this momentum be sustained?

We were able to manage the challenges of 2022 well in part because we have a diversified business comprising banking, wealth management and insurance. In particular, our well-positioned balance sheet has enabled us to benefit from the rapid rise in interest rates. Our results have been propelled by strong growth in net interest income, underpinned by asset growth and net interest margin expansion. Lower allowances from improving credit conditions and sound portfolio quality also lifted our earnings. These more than compensated for slower investment-related fee income amidst volatile and uncertain market conditions. Overall, while customer investment activity was more subdued, we were still able to attract and grow net new money inflows into our wealth management franchise. That is a very positive sign.

Our geographical diversification continued to be a plus for us as well. It is one of the key enablers for us to pursue growth in challenging and uncertain climates. Though we are headquartered in Singapore, a substantial proportion of our income comes from our key overseas markets like Greater China, Malaysia and Indonesia.

In the immediate future, as we continue to reshape our balance sheet, we are thinking about how we can consistently perform well even when interest rates are dropping. Ensuring the resilience of our portfolio quality so that we do not end up with high impairment charges is also foremost in our minds. This is especially so given the inflationary pressures and possibility of recessions in certain markets.

However, we are not just thinking about our next immediate steps, but planning for the medium to long-term too. While doing so, it is important to exercise efficient resource allocations and be able to reap benefits from our investments, and Group Finance plays a vital role in providing insights and advisory.

What impact will our net-zero commitment have on our business?

Sustainability is often seen as a balancing act and indeed, sometimes doing the right thing might come at the expense of short-term profits. But ultimately, we believe that organisations should choose to do good, and that we can still achieve consistently good returns by doing so.

Investors are now seeing sustainability as a must-have, not just good to have, and are focusing more on companies with responsible business practices. Apart from investors, rating agencies are also paying close attention. They are increasing their due diligence on our sustainability practices as part of their rating assessments for banks. We maintain regular communication with the rating agencies as well as with our investment community, to provide updates on our efforts and progress. As a result, we were included on the inaugural Steward Leadership 25 list and the FTSE4Good Index. Our net-zero commitment, and other efforts in the realm of sustainability, are vital to position us well for the future.

Achievements

Record net profit of
$5.75 billion

Return on equity improved to
11.1% from 9.6% in 2021

Earnings per share at
$1.27, up 18% from 2021

Total dividend raised to
68 cents, at 53% dividend payout ratio

Strong capital position with Common Equity Tier 1 Capital Adequacy Ratio of **15.2%**

Upfront with Khiang Tong

Group Chief Operating Officer

"The exchange of insights and information between businesses and academia has long been valued by us and we want to embark on more of such collaborations to pioneer new innovations that will benefit our customers and the community."

What did the Bank achieve on the digitalisation and transformation front?

We continue to double down on our digitalisation and transformation efforts to drive operational and business excellence.

2022 marked the completion of Phase 1 of our seven-year digital core roadmap which commenced in 2019. Over $250 million was invested in the period (2019 – 2022) to refresh our key channel systems across our markets to enable quicker roll-out of digital features and sharpening of our personalisation capabilities with artificial intelligence and machine learning.

Time-to-market for new digital features has been cut dramatically, allowing new releases to be introduced twice as quickly. An example was the use of digital passport authentication for foreign SME owners to open accounts with us, eliminating the need for cumbersome paper documents. There has also been a significant uptake in sales through the deployment of personalisation capabilities.

We continue to explore opportunities in the digital asset space to benefit our customers, employees and the broader community. In conjunction with the Bank's 90th anniversary celebrations and to raise awareness of such assets among our staff, we minted our first Non-Fungible Token (NFT) which was given to staff to commemorate the special occasion. The NFT was minted on our in-house blockchain platform.

On the operational excellence front, we have streamlined close to 150 processes in the second half of 2022. Such improvements not only speed up our response to our customers' needs but also optimise the internal workflows and drive better working experience for our colleagues.

Building our data and analytics capabilities remains a key focus as well. More than 7,000 staff completed the 'Lead with Data' training programme in 2022 and we will further tap on data to make decisions and unlock insights.

What is the progress on the operational decarbonisation front?

I am glad that we achieved carbon neutrality in our operational emissions in 2022. In pursuing this target annually, not just in 2022, we are guided by the principle of reducing our global carbon footprint as much as possible before offsetting the residual and unavoidable emissions through the purchase of carbon credits.

We announced in May last year that more than $25 million will be invested in decarbonisation efforts in Singapore, Malaysia and Greater China. The investments will be used to deploy energy-efficient technology to reduce our carbon emissions, and solar energy systems that will increase renewables in our energy mix for powering operations.

These investments will yield approximately a reduction of 10,000 tonnes of carbon emissions by 2025. This is equivalent to removing close to 10,000 cars from the road.

Other initiatives in our decarbonisation roadmap include converting our fleet of corporate cars to electric vehicles and deploying electric vehicle charging facilities at major commercial buildings we manage. In March 2022, 10 charging points were installed at OCBC Centre – making it the largest electric vehicle charging hub in the central business district in Singapore.

We will not stay still in our efforts and will continue to explore new ways to reduce our global carbon footprint as it is the right thing to do for ourselves and the communities we are in.

Going into 2023, what are your priorities and goals?

We have commenced Phase 2 of our digital core roadmap which will see another investment of $300 million over the period of 2023 to 2025. The investments will go into improving areas such as the facilitation of payments and loans that will improve turnaround time.

To intensify our transformation, we have been and will continue to build our workforce capabilities. Our tech workforce doubled from 2018 to 2023 and there are plans to hire another 1,500 tech talents by 2025.

Strategic partnerships is another area that we will continue to harness to deliver greater value for our customers and employees. Last year, we signed a five-year partnership with NTU Singapore to develop innovative technological solutions in areas such as data privacy and cyber security.

The exchange of insights and information between businesses and academia has long been valued by us and we want to embark on more of such collaborations to pioneer new innovations that will benefit our customers and the community.

Singapore's Deputy Prime Minister, Coordinating Minister for Economic Policies, and Chairman of the National Research Foundation, Mr Heng Swee Keat (standing, middle), witnessed the signing of the research collaboration agreement between NTU Singapore and the Bank.

Achievements

SG Mark Gold
Awarded by Design Business Chamber Singapore

Singapore Employee Experience of the Year – Banking
Awarded by Asian Business Review for our HR-in-your-Pocket app

Best Digital Robo-Advisory Service
Awarded by The Asian Banker

Best Mobile Banking Initiative
Awarded by The Digital Banker

Upfront with
Noel
Group Chief Risk Officer

"We are resilient and well-positioned to navigate the challenging risk landscape and capture new opportunities to excel for sustainable growth."

How did the Bank navigate through the risk and credit portfolio challenges of 2022? How is 2023 going to look like?

2022 had its own share of challenges, with the withdrawal of Covid restrictions in many economies offset by multiple headwinds and event risks. Pent-up demand as economic activities returned, supply bottlenecks caused by Russian-Ukraine war and labour shortages, for instance, led to sharp spikes in inflation. Central banks responded with several rounds of interest rate increases, sharply raising borrowing costs. Other challenges included China's rolling Covid lockdown and property malaise, as well as escalating geopolitical and economic tensions with the US.

In the face of this, we managed our risks well and our portfolio quality has remained resilient. We proactively assessed the vulnerability of our credit portfolio from emerging headwinds and event risks via thematic and portfolio reviews and stress tests. Appropriate and timely actions were then taken to manage potentially vulnerable borrowers and portfolios identified. We grew our portfolio cautiously through careful client selection and tightening of underwriting criteria for sectors-at-risk. We also increased hedges in our bond portfolios to manage the sharp corrections in major financial markets.

In 2023, headwinds from the polycrisis are expected to continue. The macroeconomic environment remains uncertain and financial markets volatile.

That said, there are growth opportunities via foreign direct investments in ASEAN and Greater China as global businesses attempt to diversify their supply chains. China has removed its zero Covid policy and is rebooting its economy. Inflation appears to have peaked, though expected to remain elevated compared to the pre-Covid period. We will continue to closely monitor our portfolio and the evolving operating environment and cautiously capture growth opportunities by leveraging on our regional footprint and the strength of our core client relationships. With our strong capital, funding and liquidity position, backed by our strong corporate culture, we are well-positioned for sustainable growth.

How did the Bank protect its investments and that of the customers in light of uncertain and volatile markets?

To protect the value of our investment portfolio, we shortened the interest rate duration and increased interest rate hedge positions. We prioritised investments into sectors that were resilient against recession risk and remained selective over names in the late cycle economic phase. We also implemented controls to limit the downside capital impact and entered into macro hedges to protect against tail risks of our portfolios.

For our customers, we have been advocating defensive positioning and portfolio diversification to include investments that exhibited lower volatility and stable earnings. We also tracked the price changes and adverse news on our customers' investments to provide relevant and timely communications for them to make better-informed investment decisions.

We will continue to stay nimble and advocate caution for the various investment portfolios in the coming year.

How has the Bank responded to the growing calls to reinforce the financial system's resilience to climate risks?

Our approach to this challenge is two-pronged.

First, fulfilling our responsible and sustainable financing commitments to minimise our contribution to climate risks. In 2022, we expanded our prohibitions on coal power generation and thermal coal mining by not financing corporates that derived more than 50% of their revenues or production capacity from these activities.

We joined the Net-Zero Banking Alliance in October 2022 to reinforce OCBC's commitment towards a net-zero economy. We also leveraged our strengths in sustainable finance to support our clients' net-zero transition efforts.

Second, adequately addressing the potential impacts of climate change on business and operational resilience. Climate risk is transverse and can amplify credit, market, liquidity, operational and reputational risks. To bolster our resilience, we embedded climate risk management in relevant governance structures across the Bank.

We enhanced climate scenario analysis capabilities to better understand the implications of climate change on portfolio resilience. We also actively participated in industry capacity building initiatives, including a pilot study on applying the Task Force on Nature-related Financial Disclosures' framework for addressing nature and biodiversity loss.

What non-financial risks are high on the Bank's radar?

We embarked on a strategy to bolster operational resilience by uplifting day-to-day risk management practices, particularly for hotspots that warrant heightened attention due to the challenging macroeconomic conditions, unrelenting pace of digital transformation, and increasing regulatory requirements. We also continued to strengthen our engagement with our people especially with the Great Resignation impact seen across the industry since 2021.

Fraud prevention and detection is also high on our agenda. We have integrated and centralised our fraud risk management capabilities into Group Financial Crime Compliance to unlock synergies and step up vigilance in combatting scams, frauds, and financial crime. We strengthened our risk mitigation and controls across the Group, particularly in the areas of detection, prevention and transaction surveillance.

To emphasise its importance, we have elevated Information Security and Digital Risk as a principal risk type, managed by a dedicated risk management function and oversight by a newly formed group risk committee. Other enhancements made include the strengthening of cybersecurity controls and the roll-out of a Cyber Smart Programme to raise employee cyber vigilance and competency.

Given the increased regulatory expectations and scrutiny over the management of third-party service providers amidst high profile data loss incidents, we have rolled out initiatives such as the expansion of the third-party risk management programme to include ecosystem partners, and extended our education and awareness efforts on key topics such as data loss prevention to service providers.

For more information on how the Bank is managing the Climate, Fraud, Information Security and Digital and Third-Party Risks, as well as Talent Management, please refer to the Risk Management Chapter on page 70 and/or our Sustainability Report 2022.

Upfront with Sunny

Global Consumer Financial Services

“We will accelerate acquisition, deepen engagement with customers, and grow our Premier Banking business.”

With Singapore and the region in “recovery” from the Covid pandemic, what drove the consumer banking business in 2022?

2022’s volatile market conditions negatively affected equities and fixed income markets. Yet, we were able to seize opportunities thanks to our well-positioned business and strong foundations.

We beefed up staff strength, growing client advisors and relationship managers 10% since 2019. Improvements to our Group Wealth Platform for affluent customers in Singapore and Malaysia have also contributed to our overall performance. Customers can monitor investments via a single wealth account and access a wide range of best-in-class investment products and solutions, backed by reliable and consistent advice from investment specialists across the Group.

Our AUM growth has averaged above 10% annually for the past five years.

Digitalisation has been another key to our success. We have always led the industry in market-moving digital innovations. We offer one of the most comprehensive digital wealth offerings of any bank on our OCBC Digital app, including access to equities trading, robo-investments, 24/7 FX and precious metals.

Our customers can make Central Provident Fund (CPF) contributions directly from digital banking channels

– a first in Singapore – and we enabled eligible Singaporeans to collect government pay outs at ATMs using facial biometrics. We leveraged the Singapore Financial Data Exchange (SGFinDex) and integrated data from seven insurers to provide holistic financial planning to customers.

Digital wealth sales have grown more than four times in two years. We even grew our base of active digital customers to 64% from 58% in 2021.

I am happy with the agility we showed in a fast-rising interest rate environment which enabled us to remain competitive in both the loans and deposits businesses despite the challenging operating environment.

What are your key areas of focus for 2023?

We will accelerate acquisition, deepen engagement with customers, and grow our Premier Banking business.

While we seek to replicate our Singapore success in Malaysia, Indonesia and Hong Kong, we expect competition from new digital bank entrants and incumbents alike. I believe customer-centric digital offerings, complemented by the human touch, is key in setting us apart and helping to move customers towards primary banking relationships with us.

Hence, even as we double down on digital banking capabilities, we will continue to improve the branch experience.

We must move towards a single offering where the differentiation between ‘physical’ and ‘digital’ is removed. Customers should always feel they can engage with just one channel – the bank. We will leverage data and design to create seamless and hyper-personalised experiences for customers to achieve this.

As global travel picks up, we are optimistic about consumers’ return to discretionary spending. In Singapore, travel accounted for one third of the overall growth in card spend in 2022. We improved the proposition of our OCBC 365 credit card and reinstated the ‘Spend’ bonus interest category on our flagship OCBC 360 account, while revising interest rates to remain competitive. We relaunched our OCBC Cashflo credit card as ‘NXT’ to capture younger customers. Since then, monthly OCBC 360 account openings have more than doubled, and monthly OCBC 365 credit card acquisitions have increased more than 80% on average. In 2023, we expect demand to remain healthy.

What opportunities do you see in sustainable finance and investments and how do you plan to seize them?

Our sustainable financing sales have grown fourfold from 2021, and more than 80% of our recommended funds have a minimum ‘BB’ MSCI ESG Rating in 2022.

Increasing transparency is important so customers have information to make sustainable choices. We launched ESG ratings for our OCBC RoboInvest portfolios and two ESG-integrated funds in 2022, with more on the way.

We must tap on innovation and organisational partnerships to drive sustainability. We began a research initiative with the National University of Singapore to understand what messages would encourage Singaporeans to adopt electric vehicles. These insights will enable us to develop relevant products and services for customers.

The 20,000 sqft branch at Wisma Atria is OCBC Bank’s largest integrated lifestyle and banking branch in Singapore. It was officially opened in November 2022. Branches are important to facilitate face-to-face conversations for wealth management and other complex transactions.

Achievements

More than **10%** average yearly growth in AUM since 2017

64% of customers are active digital users, up from 58% in 2021

96% of financial transactions now performed digitally

Best Digital Robo-Advisory Service
Awarded by The Asian Banker for OCBC RoboInvest

Best Customer Experience via Mobile and Internet Banking
Awarded by The Digital Banker for OCBC Financial OneView

Upfront with
Teck Long

Global Wholesale Banking

"With a strong foundation in place, coupled with our robust international franchise, deep sectoral expertise and strong digital capabilities, we are well placed to seize opportunities and support our customers in the coming years ahead."

What were some of the highlights in 2022?

The Wholesale Banking Division was able to navigate the volatile economic landscape successfully, achieving a record operating profit in 2022, close to 50% higher than a year ago. This was supported by broad-based loan growth, higher treasury income and interest rate hikes.

We have achieved good outcomes in tapping flows between Greater China and ASEAN, focusing on sustainability and effective data analytics to target customer segments for business generation and risk management.

To better support increasing ASEAN-Greater China trade and investment flows, we expanded our Greater China Business Office coverage beyond Singapore, Malaysia and Thailand, to include Indonesia. With the expanded network, we were able to better support Greater China corporates investing in ASEAN.

In Singapore, we deepened our partnership with the public sector to broaden the suite of digital solutions to better serve the community. Collaborating with GovTech, the government technology agency that drives digital transformation in the public service, we rolled out a national digital payment service through GovWallet on the LifeSG mobile application for Singaporeans and Permanent Residents to receive government payments, instead of cheques and paper vouchers. They can either transfer the payments to PayNow NRIC-linked bank accounts, or spend them at merchants that accept payment via PayNow UEN or NETS QR.

Our records show that close to 3 million transactions, totalling over $100 million, were made through this service in 2022.

We continued our digitalisation efforts to acquire and deepen our relationships with SME customers as well as improve customer experience. To help our SME customers better understand their businesses, we launched Business Trends on our Business Mobile Banking app, providing personalised data-driven insights on sales, expenses and cashflow. Leveraging data analytics, we were able to better identify loan opportunities from our SME customer base. We were also the first bank in Singapore to enable digital passport authentication for foreign business owners.

As Malaysia and Indonesia wound down their moratorium schemes, we have proactively engaged and supported our SME customers in these markets to assist them with a smooth transition. We will continue to support SMEs as they recover and grow.

What progress has been made on the sustainable financing front?

Good progress was made in growing our sustainable finance commitments during the year. We achieved over $10 billion in new sustainable finance commitments, bringing our total commitments to $44 billion – on track to achieve our target of $50 billion by 2025. In addition, we completed almost three times as many sustainable and green bond deals, tripling the proceeds raised in 2021.

What was particularly pleasing to see was a shift by SMEs – who play a crucial role in addressing climate change – in how sustainability is viewed. They now see sustainability as a business risk consideration, where it is a key driver of business viability and long-term survival, as opposed to a good-to-have.

This shift contributed to over 600 SMEs and mid-cap corporates across Singapore, Malaysia and Hong Kong, taking up sustainable financing in 2022 – close to three times higher than a year ago.

We signed up to the United Nations-convened, industry-led Net-Zero Banking Alliance and are on track to unveil our sectoral financed emission targets in 2023. To achieve net zero by 2050, we have begun developing a systematic plan.

To drive the transition, we will heighten client engagement, develop new financing solutions and collaborate with partners to build ecosystems and encourage innovations in climate solutions.

What is your outlook for 2023?

The economic outlook for 2023 is expected to remain uncertain, with headwinds such as interest rate hikes and a slowdown in global demand.

We will continue to remain nimble and stay focused on executing our ASEAN-Greater China strategy. ASEAN continues to register strong economic growth due to its young demographics, macro trends of investing in ASEAN to improve global supply chain resilience and continued ASEAN-Greater China trade and investment flows. With Mainland China re-opening borders, this is expected to provide a boost for the region.

Sustainability will continue to be a multi-year trend and opportunity for us. We are committed to working with industry peers, customers and policymakers to transition into a low-carbon world.

With a strong foundation in place, coupled with our robust international franchise, deep sectoral expertise and strong digital capabilities, we are well placed to seize opportunities and support our customers in the coming years ahead.

Achievements

Record operating profit, close to **50%** higher than a year ago

Uplifted Hong Kong hub capability to support ASEAN-Greater China trade and investment flows

Tripled the proceeds raised from sustainable and green bond deals in 2021

Best SME Bank in Asia Pacific
Awarded by Global Finance

Best Cash Management Bank (Singapore, Malaysia & Indonesia)
Awarded by Asian Banking & Finance

Upfront with
Kenneth
Global Treasury

> **“Despite the challenges of 2022, Global Treasury’s revenues were well supported by our diversified customer franchise.”**

How did Global Treasury fare in 2022?

It was a tough year for financial markets. The sudden reversal of central banks’ stances on post-pandemic inflation took global markets by surprise. Increased funding rates resulted in fewer gapping opportunities and sharp repricing of risk assets. As a result, our market-facing income was lower year-on-year.

Despite the challenges of 2022, Global Treasury’s revenues were well supported by our diversified customer franchise. Our overseas treasury centres contributed to almost half of treasury revenues as we focused on further developing our core overseas markets like Greater China and Indonesia.

How do you foresee economic growth globally and within ASEAN in 2023 and how would that impact your business?

Our baseline scenario is that the major central banks will pause rate hikes by mid to late 2023. The year could, therefore, wind up being a story of two halves. Equity, rates and credit markets could remain under pressure in the first half until there is greater clarity on the central bank’s resolve and peak interest rates, while the second half could usher in a more benign market environment. As a result, trading and investment activity might remain choppy for some time before stabilising in the later half of the year.

China remains a key factor. Its Covid policy U-turn in early December came earlier than expected, and barring any setbacks, this reopening will be positive for the global economy, including ASEAN. Thus far, sentiments are generally up and the easing of Covid regulations will likely drive the business and investment pipeline back into Chinese asset markets. In tandem, sales and trading activities should also pick up for us.

For ASEAN, it might be premature to call the peak of monetary policy tightening yet if the Fed continues to nudge its expected terminal rate higher in the interim due to persistent inflationary pressures. Notwithstanding this, the region remains favoured among investors and portfolio flows are expected to be healthy. The Asset and Liability Management (ALM) business should start to recover from the second half of 2023 if central banks succeed in capping inflation.

What are your key priorities for 2023?

In line with our Corporate Strategy, sustainability continues to be a priority for us. Our clients are increasingly showing interest in sustainability-related solutions to meet their own sustainability KPIs, and we will roll out new green solutions to meet these needs.

These new solutions will beef up our current stable, which includes sustainability-linked interest rate swaps, cross currency swaps (including the first sustainability-linked Islamic cross currency swap), structured deposit and green bonds. The demand for these solutions remains healthy, showing that sustainability-related products have found a permanent place in the market.

On the research front, we will continue to support clients with reports on the green, social, sustainability and sustainability-linked credit market.

Accelerating digital transformation is another priority for us. One of our focus areas is to build a top-notch digital platform to offer treasury products. We have built an ecommerce infrastructure that helps facilitate treasury product offerings in e-channels across customer segments and geographies. Together with our colleagues from Group Operations and Technology, we are working to optimise our risk warehousing using artificial intelligence.

We believe that these improvements can help us to capture opportunities in the short term, as well as set us up for long-term success.

Achievements

House of the year (Singapore)
Awarded by Asia Risk

FX house of the year (Singapore & Malaysia)
Awarded by FX Markets Asia

Best FX Bank for Corporates & FIs (Singapore)
Awarded by Alpha Southeast Asia

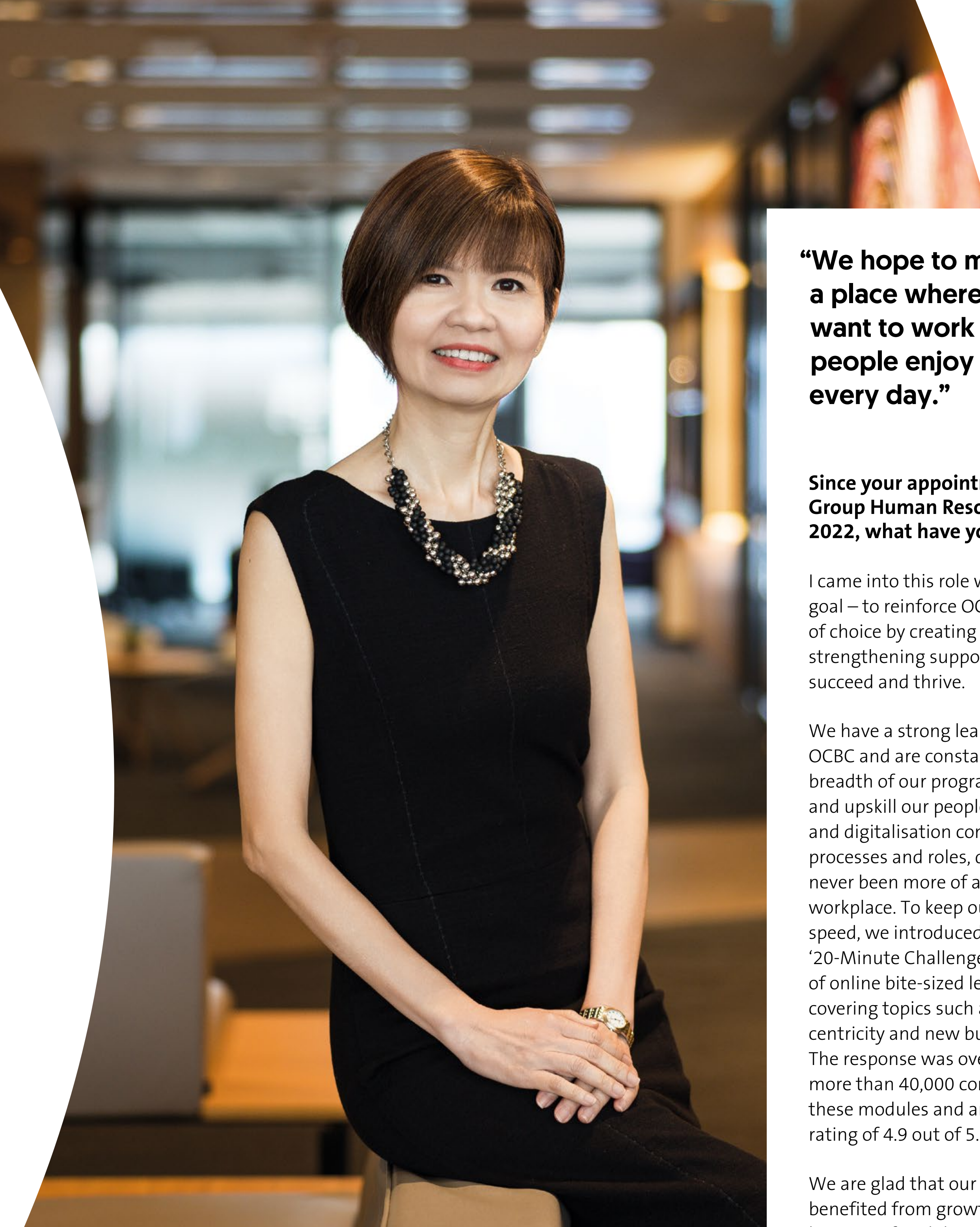
Best FX Bank for Structured Hedging Solutions and Proprietary Trading Ideas (Malaysia)
Awarded by Alpha Southeast Asia

Best Online FX Platform in Southeast Asia, Marquee Award
Awarded by Alpha Southeast Asia

OCBC Global Treasury Forum

Throughout 2022, we continued to engage our customers via multiple channels including webinars and podcasts. With the easing of Covid rules in mid-2022, we held our OCBC Global Treasury Forum on 20 July 2022 with 250 in-person attendees and 273 virtual attendees from various countries.

Head of Global Treasury Kenneth Lai and Chairman, Middle East Institute, National University of Singapore Bilahari Kausikan. Mr Kausikan was invited to speak on the topic "Geopolitical Flashpoints".



Upfront with Hwee Boon

Group Human Resources

"We hope to make OCBC a place where the best want to work at and our people enjoy coming to every day."

Since your appointment as Head of Group Human Resources in June 2022, what have you set out to do?

I came into this role with a very clear goal – to reinforce OCBC as an employer of choice by creating opportunities and strengthening support for our people to succeed and thrive.

We have a strong learning culture at OCBC and are constantly expanding the breadth of our programmes to reskill and upskill our people. As technology and digitalisation continue to reshape processes and roles, digital skills have never been more of a priority in the workplace. To keep our workforce up to speed, we introduced The Future Smart '20-Minute Challenge' in 2022, a series of online bite-sized learning modules covering topics such as data, customer centricity and new business models. The response was overwhelming, with more than 40,000 completions for these modules and an average user rating of 4.9 out of 5.

We are glad that our workforce has benefited from growth opportunities because of such learning and development support.

Employee wellness is another area where we want to double down on our efforts. Recognising the increasing pressure on our people from the fast pace of work, rising cost of living and other factors, we refreshed our MyWellness framework in 2022 to empower our people to invest in their own health and wellness. The array of programmes and online resources supports their journey to better health

– both mentally and physically – and financial wellbeing. The expanded line-up of wellness talks and activities under the programme's flagship event, MyWellness Fiesta, saw an increase in participation across 19 markets – more than 2.5 times compared to that in 2021.

In-person employee resource group sessions have also resumed, providing groups of employees – such as first-time parents and parents of teenagers – with a platform where they can share their problems, support each other and get practical tips and resources.

While our progress thus far has been encouraging, there is still more to be done.

What are the areas that you are keeping a close watch on?

Our people are empowered to take on new initiatives, projects or meaningful causes that resonate with them. One such initiative that came to fruition is the urban farm atop OCBC Centre's carpark roof. Run by a group of more than 100 bank volunteers, the farm is one of many low-carbon projects at OCBC. We also launched our inaugural OCBC Sustainability Day in 2022, an event managed by the Sustainability Interest Networking Group, a group of employees united in their shared desire to raise awareness of the importance of climate action and inspire behavioural change.

We support and encourage employee activism as it engages our people and fosters bonding within the growing OCBC community.

The use of data to drive decision-making and employee experience is another area in which the leadership team and I pay particular attention. There is vast potential for us to further leverage data to improve decision-making in people-related matters, make HR processes and operations more efficient and improve our employees' overall effectiveness in the course of their work.

What are your priorities for 2023?

Accelerating HR transformation will be one of the key priorities in 2023 to achieve both operational excellence and strategic impact. The aim is to refocus roles, modernise organisational structure, uplift capabilities and internalise mobility to deploy talent with the right skills to areas of demand at speed.

To future-proof our workforce, we will continue to focus on talent and leadership development by expanding our suite of learning opportunities, leadership programmes and mentoring framework. We will also introduce overseas assignments on a wider scale so that more colleagues can experience the OCBC culture across geographies and in different contexts.

People are our greatest asset. We will continue to invest significantly in developing their skills and instilling a mindset of lifelong learning. Our learning culture enables us to open up opportunities and shape diverse paths for our people's professional growth. In so doing, we hope to make OCBC a place where the best want to work at and our people enjoy coming to every day.

A team of over 100 bank volunteers will join forces to shoulder year-round tasks like seeding, germination and harvesting.

Achievements

SkillsFuture Employer Award – Gold (Singapore)
Awarded by SkillsFuture Singapore

2022 LinkedIn Top Companies (Singapore, Malaysia & Indonesia)
Awarded by LinkedIn

Best Leadership Development – Gold (Singapore)
Awarded by EngageRocket

Outstanding Employer (Greater China)
Awarded by HRoot

Best Corporate Wellbeing Programme Grand Award (Hong Kong)
Awarded by CTgoodjobs

Bank of Singapore
Highlights

Net new money inflows more than **doubled**

Strong momentum in alternative investments with **15%** growth in flows

20% asset growth from net new money flows in the financial intermediary segment

Partnered **Community Foundation of Singapore** to avail philanthropy services to high-net-worth individuals

Co-chaired The Association of Banks in Singapore's taskforce that launched the Sustainable Private Banking and Wealth Management Guidelines

20% increase in ESG and sustainability learning hours

Named **Best Asia-based private bank active in Middle East and North Africa** by WealthBriefing

First private bank to become a signatory of the Singapore Stewardship Principles for Responsible Investors

Recognised as **"World's Best for ESG Investing"** by Euromoney

"With market volatility expected to continue way through 2023, Bank of Singapore will focus on what it does very well – delivering a hyper-personalised client experience with strong risk management and governance. We will continue to tap on the regional resources and capabilities of the OCBC Group. The Group's comprehensive Greater China and ASEAN network, global wealth platform, and commercial banking and treasury solutions put Bank of Singapore in a very sweet spot to capture the increasing wealth flows in this region."

Jason Moo
Appointed CEO, Bank of Singapore
with effect from 6 March 2023

Corporate Governance

The Bank is fully committed to living its core values and fair dealing in all its activities. The Bank's core values are captured as LIFRR which stands for Lasting Values, Integrity, Forward-looking, Respect and Responsibility. The Bank upholds the highest standards of corporate governance and complies in all material aspects with corporate governance regulations, code and guidelines established in Singapore.

Disclosures made pursuant to the Bank's corporate governance practices are summarised on pages 61 and 62 of this Annual Report.

Board Matters

Principle 1: The Board's Conduct of Affairs

The Board is elected by the shareholders to supervise the management and affairs of the Bank. The prime stewardship responsibility of the Board is to ensure the viability of the Bank and to ensure that it is managed in the best interests of the Bank as a whole while taking into account the need to safeguard the interests of shareholders, customers and other stakeholders. The Bank has a board charter approved by the Board.

Broadly, the responsibilities of the Board include the following:

- reviewing, approving and overseeing the implementation of strategic direction and overall business objectives as well as organisation structure, as developed and recommended by management;
- ensuring that decisions and investments are consistent with long-term strategic goals;
- ensuring that the Bank operates in such a way as to preserve its financial integrity and in accordance with policies approved by the Board;
- overseeing, through the Audit Committee, the quality and integrity of the accounting and financial reporting systems, disclosure controls and procedures and internal controls;
- providing oversight in ensuring that the Bank's risk appetite and activities are consistent with its strategic intent, operating environment, effective internal controls, capital sufficiency and regulatory standards;
- overseeing, through the Risk Management Committee, the establishment and operation of an independent and effective risk management system, processes and internal control mechanism for managing risks on an enterprise-wide basis, and ensuring that the risk management function is sufficiently resourced to manage the various risks exposed by the Bank and that it has appropriate independent reporting lines;
- reviewing any transaction for the acquisition or disposal of assets that is material to the Bank;
- ensuring that the necessary resources are in place for the Bank to meet its objectives;
- reviewing management performance and ensuring that management formulates policies and processes to promote fair practices and high standards of business conduct by staff;
- overseeing, through the Ethics and Conduct Committee, the establishment and review of the code of conduct and ethics as well as the culture and conduct framework emphasising integrity, honesty and proper conduct at all times with respect to internal dealings and external transactions, including situations where there are potential conflicts of interest;
- overseeing, through the Nominating Committee, the appointment or reappointment, election or re-election, resignation and retirement of Directors of the Bank as well as the appointment, dismissal, resignation and retirement of senior management, ensuring that principles of transparency, accountability and meritocracy are observed;
- overseeing, through the Remuneration Committee, the design and operation of an appropriate remuneration framework, and ensuring that remuneration practices are aligned to and in accord with the remuneration framework;
- providing a balanced and understandable assessment of the Bank's performance, position and prospects, including interim and other price-sensitive public reports as well as reports to regulators;
- ensuring that obligations to shareholders, customers, employees and others are understood and met;
- maintaining records of all meetings of the Board and Board Committees, particularly records of discussion on key deliberations and decisions taken;
- identifying the key stakeholder groups, recognising that perceptions affect the Bank's reputation; and
- considering, through the Board Sustainability Committee, sustainability matters, e.g. environmental, social and governance (ESG) factors, as part of strategy formulation.

Directors with conflicts of interests are required under the Bank's Constitution to recuse themselves from meetings and decisions involving issues of conflicts.

Board Approval

The Bank has documented internal guidelines for matters that require Board approval. These guidelines are communicated to management in writing. Matters which are specifically reserved for Board approval, amongst others, are:

- corporate strategy and related operational plans;
- material acquisition and disposal of assets;
- corporate or financial restructuring; and
- share issuance, dividends and other returns to shareholders.

The Board approves transactions exceeding certain threshold limits, while delegating authority for transactions below those limits to the Board Committees and management to optimise operational efficiency.

Board Access to Information

Directors are provided with complete information related to agenda items in a timely manner before each meeting to allow adequate time for review. Directors are also equipped with electronic tablets that allow secured access to Board and Board Committee meeting materials, including background information on matters to be addressed by the Board. On an on-going basis, relevant information is also provided to Directors to enable them to make informed decisions when discharging their duties and responsibilities. This includes information such as disclosure documents, monthly internal financial statements, risk management reports, operating plans, forecasts, and reports of variances from operating plans and forecasts.

The Board and its Committees have unfettered access to information which the Bank is in possession of and to the Bank's senior management and Company Secretary. The Directors, individually or as a group, can also take independent professional advice from external advisors (when necessary) at the Bank's expense. The role of the Company Secretary is defined. The Company Secretary attends all board meetings and ensures that board procedures and applicable regulations are complied with. Under the direction of the Chairman, the Company Secretary ensures good information flows within the Board and its Committees and between senior management and non-executive Directors, and facilitates the orientation of new Directors and professional development of Directors, as required. The appointment and removal of the Company Secretary requires Board approval.

Board Committees

While the Board has ultimate responsibility for the affairs of the Bank, various Board Committees have been established to assist the Board in discharging its duties more effectively. The Board Committees have clearly-defined terms of reference and changes to the terms require Board approval. The Board and its Committees maintain records of all meetings setting out in detail key deliberations and decisions taken. The minutes of each Committee meeting are also circulated to members of the Board who are not members of that particular Committee. The composition and summary terms of reference of each of these Committees are as follows.

- **Executive Committee**

  The Executive Committee comprises Dr Lee Tih Shih (Chairman), Mr Andrew Lee and Dr Andrew Khoo. A majority of the Committee, i.e. Mr Andrew Lee and Dr Andrew Khoo, are independent Directors.

  The Committee has written terms of reference that describe the responsibilities of its members.

  The Executive Committee oversees – within the parameters delegated by the Board – the management of the business and affairs of the Bank and the Group. It reviews the Bank's policies, principles, strategies, values, objectives and performance targets. These include investment and divestment policies. It also endorses such other matters and initiates such special reviews and actions as are appropriate for the prudent management of the Bank.

- **Nominating Committee**

  The Nominating Committee comprises Dr Andrew Khoo (Chairman), Mr Andrew Lee, Ms Christina Ong, Mr Pramukti Surjaudaja and Ms Tan Yen Yen. All members, other than Mr Pramukti Surjaudaja, are independent Directors.

  The Committee has written terms of reference that describe the responsibilities of its members.

  The Nominating Committee plays a vital role in reinforcing the principles of transparency, accountability and meritocracy at the Bank. It plans for board succession and ensures that only the most competent individuals capable of contributing to the success of the organisation are appointed. This includes reviewing all nominations for the appointment or reappointment, election or re-election as well as resignation or retirement of Directors and members of the Executive Committee, Remuneration Committee, Audit Committee, Risk Management Committee, Ethics and Conduct Committee and Board Sustainability Committee. The Nominating Committee also has oversight of the appointments of directors to boards of key subsidiaries to ensure governance standards are aligned with the Bank's. On an annual basis, the Nominating Committee is charged with determining whether or not a Director is independent, capable of carrying out the relevant duties and qualified to remain in office. In addition, it reviews nominations for the appointment as well as dismissal, resignation or retirement of senior management, including the Chief Executive Officer (CEO), Chief Financial Officer, Chief Risk Officer and Chief Operating Officer. It makes recommendations to the Board on relevant appointments, including the compensation package for offer of employment, promotion and cessation of employment. The Nominating Committee reviews obligations arising in the event of the termination of the contracts of service of executive Directors and senior management, to ensure such contracts contain fair and reasonable termination clauses.

- **Audit Committee**
The Audit Committee comprises Mr Chua Kim Chiu (Chairman), Ms Chong Chuan Neo and Ms Tan Yen Yen. All members, including the Chairman, are independent Directors and have recent and relevant accounting or related financial management expertise or experience. The Audit Committee members are not partners of PricewaterhouseCoopers LLP, the external auditor of the Bank, and hold no financial interest in the firm.

The Audit Committee performs the functions specified in the Companies Act, the Code of Corporate Governance 2018 (the Code), the Singapore Exchange Securities Trading Limited (SGX-ST) Listing Manual, and the corporate governance regulations and guidelines issued by the Monetary Authority of Singapore (MAS).

The Committee has written terms of reference that describe the responsibilities of its members. The Board approves the terms of reference of the Audit Committee. The Committee may meet any time and no fewer than four times a year. It has full access to and co-operation from management, and has the discretion to invite any Director and executive officer to attend its meetings. It has explicit authority to investigate any matter within its terms of reference.

Further information on the Audit Committee is provided under Principle 10 on pages 56 to 58.

- **Remuneration Committee**
The Remuneration Committee comprises Ms Christina Ong (Chairman), Mr Andrew Lee, Dr Andrew Khoo and Mr Pramukti Surjaudaja. All members are non-executive Directors and, other than Mr Pramukti Surjaudaja, are also independent Directors. All are knowledgeable in executive compensation matters, given their extensive experience in senior corporate positions and major appointments.

The Committee has written terms of reference that describe the responsibilities of its members.

The Remuneration Committee recommends to the Board a framework for determining the remuneration of executive officers, and reviews the remuneration practices to ensure that they are aligned with the approved framework. It is empowered to review the human resource management policies and the policies governing the compensation of executive officers of the Bank and its subsidiaries, as well as the remuneration of senior executives and Directors. In addition, the Remuneration Committee administers employee share ownership schemes. In its deliberations, the Remuneration Committee takes into account remuneration principles, practices and standards that may be specified by MAS from time to time.

- **Risk Management Committee**
The Risk Management Committee, which supports the Board in performing its risk oversight responsibilities, comprises Mr Andrew Lee (Chairman), Mr Chua Kim Chiu, Ms Tan Yen Yen and Ms Helen Wong. All members, other than Ms Helen Wong, are independent Directors. All members have the relevant technical financial expertise in risk disciplines or businesses to discharge their responsibilities. Mr Chua Kim Chiu and Ms Tan Yen Yen also serve on the Audit Committee. The common membership helps to facilitate communication and foster the sharing of information and knowledge between the two Committees.

The Committee has written terms of reference that describes the responsibilities of its members.

The Committee reviews the overall risk management philosophy in line with the overall corporate strategy as set and approved by the Board. It oversees the establishment and operation of an independent risk management system for identifying, measuring, monitoring, controlling and reporting risk on an enterprise-wide basis. This includes ensuring the adequacy of risk management practices for material risks such as credit, market, liquidity, operational, information security and digital, conduct, money laundering and terrorism financing, legal, regulatory, reputational, strategic as well as ESG risks.

The Committee reviews the scope, effectiveness and objectivity of the Group Risk Management Division. It ensures that the risk management function has appropriate independent reporting lines and is adequately resourced with experienced and qualified employees to monitor risk by the various risk categories. It approves the risk management frameworks, internal control systems and major policies, as well as reviews the risk appetite statement, risk disclosure policy and risk management principles for the approval of the Board. It also reviews the risk profile, risk tolerance level and risk strategy of the Bank for effective risk management, as well as the risk reports to monitor and control risk exposures. The Chief Risk Officer has direct reporting lines to the Committee and CEO.

Activities performed by the Risk Management Committee are also described under the section on Risk Management on pages 70 to 83.

- **Ethics and Conduct Committee**
The Ethics and Conduct Committee supports the Board in overseeing efforts to build and maintain a strong and responsible organisational culture firmly founded on the Bank's LIFRR core values and the spirit of long-term thinking. The Committee comprises Ms Christina Ong (Chairman), Mr Andrew Lee and Ms Chong Chuan Neo. All members are independent Directors.

The Committee has written terms of reference that describe the responsibilities of its members.

The Committee reviews and assesses the state, adequacy, effectiveness and relevancy of the Bank's culture and conduct programmes and initiatives. Such review and assessment take into account regulatory policies, guidelines and expectations and desired outcomes. The Committee also reviews communications to stakeholders on core values, desired behaviours, ethics, culture and conduct.

- **Board Sustainability Committee**
  The Board Sustainability Committee was established on 7 February 2023 to support the Board in its oversight of the Bank's sustainability matters. The Committee comprises Ms Chong Chuan Neo (Chairman), Mr Andrew Lee and Ms Helen Wong. The members, other than Ms Helen Wong, are independent Directors.

  The Committee has written terms of reference that describe the responsibilities of its members.

  The Committee provides strategic direction on sustainability issues, with a focus on climate and environmental matters. It approves and oversees the management and monitoring of ESG factors that are material to the business and considers the Bank's position on relevant emerging sustainability trends and issues. It also has oversight of the Bank's sustainability reporting including climate-related disclosures.

Directors' Attendance at Board and Board Committee Meetings in 2022

Details of attendance at scheduled Board and Board Committee meetings are described in the tables below. In addition, the Directors also attended management strategy briefings as well as Board Committee briefings at the invitation of the respective Committee on critical subjects such as macroeconomic developments, regional business operations, climate and sustainability and new accounting standards.

	Board		Executive Committee (Exco)	Audit Committee (AC)	
	Scheduled	Ad Hoc	Scheduled	Scheduled	Ad Hoc
Name of Director	Held (1)/Attended	Attended	Held (1)/Attended	Held (1)/Attended	Attended
Ooi Sang Kuang (3)	5/5	1	4/4	5/5	1
Chong Chuan Neo (4)	4/4	1	–	3/3	1
Chua Kim Chiu	5/5	1	–	5/5	1
Andrew Khoo (5)	5/5	1	3/3	2/2	1
Koh Beng Seng	5/5	1	4/4	–	–
Andrew Lee (6)	4/4	1	3/3	–	–
Lee Tih Shih (7)	5/5	1	4/4	–	–
Christina Ong	5/5	1	–	–	–
Pramukti Surjaudaja (8)	5/5	1	–	–	–
Tan Ngiap Joo (9)	4/4	1	1/1	4/4	1
Tan Yen Yen (10)	5/5	1	–	5/5	1
Wee Joo Yeow (11)	5/5	1	1/1	–	–

	Nominating Committee (NC)		Remuneration Committee (RC)	Risk Management Committee (RMC)	Ethics and Conduct Committee (ECC)	ID Meeting	AGM(2)
	Scheduled	Ad Hoc	Scheduled	Scheduled	Scheduled		
Name of Director	Held (1)/Attended	Attended	Held (1)/Attended	Held (1)/Attended	Held (1)/Attended		
Ooi Sang Kuang (3)	2/2	4	3/3	2/2	2/2	–	1
Chong Chuan Neo (4)	–	–	–	–	1/1	1	1
Chua Kim Chiu	–	–	–	6/6	–	1	1
Andrew Khoo (5)	1/1	4	1/1	–	1/1	1	1
Koh Beng Seng	–	–	3/3	6/6	–	1	1
Andrew Lee (6)	1/1	4	–	5/5	1/1	1	1
Lee Tih Shih (7)	–	–	–	–	1/1	–	1
Christina Ong	2/2	4	3/3	–	2/2	1	1
Pramukti Surjaudaja (8)	1/1	–	1/1	–	2/2	–	1
Tan Ngiap Joo (9)	1/1	–	2/2	–	–	1	1
Tan Yen Yen (10)	1/1	4	2/2	4/4	–	1	1
Wee Joo Yeow (11)	1/1	–	2/2	6/6	–	1	1

Notes:
(1) Reflects the number of meetings held during the time the Director held office.
(2) Other than Chairman of the Board, Board Committees and Group CEO, all other Board Members attended the 2022 AGM through webcast (audio-visual) or audio.
(3) Ceased to be RMC member on 23 April 2022.
(4) Appointed as non-executive and independent Director and AC member on 18 February 2022, and as ECC member on 23 April 2022.
(5) Appointed as NC Chairman, Exco and RC member on 23 April 2022, and ceased to be AC and ECC member on 23 April 2022.
(6) Appointed as non-executive and independent Director and RMC member on 18 February 2022, and as Exco, NC and ECC member on 23 April 2022.
(7) Ceased to be ECC member on 23 April 2022.
(8) Ceased to be NC member and appointed as RC member on 23 April 2022.
(9) Ceased to be RC Chairman, Exco and NC member on 23 April 2022. Stepped down as Board and AC member on 1 October 2022.
(10) Appointed as NC and RMC member, and ceased to be RC member on 23 April 2022.
(11) Ceased to be NC Chairman, Exco, and RC member on 23 April 2022.

Directors attend and actively participate in Board and Board Committee meetings. Their contributions go beyond attendance at meetings. They individually or collectively engage with other Board members and Management outside formal meetings in their oversight of the affairs of the Bank.

In 2022, the Board and its Committees held a total of 33 meetings. The Bank's Constitution provides for Directors to participate in Board and Board Committee meetings by means of video or audio conferencing.

Board Orientation and Development
A formal appointment letter and a director handbook are provided to every new Director. The handbook sets out, along with other corporate information, the time commitment required and the duties and obligations of Directors, as well as relevant rules and regulations such as those relating to the Banking Act and SGX-ST Listing Manual. The Bank conducts a focused orientation programme, presented by the CEO and senior management, to familiarise new Directors with its business and governance practices. The programme also enables the new Directors to be acquainted with senior management, thereby facilitating the latter's interaction with and access to the Directors. Arrangements are made for new Directors to visit the Bank's operations and facilities.

On a continuing basis, the Directors receive appropriate development to perform their roles on the Board and its Committees. This includes updates on global trends and regulatory developments as well as their impact on business, new businesses and products, sustainability, accounting and finance, corporate governance, risk management and anti-money laundering issues as well as fintech, technology and cybersecurity, which are provided by subject matter experts from within and outside the Bank. When deciding on the scope of the development to be provided, the knowledge and skills required to enable Directors to properly discharge their duties as members of the Board and its Committees are taken into account.

The Directors participate in external courses and learning experience as and when needed. The Bank funds the training and development programmes that it arranges for existing and new Directors. There is a formal record of all attendance at training sessions.

Training and updates provided to Directors in 2022 were on subjects that included:

- China's Dual Circulation Strategy and its Implications for Industries and Opportunities for Banks
- Technology Risk Updates
- Environmental, Social and Governance Essentials
- Climate & Sustainability: Strategic Implications and Board & Management Responsibilities
- Briefing on SFRS (I) 17 Insurance Contracts
- Anti Money Laundering / Countering the Financing of Terrorism

Principle 2: Board Composition and Guidance

The Bank has majority representation of independent Directors on its Board.

An independent Director of the Bank is one who is independent of any management, substantial shareholder and business relationship with the Bank, and who has not served for more than nine years on the Board. The Board at present comprises nine Directors of whom six, a majority, are independent Directors. They are Mr Andrew Lee, Ms Chong Chuan Neo, Mr Chua Kim Chiu, Dr Andrew Khoo, Ms Christina Ong and Ms Tan Yen Yen.

Dr Lee Tih Shih is not independent of a substantial shareholder. Mr Pramukti Surjaudaja is not an independent director as he has served for more than nine years on the Board and has an immediate family member, a sister, who is chief executive of the Bank's subsidiary, PT Bank OCBC NISP Tbk. Ms Helen Wong, appointed on 7 February 2023, is deemed not independent by virtue of her executive role as Group Chief Executive Officer of the Bank.

Ms Christina Ong is senior partner and chairman of Allen & Gledhill LLP (A&G), one of several law firms which provides legal services to and receives fees from the Bank. She did not involve herself in the selection and appointment of legal counsels for the Group. Her interest in A&G is less than 5% and the fees paid by the Group do not form a significant portion of A&G's revenue. She is also an independent director of Singapore Telecommunications Ltd which provides telecommunication services to and receives payments from the Bank, not unlike many organisations in Singapore. The Nominating Committee (with Ms Christina Ong recusing) also notes that these business relationships have not affected her conduct at meetings where her deliberations and constructive views consistently reflect her independent business judgement. Ms Christina Ong is deemed an independent Director.

The Board reviews the size of Board and Board Committees annually and considers the current number of Board and Board Committee members to be appropriate given the size of the Group and its business complexity. It also assesses the diversity of members' profiles and determines the collective skills required to discharge its responsibilities effectively, keeping in view the Group's strategic objectives.
A Board Diversity Policy, setting out the approach to diversify the appointment of members and composition of the Board has been established and is published on the Bank's website. The policy embraces the diversity of skills, knowledge, experience including familiarity in the Bank's core markets, age, gender, nationalities and length of service as well as merit and independence. Steps are taken to improve effectiveness where necessary. In assessing the Board's mix of skills, knowledge, experience, competencies and other aspects of diversity such as gender and age, the Board agreed to adopt a gender diversity target that is aligned with the gender diversity target set by the Council for Board Diversity (CBD). The CBD advocates for women board representation of 25% by 2025 and 30% by 2030. The Bank currently has four women directors or more than 25% women representation on its board of directors. It will maintain at least 25% women representation on its board of directors until 2025 and review the targeted representation subsequently.

Board Competencies and Skills

Intrinsic Competencies

- Strategy formulation & management experience
- Banking & Finance
- Insurance
- Digital banking & cyber risk
- Core market experience in Greater China, Malaysia and Indonesia
- Sustainability/ESG

Foundational Skillsets

- Risk management
- Regulatory
- Accounting
- Law

Corporate Strategy

Drive Growth

1. Capture rising Asian wealth with our Singapore-Hong Kong hubs and digital propositions
2. Support increasing ASEAN-Greater China trade and investment flows
3. Unlock value from New Economy and high-growth industries
4. Drive transition to a sustainable low-carbon world

Reinforce Strengths

5. Forge a "One Group" integrated customer experience approach
6. Invest in accelerating Transformation and Digitalisation
7. Strengthen our people assets and culture
8. Build on our capital and risk management strengths

The Board has also assessed that its diversity profile in terms of age, nationalities, length of service and skills and knowledge are adequate to foster constructive debate and ensure the effectiveness of the Board and its Committees in supporting the Bank's strategic objectives. The Board's current competencies and skills, aligned to serve the Bank's corporate strategy are depicted above.

To strengthen overall board governance, skills and knowledge on sustainability matters, the Board established a Board Sustainability Committee which will be supported by executives with the relevant knowledge and experience on sustainability matters. The Committee will also consider appointing an external Advisor with the relevant sustainability experience to complement the Committee's existing skillsets. The Board will also consider appointing a Director with the relevant sustainability experience within the next 3 years. This requirement will be incorporated into the board succession plan and search criteria. To enhance overall Board knowledge, the Board will continue to advocate regular training for Directors on sustainability matters. Please refer to Principle 4: Board Membership for more details on the board renewal process. Details of the Directors' professional qualifications, background and age can be found on pages 256 to 258.

The non-executive Directors on the Board constructively challenge and help develop proposals on strategy, review the performance of management in meeting agreed goals and objectives, and monitor the reporting of performance. They meet during the year, without the presence of management, to discuss the effectiveness of management.

Separate sessions are also arranged for the independent Directors to meet at least once a year to ensure effective corporate governance in managing the affairs of the Board and the Bank.

The Board and senior executives meet as frequently as necessary to develop or refresh strategies for the Group.

Principle 3: Chairman and Chief Executive Officer

The Chairman and CEO are not related.

The roles of the Chairman and the CEO are separated, which is consistent with the principle of instituting an appropriate balance of power and authority. The Chairman's responsibilities, to name a few, include leading the Board to ensure its effectiveness in all aspects of its role; setting its meeting agenda; ensuring that Directors receive accurate, timely and clear information; ensuring effective communication with shareholders; encouraging constructive relations between the Board and management; promoting a culture of openness and debate at the Board and facilitating the effective contribution of all Directors; ensuring constructive relations between executive and non-executive Directors; and promoting high standards of corporate governance.

The Bank does not have a Lead Independent Director as the Chairman of the Board, Mr Andrew Lee, is a non-executive and independent director.

Principle 4: Board Membership

As a principle of good corporate governance, all Directors are subject to re-nomination and re-election at regular intervals and at least every three years. The Bank's Constitution provides for the retirement of Directors by rotation and all appointments and reappointments of Directors have to be approved by MAS.

The Board establishes a Nominating Committee to make recommendations to the Board on matters relating to board membership. The Committee reviews the independence of Directors at least annually in accordance with internal due diligence procedures and the Directors' declarations. It also reviews the succession plans for Directors, including the appointment and/or replacement of the Chairman and executive Director, and ensures that only the most competent individuals capable of contributing to the success of the organisation are appointed. It reviews all nominations for the appointment or reappointment, election or re-election – as well as resignation or retirement – of Directors of the Bank and members of the Executive Committee, Remuneration Committee, Audit Committee, Risk Management Committee, Ethics and Conduct Committee and Board Sustainability Committee. It is also charged with determining annually whether or not a Director is independent, capable of carrying out relevant duties and qualified to remain in office.

The Nominating Committee assesses annually the profile of Board members individually and collectively, having regard to the skills, talents, experience and diversity required and their alignment with the Group's strategic priorities, and makes recommendations to the Board on the appointment of new Directors, when necessary. When the need for a new Director is identified, the Nominating Committee will consider a shortlist of candidates with the appropriate profile and qualities for nomination. To improve gender and other aspects of diversity as well as skills, talents and experience in ESG matters, the Nominating Committee may engage external search consultants to identify suitable director candidates from a wider pool. Short listed candidates are assessed by the Nominating Committee and recommendations submitted to the Board for review and appointment, subject to the approval of MAS. In accordance with the Bank's Constitution, the new Director will hold office until the next Annual General Meeting (AGM) and, if eligible, may then stand for re-election.

As part of the Board renewal process, the Board has appointed new Directors, Ms Chong Chuan Neo and Mr Andrew Lee on 18 February 2022 and Ms Helen Wong on 7 February 2023. Mr Tan Ngiap Joo and Mr Wee Joo Yeow retired from the Board on 1 October 2022 and 1 January 2023 respectively, after having served for more than nine years on the Board, the maximum period to be deemed an independent Director. Mr Ooi Sang Kuang retired as Chairman and also as a Director on 31 January 2023. Mr Koh Beng Seng stepped down as a Director on 3 February 2023 to allow more time to focus on his other commitments.

The Bank does not, as a matter of practice, appoint alternate directors.

Directors are aware of their duties and obligations and the expectation to set aside adequate time for their oversight of matters relating to the Bank. They attend and actively participate in Board and Board Committee meetings. The number of such meetings and each director's attendances at such meetings are disclosed in the annual report. They must provide declarations of any changes in their other appointments and principal commitments, which are disseminated to all Board members. The Bank has guidelines on meeting attendance and the extent of other appointments that a Director can assume. The Nominating Committee, based on the guidelines established, assesses annually each Director's attendance record and degree of participation at meetings to determine if a Director is able to and has been adequately carrying out his or her duties as a Director of the Bank. In respect of other appointments, it takes into account – among various factors – the nature of an appointment (full-time or otherwise), number of meetings to attend, complexity of organisation and degree of participation in sub-Committees. Generally, a Director who has full-time employment in any organisation shall have appointments in no more than three other listed companies, while a Director who has no full-time employment shall have appointments in no more than six other listed companies.

Key information on the Directors' qualifications, working experience, and other directorships and principal commitments/appointments are provided on pages 256 to 258 while information on their shareholdings in the Bank and its related corporations are provided in the Directors' Statement on pages 103 to 108.

Principle 5: Board Performance

The Board has an annual performance evaluation process, carried out by the Nominating Committee, Nominating Committee Chairman and Board Chairman, to assess the effectiveness of the Board, Board Committees and each Director's contribution. The purpose of the evaluation process is to increase the overall effectiveness of the Board.

An external party is engaged after every three years of internal evaluation to facilitate the evaluation of the Board as a whole and provide the Board with an independent perspective of the Board's performance, including benchmarking against peer boards and industry best practices. In 2022, the Nominating Committee engaged Aon Solutions Singapore Pte. Ltd. (Aon) for the evaluation. Aon and its consultants are independent and not related to the Bank or its subsidiaries or any of their directors.

The Directors participate in the evaluation. Each Director evaluates the performance of the Board and Board Committees as well as the Board Chairman, whilst the Chairman and Nominating Committee Chairman evaluate the performance of each Director and meet to discuss the matter. The assessments are made against pre-established criteria which include composition, information management, board processes, representation of shareholders and ESG matters, performance management, human capital management, director development, internal controls and risk management and effectiveness of Board Committees. The results of the evaluation are used constructively to discuss improvements to the Board and ensure that each Director remains qualified for office. The Chairman and/or Nominating Committee Chairman acts on the results of the evaluation, and if appropriate, proposes new Directors or seeks the resignation or retirement of Directors, in consultation with the Nominating Committee.

Remuneration Matters

Principle 6: Procedures for Developing Remuneration Policies

The objective of the Bank's remuneration policy is to attract, motivate, reward and retain talented and competent staff globally. The Board ensures that remuneration policies are in line with the strategic objectives as well as code of conduct and ethics of the Bank, and do not give rise to conflicts between the objectives of the Bank and the interests of employees.

The Remuneration Committee is tasked to review and recommend to the Board the general remuneration framework as well as the specific remuneration for each Director and for each key executive. The composition and summary terms of reference of the Remuneration Committee are provided on page 46. No member of the Remuneration Committee is involved in the deliberations regarding any remuneration, compensation, options or any form of benefits to be granted to himself or herself.

In its review of the Bank's remuneration practices, the Remuneration Committee can seek expert advice, if necessary. The Bank used salary surveys conducted by external compensation consultants, Aon, Mercer and Willis Towers Watson for the purpose of benchmarking employee salaries in Singapore and overseas. Aon, Mercer and Willis Towers Watson and their consultants are independent and are not related to the Bank or its subsidiaries or any of their directors. The Bank's compensation practices are also reviewed annually by Aon against local regulations as well as the Financial Stability Forum's principles and implementation standards for Sound Compensation Practices for significant financial institutions.

The Bank's remuneration policy is applied to all OCBC overseas branches and the following subsidiaries:

- Bank of Singapore Ltd
- OCBC Management Services Pte Ltd
- OCBC Securities Pte Ltd
- OCBC Investment Research Pte Ltd
- BOS Trustee Ltd
- e2 Power Pte Ltd
- e2 Power Sendirian Berhad
- OCBC Bank (Malaysia) Berhad
- OCBC Al-Amin Bank Berhad
- OCBC Wing Hang Bank Ltd
- OCBC Wing Hang Bank (China) Ltd

The Bank does not provide for any termination, retirement or post-employment benefits to executive Directors or the top five key management personnel.

Principle 7: Level and Mix of Remuneration

Compensation for Non-Executive Directors

The Bank's remuneration for non-executive Directors is intended to attract capable individuals to the Board, as well as retain and motivate them in their roles as non-executive Directors. It aligns their interests with those of shareholders, and recognises individual contributions. The remuneration for non-executive Directors is subject to shareholder approval at the AGM.

The Remuneration Committee has considered market practices for non-executive Director compensation. On its recommendation, the Board has decided to adopt the following fee structure to fix the fee for each non-executive Director of the Bank.

The fee structure is as follows:

• Board chairman's fee	$1,400,000
• Retainer fee	$55,000
• Committee chairperson's fee for the Audit, Risk Management and Executive Committees	$95,000
• Committee chairperson's fee for the Nominating, Remuneration, Ethics and Conduct, and Board Sustainability Committees	$55,000
• Committee member's fee for the Audit, Risk Management and Executive Committees (Committee chairpersons are not awarded these fees)	$55,000
• Committee member's fee for the Nominating, Remuneration, Ethics and Conduct, and Board Sustainability Committees (Committee chairpersons are not awarded these fees)	$30,000
• Attendance fee per meeting	$4,000

The resolution proposing the fee for non-executive Directors will be presented to shareholders at the 2023 AGM.

In the previous year, shareholders had approved the grant of 6,000 remuneration shares to each non-executive Director. The remuneration shares align the interests of non-executive Directors with the interests of shareholders. At the recommendation of the Remuneration Committee, the Board has decided to continue with the granting of 6,000 new ordinary shares to each non-executive Director. Any non-executive Director who has served on the Board for less than a full financial year will be awarded shares on a pro-rated basis, depending on the length of service. The resolution proposing these share grants will be presented to shareholders at the 2023 AGM.

Compensation for Executive Directors

The compensation for an executive Director is formulated and reviewed annually by the Remuneration Committee to ensure that it is market-competitive and that the rewards are commensurate with the contributions made. The compensation package comprises basic salary, benefits-in-kind, performance bonus, share awards and compensation in the event of early termination where service contracts are applicable. Performance bonus relate directly to the financial performance of the Group and the contributions of the executive Director. The guidelines on the granting of share awards to the executive Director are similar to those for the executives of the Bank.

Employee Remuneration

The total compensation packages for employees comprise basic salary, variable performance bonus, allowances and deferred share awards for eligible executives, as well as benefits. Compensation is tied to the achievement of business and performance objectives based on a balanced scorecard approach, which includes leadership competencies and adherence to core values. Where relevant, financial measurements – adjusted as appropriate for the various types of risk (such as market, credit and operational risks) – include:

- Operating efficiency measures covering revenue, direct and allocated costs and operating profits, net profits as well as efficiency indicators such as unit costs.

- Economic efficiency measures such as cost of capital. Capital is attributed to each business based on the amount of risk-weighted assets held and the return on capital.

- Liquidity is factored into the performance measurement of each business through the application of liquidity premiums charged or credited according to the behavioural maturity of each type of asset and liability booked.

There were no significant changes to the above measures during 2022.

In the Bank's continuous efforts to create sustainable value for stakeholders, relevant performance measures are set for each business unit. These objectives which include broad-based growth across its core markets, delivering sustained earnings momentum from core businesses, driving core competencies of disciplined risk management, diversified funding base and continued investments in technology and people, and ensuring sustainable business practices are also consistent with the Group's risk appetite. In the determination of remuneration of senior executives, risk and control indicators as well as audit findings and compliance issues are taken into account when assessing business performance. Executives are remunerated based on the achievements of their own performance measures, and the demonstration of core values and competencies, while taking into account market compensation data for their respective job roles.

The performance of risk and compliance functions is measured independently of the businesses they oversee. Employees in these functions are assessed based on achievement related to their respective performance measures. Market compensation data on risk and compliance functions is also taken into account for remuneration.

In determining the composition of compensation packages, the Bank takes into account the time horizon of risk and includes, in the total compensation for executives, a significant portion of deferred payment in the form of deferred shares. All awards of deferred shares or share options (granted in previous years) are subject to cancellation and clawback if it is determined, amongst other things, that they were granted on the basis of materially inaccurate financial statements and/or that the employee has engaged in conduct that results in financial loss, reputational harm, restatement of financial results, adverse changes to the Bank's risk profile/rating and/or is otherwise detrimental to the Bank and/or Group and/or the business conducted by any member of the Group. To ensure that its remuneration packages are competitive, the Bank regularly reviews salary levels and benefits packages based on market data provided by recognised consultants who conduct surveys on comparative groups in the financial sector. The determination of the Bank's variable bonus pool is fully discretionary and the factors taken into consideration include financial and non-financial metrics like the Bank's performance, audit ratings, risk indicators and compliance issues, market conditions and competitive market practices.

The Bank adopts a performance-driven approach to compensation. Compensation packages are linked to personal performance, the performance of each business unit, and the overall performance of the Bank. Compensation is reviewed each year based on information from market surveys provided by reputable management consultants.

As a consequence of the last financial crisis, the Financial Stability Forum developed principles and implementation standards for Sound Compensation Practices for significant financial institutions. The Remuneration Committee made changes to the Bank's compensation structure to increase the proportion of the deferred remuneration component for senior executives. The Bank's compensation practices are reviewed annually by Aon which has confirmed for 2022 that the Bank had met the Financial Stability Forum principles and implementation standards.

The Bank has identified a group of senior executives whose authority and actions are deemed to have a major influence on the long-term performance of the Bank and whose actions or decisions can materially impact the Bank's risk profile. This group, identified as "Material Risk Takers" comprises senior management (the CEO and her direct reports), employees of Senior Vice President rank and above, key personnel at business units, senior control staff, and employees who had been awarded significant variable performance bonuses as well as senior managers identified under the regulator's guidelines. For the "Material Risk Takers" with bonuses exceeding $100,000, at least 40% of their variable performance bonuses are deferred in the form of shares. The Board approves the compensation of the CEO, Chief Financial Officer, Chief Risk Officer, Chief Operating Officer and Head, Global Treasury, and the Audit Committee approves the compensation of Head of Group Audit. The Remuneration Committee approves the compensation of all other senior executives of Senior Vice President rank and above, as well as the top five employees who had been awarded significant variable performance bonuses who are below the rank of Senior Vice President.

The performance evaluation for senior executives in 2022 has been conducted in accordance with the above objectives and considerations.

The remuneration practices for staff in bargainable positions are established through negotiation with the Bank's unions.

Share Schemes

- **OCBC Share Option Scheme 2001**
  The Bank has ceased granting share options under the OCBC Share Option Scheme 2001 (the Scheme) effective from financial year 2018 remuneration. The Scheme which was extended from 2011 had ceased operation on 2 August 2021. Share options granted in prior years continue to be outstanding until the options lapse or are exercised by the recipients.

  The validity period of the options granted is subject to legislation applicable on the date of grant. Options granted to Group executives are exercisable for up to 10 years, while options granted to non-executive Directors are exercisable for up to five years.

The options granted will lapse immediately upon termination of employment or appointment, except in the event of retirement, redundancy or death, or where approved by the Remuneration Committee, in which case the Committee may allow the options to be retained and exercisable within the relevant option periods or such option periods as may be determined by the Remuneration Committee. Shares granted upon the exercising of options are allocated from treasury shares or from new ordinary shares issued by the Bank.

All grants are subject to cancellation and clawback if it is determined, amongst other things, that they were made on the basis of materially inaccurate financial statements and/or that the employee has engaged in conduct that results in financial loss, reputational harm, restatement of financial results, adverse changes to the Bank's risk profile/rating and/or is otherwise detrimental to the Bank and/or the Group and/or the business conducted by any member of the Group.

- **OCBC Deferred Share Plan**
  The OCBC Deferred Share Plan (the Plan) aims to increase the performance-orientation and retention factor in compensation packages of executives, and foster an ownership culture within the organisation. It also aligns the interests of executives with the sustained business performance of the Bank. Group executives holding the rank or equivalent rank of Assistant Manager and above, and any Group Executive Director selected by the Remuneration Committee, are eligible to participate in the Plan.

  In 2021, the Bank adopted a new OCBC Deferred Share Plan 2021 (DSP 2021). The new OCBC DSP 2021 permits new ordinary shares to be issued to satisfy the Bank's delivery obligations under the Plan. It replaces the previous OCBC Deferred Share Plan, under which no new ordinary shares may be issued. The participants are executives of the Bank, selected overseas locations and subsidiaries.

  Under the DSP 2021, share awards are granted annually to eligible executives who are paid variable performance bonuses exceeding $100,000. The share awards form 20% to 40% of their total variable performance bonus for the year. Half (50%) of the share awards will vest after two years with the remaining 50% vesting at the end of three years in accordance with the guidelines established under the Plan. The grants are part of the performance bonuses for the prior year where the delivery of key performance indicator targets have been completed. There are no further performance conditions imposed prior to the vesting of the share awards, other than those described on pages 52 and 53 of the 2022 Annual Report related to the conditions for cancellation and clawback of these share awards. Prior to the vesting date, the executives will not be accorded voting rights for the shares.

  By implementing the DSP 2021, which permits new ordinary shares to be issued, the Bank has greater flexibility in its methods for delivery of ordinary shares to fulfil share grants, as this can be effected through an issue of new ordinary shares, in addition to the transfer of existing ordinary shares (including treasury shares). The unvested deferred share grants will be adjusted to take into account dividends declared by the Bank. The additional shares granted in respect of this adjustment may be acquired from the market in accordance with guidelines established under the Plan.

  The awards will lapse immediately upon termination of employment or appointment, except in the event of retirement, redundancy or death, or where approved by the Remuneration Committee, in which case the Committee may allow the awards to be retained and vested within the relevant vesting periods or such periods as may be determined by the Remuneration Committee.

  All awards are subject to cancellation and clawback if it is determined, amongst other things, that they were granted on the basis of materially inaccurate financial statements and/or that the employee has engaged in conduct that results in financial loss, reputational harm, restatement of financial results, adverse changes to the Bank's risk profile/rating and/or is otherwise detrimental to the Bank and/or the Group and/or the business conducted by any member of the Group.

- **OCBC Employee Share Purchase Plan**
  The OCBC Employee Share Purchase Plan (ESPP) was implemented for all employees of the participating companies in the Group, including executive Directors, to inculcate in all participants a stronger and more lasting sense of identification with the Group.

  The ESPP is a saving-based share ownership plan to help employees own ordinary shares in the Bank through their monthly contributions via deductions from payroll and/or CPF funds. The employees have the option to convert the contributions to ordinary shares after one year or to withdraw the contributions at any time. As a further incentive to employees to enrol in the ESPP, the Bank pays interest on the amounts saved at a preferential interest rate.

  The duration of the offering period is 24 months and the share acquisition price is fixed before the offering period based on the average of the last traded prices over the five consecutive trading days immediately preceding the price fixing date. Shares granted upon conversions in accordance with the rules of the ESPP are allocated from treasury shares or from new ordinary shares issued by the Bank.

  The aggregate number of new ordinary shares issued by the Bank pursuant to the ESPP, together with the aggregate number of any new ordinary shares issued pursuant to the OCBC Share Option Scheme 2001 and the aggregate number of new ordinary shares issued to awards granted under the DSP 2021, cannot exceed 10% of the Bank's total number of issued ordinary shares (excluding treasury shares and subsidiary holdings (as defined in the SGX-ST Listing Manual)). Notwithstanding the limits allowed under the relevant rules, the Bank has been applying a lower aggregate limit of 5% instead of 10% as a matter of conservative practice.

Principle 8: Disclosure on Remuneration

The following disclosures should be read in conjunction with the remuneration policies, practices and share plans as described under Principles 6 and 7.

Directors' and Group CEO's Remuneration in 2022

Bank

Director	Fees	Shares [a]	Other Benefits [b]	Total
	$	$	$	$
Ooi Sang Kuang	1,656,877	75,000	47,649	1,779,526
Chong Chuan Neo	160,329	65,125	786	226,240
Chua Kim Chiu	281,000	75,000	4,237	360,237
Andrew Khoo	258,123	75,000	1,139	334,262
Koh Beng Seng	373,493	75,000	–	448,493
Andrew Lee	255,247	65,125	–	320,372
Lee Tih Shih	171,205	75,000	4,237	250,442
Christina Ong	259,328	75,000	4,237	338,565
Pramukti Surjaudaja	155,000	75,000	–	230,000
Tan Ngiap Joo	185,233	56,088	4,237	245,558
Tan Yen Yen	274,123	75,000	4,237	353,360
Wee Joo Yeow	220,959	75,000	4,237	300,196
	4,250,917	861,338	74,996	5,187,251

Group CEO	Salary	Bonus	Deferred Shares	Other Benefits [b]	Total
	$	$	$	$	$
Helen Wong	1,442,400	5,385,000	3,590,000	782,244 [c]	11,199,644

Subsidiaries

Director	Total
	$
Ooi Sang Kuang	91,296 [d]
Chong Chuan Neo	77,010 [e]
Andrew Khoo	170,534 [f]
Koh Beng Seng	558,000 [g]
Andrew Lee	58,166 [h]
Pramukti Surjaudaja	795,760 [i]
Tan Ngiap Joo	165,386 [j]
Wee Joo Yeow	150,000 [k]

Notes:

(a) Value of remuneration shares was estimated based on closing price of ordinary shares on 3 March 2023, i.e. $12.50 per share.
(b) Non-cash component such as club and car benefits for Mr Ooi Sang Kuang and Ms Helen Wong, and carparks for Directors.
(c) Includes the value of shares and cash awarded for loss of compensation from previous employment.
(d) Fees from OCBC Wing Hang Bank.
(e) Fees from Great Eastern Digital for services as nominee director on board of Boost Holdings (an associated company of Great Eastern Holdings) and Lion Global Investors Ltd.
(f) Fees from OCBC Wing Hang Bank.
(g) Fees from Great Eastern Holdings and its subsidiaries.
(h) Fees from OCBC Al-Amin Bank.
(i) Fees from PT Bank OCBC NISP for being Board President Commissioner, a capacity in Indonesia with critical supervisory responsibilities over the organisation.
(j) Fees from OCBC Bank (Malaysia) and OCBC Al-Amin Bank.
(k) Fees from Great Eastern Holdings.

Remuneration of Top Five Key Management Personnel in 2022

The Code recommends the disclosure of the individual remuneration of the Bank's top five key management personnel as well as their aggregate remuneration. The Board considered this matter carefully and has decided against such a disclosure for the time being as it is not standard business practice to do so, having taken into account the highly competitive conditions for talent in the industry.

Remuneration of Directors' and CEO's Immediate Family

Mr Pramukti Surjaudaja, a Director of the Bank, has a sister, Ms Parwati Surjaudaja, who is chief executive of the Bank's subsidiary, PT Bank OCBC NISP Tbk. Her personal remuneration in 2022 exceeds $100,000 but for reasons stated above, her individual remuneration is not disclosed. In 2022, apart from Ms Parwati Surjaudaja, none of the Group's employees was an immediate family member of a Director or the CEO.

Remuneration of Substantial Shareholder's Immediate Family

A disclosure on remuneration to employees who are immediate family members of substantial shareholders is not applicable as none of the Bank's substantial shareholders are individuals.

Remuneration Disclosure for Senior Management and Material Risk Takers

Remuneration Awarded during the Financial Year

		Senior Management	Other Material Risk-Takers
Fixed remuneration	Number of employees	17	389
	Total fixed remuneration	29%	56%
	Of which: cash-based	29%	56%
	Of which: deferred	0%	0%
	Of which: shares and other share-linked instruments	0%	0%
	Of which: deferred	0%	0%
	Of which: other forms	0%	0%
	Of which: deferred	0%	0%
Variable remuneration	Number of employees	17	379
	Total variable remuneration	71%	44%
	Of which: cash-based	43%	27%
	Of which: deferred	0%	0%
	Of which: shares and other share-linked instruments	28%	17%
	Of which: deferred	28%	17%
	Of which: other forms	0%	0%
	Of which: deferred	0%	0%
Total remuneration		100%	100%

Special Payments

	Guaranteed Bonuses		Sign-on Awards		Severance Payments	
	Number of Employees	Total Amount ($)	Number of Employees	Total Amount ($)	Number of Employees	Total Amount ($)
Senior Management	2	Not disclosed*	0	0	0	0
Other Material Risk-Takers	3	910,476	3	547,866	0	0

* Due to confidentiality reason

Deferred Remuneration

Deferred and Retained Remuneration	Total outstanding deferred remuneration	Of which: Total outstanding deferred and retained remuneration exposed to ex post explicit and/or implicit adjustments	Total amendment during the year due to ex post explicit adjustments [1]	Total amendment during the year due to ex post implicit adjustments [2]	Total deferred remuneration paid out in the financial year
Senior management	100%	100%	0%	0%	41%
Cash	0%	0%	0%	0%	0%
Shares	100%	100%	0%	0%	41%
Share-linked instruments	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%
Other material risk-takers	100%	100%	0%	0%	41%
Cash	1%	1%	0%	0%	0%
Shares	99%	99%	0%	0%	41%
Share-linked instruments	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%

Notes:

(1) Examples of ex post explicit adjustments include malus, clawbacks or similar reversal or downward revaluations of awards.

(2) Examples of ex post implicit adjustments include fluctuation in the value of shares performance or performance units.

Accountability and Audit

Principle 9: Risk Management and Internal Controls

The Board is responsible for the governance of risk and sets the tone from the top to cultivate a strong risk culture. It approves the Bank's risk appetite and oversees risk activities to ensure that these are consistent with the Bank's strategic intent and operating environment, as well as capital sufficiency and regulatory standards. It oversees, through the Risk Management Committee, the establishment and operation of an independent risk management system for managing risks on an enterprise-wide basis. It also oversees the adequacy and effectiveness of the internal controls and risk management processes and systems. It ensures that the risk management function has appropriate independent reporting lines and is sufficiently resourced to monitor risk by the various risk categories.

Further details on risk management are described under the section on Risk Management Committee on page 46.

The Board is also responsible for ensuring that the Bank's internal controls adequately safeguard shareholders' interests and the Bank's assets. Self-assessment processes are in place for all business units to assess the adequacy and effectiveness of their internal controls, and level of compliance with applicable rules and regulations. The results of the evaluations are reviewed by senior management. The Board has received assurance from the CEO and key management personnel who are responsible regarding the adequacy and effectiveness of the Bank's risk management and internal control systems. The Board has also received assurances from the CEO and Chief Financial Officer that the financial records have been properly maintained and the financial statements give a true and fair view of the Bank's operations and finances.

Based on the established internal control, work performed by the internal and external auditors, and reviews performed by the management and various Board Committees, the Board – with the concurrence of the Audit and Risk Management Committees – is of the view that the system of internal controls, including financial, operational, compliance and information technology controls, and risk management policies and systems, were adequate and effective as at 31 December 2022, to address the risks which the Bank considers relevant and material to its operations.

The system of internal controls provides reasonable but not absolute assurance that the Bank will not be adversely affected by any event that could be reasonably foreseen as it strives to achieve its business objectives. However, the Board also notes that no system of internal controls can provide absolute assurance in this regard, or absolute assurance against the occurrence of material errors, poor judgement in decision-making, human error, losses, fraud or other irregularities.

Principle 10: Audit Committee

The composition and summary terms of reference of the Audit Committee are provided under the section on Audit Committee on page 46 and the Committee's summary activities are also provided in the Directors' Statement on page 108. The Audit Committee adopts, where appropriate, relevant best practices set out in the Guidebook for Audit Committees in Singapore.

In addition to the review of the Group Financial Statements, which includes reviewing the assurances provided by the CEO and Chief Financial Officer on the financial records and statements, the Audit Committee reviews and evaluates, with the external and internal auditors, the adequacy and effectiveness of the system of internal controls including financial, operational, compliance and information technology controls, and risk management policies and systems. It reviews the scope and results of the audits, the cost-effectiveness of the audits and the independence and objectivity of the external and internal auditors. When the external auditor provides non-audit services to the Bank, the Committee keeps the nature, extent and costs of such services under review. This is to balance the objectivity of the external auditor against its ability to provide value-for-money services. The Audit Committee members keep abreast of changes to accounting standards and development of related significant accounting policies which have a direct impact on financial statements and Group accounting policies through briefings provided by internal or external subject matter experts. The Audit Committee also reviews significant financial reporting issues and judgements to ensure the integrity of the financial statements. The Committee reviews announcements relating to financial performance.

The Audit Committee is also responsible for the review of the Bank's whistleblowing policy as well as any concerns, including anonymous complaints, which staff may in confidence raise about possible improprieties in matters of financial reporting or other matters. The whistleblowing policy and procedures for raising such concerns are disclosed and clearly communicated to employees. The Committee will ensure such concerns are independently investigated and followed up on. If the case escalated is found to be substantiated, appropriate action will be taken and the Audit Committee updated regularly on its status. The whistleblower's identity is kept confidential and his/her interests will be safeguarded at all times, including a right to appeal to the Audit Committee if reprisals are taken against him/her.

The Audit Committee meets at least once a year with the external auditor and internal auditor in separate sessions and without the presence of management, to consider any matters which may be raised privately. In addition, the Chairman of the Audit Committee meets the Head of Group Audit on a regular basis to discuss the work undertaken, key findings and any other significant matters arising from the Group's operations. Formal reports are sent to the Audit Committee on a regular basis.

External Audit

The Audit Committee has received the requisite disclosures from the current external auditor evidencing its independence. It is satisfied that the financial, professional and business relationships between the Group and the external auditor will not prejudice the independence and objectivity of the external auditor. The aggregate amount of fees paid to the external auditor for financial year 2022, and the breakdown of total fees paid for audit and non-audit services, are shown in the Notes to the Financial Statements.

The Audit Committee assesses the quality of OCBC's external auditor before its first appointment and at least annually thereafter. The selection of the external auditor is made through a tender process based on an established framework for the selection/ appointment of OCBC's external auditor. This framework lists the considerations and criteria for the external auditor and provides a robust tender process. Considerations include having global reach as well as technical and industry expertise, skills, resources and reputation, and quality of service delivery.

Exercising oversight over the external audit function, the Audit Committee is responsible for making recommendations to the Board in relation to the appointment, reappointment and removal of the external auditor. The Audit Committee also considers the annual fee proposals presented by the external auditor and reviews the scope of the audit plan, the level of materiality, areas of focus and significant risks to be addressed.

For reappointment of external auditor, the Audit Committee considers the length of the external auditor's tenure and the risk this may pose to objectivity and independence. The Audit Committee also takes into consideration the external auditor's compliance with SGX-ST Listing Rules which require the lead engagement partner to be rotated every five years.

The Audit Committee is responsible for monitoring the performance, objectivity and independence of the external auditor. In its evaluation process, the Audit Committee takes into consideration the following:

- the experience and expertise of senior members of the engagement team;
- the audit plan agreed with the external auditor, the areas of audit focus and the external auditor's approach to materiality;
- the quality of reports and findings presented by the external auditor;
- the external auditor's presentation of its Audit Quality Framework and its confirmation of independence pursuant to its policies and processes for maintaining independence and objectivity;
- the external auditor's report to the Audit Committee on main findings on audit quality reviews of the Bank's audit;
- the key highlights or findings on the external auditor's quality control systems by audit oversight bodies and, where relevant, the appropriate steps taken by the external auditor; and
- feedback through an annual evaluation exercise from senior management across geographical regions to gather internal perceptions as to the knowledge, competence, independence, efficiency and effectiveness – as well as communications by and with – the external auditor.

As part of its assurance process on the objectivity and independence of the external auditor, the Audit Committee has in place a policy that lists the non-audit services which may not be provided by the external auditor and sets out the circumstances in which the external auditor may be permitted to undertake non-audit services. Permitted non-audit services exceeding $250,000 require the approval of the Audit Committee before the auditor can be engaged. In addition, the Audit Committee reviews reports on non-audit services undertaken by the external auditor to satisfy itself as to the nature of non-audit services being provided and the fees incurred. The nature of the non-audit services provided during the financial year ended 31 December 2022 is shown in the Notes to the Financial Statements.

To reinforce the Audit Committee's effectiveness and enhance the quality of the audit, the Audit Committee meets regularly with the external auditor. The external auditor discusses its audit plan with the Audit Committee and presents its engagement teams and its audit fee proposals. It reports to the Audit Committee on audit focus areas, the support rendered by management, key audit findings, quantitative and qualitative aspects of financial statement disclosures, any unadjusted audit differences (or review differences in the case of a half-yearly or a quarterly review) and any other matters relevant to its engagement. Discussions may be held privately without the presence of management. The external auditor also discusses with the Audit Committee key changes to regulatory requirements and reporting as well as developments in accounting standards.

In the review of the 2022 financial statements, the Audit Committee discussed with management the accounting principles applied and significant judgements affecting the financial statements. Matters raised by Group Audit and the external auditor in respect of governance, risk management, accounting and internal controls over financial reporting were also reviewed. The following key audit matters highlighted in the Independent Auditor's Report on pages 109 to 115 of the Annual Report were discussed with management and the external auditor:

- **Impairment of loans to customers**
  The Audit Committee reviewed management's assessment and justification of allowances for impaired loans and non-impaired loans, including the forward-looking assumptions and scenarios adopted as well as the adjustments made to the model-driven requirements to reflect current conditions and forecasts of future economic conditions (e.g. economic and geopolitical developments). The adequacy of allowances for impaired loans set aside for key loan accounts was also discussed with the external auditor. Additionally, the Audit Committee also considered the input from Group Audit's independent assessment of the Group's credit portfolio quality and credit risk management process.

- **Valuation of financial instruments measured at fair value – Levels 2 and 3**
  The Audit Committee, with the input of the Risk Management Committee, reviewed management's valuation of financial instruments framework and their control, monitoring and issue escalation processes. In addition, the Committee reviewed both internal and the external auditors' assessment of the controls over valuation which included independent verification of price and validation of valuation models.

- **Impairment of goodwill**
  The Audit Committee reviewed management's goodwill impairment testing methodology and results, including the cash flow projections and discount rates used. The Committee also considered the external auditor's assessment of the methodology and testing results.

- **Valuation of life insurance contract liabilities**
  The Audit Committee reviewed the approach and methodology applied to the valuation of life insurance contract liabilities in the consolidated financial statements of Great Eastern Holdings Ltd (Great Eastern) in their review of Great Eastern's financial results together with the Group's financial performance. In considering the valuation of life insurance contract liabilities, the Committee considered the external auditor's assessment of the valuation methodology and assumptions adopted by Great Eastern and its subsidiaries.

  The Audit Committee believes that the financial statements are fairly presented in conformity with the relevant Singapore Financial Reporting Standards (International) in all material aspects, based on its review and discussions with management and the external auditor.

Internal Audit

The Audit Committee approves the Internal Audit Charter of Group Audit and reviews the adequacy and effectiveness of the internal audit function, at least annually. In line with leading practice, Group Audit's mission statement and charter requires it to provide independent and reasonable, but not absolute, assurance that the Group's governance, risk management and internal control processes – as designed and implemented by senior management – are adequate and effective. Group Audit reports on the adequacy and effectiveness of the system of internal controls to the Audit Committee and management, but does not form any part of the system of internal controls. Group Audit meets or exceeds the International Standards for the Professional Practice of Internal Auditing of The Institute of Internal Auditors.

Group Audit adopts a risk-based approach where audit work is prioritised and scoped according to an assessment of current and emerging risks, including financial, operational, technology, cyber, compliance, sustainability and strategic risks. The work undertaken by Group Audit involves the assessment of the adequacy and effectiveness of the Group's governance, risk management and internal control processes in meeting its strategic objectives and operating within the risk appetite established. In addition, Group Audit provides an independent assessment of the Group's credit portfolio quality and credit risk management process. Without assuming management responsibility, Group Audit may provide advisory services to line management on certain business initiatives as well as system developments and enhancements where the objective is to add value and improve governance, risk management and controls.

The Audit Committee is responsible for reviewing the independence, effectiveness and standing of the internal audit function and adequacy of resources needed to achieve the internal audit objectives. For the year ended 31 December 2022, the Audit Committee has assessed that the internal audit function was adequately resourced, independent, effective and possessed the right standing within the organisation. The Committee reviews the processes that are in place to deal with recommendations raised in internal audit reports in a timely manner and to closely monitor outstanding exceptions or recommendations. Currently, the number of internal audit staff in the Group is 320. The division is organised into departments that are aligned with the structure of the Group. The Audit Committee approves the appointment, resignation, dismissal, succession and remuneration of the Head of Group Audit and reviews the reasons for the resignation or dismissal of Head of Group Audit.

Shareholder Rights and Engagement

Principle 11: Shareholder Rights and Conduct of General Meetings

In 2022, pursuant to the Covid-19 (Temporary Measures) (Alternative Arrangements for Meetings for Companies, Variable Capital Companies, Business Trusts, Unit Trusts and Debenture Holders) Order 2020, the Bank convened and held its AGM via electronic means on 22 April 2022, as a precautionary measure in view of prevailing Covid-19 situation.

All Directors attended the virtual 2022 AGM together with the external auditor, senior management and independent scrutineers. The Chairman shared his observations on the operating environment for 2021 and the overall macro-economic outlook for 2022. This was followed by the CEO's presentation of the Group's 2021 financial performance, 2022 outlook and corporate strategy.

Shareholders were given the opportunity to participate in the 2022 AGM despite not being able to attend the AGM in person. Shareholders or appointed proxies who were authenticated via the Bank's verification process, were able to observe and/or listen to the AGM proceedings via live audio-visual webcast or live audio-only stream and cast their votes electronically during the AGM. Shareholders or appointed proxies were also able to submit questions at the 2022 AGM in real time via the virtual AGM platform, or in advance of the 2022 AGM via the registration portal, and by post or email. Responses to all substantial and relevant questions were provided during the AGM and published on the SGX website and the Bank's website.

The Bank conducts voting by poll for all resolutions proposed at its general meetings, for greater transparency in the voting process. The Bank also provides for separate resolutions on each substantially separate issue. It does not "bundle" resolutions, unless the resolutions are interdependent and linked so as to form one significant proposal.

Under the Bank's Constitution, shareholders are allowed to vote in person or appoint up to two proxies unless the shareholder is a relevant intermediary (as defined under the Singapore Companies Act 1967). A shareholder who is a relevant intermediary can appoint more than two proxies to attend, speak and vote at the general meetings of the Bank. For 2022 AGM which was convened via electronic means, all shareholders or appointed proxies were able to perform live voting via the virtual platform during the AGM. Shareholders who were unable to attend the AGM were also allowed to appoint the Chairman of the Meeting as proxy to attend, speak and vote on their behalf at the 2022 AGM. Proxy forms submitted by shareholders were independently verified by the independent scrutineers. The voting results of all votes cast for and against each resolution and the respective percentages, were announced by the Chairman at the 2022 AGM. The detailed voting results were announced on the SGX website and posted on the Bank's website within the same day after the conclusion of the 2022 AGM.

As is the practice, minutes of the Bank's general meetings are made available on the SGX website and the Bank's website. The minutes prepared by the Company Secretary would reflect the proceedings including responses from the Board and management to queries from shareholders.

Principle 12: Engagement with Shareholders

The Bank has a shareholders communication policy approved by the Board. The Bank recognises the importance of communicating regularly and effectively with its shareholders so that they can better understand its operations, strategies and directions. One of the key roles of the Group's Investor Relations and Group Brand and Communications units is to keep the market and investors apprised of the Group's major corporate developments and financial performance through regular media releases, briefings and meetings with the investment community and media. As a result of the evolving conditions arising from the Covid-19 pandemic, the Bank's financial results presentations in 2022 were conducted both virtually and physically, with audio recordings of the results briefings uploaded on the Bank's website. The Bank's dividend policy is also disclosed in the Capital Management section on pages 68 and 69 of this Annual Report. In 2022, the Bank held close to 600 meetings and conference calls with the investment community including investors, rating agencies and analysts. In addition, shareholders and the public can access the Group's media releases, financial results and presentation materials used at briefings, and other corporate information via the Bank's website.

Material information is also announced through the SGX website.

Investors can submit feedback and queries to OCBC's Investor Relations Unit through the contact details provided on the Bank's website

Managing Stakeholders Relationships

Principle 13: Engagement with Stakeholders

The Bank recognises the importance in maintaining positive stakeholder relationships, and adopts an inclusive approach in the management and engagement of its stakeholders – namely customers, investors, communities, regulators and employees. The Sustainability Report sets out the Bank's approach to stakeholder engagement including key areas of focus and how it responds to stakeholder concerns.

The Bank maintains a corporate website – OCBC.com – to communicate and engage with its stakeholders.

Related Party Transactions and Interested Person Transactions

The Group has established policies and procedures on transactions involving related parties and interested persons in compliance with relevant regulatory requirements and SGX-ST Listing Rules.

For related party transactions, the Group is guided by relevant authorities governing the definitions of relatedness, limits applied, terms of transactions, procedures for approving and monitoring the transactions and where necessary, the writing off of these transactions. Related party transactions are monitored with particular care, and appropriate steps are taken to control or mitigate the risks of such transactions. The Board reviews the Group policy on a regular basis to ensure it remains relevant and is kept informed of all material related party transactions. During the financial year, there were no material related party transactions between the Bank and its related parties under the Group policy.

For interested person transactions, the Bank's established policy and procedures comply with requirements mandated under Chapter 9 of the SGX-ST Listing Manual. Details of interested person transactions carried out during the financial year under review are set out in the section under "Additional Information Required under the SGX-ST Listing Manual" on page 67.

Ethical Standards

The Bank's ethical standards are guided by its commitment to uphold its core values or "LIFRR".

The Bank has also adopted the SGX-ST Listing Manual's guidelines on dealings in securities and has a policy against insider trading. Directors and officers are prohibited from dealing in the securities of the Bank and its listed subsidiary, Great Eastern, during the period commencing two weeks before the voluntary disclosures of the Bank's and Great Eastern's first and third quarters' financial results, and one month before the announcement of half-year and full-year financial results (the blackout period) and any time they are in possession of unpublished material price-sensitive information. The Bank will notify Directors and employees of the commencement date for each blackout period. The policy also states that employees are not to deal in the Bank's securities on short-term considerations. In addition, employees are instructed to conduct all their personal securities transactions through the Group's stockbroking subsidiary.

The Bank's insider trading policy also includes instructions pertaining to dealings in the listed securities of customers of the Group. The Bank reviews its policy on insider trading at least annually to ensure it remains relevant and effective.

The Bank has a code of conduct that applies to all employees and reinforces the core values expected of employees. The code covers all aspects of the business operations of the Bank and sets out principles to guide employees in carrying out their duties and responsibilities while adhering to the highest standards of personal and corporate integrity.

Employees are required to observe and comply with laws and regulations as well as company policies, along with the ABS Code of Conduct for Banks and Bank Staff.

The Bank has a suite of policies in place for proper governance and management that staff have to comply with. All policies, including those related to vendor management and procurement, are subject to the Bank's risk management and internal control systems and processes, including management self-assessment and independent audits.

The Bank also has a policy to manage or eliminate any actual or potential conflicts of interest which may impact the impartiality of research analyses or research reports issued by research analysts in the Bank or its financial subsidiaries. These include prohibitions on business units attempting to influence research analyses or recommendations by research analysts, as well as on securities trading by staff who receive information on research analyses or recommendations in unissued research reports.

Summary of Disclosures

Express disclosure requirements in the Guidelines on Corporate Governance for Designated Financial Holding Companies, Banks, Direct Insurers, Reinsurers and Captive Insurers which are incorporated in Singapore issued by the Monetary Authority of Singapore (MAS) on 9 November 2021, which comprises the Code of Corporate Governance 2018 and the additional guidelines added by the MAS.

Provisions of the Code of Corporate Governance 2018	Page reference in OCBC Annual Report 2022
Provision 1.2 The induction, training and development provided to new and existing directors.	Page 48
Provision 1.3 Matters that require Board approval.	Page 45
Provision 1.4 Names of the Board Committee members, the terms of reference, delegation of the Board's authority to make decisions, and a summary of each Board Committee's activities.	Pages 45 to 47
Provision 1.5 The number of Board and Board Committee meetings and the directors' attendance at these meetings.	Page 47
Provision 2.4 The board diversity policy and progress made towards implementing the board diversity policy, including objectives.	Pages 48 and 49
Provision 4.3 Process for the selection, appointment and reappointment of directors to the Board, including the criteria used to identify and evaluate potential new directors and channels used in searching for appropriate candidates.	Pages 49 and 50
Provision 4.4 If the Board determines that a director is independent notwithstanding the existence of a relationship with the Company, its related corporations, its substantial shareholders or its officers, which may affect his/her independence, the relationships and the Board's reasons for considering him/her as independent.	Page 48
Provision 4.5 The listed company directorships and principal commitments of each director, and where a director holds significant number of directorships and commitments, the Nominating Committee's and Board's reasoned assessment of the ability of the director to diligently discharge his/her duties.	Pages 256 to 258, 49 and 50
Provision 5.2 How the assessments of the Board, its Board Committees and each director have been conducted, including the identity of any external facilitator and its connection (if any) with the Company or any of its directors.	Page 50
Provision 6.4 The engagement of any remuneration consultants and their independence.	Page 51
Provision 8.1 The policy and criteria for setting remuneration, as well as names, amounts and breakdown of remuneration of: (a) Each individual director and the CEO (b) At least the top five key management personnel (who are not directors or the CEO) in bands no wider than $250,000 and in aggregate the total remuneration paid to these key management personnel.	For CEO and Management: Pages 50 to 55 For the Company's Directors: Pages 51, 52, and 54
Provision 8.2 Names and remuneration of employees who are substantial shareholders of the Company, or are immediate family members of a director, the CEO or a substantial shareholder of the Company, and whose remuneration exceeds $100,000 during the year, in bands no wider than $100,000. The Company should also state clearly the employee's relationship with the relevant director or the CEO or substantial shareholder.	Pages 54 and 55
Provision 8.3 All forms of remuneration and other payments and benefits, paid by the Company and its subsidiaries to directors and key management personnel of the Company as well as details of employee share schemes.	Pages 52 to 55, and Pages 104 to 107

Provisions of the Code of Corporate Governance 2018	Page reference in OCBC Annual Report 2022
Provision 9.2 The Board has received assurance from: (a) the CEO and the CFO that the financial records have been properly maintained and the financial statements give a true and fair view of the Company's operations and finances; and (b) the CEO and other key management personnel who are responsible, regarding the adequacy and effectiveness of the Company's risk management and internal control systems.	Page 56
Provision 10.1 The Company publicly discloses, and clearly communicates to employees, the existence of a whistleblowing policy and procedures for raising concerns.	Page 56
Provision 11.3 Directors' attendance at general meetings of shareholders held during the financial year.	Pages 47 and 59
Provision 12.1 The steps taken to solicit and understand the views of shareholders.	Page 59
Provision 13.2 The strategy and key areas of focus in relation to the management of stakeholder relationships during the reporting period.	Page 59

Additional Guidelines	Page reference in OCBC Annual Report 2022
Additional Guideline 1.17 An assessment of how the induction, orientation and training provided to new and existing directors meet the requirements as set out by the Nominating Committee to equip the Board and the respective Board Committees with relevant knowledge and skills in order to perform their roles effectively.	Page 48
Additional Guideline 4.7 The names of the directors submitted for appointment or re-appointment are accompanied by details and information to enable shareholders and the Board to make informed decisions. Such information, which accompanies the relevant resolution, includes: (a) date of last re-appointment; (b) professional qualifications; (c) any relationships including immediate family relationships between the candidate and the Directors, the Company or its substantial shareholders; (d) a separate list of all current directorships in other listed companies; (e) details of other principal commitments; and (f) any prior experience as a director of a listed issuer or as a director of a financial institution.	Pages 63 to 66
Additional Guideline 4.11 Resignation or dismissal of key appointment holders.	Page 50
Additional Guideline 4.12 Designations and roles of all directors.	Pages 20 and 21
Additional Guideline 9.9 The appointment and remuneration of the non-director member of the Risk Management Committee.	Not applicable
Additional Guideline 9.11 (a) The Board's comments on the adequacy and effectiveness of the internal controls (including financial, operational, compliance and information technology controls, and risk management systems). (b) A statement on whether the Audit Committee concurs with the Board's comment. Where material weaknesses are identified by the Board or Audit Committee, they are disclosed together with the steps taken to address them.	Page 56
Additional Guideline 10.19 The Audit Committee's comments on whether the internal audit function is independent, effective and adequately resourced.	Page 58
Additional Guideline 14.5 Material related party transactions.	Page 60

Additional Information on Directors Seeking Re-Election

Name of Director	Chua Kim Chiu	Lee Tih Shih	Tan Yen Yen	Helen Wong
Date of appointment	20 September 2017	4 April 2003	1 January 2020	7 February 2023
Date of last re-appointment (if applicable)	29 April 2021	18 May 2020	18 May 2020	Not applicable
Age	68	59	57	61
Country of principal residence	Singapore	Singapore	Singapore	Singapore
The Board's comments on this appointment (including rationale, selection criteria, board diversity considerations, and the search and nomination process)	Mr Chua Kim Chiu's extensive knowledge and experience in financial and accounting matters will continue to enhance the Board's overall competencies.	In addition to being the representative of a substantial shareholder, Dr Lee will continue to be of value to the Board with his qualifications and experience.	Ms Tan's background and experience in technology will enhance Board competencies.	As Chief Executive Officer of OCBC Bank, Ms Wong's continuing membership of the Board will facilitate governance and decision making.
Whether appointment is executive, and if so, the area of responsibility	Non-executive	Non-executive	Non-executive	Executive
Job title (e.g. Lead ID, AC Chairman, AC Member etc.)	Chairman, Audit Committee Member, Risk Management Committee	Chairman, Executive Committee	Member, Audit Committee Member, Nominating Committee Member, Risk Management Committee	Member, Risk Management Committee Member, Board Sustainability Committee
Professional qualifications	Please refer to his academic and professional qualifications in the section under "Further Information on Board of Directors" on page 256.	Please refer to his academic and professional qualifications in the section under "Further Information on Board of Directors" on page 257.	Please refer to her academic and professional qualifications in the section under "Further Information on Board of Directors" on page 258.	Please refer to her academic and professional qualifications in the section under "Further Information on Board of Directors" on page 258.
Working experience and occupation(s) during the past 10 years	Mr Chua Kim Chiu served as a partner in PricewaterhouseCoopers (PwC) Singapore from 1990, headed the banking and capital markets group as well as the China desk, and was appointed a member of the firm's leadership team in 2005. He retired in July 2012 but was retained as senior advisor for PwC Hong Kong until June 2016. He is currently a Professor (Practice) in Accounting, National University of Singapore (NUS) Business School. Please refer to his present directorships/principal commitments in the section under "Further Information on Board of Directors" on page 256 for further information.	Dr Lee Tih Shih is presently an Associate Professor at the Duke-NUS Medical School. Please refer to his present directorships/principal commitments in the section under "Further Information on Board of Directors" on page 257 for further information.	Ms Tan Yen Yen's past experiences included IT and IT-related positions in SAS Institute Inc, Oracle Corporation and Hewlett-Packard Singapore, and she has played an active role in Singapore's infocomm industry. She was the President (Asia Pacific) of Vodafone Enterprise Singapore Pte Ltd until she left in April 2020. Please refer to her present directorships/principal commitments in the section under "Further Information on Board of Directors" on page 258 for further information.	Ms Helen Wong has 40 years of banking experience, having started out as a Management Trainee in OCBC Bank and was its first China Desk Manager. She has vast experience in Greater China, covering a wide range of roles in capital markets, syndicated finance and corporate banking. Before returning to OCBC Bank, Ms Wong spent 27 years at HSBC, where her last role was its Chief Executive for Greater China. Please refer to her present directorships/principal commitments in the section under "Further Information on Board of Directors" on page 258 for further information.

Name of Director	Chua Kim Chiu	Lee Tih Shih	Tan Yen Yen	Helen Wong
Shareholding interest in the listed issuer and its subsidiaries	Yes 26,663 ordinary shares in Oversea-Chinese Banking Corporation Limited (Direct interest)	Yes 11,656,000 ordinary shares in Oversea-Chinese Banking Corporation Limited (Direct interest)	Yes 12,000 ordinary shares in Oversea-Chinese Banking Corporation Limited (Direct interest)	Yes 262,431 ordinary shares in Oversea-Chinese Banking Corporation Limited (Direct interest) 434,713 ordinary shares under OCBC Deferred Share Plan and OCBC Deferred Share Plan 2021
Any relationship (including immediate family relationships) with any existing director, existing executive officer, the issuer and/or substantial shareholder of the listed issuer or of any of its principal subsidiaries	Nil	Yes. Director of Lee Foundation and Selat (Pte) Ltd, both substantial shareholders of OCBC.	Nil	Nil
Conflict of interests (including any competing business)	Nil	Nil	Nil	Nil
Undertaking (in the format set out in Appendix 7.7) under Rule 720(1) has been submitted to the listed issuer	Yes	Yes	Yes	Yes
Other Principal Commitments* Including Directorships * "Principal Commitments" has the same meaning as defined in the Code of Corporate Governance 2018.				
Past (for the last 5 years)	Please refer to the section under "Further Information on Board of Directors" on page 256.	Please refer to the section under "Further Information on Board of Directors" on page 257.	Please refer to the section under "Further Information on Board of Directors" on page 258.	Please refer to the section under "Further Information on Board of Directors" on page 258.
Present	Please refer to the section under "Further Information on Board of Directors" on page 256.	Please refer to the section under "Further Information on Board of Directors" on page 257.	Please refer to the section under "Further Information on Board of Directors" on page 258.	Please refer to the section under "Further Information on Board of Directors" on page 258.
Information required under items (a) to (k) of Appendix 7.4.1 of the SGX-ST Listing Manual				
(a) Whether at any time during the last 10 years, an application or a petition under any bankruptcy law of any jurisdiction was filed against him/her or against a partnership of which he/she was a partner at the time when he/she was a partner or at any time within 2 years from the date he/she ceased to be a partner?	No	No	No	No

Name of Director	Chua Kim Chiu	Lee Tih Shih	Tan Yen Yen	Helen Wong
(b) Whether at any time during the last 10 years, an application or a petition under any law of any jurisdiction was filed against an entity (not being a partnership) of which he/she was a director or an equivalent person or a key executive, at the time when he/she was a director or an equivalent person or a key executive of that entity or at any time within 2 years from the date he/she ceased to be a director or an equivalent person or a key executive of that entity, for the winding up or dissolution of that entity or, where that entity is the trustee of a business trust, that business trust, on the ground of insolvency?	No	No	No	No
(c) Whether there is any unsatisfied judgment against him/her?	No	No	No	No
(d) Whether he/she has ever been convicted of any offence, in Singapore or elsewhere, involving fraud or dishonesty which is punishable with imprisonment, or has been the subject of any criminal proceedings (including any pending criminal proceedings of which he/she is aware) for such purpose?	No	No	No	No
(e) Whether he/she has ever been convicted of any offence, in Singapore or elsewhere, involving a breach of any law or regulatory requirement that relates to the securities or futures industry in Singapore or elsewhere, or has been the subject of any criminal proceedings (including any pending criminal proceedings of which he/she is aware) for such breach?	No	No	No	No
(f) Whether at any time during the last 10 years, judgment has been entered against him/her in any civil proceedings in Singapore or elsewhere involving a breach of any law or regulatory requirement that relates to the securities or futures industry in Singapore or elsewhere, or a finding of fraud, misrepresentation or dishonesty on his/her part, or he/she has been the subject of any civil proceedings (including any pending civil proceedings of which he/she is aware) involving an allegation of fraud, misrepresentation or dishonesty on his/her part?	No	No	No	No
(g) Whether he/she has ever been convicted in Singapore or elsewhere of any offence in connection with the formation or management of any entity or business trust?	No	No	No	No

Name of Director	Chua Kim Chiu	Lee Tih Shih	Tan Yen Yen	Helen Wong
(h) Whether he/she has ever been disqualified from acting as a director or an equivalent person of any entity (including the trustee of a business trust), or from taking part directly or indirectly in the management of any entity or business trust?	No	No	No	No
(i) Whether he/she has ever been the subject of any order, judgment or ruling of any court, tribunal or governmental body, permanently or temporarily enjoining him/her from engaging in any type of business practice or activity?	No	No	No	No
(j) Whether he/she has ever, to his/her knowledge, been concerned with the management or conduct, in Singapore or elsewhere, of the affairs of:—	No	No	No	No
(i) any corporation which has been investigated for a breach of any law or regulatory requirement governing corporations in Singapore or elsewhere; or	No	No	No	No
(ii) any entity (not being a corporation) which has been investigated for a breach of any law or regulatory requirement governing such entities in Singapore or elsewhere; or	No	No	No	No
(iii) any business trust which has been investigated for a breach of any law or regulatory requirement governing business trusts in Singapore or elsewhere; or	No	No	No	No
(iv) any entity or business trust which has been investigated for a breach of any law or regulatory requirement that relates to the securities or futures industry in Singapore or elsewhere, in connection with any matter occurring or arising during that period when he/she was so concerned with the entity or business trust?	No	No	No	No
(k) Whether he/she has been the subject of any current or past investigation or disciplinary proceedings, or has been reprimanded or issued any warning, by the Monetary Authority of Singapore or any other regulatory authority, exchange, professional body or government agency, whether in Singapore or elsewhere?	No	No	No	No

Additional Information Required under the SGX-ST Listing Manual

1. Interested Person Transactions

Interested person transactions carried out during the financial year under review:

Name of interested person	Nature of relationship	Aggregate value of all interested person transactions during the financial year under review (excluding transactions less than $100,000 and transactions conducted under shareholders' mandate pursuant to Rule 920) 2022 $'000	Aggregate value of all interested person transactions conducted under shareholders' mandate pursuant to Rule 920 (excluding transactions less than $100,000) 2022 $'000
Dasar Sentral (M) Sdn Bhd – Lease of premises at Wisma Lee Rubber, Kuala Lumpur to subsidiaries of OCBC Bank.	An associate of Dr Lee Tih Shih, director of OCBC Bank	927	–

2. Material Contracts

Since the end of the previous financial year, no material contract involving the interest of the Chief Executive Officer, any Director or controlling shareholder of the Bank has been entered into by the Bank or any of its subsidiary companies, and no such contract subsisted as at 31 December 2022, save as disclosed via SGXNet.

3. Appointment of Auditor

The Group has complied with Rules 712 and 715 of the Listing Manual issued by Singapore Exchange Securities Trading Limited in relation to its auditor.

Capital Management

Capital Policy

The key objective of the Group's capital management policy is to maintain a strong capital position to support business growth and strategic investments, and to sustain investor, depositor, customer and market confidence. In line with this, the Group targets a minimum credit rating of "A" and ensures that its capital ratios are comfortably above the regulatory minima, while balancing shareholders' desire for sustainable returns and high standards of prudence. The Group actively manages its capital composition with an optimal mix of capital instruments in order to keep our overall cost of capital low.

Capital Monitoring and Planning

The Group's capital is closely monitored and actively managed to ensure that there is sufficient capital to support business growth, and to pursue strategic business and investment opportunities that will create value for our stakeholders, while taking into consideration the Group's risk appetite. The Group's internal capital adequacy assessment process (ICAAP) involves a comprehensive assessment of all material risks that the Group is exposed to and an evaluation of the adequacy of the Group's capital in relation to those risks. This includes an annual capital planning exercise to forecast capital demands and assess the Group's capital adequacy over a multi-year horizon. This process takes into consideration the Group's business strategy, operating environment, regulatory changes, target capital ratios and composition, as well as expectations of its various stakeholders. In addition, capital stress tests are conducted to understand the sensitivity of the key assumptions in the capital plan to the effects of plausible stress scenarios, and to evaluate how the Group can continue to maintain adequate capital under such scenarios.

Within the Group, excess capital will be centralised as far as possible at the parent (i.e. OCBC Bank) level for efficient deployment across the Group. Whilst the transfer of capital resources within the Group is generally subject to regulations in local jurisdictions, where applicable, the Bank has not faced significant impediments on the flow of capital within the Group.

Dividend

The Group aims to deliver a dividend payout ratio of 50% of its core net profit, barring unforeseen circumstances. The dividends are payable on a half-yearly basis. For the financial year ended 31 December 2022, the Board of Directors has recommended a final dividend of 40 cents per share. This brings the full year 2022 dividend to 68 cents per share, or a total dividend payout of $3.06 billion.

Share Buyback and Treasury Shares

Shares purchased under the share buyback programme are held as treasury shares. These are recorded as a deduction against share capital, and may be subsequently cancelled, sold or used to meet delivery obligations under employee share schemes. During the financial year ended 31 December 2022, the Bank purchased 20.9 million ordinary shares for $250 million as part of its share buyback programme, while 24.2 million treasury shares were delivered to meet obligations under its employee share schemes.

Capital Adequacy Ratios

Since 1 January 2019, the Monetary Authority of Singapore (MAS) has fully phased-in the Basel III capital adequacy ratio requirements under the MAS Notice 637. Under this framework, Singapore-incorporated banks are required to meet minimum Common Equity Tier 1 (CET1), Tier 1, and total capital adequacy ratios (CAR) of 6.5%, 8.0%, and 10.0%, respectively.

To ensure that banks build up adequate capital buffer outside periods of stress, a Capital Conservation Buffer (CCB) of 2.5 percentage points above the minimum capital adequacy requirements was introduced. Including the CCB, Singapore-incorporated banks are required to meet CET1 CAR, Tier 1 CAR and Total CAR of 9.0%, 10.5% and 12.5%, respectively.

In addition, the Group will be subject to a Countercyclical Buffer requirement if this buffer is applied by regulators in countries which the Group has credit exposures to. Generally in the range of 0% to 2.5% of risk-weighted assets, the Countercyclical Buffer is not an ongoing requirement but it may be applied by regulators to limit excessive credit growth in their economy.

The table below shows the composition of the Group's regulatory capital and its capital adequacy ratios as of 31 December 2022. The capital adequacy ratios were determined in accordance with the requirements of MAS Notice 637, which included the definitions for CET1, Tier 1 and Tier 2 capital, the required regulatory adjustments against capital (including goodwill, intangible assets, deferred tax assets and investments in unconsolidated financial institutions in which the Bank holds a major stake), and the methodologies available for computing risk-weighted assets. As per the requirements of MAS Notice 637, the Bank's insurance subsidiaries were not consolidated for the computation of the capital adequacy ratios, i.e. capital investments in these insurance subsidiaries were deducted from the Group's capital and their assets were excluded from the computation of the Group's risk-weighted assets.

A description of the key terms and conditions of the regulatory capital instruments can be found in Notes 13, 14 and 21 of the financial statements, and the approaches adopted by the Group for the computation of risk-weighted assets can be found in the "Pillar 3 Disclosures" chapter.

$ million	2022	2021
Ordinary shares	**18,048**	18,040
Disclosed reserves/others	**26,254**	25,782
Regulatory adjustments	**(9,123)**	(8,977)
Common Equity Tier 1 Capital	**35,179**	34,845
Additional Tier 1 capital	**1,730**	1,231
Regulatory adjustments	**–**	–
Tier 1 Capital	**36,909**	36,076
Tier 2 capital	**4,028**	3,497
Regulatory adjustments	**–**	–
Total Eligible Capital	**40,937**	39,573
Credit	**202,713**	197,164
Market	**8,587**	11,681
Operational	**20,348**	16,021
Risk Weighted Assets	**231,648**	224,866
Capital Adequacy Ratios		
Common Equity Tier 1	**15.2%**	15.5%
Tier 1	**15.9%**	16.0%
Total	**17.7%**	17.6%

The Bank's banking and insurance subsidiaries are subject to capital adequacy requirements of the jurisdiction in which they operate. As of 31 December 2022, the capital adequacy ratios of these subsidiaries were above their respective local requirements.

Risk Management

Risk is inherent in the business activities of the Group and managing risks is central to our sustainability. Our overall goal is to manage our businesses and the associated risks in a manner that delivers sustainable value for our customers, employees, shareholders and communities over the long term.

Our risk management framework comprises strong governance, sound policies and methodologies, and professionals, supported by fit-for-purpose technology, infrastructure and data. It is underpinned by a strong corporate culture that emphasises accountability, ownership, integrity, and high ethical standards. We engage in businesses that are consistent with our corporate strategy and risk appetite, are well understood and are appropriately priced to provide us with an adequate return.

While the categorisation of risks can be complex because of their inter-relationships, we generally categorise the risks we take into five principal risk types, described in the table below.

Each principal risk type is governed by an appropriate risk framework that is operationalised through policies and procedures and supported by robust risk management processes that are regularly assessed for their continued effectiveness. Our policies and procedures comply with regulatory standards such as MAS Notice 637 on Risk Based Capital Adequacy Requirements for Banks incorporated in Singapore (MAS Notice 637) that are aligned with the Basel Framework published by the Basel Committee on Banking Supervision. We continue to invest in risk infrastructure and digital technologies to meet regulatory expectations, improve the governance and risk management capabilities of the Group and support our corporate strategy.

We adopt a disciplined risk management approach to identify, assess, measure, control, monitor and report our risk positions at granular and aggregate levels. We regularly review the relevance of the risk drivers and their potential impact on the Group's business to formulate appropriate risk mitigation actions where necessary. Risk drivers can emanate from developments in the economic, business and physical environment, geopolitical shifts, regulatory and social changes, cyber threats, data loss, fraud and human error, as well as Environment, Social and Governance (ESG) issues. These drivers impinge on one or more of the principal

Principal Risks	Definition
Credit Risk	Credit risk is the risk of losing principal and/or income due to the failure of an obligor or counterparty to meet its financial or contractual obligations or an adverse change in the credit profile of an obligor or counterparty.
Market Risk	Market risk is the risk of losing income and/or market value due to fluctuation in factors such as interest rates, foreign exchange rates, credit spreads, equity and commodity prices or changes in volatilities, or correlation of such factors. It also includes interest rate risk in the banking book which is the risk to income and/or capital arising from exposure to adverse changes in the interest rate environment.
Liquidity Risk	Liquidity risk is the risk arising from the inability to meet financial and cash outflow obligations as they fall due without incurring unacceptable costs or losses through fundraising and asset liquidation.
Information Security and Digital Risk	Information security risk is the risk of compromising confidentiality, integrity and/or availability of information (in physical or digital form). Digital risk encompasses cyber and technology risks. Cyber risk is the risk arising from malicious acts perpetrated by threat actors. Technology risk is the risk of disruption, failure or irregularity in essential financial services arising from the use of information and communication technologies.
Operational Risk	Operational risk is the risk of loss resulting from inadequate or failed internal processes and systems, poor management, human error or external events. This is a broad risk category that encompasses fraud risk, money laundering, terrorism financing and sanctions risk, third-party risk, physical and people security risk, conduct risk, business continuity risk, unauthorised trading risk, regulatory risk, legal risk, fiduciary risk and reputational risk.

Please refer to the respective sections for details of our risk management approach for each of the principal risk types.

risk types with consequential impact on earnings and asset quality as well as our reputation, customer franchise and ability to do business.

With respect to ESG issues, we take an integrated and risk-based approach to address their multi-dimensional implications. This entails ensuring ESG risk drivers that impact the Group across credit, market, liquidity, operational and reputational risks are adequately addressed. It also ensures that we deliver on our sustainability commitments to create a positive impact for all stakeholders. We prioritise the management of salient risk issues, such as ESG-related credit and reputational risks that arise from our lending activities within our responsible financing framework. Given the significant and wide-ranging implications of climate risks, we have enhanced our climate risk management framework. This includes embedding ESG and climate risk management within the responsibilities of the relevant risk committees, deepening our climate scenario analysis and stress testing capabilities, and measuring the financed emissions of carbon-intensive sectors in our corporate lending portfolio. We have also established a dedicated Group ESG Risk and Sustainability function to drive the continual enhancement of our ESG risk management framework, processes and capabilities across the Group.

Please refer to our Sustainability Report 2022 for more information on our ESG risk management efforts.

In consultation with Group Risk Management, our banking subsidiaries adapt the Group risk management framework and policies to comply with the Group's risk standards and/or local regulatory requirements, whichever is stricter. Approving authority and limit structures, designed to ensure proper ownership and accountability, are also consistent with that of the Group.

Great Eastern Holdings (GEH) and Bank OCBC NISP are listed companies. Their annual reports contain information on their risk management frameworks and practices. Their risk management frameworks, policies and practices are appropriately aligned with the Group's risk standards. For information on GEH's risk management, please refer to Note 38 in the Group's Financial Statements.

Risk Governance and Organisation

Figure 1 illustrates the risk governance and oversight structure across the Group. The Board of Directors has ultimate responsibility for the effective management of risk. It establishes the corporate strategy and approves the risk appetite within which senior management executes the strategy.

The Board Risk Management Committee (BRMC) is the designated board committee overseeing risk management matters. It ensures that the Group's overall risk management philosophy and principles are aligned with the corporate strategy and within the approved risk appetite. The Committee has oversight of credit, market, liquidity, information security and digital, operational, conduct, money laundering and terrorism financing, legal, regulatory, strategic, ESG and fiduciary risks, as well as any other category of risk that may be delegated by the Board or deemed necessary by the Committee. It also ensures that the necessary overall risk management organisation is in place and effective.

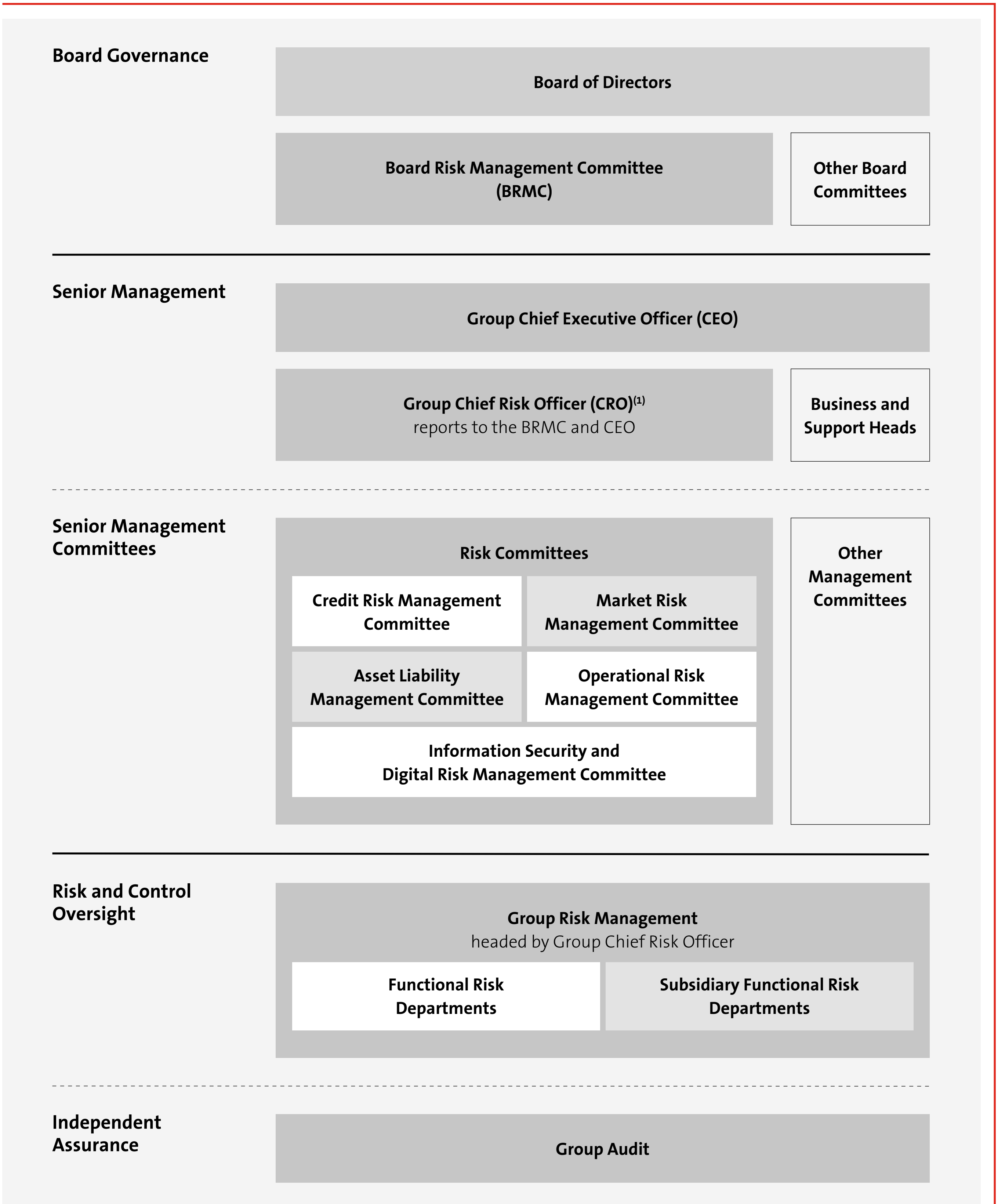
Based on the approved risk appetite, the BRMC provides quantitative and qualitative guidance to major business units and risk functions to guide risk-taking. Senior management, functional risk committees covering principal risk types and the BRMC regularly review our risk drivers, risk profiles across major lines of business and risk types, risk management frameworks and major risk policies, as well as compliance matters. Please refer to the Corporate Governance Chapter for more information on the BRMC.

Dedicated Group risk committees for major risk types have been established to facilitate the BRMC's risk oversight. These committees are supported, where appropriate, by local risk committees that oversee the local risk positions, approve local risk policies and ensure that risk-taking activities remain within the limits set by the Group.

The Group's independent risk management function, the Group Risk Management Division (GRM), is headed by the Group Chief Risk Officer (CRO), who is also the Group Chief Information Security Officer (CISO). The Group CRO is a member of the Group Management Executive Committee and also the functional risk committees. GRM's day-to-day functional responsibility involves providing independent risk control and managing credit, market, liquidity, information security and digital, operational and ESG risks. It provides regular risk reports and updates on developments in material risk drivers and potential vulnerabilities, as well as recommended mitigating actions, to senior management, risk committees, the BRMC and Board. Risk management staff work closely with the business and other support units to ensure that risks are well understood and appropriately managed.

GRM oversees the New Product Approval Process to ensure that risks are properly and comprehensively identified, and adequately addressed before implementation. GRM also oversees the data management framework so that comprehensive, accurate and timely information can support management decisions. With the increasing use of Artificial Intelligence and Data Analytics (AIDA) across the Group, GRM is taking the lead in embedding the principles of Fairness, Ethics, Accountability and Transparency (FEAT) into our data and model governance as we upgrade our digital capabilities in keeping with evolving industry practices.

Figure 1: Risk Governance and Oversight Structure



(1) Group Chief Risk Officer (CRO) is also the Group Chief Information Security Officer (CISO)

Three Lines of Defence

All employees are responsible for identifying and managing risk; their accountability is embedded in our corporate culture and robust internal control environment. This is operationalised through a three-line defence structure, which clearly delineates the roles, responsibilities and accountability of risk ownership.

Three Lines of Defence

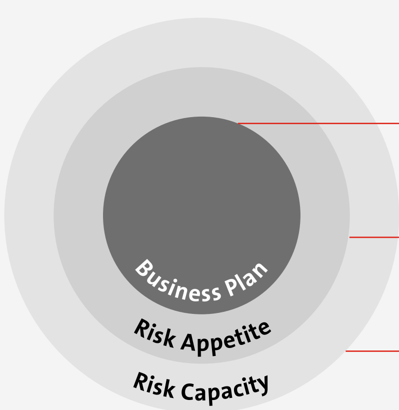
First Line	Second Line	Third Line
Day-to-day Risk Management	**Risk and Control Oversight**	**Independent Assurance**
Business and Support Units: • Own and manage risks arising from their business activities on a day-to-day basis. • Carry out business activities that are consistent with the Group's strategy and risk appetite. • Operate within the approved boundaries of our policies and limits, and comply with applicable laws and regulations.	**Risk and Control Function:** • Independently and objectively assesses the risk-taking activities of the first line. • Establishes relevant risk management frameworks, policies, processes and systems. • Provides independent identification, assessment, monitoring and reporting of the Group's risk profiles, portfolio concentrations and material risk issues.	**Group Audit:** • Independently assures the Group CEO, Audit Committee and Board of the adequacy and effectiveness of our risk management and internal control systems. • Evaluates the overall risk awareness and control consciousness of the management in discharging its supervisory and oversight responsibilities.

Risk Appetite

Our objective is to manage our risks prudently and sustainably for the long-term viability of the Group. To that end, the Board has established the Group's risk appetite, which defines the level and nature of risks that we are willing to take in the conduct of our business on behalf of our shareholders while maintaining our commitments to customers, debt holders, employees, regulators and other stakeholders. Business plans are developed taking into account the forward-looking operating environment and potential downside risks and assessed against our risk appetite, which in turn is a function of our capacity to absorb risks, taking into account capital, funding, and other resources. We operationalise our risk appetite through our policies, processes and limits.

Senior business and risk managers participate in regular forums to review macroeconomic and financial developments and discuss the operating environment, event risks and potential 'dark clouds' that may have a significant impact on our earnings or solvency. These risks are quantified via stress tests as well as segment-specific and ad hoc event-specific portfolio reviews. The results are used to assess the potential impact of alternative scenarios on our earnings and capital, as well as vulnerabilities of material portfolios.

An Internal Capital Adequacy Assessment Process (ICAAP) incorporating the results of stress tests covering various risk types is conducted annually. The objective is to evaluate whether we are able to maintain sound capital levels under a forward-looking operating environment and against severe stress scenarios. Appropriate risk-mitigating actions are taken to manage downside risks.



Business Plan
Demand for Risk and Financial Resources such as Funding and Capital

Risk Appetite
Level and nature of risk deemed acceptable while ensuring a sufficient buffer in the Risk and Financial Resources

Risk Capacity
Supply of Risk and Financial Resources such as Funding and Capital

Credit Risk Management

Credit risk arises from our lending activities to retail, corporate and institutional customers. It also includes counterparty and issuer credit risks arising from our underwriting, trading and investment banking activities.

Credit Risk Management Approach

Our credit risk management framework captures the complete credit risk management cycle. It is operationalised through policies and procedures that cover the identification, assessment, measurement and monitoring – as well as the control and mitigation – of credit risk at the enterprise level.

Our credit risk management approach varies according to the characteristics and nature of the relevant portfolios or customer segments. Specific policies and procedures have been established for major customer segments. Please refer to Table 1 for more information.

Table 1: Credit Risk Management Approach for Major Customer Segments

Consumers and Small Businesses	Corporate and Institutional Customers	Private Banking Customers
• Manage credit risks on a portfolio basis. • Extend credits through credit programmes with predefined acquisition strategies, product structures and portfolio and transaction limits, as well as customer selection, lending and collateral criteria. • Use application models for efficient, objective and consistent credit decisioning. • Use bankruptcy and credit bureau checks, along with systems and processes such as source identification of credit origination and independent verification of documentation for credit screening and fraud detection purposes. • Use comprehensive risk management information systems (MIS), behavioural models and stress testing for monitoring and early identification of potentially weak credits.	• Assess credits individually with robust independent evaluation carried out by experienced credit officers. • Use predefined target market and risk acceptance criteria to guide credit extensions. • Make credit decisions after comprehensive qualitative and quantitative risk assessment, including a thorough understanding of the customer and customer group's interdependencies. • Business and credit risk units to jointly approve credits to ensure objectivity and shared risk ownership. • Conduct regular reviews and forward-looking stress tests at borrower and portfolio levels to monitor credit quality and identify potential weak credits early.	• Assess credits individually with robust independent evaluation carried out by experienced credit officers. • Use predefined risk acceptance criteria, availability of acceptable collateral and stipulated loan advance ratio and margin requirements to guide credit extensions. • Business and credit risk units to jointly approve credits to ensure objectivity and shared risk ownership. • Take prompt remedial actions through timely and disciplined execution of margin calls, top-up provisions, stop-loss and force-selling.

Counterparty Credit Risk Management

Counterparty credit risk, typically arising from our trading and/or banking activities in derivatives and debt securities, is the risk that a counterparty may default on its obligations during the term of the financial contract. The credit exposure to a counterparty is measured as the sum of current mark-to-market value of the transactions plus an appropriate add-on for potential future exposures in response to market price changes. Counterparty credit risk also covers settlement risk, which is the risk of loss during the settlement process due to a counterparty's failure to fulfil its obligation after the Bank has performed its obligation under a contract or agreement at the settlement date.

We have a dedicated risk management function to manage counterparty credit risk on a current and forward-looking basis across multiple dimensions – on the individual counterparty level, country and sector portfolio level, and product level – as guided by established policies and procedures. Each counterparty is subject to robust credit assessment, including the suitability and appropriateness of the product offered. Credit risk mitigation tools are also used to manage counterparty credit risk where appropriate. Please refer to the Credit Risk Mitigation section for details.

We manage our credit exposures independently through daily limit excess monitoring, excess escalation, pre-deal excess approval, and timely risk reporting. In addition, we have an established policy and process to manage wrong-way risk. This risk may occur when the credit exposure to a counterparty is adversely correlated with the credit quality of the same counterparty.

ESG Risk Management

Managing ESG risks is an integral part of our credit risk management process. We have in place a responsible financing framework that defines our approach and commitment to managing ESG risks associated with our lending activities. The framework is operationalised through supporting policies and procedures that integrate ESG considerations – including the requirements of the Equator Principles and the MAS Environmental Risk Management Guidelines for Banks – within our credit risk evaluation and approval process. Transactions with high ESG risks are subject to enhanced due diligence and approval requirements, including escalation of transactions with significant reputational risks to the Reputational Risk Review Group. We review our framework regularly to reflect the evolving nature of ESG risk management practices.

Please refer to our Sustainability Report 2022 for more information on Responsible Financing.

Credit Portfolio Management

Credit portfolio management focuses on managing the collective or aggregate risk of our credit portfolios, instead of the credit risk of individual borrowers. We have developed and implemented a range of capabilities to better understand, measure and monitor credit risk at the portfolio level. These capabilities include:

- **Portfolio Segmentation:** This is the process of grouping credit exposures that are similar in nature. It involves using attributes that represent common business drivers, such as location, industry and product type, as well as common risk drivers such as exposure to material downside risks like a property bubble.

- **Portfolio Modelling:** This includes using internal rating models to quantify the exposure risk, default risk and potential losses of our borrowers. Please refer to Table 2 for information on our internal rating models. We also use stress test models to simulate the potential increase in our credit losses and Credit Risk Weighted Assets (CRWA) under stressed scenarios.

- **Portfolio Reporting:** This includes internal and external reporting of portfolio risk information to the respective stakeholders. These reports provide a better understanding of how the credit portfolio quality trends are evolving in response to the changing operating environment and downside risks. Regular risk reports covering detailed credit exposures, credit migration, expected losses and risk concentrations by business segment and geography are provided to the Credit Risk Management Committee, Group CEO, BRMC and Board for making timely and better-informed decisions.

With the insights provided by portfolio modelling and reporting, we will allocate appropriate risk and financial resources such as funding and capital to support growth opportunities. We will also use these insights to set credit concentration limits to manage the potential downside risks from adverse changes in the operating environment. The design of such credit concentration limits takes into consideration direct risk drivers, such as economic sector, industry and geographic location, and indirect risk drivers, such as collateral type or credit protection by a single counterparty arising from credit risk mitigation.

Table 2: Internal Rating Models

Internal credit rating models and their parameters – probability of default (PD), loss given default (LGD) and exposure at default (EAD) – are used in limit setting, credit approval, portfolio monitoring and reporting, remedial management, stress testing and the internal assessment of capital adequacy and portfolio allowances.

Our Model Risk Management Framework governs the development, validation, application and maintenance of rating models. Models are developed with the active participation of credit experts from risk taking and risk control units.

They are subject to independent validation before implementation and annually after that to ensure that performance standards, which take into consideration regulatory requirements and industry best practices, are continually met. In addition, Group Audit reviews the robustness of the rating process and the effectiveness of the independent validation process annually. Approval for the adoption and continued use of material models rests with the BRMC. In addition, models that are used in the regulatory capital assessment must be approved by the regulators.

While our internal risk grades are not explicitly mapped to external credit ratings, they may correlate with external credit ratings in terms of the PD ranges because the factors used to rate obligors are similar. As such, an obligor rated poorly by an external credit rating agency is likely to have a weak internal risk rating as well.

The table below describes the approach used to estimate the key parameters for Advanced Internal Ratings-Based (A-IRB) and Foundation Internal Ratings-Based (F-IRB) credit risk models used to calculate the CRWA.

Key Components of Internal Ratings Based (IRB) Models

IRB Models and Portfolios	PD	LGD and EAD
A-IRB approach covers major retail portfolios such as residential mortgages, credit cards, auto loans, small business and margin lending	• Estimated based on the application and behaviour scores of obligors. • PD models are calibrated to reflect the expected long-run average one-year default rate over an economic cycle.	• Product, collateral and geographical characteristics are major factors. • LGD models are calibrated to reflect the economic loss under downturn conditions. • EAD models are calibrated to reflect the default-weighted average and economic downturn conditions.
F-IRB (Non-Supervisory Slotting) approach covers major wholesale portfolios such as sovereigns, banks, non-bank financial institutions, corporate real estate (including income producing real estate) and general corporates	• PD models are statistical based or expert judgement models that use both quantitative and qualitative factors to assess an obligor's repayment capacity and calibrated to reflect the expected long-run average one-year default rate over an economic cycle. • Expert judgement models based on inputs from internal credit experts are typically used for portfolios with low default rates.	• Estimated based on rules prescribed in MAS Notice 637.
F-IRB (Supervisory Slotting) approach covers other specialised lending portfolios such as project finance, object finance and commodities finance	• Obligors are mapped to the five supervisory slotting categories prescribed in MAS Notice 637 based on regulatory loan classifications.	• Estimated based on rules prescribed in MAS Notice 637.

Credit Risk Mitigation

We use a range of credit risk mitigation tools such as requiring collateral, buying credit protection and establishing netting arrangements to reduce credit risk exposures. However, risk mitigation is not a substitute for a proper assessment of the obligor's ability to repay, which should remain the primary repayment source.

Our credit policies set out the key considerations for eligible credit risk mitigants. These criteria include legal certainty and enforceability, correlation, liquidity, marketability, counterparty risk of the credit protection provider and collateral-specific minimum operational requirements. Eligible physical and financial collateral include cash, real estate, marketable securities, standby letters of credit and credit insurance.

We apply appropriate haircuts to the market value of the collateral to reflect its underlying nature, quality, liquidity and volatility and independently value the collateral on a regular basis. We monitor our collateral holdings to ensure diversification across asset classes and markets. Guarantees from individuals, corporates and institutions are accepted as a form of support. Where guarantees are recognised as credit risk mitigants via the PD substitution approach, eligibility criteria and guidelines are in place.

Netting, collateral arrangements, early termination options and central clearing mechanisms are common risk mitigation tools for managing counterparty credit risk. Netting agreements, in approved netting jurisdictions, allow us to reduce credit risk exposure by offsetting what we owe a counterparty against what is due from that counterparty in the event of a default. Collateral arrangements are typically covered under market standard documentation such as the International Swaps and Derivatives Association (ISDA) and Credit Support Annexes (CSA) or Global Master Repurchase Agreements (GMRA). Such arrangements will require additional collateral to be posted if the mark-to-market exposures exceed the agreed threshold amount. We apply a haircut to the value of the eligible collateral to cover potential adverse market volatility; the agreed threshold amount may be subject to regulatory margin requirements where applicable. ISDA agreements may also contain rating triggers to allow for termination of transactions or require posting of additional collateral in the event of a rating downgrade. Given our current investment grade rating, there would be a minimal increase in collateral to be posted if there is a one-notch rating downgrade. Where available, we also clear Over-the-Counter (OTC) derivatives transactions through approved central clearing counterparties: The counterparty's credit risk is thereby replaced by that of a highly regulated and relatively better credit rated central clearing counterparty.

Remedial Management

Processes are in place to foster early identification of vulnerable borrowers. The quality of our credit portfolios is proactively monitored and discussed at various risk forums. Action plans to remediate deteriorating trends are worked out and reviewed at such forums.

Relief programs in Singapore and Malaysia have largely ended and portfolio performance has mostly normalised, with customers resuming their regular repayments. In other markets such as Hong Kong and Indonesia, we will continue to monitor and engage the borrowers to ensure a smooth transition after the reliefs expire.

Our categories for credit exposures are "Pass", "Special Mention" or "Non-Performing Asset" (NPA). NPAs are further categorised into "Substandard", "Doubtful" or "Loss" in accordance with MAS Notice 612 on Credit Files, Grading and Provisioning (MAS Notice 612). The categorisation of credit exposures is based on our assessment of borrowers' ability to meet their financial obligations from normal sources of income and their creditworthiness in the long term. We categorise retail borrowers into the respective MAS loan grades at the facility level, in line with MAS Notice 612. An NPA may be upgraded to performing status when there is an established trend of credit improvement, supported by an assessment of the borrower's repayment capability, cash flows and financial position.

We classify our credit exposures as restructured assets when we grant non-commercial concessions to borrowers who are unable to meet their original repayment obligations. We further classify a restructured credit exposure into the appropriate non-performing grade based on our assessment of the borrower's financial condition and ability to repay under the restructured terms. Such credit exposure must comply fully with the restructured terms for a reasonable period before it can be restored to performing status in accordance with MAS Notice 612.

Dedicated remedial management units manage the restructuring, work-out and recovery of NPAs for wholesale portfolios. The objective is to rehabilitate NPAs where possible or maximise recoveries for NPAs that are on an exit strategy. For retail portfolios, we develop appropriate risk-based and time-based collections strategies to maximise recoveries while trying to minimise any non-financial impact to our customers. We use data such as delinquency buckets and adverse status tags for delinquent consumer loans to constantly analyse, fine-tune and prioritise our collection efforts.

Credit Loss Allowances

We maintain sufficient allowances to absorb credit losses inherent in our loan portfolios. Allowance for Expected Credit Losses (ECL) is recognised for credit-impaired and non-credit-impaired exposures in accordance with Singapore Financial Reporting Standard (International) 9: *Financial Instruments* (SFRS(I) 9) and MAS Notice 612 through a forward-looking ECL model.

We assess our ECL allowances on a forward-looking basis and based on the three stages of credit risk below.

Stages of Credit Risk and Expected Credit Losses

Non-Credit-Impaired		Credit-Impaired
Stage 1 Performing exposures with no significant increase in credit risk since initial recognition	**Stage 2** Performing exposures with significant increase in credit risk since initial recognition	**Stage 3** Non-performing exposures
12-month ECL	**Lifetime ECL**	**Lifetime ECL**

Please refer to Note 2.12 in the Group's Financial Statements for more information on impairment allowances.

Market Risk Management

Market risks arise primarily from our trading, client servicing and balance sheet management activities.

Market Risk Management Approach

Our market risk management framework covers the identification, assessment, measurement, monitoring and control of risks. Group-level market risk policies and procedures have been established to provide common guidelines and standards for managing market risks. We regularly review our market risk management strategy and limits – established within our risk appetite and in line with our business strategies – taking into account prevailing macroeconomic and market conditions.

Market Risk Identification

Our internal New Product Approval Process ensures that market risk is properly identified and quantified, allowing us to manage and mitigate such risks.

Market Risk Measurements

Value-At-Risk

Value-at-risk (VaR) is a key metric used to quantify market risk exposures arising from our trading activities. VaR is measured and monitored by individual market risk components, namely interest rate risk, foreign exchange risk, equity risk and credit spread risk, as well as at the consolidated level. Our VaR model is based on the historical simulation approach, calibrated at the 99% confidence level and a one-day holding period. A 99% confidence level means that, statistically, losses on a single trading day may exceed VaR on average, once every 100 days. Table 3 provides a summary of the Group's trading VaR profile by risk types as at 31 December 2022 and 31 December 2021.

Other Risk Measures

As our main market risk arises from interest rate movements, Present Value of a Basis Point (PV01) – which measures the change in value of interest rate-sensitive exposures resulting from a one basis point increase across the entire yield curve – is an important measure that is monitored on a daily basis.

Table 3: VaR by Risk Type – Trading Portfolio

	2022				2021			
SGD Million	**End of the period**	**Average**	**Minimum**	**Maximum**	End of the period	Average	Minimum	Maximum
Interest Rate VaR	**4.89**	**5.25**	**1.43**	**7.96**	4.11	4.38	2.15	12.30
Foreign Exchange VaR	**3.62**	**1.71**	**0.40**	**6.76**	0.63	1.74	0.59	5.75
Equity VaR	**0.97**	**1.99**	**0.61**	**4.91**	1.21	2.05	0.55	6.36
Credit Spread VaR	**5.76**	**3.62**	**1.91**	**6.78**	2.01	2.67	1.42	7.02
Diversification Effect (1)	**(6.92)**	**(5.82)**	**NM (2)**	**NM (2)**	(4.93)	(5.53)	NM (2)	NM (2)
Aggregate VaR	**8.32**	**6.76**	**2.84**	**11.07**	3.03	5.32	2.49	18.14

(1) Diversification effect is computed as the difference between Aggregate VaR and the sum of asset class VaRs.
(2) Not meaningful as the minimum and maximum VaRs may have occurred on different days for different asset classes.

Other than VaR and PV01, we use risk metrics such as notional positions, Profit & Loss (P&L) for One Basis Point Move in Credit Spreads (CS01) and other risk variables for specific exposure types.

Stress Testing and Scenario Analysis

We perform stress testing and scenario analyses to quantify and assess potential losses arising from low-probability but plausible extreme market conditions. We regularly review and fine-tune the stress scenarios to ensure that they remain relevant to our trading activities and risk profile, as well as prevailing and forecasted economic conditions. These analyses determine if potential losses from such extreme market conditions are within our risk tolerance. In addition to regular stress scenarios, we also use ad hoc event-specific stress scenarios to assess the potential impact of specific market conditions on our market risk exposures.

Risk Monitoring and Control

Limits

Trading units may only undertake authorised trading activities for approved products. All trading risk positions are monitored on a daily basis against approved and allocated limits. Trading activities are conducted within approved mandates and dynamically hedged to remain within limits. Hedge effectiveness is enforced through independent limit monitoring to ensure compliance with market risk limits. Limits are approved to reflect available and anticipated trading opportunities, with clearly defined exception escalation procedures. Exceptions, including temporary breaches, are promptly reported and escalated to senior management for resolution. We also manage market risk exposure holistically by using multiple risk limits (VaR and risk sensitivities), P&L stop loss and other measures.

Model Validation

Model validation is an integral part of our risk control process. Financial models are used to price financial instruments and calculate VaR. We ensure that the models used are fit for their intended purposes through periodic independent validation and reviews. To enhance the integrity of the trading P&L and risk measures generated, we source market rates independently for risk measurement and valuation.

Back-testing

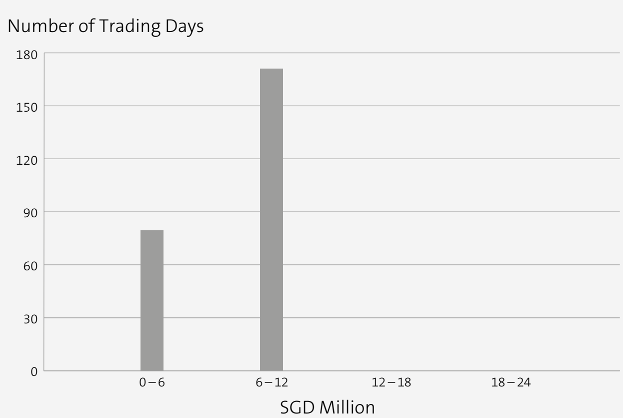
To ensure the continued integrity of our VaR models, we regularly back-test the VaR estimates against actual daily trading P&Ls and hypothetical P&Ls to confirm that the models do not underestimate our market risk exposures. The charts below illustrate the Frequency Distribution of Group Trading Book's Daily Total VaR and P&L.

Interbank Offered Rates (IBOR) Transition

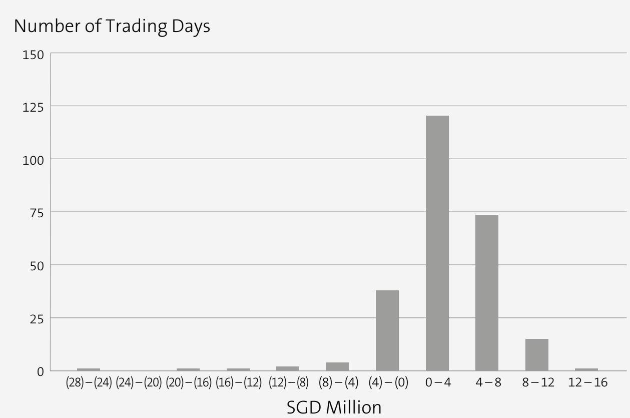
The London Interbank Offered Rate (LIBOR), a key benchmark used in international financial markets, is being phased out and replaced by Risk Free Rates (RFRs). On 5 March 2021, the UK Financial Conduct Authority (FCA) confirmed a two-phase discontinuation approach for LIBOR. All British pound, Euro, Swiss franc and Japanese yen LIBORs, as well as the 1-week and 2-month US dollar LIBOR; have been discontinued since 31 December 2021. All remaining US dollar LIBORs will be discontinued after 30 June 2023.

The expected discontinuation of LIBOR directly impacts the viability of the Singapore Dollar Swap Offer Rate (SOR), which relies on US dollar LIBOR in its computation. Like LIBOR, the Singapore Interbank Offered Rate (SIBOR), a key benchmark widely used in retail loans, is subject to expert judgement due to a lack of underlying transactions. The Singapore Overnight Rate Average (SORA) has been identified as the alternative benchmark to SOR and SIBOR. MAS has established an industry-led Steering Committee for SOR & SIBOR Transition to SORA (SC-STS), to oversee the coordination and implementation of the transition efforts.

Frequency Distribution of Group Trading Book Daily Total VaR (One Day Holding Period) for FY 2022



Frequency Distribution of Group Trading Daily P&L for FY 2022



To ensure a smooth transition from LIBOR to RFRs and SOR and SIBOR to SORA, we have established an internal Steering Committee to coordinate efforts across various business, control and support functions. Clear timelines and deliverables have been established to keep pace with industry transition roadmaps and regulatory timelines.

We have implemented the necessary system upgrades and modifications to ensure the readiness of our infrastructure and processes. We have also assessed the adequacy of provisions relating to the permanent discontinuation of benchmarks in loan documentation, derivatives contracts, debt issuances and other relevant contracts. With respect to the transition of SOR contracts, all retail loans referencing SOR have transitioned to SORA, fixed rates or other benchmarks, with the last transition completed on 18 Oct 2022 in line with the industry. As for corporate loans and derivatives referencing SOR, transition is in progress and expected to be completed by the first half of 2023 in line with industry guidelines. Appropriate adjustments will be made as recommended by the industry to reflect the differences between SOR and SORA. For SIBOR, the transition will be completed in 2024 in line with the roadmap established by the industry. No significant impact is expected from the transition of SOR and SIBOR to SORA.

We will continue to engage our customers to help them understand how their existing contracts may be affected by SOR and USD LIBOR cessation, taking reasonable efforts to remediate their legacy SOR/USD LIBOR loans.

Asset Liability Management

Asset liability management is the strategic management of our balance sheet structure and liquidity requirements. It covers liquidity sourcing and diversification, as well as interest rate and structural foreign exchange management.

Asset Liability Management Approach
Our asset liability management framework focuses on managing the exposures arising from the balance sheet. We monitor our liquidity risk, interest rate risk in the banking book (IRRBB) and structural foreign exchange risk profiles against approved risk limits under both business-as-usual and stressed scenarios. These are based on the standards established in our framework, policies and procedures, which are reviewed regularly to ensure that they remain relevant in the context of prevailing market practices and regulatory guidelines.

Liquidity Risk
The objective of liquidity risk management is to ensure that we have sufficient funds to meet the required contractual and regulatory financial obligations and to undertake new transactions.

Liquidity monitoring is performed on daily basis within a framework for projecting cash flows on both contractual and behavioural bases. Indicators such as liquidity and deposit concentration ratios are used to establish the optimal funding mix and asset composition. Funding strategies are established to provide effective diversification and stability in funding sources across tenors, products and geographies. Simulations of liquidity exposures under stressed market scenarios are performed and the results are used to adjust liquidity risk management strategies, policies and positions, as well as to develop contingency funding plans. We maintain liquid assets in excess of regulatory requirements to strengthen our ability to meet liquidity needs during a crisis. These liquid assets comprise central bank reserves and marketable securities.

Interest Rate Risk in the Banking Book
The primary goal of the management of IRRBB is to ensure that interest rate risk exposures are consistent with our risk appetite and maintained within the defined risk tolerances. The material sources of IRRBB are repricing risk, yield curve risk, basis risk and optionality risk.

We use a range of techniques to measure IRRBB from both the earnings and economic value perspectives on a monthly basis. One measure involves the assessment of the impact of various interest rate scenarios on our net interest income and the banking book's Economic Value of Equity (EVE). Other measures include interest rate sensitivity measures such as PV01 and repricing gap profile analysis. We also use behavioural models to assess interest rate risks in relation to loan prepayment, time deposit early redemption and the profile of non-maturity deposits. These measurements facilitate the calibration of appropriate IRRBB management, hedging strategies, policies and positions.

Structural Foreign Exchange Risk
Structural foreign exchange exposure arises primarily from our net investment in overseas branches, subsidiaries and other strategic and property assets. We manage structural foreign exchange risk through hedging instruments, which include the use of derivatives and matched funding for foreign currency investments.

Other Risks
Non-structural foreign exchange exposures in our banking book are largely transferred to our trading book for foreign exchange risk management. In addition, we are exposed to credit spread risk through the holding of high-quality liquid assets (HQLA) in our banking book to comply with the Liquidity Coverage Ratio (LCR). While HQLA have low default risk, their value could be sensitive to changes in credit spreads. This risk is monitored against approved CS01 limits on a daily basis and subject to historical and anticipatory stress testing. The other risk residing in our banking book is non-strategic equity price risk arising from our equity investments in listed and non-listed companies. Non-strategic equity investments form an insignificant portion of our overall securities portfolio, excluding securities held by GEH.

Information Security and Digital Risk Management

Information security and digital risk is a business risk that comprises the risk domains of information, cyber and technology risks. Effective management of information security and digital risk is critical to minimising any impact on our customers and any financial, operational, reputational, legal and/or regulatory impact on the Group.

Information Security and Digital Risk Management Approach

We adopt a whole-of-organisational approach to managing information security and digital risk so as to achieve resilience for the Group. The key components of our risk management approach are:

Framework and Policies

A framework supported by robust policies establishes the governance and oversight structure and defines the roles and responsibilities across the three independent lines of defence. It also sets out the risk management processes to monitor, assess and respond to information security and digital risk, including communication protocols. We regularly update our framework and policies to align with applicable regulatory requirements such as 2021 MAS Technology Risk Management Guidelines, and industry leading practices such as ISO/IEC Information Security, Cybersecurity and Privacy Protection.

Multi-Layered Controls

We have preventive, detective and response capabilities in place to sustain and enhance existing defences against information security and digital risk. A 24-by-7 Cybersecurity Operations Centre and a Technology Command Centre monitor our networks and systems for cyber threats and any disruption of essential financial services. Existing measures are reviewed and tested regularly with new capabilities added where necessary to address evolving threats. Various controls have been implemented to safeguard against data loss and ensure the confidentiality, integrity and availability of our information assets.

Risk Awareness, Training and Testing Programmes

Our mandatory cyber and information security awareness e-learning, regular risk awareness broadcasts and social engineering testing programmes serve to raise the knowledge and vigilance of our staff as a strong defence against cyber threats and information security breaches. In addition to our Cybersecurity Certification Pathway, we have also rolled out an extensive group-wide Cyber Smart Programme for all staff, to improve their vigilance and relevant competencies. We educate our customers through security advisories and enhance cyber risk awareness of selected outsourced services providers by familiarising them with the control expectations of the Group.

Incident Response and Crisis Management

There are robust incident response and crisis management processes to minimise the disruption of essential financial services during times of crisis. We conduct simulation exercises regularly to improve the readiness of our cybersecurity incident response team to handle cybersecurity events. Crisis management exercises based on plausible information security and digital risk-related scenarios are also conducted regularly to enhance the preparedness of senior management. Additionally, to better manage any potential downstream implications for the Bank, we have formalised a process to facilitate prompt triage and responses in the event that relevant third parties suffer cyber-attack or data loss incidents.

Cyber and Network Security Insurance

We have relevant cyber and network security insurance to cover damages arising from specific cyber-attacks and technology disruption scenarios such as cyber extortion and business interruption losses due to a security breach or system failure.

Separately, we continue to actively engage – and share information security and digital risk-related updates with – regulatory agencies in Singapore, Malaysia and Hong Kong. We do so with the ABS Standing Committee on Cyber Security and the Financial Services Information Sharing and Analysis Centre as well.

Operational Risk Management

Operational risk is inherent in all banking products, activities, processes and systems. The effective management of operational risk is a fundamental element of our risk management programme that serves to enhance our corporate culture.

Operational Risk Management Approach

We manage both expected and unexpected losses, including those caused by catastrophic events, through a robust groupwide framework that is aligned with regulatory requirements and industry standards. The framework is supported by a comprehensive suite of policies and procedures to identify, assess, measure, monitor and control the operational risks arising from the Group's business activities and operations. The roles across the three lines of defence are clearly defined in these policies and procedures to ensure clear accountability and responsibility in the fulfilling of control expectations. A comprehensive insurance programme is also part of our risk mitigation strategy.

The Board and senior management exercise robust oversight of operational risk management and set the tone from the top in promoting a strong corporate culture. Our operational risk profile, comprising key risk indicators, operational risk events, material issues and trends, is regularly reported to senior management, the BRMC and Board via risk committees such as the Operational Risk Management Committee.

The Board also receives – through the Group CEO – an annual assurance report on the adequacy and effectiveness of our internal controls and risk management systems. The report highlights any key control deficiencies and accompanying remedial plans.

Various forums and working groups such as the Operational Risk Partners Forum and Emerging Operational Risk Forum are established to foster continuous engagement with internal and external stakeholders, facilitating awareness and understanding of operational risk. Targeted and specialised training, including certified courses recognised by the Institute of Banking and Finance (IBF) and International Compliance Training Academy (ICA), are available to raise staff competency.

Apart from the risk management approach mentioned above, we have put in place additional risk management measures to address the following key subject-specific risks:

Key Risks	Additional Risk Management Measures
Fraud Risk	• Whistleblowing channels and awareness programmes for both employees and customers to build awareness of fraud risks and report suspicious events. • Robust anti-fraud measures utilising transaction monitoring to detect and alert customers to suspicious account activities, with an additional capability to prevent the completion of such transactions. • A comprehensive governance and anti-fraud response model to expedite incident handling through the Dynamic Response Committee (DRC) and Anti-Fraud Standing Committee (AFSC). • Continuous strengthening of surveillance systems in response to changes in fraud/scam typologies and the regulatory landscape. • Independent review by Group Audit of all fraud and whistleblowing cases.
Money Laundering, Financing of Terrorism and Sanctions Risk	• Risk assessment methodologies that leverage existing monitoring and screening platforms to assess customer, product and geographical risks. • Risk surveillance capabilities that leverage artificial intelligence and data analytics for the dynamic monitoring and detection of emerging financial crime trends and typologies.
Third-Party Risk	• Designated functional specialists across various functions within the Bank who provide guidance in their respective areas of expertise throughout the third-party risk management process. • Active engagement with the ABS Outsourcing Advisory Committee as well as continual tracking and assessment of industry developments. • Regular outreach to our service providers to raise their awareness of operational risks.
Physical and People Security Risk	• Active monitoring of external events that may pose a threat to OCBC locations, people and assets. • Advisories and response procedures to better prepare the Bank and our employees to handle risk events, including risks posed to employees undertaking business travel. • Regular physical security and country risk assessments to identify potential physical security risks, associated threats and vulnerabilities.
Conduct Risk	• New initiatives to promote good culture and conduct, effective risk governance and employee accountability. These include peer recognition programmes, the Employee Pulse Survey, the Code of Conduct Annual Assessment and enhancements to the Group Disciplinary Framework. • Active monitoring of culture and conduct-related matters such as customer complaint trends, staff attrition rates, regulatory breaches and whistleblowing investigations. • An Employee Conduct Triggers (ECT) Programme featuring clear and measurable conduct indicators.

Key Risks	Additional Risk Management Measures
Business Continuity Risk	• Robust recovery strategies and business recovery plans that are reviewed and tested annually. • Annual attestation to senior management, the BRMC and Board on the maturity of the business continuity programme, key initiatives and alignment with MAS guidelines.
Unauthorised Trading Risk	• Trade surveillance and investigation by an independent control assurance function to detect and address potential control issues so as to prevent rogue or unauthorised trading.
Regulatory Risk	• A Regulatory Compliance Matrix that provides a central platform to map applicable compliance laws, rules and standards to the relevant units in OCBC Group. • A risk assessment methodology to identify business activities with a higher level of compliance risk. Compliance testing and reviews are performed to determine if the established processes and procedures are effective in managing the risk. • Designated Divisional Compliance Officers at business units to provide insights and perspective on risk mitigation and compliance within their functions.
Legal Risk	• Providing legal advisory services that balance risk and opportunities for businesses to grow sustainably. • Managing litigation or dispute resolution processes as well as the making of trademark filings. • Advisory on data protection and compliance with applicable data privacy regulation.
Fiduciary Risk	• Standards relating to fiduciary or fiduciary-like business activities such as Fair Dealing, Insider Trading and Chinese Wall and Code of Conduct to guide decisions and behaviour throughout the organisation.
Reputational Risk	• Dedicated committees such as the Fair Dealing Committee and Reputational Risk Review Group, helmed by senior management, provide oversight and focus on areas such as fair dealing and responsible financing to manage our responsibilities towards stakeholders and protect our reputation. • Guidelines to advise staff on how to use social media responsibly and appropriately.

For more information on how the Bank is managing the Fraud, Money Laundering and Financing of Terrorism Risks, please refer to our Sustainability Report 2022.

Pillar 3 Disclosures

(OCBC Group – As at 31 December 2022)

Introduction

In accordance with Pillar 3 disclosure requirements under Monetary Authority of Singapore (MAS) Notice 637 on Risk Based Capital Adequacy Requirements, Notice 651 on Liquidity Coverage Ratio Disclosure and Notice 653 on Net Stable Funding Ratio Disclosure for Banks incorporated in Singapore, relevant quantitative and qualitative disclosures have been included in the Stand-alone Pillar 3 Disclosures Report and this Annual Report under the Risk Management, Corporate Governance, Capital Management Chapters and the Notes to Financial Statements. The Pillar 3 disclosures are to enable market participants to better understand and compare capital adequacy and risk profiles across banks via improved consistency in public disclosures.

Scope of Consolidation

The consolidation basis used for regulatory capital computation is similar to that used for financial reporting except for Great Eastern Holdings Limited and its insurance subsidiaries, which are excluded from regulatory consolidation and are treated as investments in unconsolidated major stake companies that are financial institutions in accordance with MAS Notice 637's definition of an insurance subsidiary. The regulatory adjustments applied to these investments are in accordance with MAS Notice 637 paragraphs 6.1.3(p), 6.2.3(e) and 6.3.3(e).

The Stand-alone Pillar 3 Disclosures Report is located in the Capital and Regulatory section of OCBC's website under Fourth Quarter and Full Year 2022 (https://www.ocbc.com/group/investors/investor-information.page#Capital-and-regulatory-disclosures).

Overview Of Disclosures

To read the quantitative and qualitative Pillar 3 disclosures, please refer to this table:

Disclosure Requirement	Location of Disclosure
Overview of Risk Management and RWA	
Key Metrics	Pillar 3 Disclosures Report Section 4
Risk Management Approach	OCBC Annual Report 2022 – Risk Management Chapter – Corporate Governance Chapter – Capital Management Chapter
Overview of Risk Weighted Assets (RWA)	Pillar 3 Disclosures Report Section 11
Linkages between Financial Statements and Regulatory Exposures	
Differences between Accounting and Regulatory Scopes of Consolidation and Mapping of Financial Statement Categories with Regulatory Risk Categories	Pillar 3 Disclosures Report Section 7.1
Main Sources of Differences between Regulatory Exposure Amounts and Carrying Amounts in Financial Statements	Pillar 3 Disclosures Report Section 7.2
Qualitative Disclosure of Differences between Carrying Amounts in Financial Statements and Regulatory Exposure Amounts	Pillar 3 Disclosures Report Sections 3 and 7 OCBC Annual Report 2022 – Notes to Financial Statements, Fair Values of Financial Instruments: Valuation Governance Framework [(1)] and Fair Values – Notes to Financial Statements, Summary of significant accounting policies: Critical Accounting Estimates and Judgements, Fair value estimation
Prudent Valuation Adjustments	Pillar 3 Disclosures Report Section 7.3

(1) Valuation Governance Framework does not apply to Great Eastern Holdings Limited and other non-bank entities with the exception of OCBC Securities Private Limited and PT OCBC Securitas.

Disclosure Requirement	Location of Disclosure
Credit Risk	
General Qualitative Disclosures about Credit Risk	OCBC Annual Report 2022 – Risk Management Chapter, Credit Risk Management
Credit Quality of Assets	Pillar 3 Disclosures Report Section 9.1
Changes in Stock of Defaulted Loans and Debt Securities	Pillar 3 Disclosures Report Section 9.2
Additional Disclosures related to the Credit Quality of Assets	Pillar 3 Disclosures Report Sections 9.3, 9.4 and 9.5 OCBC Annual Report 2022 – Risk Management Chapter, Credit Risk Management: Remedial Management – Notes to Financial Statements, Summary of significant accounting policies: Impairment of Assets – Notes to Financial Statements, Risk Management: Credit Risk
Qualitative Disclosures related to CRM Techniques	OCBC Annual Report 2022 – Risk Management Chapter, Credit Risk Management: Credit Risk Mitigation – Risk Management Chapter, Credit Risk Management: Credit Portfolio Management – Notes to Financial Statements, Risk Management: Credit Risk, Collateral – Notes to Financial Statements, Offsetting Financial Assets and Financial Liabilities
Overview of Credit Risk Mitigation (CRM) Techniques	Pillar 3 Disclosures Report Section 13.5
Qualitative Disclosures on the use of External Credit Ratings under the Standardised Approach (SA) Credit Risk (CR)	Pillar 3 Disclosures Report Section 10
(SA)(CR) and (SA) Equity Exposures (EQ) – Credit Risk Exposure and CRM Effects	Pillar 3 Disclosures Report Section 13.1
(SA)(CR) and (SA)(EQ) – Exposures by Asset Classes and Risk Weights	Pillar 3 Disclosures Report Section 13.2
Qualitative Disclosures for Internal Ratings-Based Approach (IRBA) Models	OCBC Annual Report 2022 – Risk Management Chapter, Credit Risk Management: Internal Rating Models – Risk Management Chapter, Credit Risk Management: Key Components of Internal Ratings Based (IRB) Models
IRBA – Credit Risk Exposures by Portfolio and Probability of Default (PD) Range	Pillar 3 Disclosures Report Sections 13.3 and 13.4
IRBA – Effect on RWA of Credit Derivatives used as CRM	Pillar 3 Disclosures Report Section 13.6
IRBA – RWA Flow Statement for Credit Risk Exposures	Pillar 3 Disclosures Report Section 12
IRBA – Backtesting of PD per Portfolio	Pillar 3 Disclosures Report Section 14
IRBA – Specialised Lending and Equities under the Simple Risk Weight Method	Pillar 3 Disclosures Report Section 15

Disclosure Requirement	Location of Disclosure
Counterparty Credit Risk (CCR)	
Qualitative Disclosures Related to Counterparty Credit Risk (CCR)	OCBC Annual Report 2022 – Risk Management Chapter, Credit Risk Management: Counterparty Credit Risk Management – Risk Management Chapter, Credit Risk Management: Credit Risk Mitigation
Analysis of CCR Exposure by Approach	Pillar 3 Disclosures Report Section 16.1
Credit Valuation Adjustments (CVA) Risk Capital Requirements	Pillar 3 Disclosures Report Section 16.2
Exposures to Central Counterparties	Pillar 3 Disclosures Report Section 16.3
Standardised Approach – CCR Exposures by Portfolio and Risk Weights	Pillar 3 Disclosures Report Section 16.4
IRBA – CCR Exposures by Portfolio and PD Range	Pillar 3 Disclosures Report Sections 16.5 and 16.6
Composition of Collateral for CCR Exposure	Pillar 3 Disclosures Report Section 16.7
Credit Derivative Exposures	Pillar 3 Disclosures Report Section 16.8
RWA Flow Statements under the CCR Internal Models Method	Pillar 3 Disclosures Report Section 2
Securitisation	
Qualitative Disclosure Related to Securitisation Exposures	Pillar 3 Disclosures Report Sections 10 and 17
Securitisation Exposures in the Banking and/or Trading Book	
Securitisation Exposures in the Banking Book and Associated Regulatory Capital Requirements – A Reporting Bank Acting as Originator/ Sponsor/ Investor	
Market Risk	
Qualitative Disclosure Related to Market Risk	Pillar 3 Disclosures Report Section 10 OCBC Annual Report 2022 – Risk Management Chapter, Market Risk Management
Qualitative Disclosures Related to Internal Models Approach (IMA)	Pillar 3 Disclosures Report Section 18
Market Risk under Standardised Approach	
RWA Flow Statements of Market Risk Exposures under IMA	Pillar 3 Disclosures Report Section 2
IMA Values for Trading Portfolios	Pillar 3 Disclosures Report Section 18
Comparison of VaR Estimates with Gains or Losses	OCBC Annual Report 2022 – Risk Management Chapter, Market Risk Management: Market Risk Measurements – Risk Management Chapter, Market Risk Management: Risk Monitoring and Control

Disclosure Requirement	Location of Disclosure
Operational Risk	
Operational Risk	Pillar 3 Disclosures Report Section 10 OCBC Annual Report 2022 – Risk Management Section, Operational Risk Management
Interest Rate Risk in the Banking Book	
Interest Rate Risk in the Banking Book	Pillar 3 Disclosures Report Section 19 OCBC Annual Report 2022 – Risk Management Chapter, Asset Liability Management: Interest Rate Risk in the Banking Book – Notes to Financial Statements, Risk Management: Market Risk and Asset Liability Management, Interest Rate Risk
Remuneration	
Remuneration	OCBC Annual Report 2022 – Corporate Governance Chapter related to Remuneration
Composition of Capital	
Reconciliation of Regulatory Capital to Balance Sheet	Pillar 3 Disclosures Report Section 6.1
Composition of Regulatory Capital	Pillar 3 Disclosures Report Section 6.2
Main Features of Regulatory Capital Instruments	Pillar 3 Disclosures Report Section 6.3
Leverage Ratio	
Leverage Ratio Summary Comparison Table	Pillar 3 Disclosures Report Section 8.1
Leverage Ratio Common Disclosure Table	Pillar 3 Disclosures Report Section 8.2
Macroprudential Supervisory Measures	
Disclosure of Global Systemically Important Bank (G-SIB) Indicators	Pillar 3 Disclosures Report Section 5.1
Geographical Distribution of Credit Exposures Used in the Countercyclical Capital Buffer	Pillar 3 Disclosures Report Section 5.2
Liquidity Coverage Ratio	
Liquidity Coverage Ratio	Pillar 3 Disclosures Report Section 20
Net Stable Funding Ratio	
Net Stable Funding Ratio	Pillar 3 Disclosures Report Section 21
Others	
Attestation Statement	Pillar 3 Disclosures Report Sections 1 and 2
Overview of Disclosure Policy	Pillar 3 Disclosures Report Section 2

Financial Report

Management Discussion and Analysis

Overview

	2022 $ million	2021 $ million	+/(-) %
Selected Income Statement Items			
Net interest income	**7,688**	5,855	31
Non-interest income	**3,987**	4,741	(16)
Total income	**11,675**	10,596	10
Operating expenses	**(5,026)**	(4,764)	5
Operating profit before allowances and amortisation	**6,649**	5,832	14
Amortisation of intangible assets	**(104)**	(103)	1
Allowances for loans and other assets	**(584)**	(873)	(33)
Operating profit after allowances and amortisation	**5,961**	4,856	23
Share of results of associates, net of tax	**978**	824	19
Profit before income tax	**6,939**	5,680	22
Net profit attributable to equity holders of the Bank	**5,748**	4,858	18
Cash basis net profit attributable to equity holders of the Bank (1)	**5,852**	4,961	18
Selected Balance Sheet Items			
Ordinary equity	**51,387**	51,463	–
Equity attributable to equity holders of the Bank	**53,087**	52,663	1
Total assets	**559,956**	542,187	3
Assets excluding life insurance fund investment securities and other assets	**461,961**	442,091	4
Net loans to customers	**291,467**	286,281	2
Deposits of non-bank customers	**350,081**	342,395	2
Per Ordinary Share ($)			
Basic earnings (2)	**1.27**	1.07	
Diluted earnings (2)	**1.27**	1.07	
Net asset value	**11.43**	11.46	
Key Financial Ratios (%)			
Return on equity (2)(3)	**11.1**	9.6	
Return on assets (4)	**1.25**	1.13	
Net interest margin	**1.91**	1.54	
Non-interest income to total income	**34.1**	44.7	
Cost-to-income	**43.0**	45.0	
Loans-to-deposits	**83.3**	83.6	
Non-performing loan ratio	**1.2**	1.5	
Total capital adequacy ratio (CAR) (5)	**17.7**	17.6	
Tier 1 CAR (5)	**15.9**	16.0	
Common Equity Tier 1 CAR (5)	**15.2**	15.5	
Leverage ratio (5)(6)	**7.2**	7.7	
Singapore dollar liquidity coverage ratio (5)(7)	**325**	308	
All-currency liquidity coverage ratio (5)(7)	**152**	151	
Net stable funding ratio (5)(8)	**117**	121	

(1) Excludes amortisation of intangible assets.
(2) Calculated based on net profit less distributions on other equity instruments paid and estimated to be due at the end of the financial year.
(3) Other equity instruments and non-controlling interests are not included in the computation for return on equity.
(4) Computation of return on assets excludes life insurance fund investment securities and other assets.
(5) Public disclosures required under MAS Notice 637, MAS Notice 651 and MAS Notice 653 can be found in the Capital and Regulatory Disclosures section of the Bank's Investor Relations website (https://www.ocbc.com/group/investors/investor-information#pillarthreedisclosures).
(6) The Group's leverage ratio is computed based on MAS Notice 637.
(7) The Group's liquidity coverage ratios ("LCR") are computed based on MAS Notice 649 and reported based on the average LCR for the respective years.
(8) The Group's net stable funding ratio is computed based on MAS Notice 652.

Overview (continued)

The Group's net profit for the financial year ended 31 December 2022 increased 18% to a record $5.75 billion, from $4.86 billion a year ago, driven by strong growth in net interest income and lower allowances.

The strong performance reflected the strength and agility of OCBC's well-diversified business franchise that was well-positioned to capture opportunities in a rapidly changing operating environment. The Group's record earnings were supported by strong growth in net interest income which more than offset weaker non-interest income. Disciplined cost management drove cost-to-income ratio lower, while allowances declined from improving credit conditions and robust portfolio quality. Wealth management fee income was softer as macro headwinds and market volatilities lowered client investment activity, although net new money inflows were higher year-on-year. Great Eastern Holdings' (GEH) underlying insurance business remained strong. However, profit from insurance declined as a result of unrealised valuation losses arising from unfavourable movement in the discount rates used to value longer-end duration insurance contract liabilities in the fourth quarter. The Group continue to maintain sound capital, funding and liquidity positions to capture growth opportunities while ensuring sufficient buffers for uncertainties. The 2022 total dividend was raised to 68 cents, supported by resilient earnings and strong capital position.

Net interest income grew 31% to a record $7.69 billion, underpinned by a 37-basis point expansion in net interest margin and 6% growth in average assets.

Non-interest income was $3.99 billion, down 16% from the previous year. Net fee income was $1.85 billion, 18% lower than a year ago. The decline was largely from softer wealth management fees attributable to prevailing risk-off investment sentiments. This was partly offset by an increase in fees from loan and trade-related activities.

Net trading income improved 9% to $834 million, compared to $763 million a year ago, from higher non-customer flow treasury income partly driven by gains from hedging activities.

Net loss from the sale of investment securities of $206 million, compared to net gain of $92 million last year, was mainly attributable to bond portfolio rebalancing and positioning amid changing market conditions.

GEH's underlying insurance business remained resilient with a 7% growth in operating profit. GEH's embedded value, a measure of the long-term economic value of the existing business of a life insurance company was $17.9 billion as at 31 December 2022. Total weighted new sales were $1.91 billion with new business embedded value (NBEV) 9% higher at $875 million and the NBEV margin increased to 45.8%. However, profit from insurance fell 11% to $1.19 billion from $1.33 billion in the previous year, largely from unrealised valuation losses in the fourth quarter due to unfavourable movement in the discount rates used to value its longer-end duration insurance contract liabilities.

The Group's wealth management income, comprising consolidated income from insurance, private banking, premier private client, premier banking, asset management and stockbroking was $3.89 billion, as compared to $4.01 billion last year, and contributed 33% to the Group's total income. As at 31 December 2022, Group wealth management assets under management was higher at $258 billion compared to $257 billion a year ago, driven by continued growth in net new money inflows which offset negative market valuation.

Operating expenses grew 5% to $5.03 billion, led by higher staff and IT-related costs. The increases were largely attributable to annual salary adjustments and headcount growth to strengthen the talent pool, coupled with the Group's continued investments to enhance technology capabilities in support of the strategic priorities to drive growth. Cost-to-income ratio improved to 43.0% from 45.0% in 2021.

Net allowances declined 33% to $584 million. A drop in allowances for impaired assets was partly offset by increased allowances for non-impaired assets arising from macro-economic variables updates and additional overlays to buffer for uncertainties.

Share of results of associates rose 19% to $978 million from $824 million in the previous year.

Full year return on equity improved to 11.1% from 9.6% in the previous year. Earnings per share rose 18% to $1.27 from $1.07 in the prior year.

Overview (continued)

Allowances and Asset Quality

As at 31 December 2022, total non-performing assets (NPA) were $3.49 billion, 20% lower than a year ago. NPAs declined from the previous year as higher recoveries and upgrades largely from Malaysia and Indonesia following exits from relief programmes more than offset new NPA formation during the year. New NPA formation more than halved from a year ago, driven by overall improvement in the credit environment and asset quality. The NPL ratio was stable at 1.2%, while the allowance coverage against total NPAs was raised to 114%.

For 2022, total allowances were lower at $584 million and represented 16-basis points of loans, as compared to $873 million and 29-basis points in the preceding year. The decline was mainly due to lower allowances for impaired assets, partly offset by increased allowances for non-impaired assets arising from macro-economic variables updates and additional overlays to buffer for uncertainties.

Funding, Liquidity and Capital Position

As at 31 December 2022, customer loans were $295 billion. On a constant currency basis, loans grew 4.5% from a year ago. In 2022, loan growth was largely driven by lending in Singapore, Australia, the United States and United Kingdom. Sustainable financing commitments rose 30% from a year ago to $44 billion, well on track to achieve the Group's target of $50 billion by 2025.

Customer deposits rose 2% year-on-year to $350 billion, led by a rise in fixed deposits. Loans-to-deposits ratio was 83.3% as compared to 83.6% in the previous year.

As at 31 December 2022, Group CET1 CAR was 15.2%, while the leverage ratio was 7.2%.

Dividend

The Board has proposed a final dividend of 40 cents per share, an increase of 43% or 12 cents from a year ago. This brings 2022 total dividend to 68 cents, up 28% or 15 cents from the previous year. This represents a payout ratio of 53% against net profit, which exceeds 49% a year ago. The Scrip Dividend Scheme is not applicable.

The increase is supported by OCBC's resilient earnings growth and strong capital position. Going forward, OCBC targets to deliver a dividend payout ratio of 50%, barring any unforeseen circumstances.

Net Interest Income

Average Balance Sheet

	2022			2021		
	Average Balance $ million	Interest $ million	Average Rate %	Average Balance $ million	Interest $ million	Average Rate %
Interest earning assets						
Loans to customers	**289,708**	**8,852**	**3.06**	272,302	5,786	2.12
Placements with and loans to banks	**49,804**	**1,314**	**2.64**	44,428	448	1.01
Other interest earning assets	**62,100**	**1,424**	**2.29**	62,959	1,191	1.89
	401,612	**11,590**	**2.89**	379,689	7,425	1.96
Interest bearing liabilities						
Deposits of non-bank customers	**347,287**	**3,223**	**0.93**	323,120	1,300	0.40
Deposits and balances of banks	**12,814**	**195**	**1.52**	10,171	68	0.67
Other borrowings	**19,590**	**484**	**2.47**	21,941	202	0.92
	379,691	**3,902**	**1.03**	355,232	1,570	0.44
Net interest income/margin [(1)]		**7,688**	**1.91**		5,855	1.54

Volume and Rate Analysis

Increase/(decrease) for 2022 over 2021 due to change in:	Volume $ million	Rate $ million	Net change $ million
Interest income			
Loans to customers	370	2,696	3,066
Placements with and loans to banks	54	812	866
Other interest earning assets	(16)	249	233
	408	3,757	4,165
Interest expense			
Deposits of non-bank customers	97	1,826	1,923
Deposits and balances of banks	18	109	127
Other borrowings	(22)	304	282
	93	2,239	2,332
Impact on net interest income	315	1,518	1,833
Due to change in number of days			–
Net interest income			1,833

(1) Net interest margin is net interest income as a percentage of interest earning assets.

Non-Interest Income

	2022 $ million	2021 $ million	+/(-) %
Gross fee and commission income			
Brokerage	**103**	141	(27)
Credit card	**337**	287	17
Fund management	**119**	133	(11)
Guarantees	**14**	14	1
Investment banking	**100**	106	(5)
Loan-related	**180**	179	–
Service charges	**87**	79	10
Trade-related and remittances	**298**	286	4
Wealth management	**919**	1,310	(30)
Others	**50**	46	9
	2,207	2,581	(15)
Fee and commission expense	**(356)**	(336)	6
Fees and commissions (net)	**1,851**	2,245	(18)
Dividends	**125**	113	11
Net trading income	**834**	763	9
Income from life and general insurance			
Profit from life insurance	**971**	1,137	(15)
Premium income from general insurance	**218**	197	11
Sub-total	**1,189**	1,334	(11)
Other income			
Disposal of investment securities	**(206)**	92	nm
Disposal of plant and equipment	**(1)**	(1)	48
Disposal of properties	**100**	108	(8)
Rental and property-related income	**78**	66	18
Others	**17**	21	(19)
Sub-total	**(12)**	286	nm
Total non-interest income	**3,987**	4,741	(16)

(1) "nm" denotes not meaningful.

Operating Expenses

	2022 $ million	2021 $ million	+/(-) %
Staff costs	**3,233**	3,028	7
Property and equipment			
Depreciation	**426**	412	3
Maintenance	**156**	145	8
Rental expenses	**7**	7	(6)
Others	**330**	304	9
	919	868	6
Other operating expenses	**874**	868	1
Total operating expenses	**5,026**	4,764	5
Group staff strength			
Period end	**31,604**	30,809	3
Average	**31,269**	30,610	2

Allowances for Loans and Other Assets

	2022 $ million	2021 $ million	+/(-) %
Allowances/(write-back):			
Impaired loans			
Singapore	**(30)**	42	nm
Malaysia	**(23)**	262	nm
Indonesia	**2**	213	(99)
Greater China	**107**	218	(51)
Others	**80**	117	(31)
	136	852	(84)
Impaired other assets	**80**	3	nm
Non-impaired loans	**369**	15	nm
Non-impaired other assets	**(1)**	3	nm
Allowances for loans and other assets	**584**	873	(33)

(1) "nm" denotes not meaningful.

Loans to Customers

	2022 $ million	2021 $ million	+/(-) %
By Industry			
Agriculture, mining and quarrying	**8,193**	8,094	1
Manufacturing	**15,052**	15,642	(4)
Building and construction	**89,299**	81,375	10
Housing loans	**62,015**	61,733	–
General commerce	**29,209**	30,159	(3)
Transport, storage and communication	**13,017**	13,423	(3)
Financial institutions, investment and holding companies	**24,387**	25,365	(4)
Professionals and individuals	**34,752**	36,854	(6)
Others	**19,056**	17,071	12
	294,980	289,716	2
By Currency			
Singapore Dollar	**107,270**	102,131	5
United States Dollar	**70,884**	73,022	(3)
Malaysian Ringgit	**18,413**	20,189	(9)
Indonesian Rupiah	**8,732**	8,720	–
Hong Kong Dollar	**36,295**	34,691	5
Chinese Renminbi	**7,358**	6,688	10
Others	**46,028**	44,275	4
	294,980	289,716	2
By Geography (1)			
Singapore	**119,925**	115,620	4
Malaysia	**25,077**	27,611	(9)
Indonesia	**18,600**	18,918	(2)
Greater China	**72,756**	74,120	(2)
Other Asia Pacific	**21,734**	19,293	13
Rest of the World	**36,888**	34,154	8
	294,980	289,716	2

(1) Loans by geography are determined based on where the credit risk resides, which may be different from the borrower's country of residence or the booking location of the loans.

Non-Performing Assets

	Total NPAs[1] $ million	Substandard $ million	Doubtful $ million	Loss $ million	NPLs[2] $ million	NPL Ratio[2] %
Singapore						
2022	**437**	**202**	**154**	**81**	**383**	**0.3**
2021	606	300	206	100	551	0.5
Malaysia						
2022	**981**	**522**	**188**	**271**	**941**	**3.8**
2021	1,516	1,126	166	224	1,467	5.3
Indonesia						
2022	**778**	**343**	**252**	**183**	**778**	**4.2**
2021	1,216	722	255	189	1,208	6.4
Greater China						
2022	**901**	**444**	**431**	**26**	**901**	**1.2**
2021	586	117	447	22	586	0.8
Other Asia Pacific						
2022	**96**	**41**	**54**	**1**	**96**	**0.4**
2021	186	62	124	#	186	1.0
Rest of the World						
2022	**293**	**30**	**263**	**#**	**284**	**0.8**
2021	228	21	207	#	217	0.6
Group						
2022	**3,486**	**1,582**	**1,342**	**562**	**3,383**	**1.2**
2021	4,338	2,398	1,405	535	4,215	1.5

(1) Refer to non-performing assets. Comprise loans to customers, debt securities and contingent liabilities.
(2) Refer to non-performing loans. Exclude debt securities and contingent liabilities.
(3) # represents amounts less than $0.5 million.

Non-Performing Assets (continued)

	2022		2021	
	$ million	% of gross loans	$ million	% of gross loans
NPLs by Industry				
Loans and advances				
Agriculture, mining and quarrying	**56**	**0.7**	96	1.2
Manufacturing	**614**	**4.1**	840	5.4
Building and construction	**592**	**0.7**	330	0.4
Housing loans	**579**	**0.9**	1,002	1.6
General commerce	**392**	**1.3**	594	2.0
Transport, storage and communication	**392**	**3.0**	491	3.7
Financial institutions, investment and holding companies	**131**	**0.5**	89	0.4
Professionals and individuals	**128**	**0.4**	179	0.5
Others	**499**	**2.6**	594	3.5
Total NPLs	**3,383**	**1.2**	4,215	1.5
Classified debt securities	**–**		6	
Classified contingent liabilities	**103**		117	
Total NPAs	**3,486**		4,338	

	2022		2021	
	$ million	%	$ million	%
NPAs by Period Overdue				
Over 180 days	**968**	**28**	927	21
Over 90 to 180 days	**396**	**11**	145	3
30 to 90 days	**296**	**9**	179	4
Less than 30 days	**383**	**11**	1,018	24
Not overdue	**1,443**	**41**	2,069	48
	3,486	**100**	4,338	100

Deposits

	2022 $ million	2021 $ million	+/(-) %
Deposits of non-bank customers	**350,081**	342,395	2
Deposits and balances of banks	**10,046**	8,239	22
	360,127	350,634	3

Non-Bank Deposits by Product			
Fixed deposits	**133,415**	91,338	46
Savings deposits	**69,036**	78,566	(12)
Current accounts	**112,245**	138,077	(19)
Others	**35,385**	34,414	3
	350,081	342,395	2

Non-Bank Deposits by Currency			
Singapore Dollar	**130,205**	133,157	(2)
United States Dollar	**119,527**	109,842	9
Malaysian Ringgit	**21,278**	22,603	(6)
Indonesian Rupiah	**11,196**	12,197	(8)
Hong Kong Dollar	**26,210**	23,381	12
Chinese Renminbi	**8,837**	10,311	(14)
Others	**32,828**	30,904	6
	350,081	342,395	2

Performance by Business Segment

OCBC Group's businesses are presented in the following customer segments and business activities: Global Consumer/Private Banking, Global Wholesale Banking, Global Treasury and Markets and Insurance.

Profit before Income Tax by Business Segment

	2022 $ million	2021 $ million	+/(-) %
Global Consumer/Private Banking	**1,537**	1,110	38
Global Wholesale Banking	**3,002**	1,688	78
Global Treasury and Markets	**649**	864	(25)
Insurance	**881**	1,224	(28)
Others	**870**	794	9
Profit before income tax	**6,939**	5,680	22

Performance by Business Segment (continued)

Global Consumer/Private Banking

Global Consumer/Private Banking provides a full range of products and services to individual customers. At Global Consumer Banking, the products and services offered include deposit products (checking accounts, savings and fixed deposits), consumer loans (housing loans and other personal loans), credit cards, wealth management products (unit trusts, bancassurance products and structured deposits) and brokerage services. Private Banking caters to the specialised banking needs of high net worth individuals, offering wealth management expertise, including investment advice and portfolio management services, estate and trust planning, and wealth structuring.

Global Consumer/Private Banking's 2022 profit before income tax rose 38% to $1.54 billion, driven by net interest income growth amid a rising interest rate environment and lower allowances. This was partly offset by a decline in wealth management and brokerage fee income and higher expenses.

Global Wholesale Banking

Global Wholesale Banking serves institutional customers ranging from large corporates and the public sector to small and medium enterprises. The business provides a full range of financing solutions including long-term project financing, short-term credit, working capital and trade financing, as well as customised and structured equity-linked financing. It also provides customers with a broad range of products and services such as cash management and custodian services, capital market solutions, corporate finance services and advisory banking, and treasury products.

Global Wholesale Banking's profit before income tax rose 78% to $3.00 billion in 2022, from $1.69 billion a year ago. The higher profit was led by growth in net interest income and lower allowances, partly offset by a decline in income from investment banking activities and an increase in expenses.

Global Treasury and Markets

Global Treasury and Markets is responsible for the management of the Group's asset and liability interest rate positions, engages in foreign exchange activities, money market operations, fixed income and derivatives trading, and offers structured treasury products and financial solutions to meet customers' investment and hedging needs. Income from treasury products and services offered to customers in Global Consumer/Private Banking and Global Wholesale Banking, is reflected in the respective business segments.

Global Treasury's profit before income tax was down 25% to $649 million in 2022, mainly attributable to lower net interest income, realised losses from its fixed income portfolio, partly offset by an increase in net trading income.

Insurance

The Group's insurance business, including its fund management activities, is undertaken by 87.9%-owned subsidiary GEH and its subsidiaries, which provide both life and general insurance products to its customers mainly in Singapore and Malaysia.

GEH's profit before income tax was $881 million in 2022, down 28% from $1.22 billion in the previous year, mainly attributable to lower net valuation gains in its insurance funds largely due to unrealised mark-to-market losses on its insurance contract liabilities in the fourth quarter.

After tax and non-controlling interests, GEH's contribution to the Group's net profit was $643 million in 2022, lower than the $932 million a year ago.

Others

Others comprise mainly property holding, investment holding and items not attributable to the business segments described above.

Where there are material changes in the organisational structure and management reporting methodologies, segment information for prior periods is reclassified to allow comparability.

Performance by Geographical Segment

	2022		2021	
	$ million	%	$ million	%
Total income				
Singapore	**6,738**	**58**	5,955	56
Malaysia	**1,668**	**14**	1,619	15
Indonesia	**1,016**	**9**	940	9
Greater China	**1,558**	**13**	1,453	14
Other Asia Pacific	**251**	**2**	262	3
Rest of the World	**444**	**4**	367	3
	11,675	**100**	10,596	100
Operating profit before allowances and amortisation				
Singapore	**3,771**	**57**	3,118	53
Malaysia	**1,135**	**17**	1,088	19
Indonesia	**547**	**8**	517	9
Greater China	**721**	**11**	680	12
Other Asia Pacific	**176**	**3**	197	3
Rest of the World	**299**	**4**	232	4
	6,649	**100**	5,832	100
Profit before income tax				
Singapore	**3,568**	**51**	3,039	53
Malaysia	**1,239**	**18**	860	15
Indonesia	**325**	**5**	325	6
Greater China	**1,353**	**20**	1,243	22
Other Asia Pacific	**239**	**3**	102	2
Rest of the World	**215**	**3**	111	2
	6,939	**100**	5,680	100
Total assets				
Singapore	**323,392**	**58**	317,491	59
Malaysia	**65,280**	**12**	66,997	12
Indonesia	**21,047**	**4**	20,954	4
Greater China	**93,291**	**17**	88,031	16
Other Asia Pacific	**20,321**	**3**	18,631	3
Rest of the World	**36,625**	**6**	30,083	6
	559,956	**100**	542,187	100

The geographical segment analysis is based on the location where assets or transactions are booked. The geographical information is stated after elimination of intra-group transactions and balances.

Capital Adequacy Ratios

The Group remained strongly capitalised, with a Common Equity Tier 1 (CET1) capital adequacy ratio (CAR) of 15.2%, and Tier 1 and Total CAR of 15.9% and 17.7% respectively. These ratios were well above the regulatory minima of 6.5%, 8% and 10%, respectively, for 2022.

Directors' Statement

For the financial year ended 31 December 2022

The directors present this statement to the members of the Bank together with the audited consolidated financial statements of the Group and the income statement, statement of comprehensive income, balance sheet and statement of changes in equity of the Bank for the financial year ended 31 December 2022.

In our opinion:

(a) the financial statements set out on pages 116 to 252 are drawn up so as to give a true and fair view of the financial position of the Group and of the Bank as at 31 December 2022, the financial performance and changes in equity of the Group and of the Bank for the financial year ended on that date, and cash flows of the Group for the financial year ended on that date, in accordance with the provisions of the Singapore Companies Act 1967 (the Act) and Singapore Financial Reporting Standards (International); and

(b) at the date of this statement, there are reasonable grounds to believe that the Bank will be able to pay its debts as and when they fall due.

The Board of Directors has, on the date of this statement, authorised these financial statements for issue.

Directors

The directors of the Bank in office at the date of this statement are as follows:

Andrew Lee Kok Keng, Chairman (appointed on 18 February 2022)
Chong Chuan Neo (appointed on 18 February 2022)
Chua Kim Chiu
Andrew Khoo Cheng Hoe
Lee Tih Shih
Christina Hon Kwee Fong (Christina Ong)
Pramukti Surjaudaja
Tan Yen Yen
Helen Wong Pik Kuen (appointed on 7 February 2023)

Chua Kim Chiu, Lee Tih Shih and Tan Yen Yen will retire by rotation under Article 98 of the Constitution at the forthcoming annual general meeting of the Bank and, being eligible, will offer themselves for re-election thereat.

Helen Wong Pik Kuen will retire under Article 104 of the Constitution at the forthcoming annual general meeting of the Bank and, being eligible, will offer herself for re-election thereat.

Arrangements to Enable Directors to Acquire Shares and Debentures

Neither at the end of, nor at any time during the financial year, was the Bank a party to any arrangement whose objects are, or one of whose objects is, to enable the directors of the Bank to acquire benefits by means of the acquisition of shares in, or debentures of, the Bank or any other body corporate, other than as disclosed in this statement.

Directors' Interests in Shares or Debentures

According to the register of directors' shareholdings, the directors holding office at the end of the financial year had interests in shares in the Bank and its related corporations, as follows:

	Direct interest		Deemed interest [1]	
	At 31.12.2022	At 1.1.2022/ Date of appointment	At 31.12.2022	At 1.1.2022/ Date of appointment
BANK				
Ordinary shares				
Ooi Sang Kuang [2]	**67,202**	61,202	**–**	–
Andrew Lee Kok Keng	**257,431**	167,910	**–**	–
Chong Chuan Neo	**–**	–	**–**	–
Chua Kim Chiu	**26,663**	20,663	**–**	–
Andrew Khoo Cheng Hoe	**12,151**	7,236	**–**	–
Koh Beng Seng [3]	**13,644**	7,644	**–**	–
Lee Tih Shih	**11,656,000**	11,650,000	**–**	–
Christina Hon Kwee Fong (Christina Ong)	**37,240**	31,240	**–**	–
Pramukti Surjaudaja	**91,050**	85,050	**–**	–
Tan Yen Yen	**12,000**	6,000	**–**	–
Wee Joo Yeow [4]	**89,627**	83,627	**4,892**	4,892
Options to acquire ordinary shares under the OCBC Share Option Scheme 2001				
Andrew Lee Kok Keng	**310,824**	400,345	**–**	–

(1) Ordinary shares held by spouse.
(2) Mr Ooi Sang Kuang stepped down from the Board of Directors on 31 January 2023.
(3) Mr Koh Beng Seng stepped down from the Board of Directors on 3 February 2023.
(4) Mr Wee Joo Yeow stepped down from the Board of Directors on 1 January 2023.

Save as disclosed above, no director holding office at the end of the financial year had any interest in shares in, or debentures of, the Bank or any of its related corporations either at the beginning of the financial year, date of appointment, or at the end of the financial year. There were no changes to any of the above-mentioned interests between the end of the financial year and 21 January 2023.

Share-Based Compensation Plans

The Bank's share-based compensation plans are administered by the Remuneration Committee, which as at the date of this statement comprises:

Christina Hon Kwee Fong (Christina Ong), Chairman
Andrew Khoo Cheng Hoe
Andrew Lee Kok Keng
Pramukti Surjaudaja

Under the share-based compensation plans, no options, rights or awards have been granted to controlling shareholders of the Bank or their associates, nor has any participant received 5% or more of the total number of options, rights or awards available under each respective scheme or plan during the financial year. No options or rights were granted at a discount during the financial year. The persons to whom the options, rights or awards were issued have no right by virtue of these options, rights or awards to participate in any share issue of any other company. The disclosure requirement in Rule 852(1)(c) of the SGX Listing Manual relating to the grant of options to directors and employees of the parent company and its subsidiaries is not applicable to the Bank's share-based compensation plans.

Share-Based Compensation Plans (continued)

The Bank's share-based compensation plans are as follows:

(a) OCBC Share Option Scheme 2001

The OCBC Share Option Scheme 2001 (2001 Scheme), which was implemented in 2001, was extended for a period of 10 years from 2011 to 2021, with the approval of shareholders at an extraordinary general meeting of the Bank which was held on 15 April 2011. Executives of the Group ranked Manager and above and non-executive directors of the Group were eligible to participate in this scheme. The Bank will either issue new shares or transfer treasury shares to the participants upon the exercise of their options.

The 2001 Scheme expired on 2 August 2021. No further options may be granted by the Bank under the 2001 Scheme following its expiry. However, the expiration of the 2001 Scheme does not affect the options which have been granted and accepted before the expiry of the 2001 Scheme, whether such options have been exercised (whether fully or partially) or not.

Particulars of Options 2012, 2013, 2014, 2015, 2015CT, 2016, 2016A, 2017, 2017SL, 2017DM and 2018 were set out in the Directors' Reports/Directors' Statements for the financial years ended 31 December 2012 to 2018.

No share options were granted under the 2001 Scheme during the financial year.

Details of unissued ordinary shares under the 2001 Scheme, options exercised during the financial year and options outstanding and exercisable at 31 December 2022 are as follows:

					At 31.12.2022	
Options	Exercise period	Acquisition price ($)	Options exercised	Treasury shares transferred	Outstanding	Exercisable
2012	15.03.2013 to 13.03.2022	8.556	973,074	973,074	–	–
2013	15.03.2014 to 13.03.2023	10.018	751,080	751,080	1,683,699	1,683,699
2014	15.03.2015 to 13.03.2024	9.169	557,401	557,401	1,435,084	1,435,084
2015	16.03.2016 to 15.03.2025	10.378	1,288,283	1,288,283	2,684,276	2,684,276
2015CT	30.06.2016 to 29.06.2025	10.254	–	–	31,779	31,779
2016	16.03.2017 to 15.03.2026	8.814	739,332	739,332	2,858,870	2,858,870
2016A	16.03.2017 to 15.03.2026	8.814	–	–	85,202	85,202
2017	23.03.2018 to 22.03.2027	9.598	2,233,233	2,227,330	3,855,136	3,855,136
2017SL	04.08.2018 to 03.08.2027	11.378	–	–	18,943	18,943
2017DM	29.12.2018 to 28.12.2027	12.316	–	–	5,673	5,673
2018	22.03.2019 to 21.03.2028	13.340	–	–	5,718,697	5,718,697
			6,542,403	6,536,500	18,377,359	18,377,359

Share-Based Compensation Plans (continued)

(b) OCBC Employee Share Purchase Plan

The OCBC Employee Share Purchase Plan (ESP Plan), which was implemented in 2004, was extended for a period of 10 years from 19 May 2014 up to 18 May 2024 (both dates inclusive), with the approval of shareholders at an extraordinary general meeting of the Bank which was held on 24 April 2014. The further extension of, and alterations to, the ESP Plan, are intended to be tabled for shareholders' approval at the forthcoming annual general meeting of the Bank. If approved by shareholders, the ESP Plan will be extended for a further period of 10 years from 19 May 2024 up to 18 May 2034 (both dates inclusive).

Employees of the Group who have attained the age of 21 years and have been employed for not less than six months are eligible to participate in the ESP Plan.

At an extraordinary general meeting held on 17 April 2009, alterations to the ESP Plan were approved to enable two (but not more than two) Offering Periods to be outstanding on any date. Since each Offering Period currently consists of a 24-month period, these alterations will enable the Bank to prescribe Offering Periods once every 12 months (instead of once every 24 months as was previously the case).

In July 2022, the Bank launched its seventeenth offering under the ESP Plan, which commenced on 1 September 2022 and will expire on 31 August 2024. Under the seventeenth offering, 6,872 employees enrolled to participate in the ESP Plan to acquire 8,738,996 ordinary shares at S$12.07 per ordinary share. The acquisition price is equal to the average of the last traded price of the ordinary shares of the Bank on the Singapore Exchange over five consecutive trading days immediately preceding the price fixing date. Particulars of the first to sixteenth offerings under the ESP Plan were set out in the Directors' Reports/Directors' Statements for the financial years ended 31 December 2004 to 2021. During the financial year, 9,581,017 ordinary shares were delivered to participants under the ESP Plan. As at the end of the financial year, there were (i) rights to acquire 6,677,912 ordinary shares at S$11.58 per ordinary share granted under the sixteenth offering (which will expire on 31 August 2023) outstanding, and (ii) rights to acquire 8,229,792 ordinary shares at S$12.07 per ordinary share granted under the seventeenth offering (which will expire on 31 August 2024) outstanding. Further details on the ESP Plan can be found in Note 13.3 of the Notes to the Financial Statements.

(c) OCBC Deferred Share Plan

The Bank implemented the OCBC Deferred Share Plan (DSP) in 2003. The DSP was a discretionary incentive and retention award programme extended to executives of the Group at the absolute discretion of the Remuneration Committee. The DSP was terminated with effect from 29 April 2021, following the adoption of the OCBC Deferred Share Plan 2021 at the annual general meeting of the Bank held on 29 April 2021. However, the termination of the DSP does not affect the awards which have been granted, whether such awards have been released (whether fully or partially) or not.

In light of the Bank's transition to the new DSP 2021, no awards were granted under the DSP during the financial year ended 31 December 2022. Existing awards were adjusted following the declarations of a final dividend for the financial year ended 31 December 2021, and an interim dividend for the financial year ended 31 December 2022, resulting in an additional 254,170 ordinary shares being subject to awards under the DSP (including an additional 4,652 ordinary shares being subject to awards held by Ms Helen Wong Pik Kuen, who was appointed as a director of the Bank on 7 February 2023). During the financial year, 9,734,401 deferred shares were released to grantees, of which 97,671 deferred shares were released to Ms Helen Wong Pik Kuen.

Share-Based Compensation Plans (continued)

(d) OCBC Deferred Share Plan 2021

The OCBC Deferred Share Plan 2021 (DSP 2021) was adopted at the annual general meeting of the Bank held on 29 April 2021 to replace the DSP under which no new ordinary shares may be issued. By implementing the DSP 2021, which permits new ordinary shares to be issued, the Bank has greater flexibility in its methods for delivery of ordinary shares, as this can be effected through an issue of new ordinary shares, in addition to the transfer of existing ordinary shares (including treasury shares). The objectives of the DSP 2021 are otherwise the same as those for the DSP, which is to align the interests of Group executives with the sustained business performance of the Bank by way of awards of deferred shares as part of variable performance already earned for the previous year.

Awards over an aggregate of 9,232,761 ordinary shares (including awards over 170,557 ordinary shares granted to Ms Helen Wong Pik Kuen who was appointed as a director of the Bank on 7 February 2023) were granted to eligible executives under the DSP 2021 during the financial year ended 31 December 2022, and awards over an aggregate of 16,996,021 ordinary shares (including awards over 312,299 ordinary shares granted to Ms Helen Wong Pik Kuen) have been granted under the DSP 2021 since the commencement of the plan to the end of the financial year ended 31 December 2022. No ordinary shares were released under the DSP 2021 during the financial year ended 31 December 2022. An aggregate of 16,913,030 ordinary shares (including 332,389 ordinary shares comprised in awards granted to Ms Helen Wong Pik Kuen) are comprised in awards which are outstanding and have not been released under the DSP 2021 as at the end of the financial year ended 31 December 2022. Existing awards were adjusted following the declarations of a final dividend for the financial year ended 31 December 2021, and an interim dividend for the financial year ended 31 December 2022, resulting in an additional 790,461 ordinary shares being subject to awards under the DSP 2021 (including an additional 15,114 ordinary shares being subject to awards held by Ms Helen Wong Pik Kuen).

Details of options granted under the 2001 Scheme and share awards granted under the DSP and DSP 2021 to directors of the Bank are as follows:

Name	Options/ awards granted during the financial year ended 31.12.2022	Aggregate number of options/ awards granted since commencement of scheme/plan to 31.12.2022	Aggregate number of options exercised/awards released since commencement of scheme/plan to 31.12.2022	Aggregate number of options/ awards outstanding at 31.12.2022
2001 Scheme				
Andrew Lee Kok Keng	–	724,065	413,241	310,824 [1]
DSP				
Helen Wong Pik Kuen	–	179,789 [2]	97,671	102,324
DSP 2021				
Helen Wong Pik Kuen	170,557 [2]	312,299 [2]	–	332,389

(1) These details have already been disclosed in the section on "Directors' interests in shares or debentures" above.
(2) Does not include additional ordinary shares arising from subsequent adjustments to share awards under the DSP/DSP 2021 following the declarations of dividends by the Bank.

There were no changes to the above-mentioned interests between the end of the financial year and 21 January 2023.

Except as disclosed above, no options under the 2001 Scheme, no acquisition rights under the ESP Plan and no share awards under the DSP 2021 were granted to any of the directors of the Bank who held office during the financial year ended 31 December 2022 or who held office as at the date of this statement.

Except as disclosed above, there were no unissued shares of the Bank or its subsidiaries under options granted by the Bank or its subsidiaries as at the end of the financial year.

Audit Committee

The members of the Audit Committee as at the date of this statement are:

Chua Kim Chiu, Chairman
Chong Chuan Neo (appointed on 18 February 2022)
Tan Yen Yen

The Audit Committee performed the functions specified in the Act, the SGX Listing Manual, the Banking (Corporate Governance) Regulations 2005, the MAS Guidelines for Corporate Governance and the Code of Corporate Governance 2018. In performing these functions, the Audit Committee reviewed with the Bank's external and internal auditors their audit plans and findings, including their examination and evaluation of the system of internal accounting controls and the internal audit programme. The Audit Committee also reviewed the external auditor's independence, objectivity and performance.

The Audit Committee also reviewed, *inter alia*, the following:

(a) response of the Bank's management and the assistance provided by officers of the Bank to the external and internal auditors;
(b) the CEO and CFO's assurances regarding the integrity of the financial statements and the adequacy and effectiveness of the Bank's risk management and internal control systems; and
(c) the financial statements of the Group and the Bank and the auditor's report thereon, including key audit matters, prior to their submission to the Board of Directors.

The Audit Committee has full access to, and the cooperation of, the management and has been given the resources required for it to discharge its functions. It has full authority and discretion to invite any director and executive officer to attend its meetings.

The Audit Committee has recommended to the Board of Directors that the auditor, PricewaterhouseCoopers LLP, be nominated for re-appointment as the auditor of the Bank at the forthcoming annual general meeting of the Bank.

Auditor

PricewaterhouseCoopers LLP has indicated its willingness to accept re-appointment as the auditor of the Bank at the forthcoming annual general meeting of the Bank.

On behalf of the Board of Directors,

Andrew Lee Kok Keng
Director

Helen Wong Pik Kuen
Director

Singapore
23 February 2023

Independent Auditor's Report

To The Members Of Oversea-Chinese Banking Corporation Limited

Report on the Audit of the Financial Statements

Our Opinion

In our opinion, the accompanying consolidated financial statements of Oversea-Chinese Banking Corporation Limited ("the Bank") and its subsidiaries ("the Group") and the balance sheet, income statement, statement of comprehensive income and statement of changes in equity of the Bank are properly drawn up in accordance with the provisions of the Companies Act 1967 ("the Act") and Singapore Financial Reporting Standards (International) ("SFRS(I)s") so as to give a true and fair view of the consolidated financial position of the Group and the financial position of the Bank as at 31 December 2022 and of the consolidated financial performance, consolidated changes in equity and consolidated cash flows of the Group and of the financial performance and changes in equity of the Bank for the financial year ended on that date.

What We Have Audited

The financial statements of the Bank and the Group comprise:

- the income statements of the Group and of the Bank for the financial year ended 31 December 2022;
- the statements of comprehensive income of the Group and of the Bank for the financial year then ended;
- the balance sheets of the Group and of the Bank as at 31 December 2022;
- the statement of changes in equity of the Group for the financial year then ended;
- the statement of changes in equity of the Bank for the financial year then ended;
- the consolidated cash flow statement of the Group for the financial year then ended; and
- the notes to the financial statements, including a summary of significant accounting policies.

Basis for Opinion

We conducted our audit in accordance with Singapore Standards on Auditing ("SSAs"). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We are independent of the Group in accordance with the Accounting and Corporate Regulatory Authority Code of Professional Conduct and Ethics for Public Accountants and Accounting Entities ("ACRA Code") together with the ethical requirements that are relevant to our audit of the financial statements in Singapore, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the ACRA Code.

Our Audit Approach

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the accompanying financial statements. In particular, we considered where management made subjective judgements; for example, in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. As in all of our audits, we also addressed the risk of management override of internal controls, including among other matters consideration of whether there was evidence of bias that represented a risk of material misstatement due to fraud.

Key Audit Matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements for the financial year ended 31 December 2022. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key Audit Matter	How Our Audit Addressed the Key Audit Matter
Impairment of loans to customers *(Refer to Notes 2.25, 26, 28 and 30 to the financial statements)* The Group's allowances on non-impaired loans and impaired loans are S$2,205 million and S$1,308 million respectively as at 31 December 2022. These allowances are determined by the Group based on the Expected Credit Losses ("ECL") framework under SFRS(I) 9 Financial Instruments ("SFRS(I) 9"). *ECL on non-credit-impaired loans to customers* In respect of the ECL on non-credit impaired loans to customers, the Group utilises models which are reliant on internal and external data as well as a number of estimates. We considered this a key audit matter due to the inherent estimation uncertainty in this area which involves significant judgement and assumptions that relate to, amongst others: • determining whether a significant increase in credit risk ("SICR") has occurred; • estimating forward-looking macroeconomic scenarios; and • identifying and determining post model adjustments to the ECL models. Further, the current significant events (e.g. economic and geopolitical developments) have increased the uncertainty of these estimates and degree of judgement required to be exercised in estimating the ECL. *ECL on credit-impaired loans to customers* As at 31 December 2022, 56% (S$732 million) of the Group's ECL on credit-impaired loans to customers relates to the Global Wholesale Banking ("GWB") loan portfolio. We focused on this area because of the highly subjective judgements and assumptions applied by management in determining the necessity for, and estimating the amount of, the ECL allowances against credit-impaired loans to customers. Significant judgements were also required for the credit grading of borrowers in accordance with MAS Notice 612.	*ECL on non-credit-impaired loans to customers* We assessed the design and evaluated the operating effectiveness of key controls over the ECL on non-credit-impaired loans to customers. These controls include: • review and approval of forward-looking information used in the ECL models; • use of reliable and accurate critical data elements in the ECL models; • review and approval of the ECL results, including post model adjustments applied; • independent validation of the ECL models and review of model validation results by management; and • general IT controls over the ECL system as well as IT application controls over the completeness and accuracy of data flows from source systems to the ECL systems. We determined that we could rely on these controls for the purposes of our audit. For a sample of the Group's ECL models, we examined the model methodologies and assessed the reasonableness of key judgements and assumptions made by management in the model and parameters used. We also reviewed the results of independent model validation conducted by the Group's model validation function as part of our assessment of the ECL models. We also assessed the reasonableness of criteria used to determine a SICR and accuracy and timeliness of allocation of exposures into Stage 1 and Stage 2 based on quantitative and qualitative criteria. Through the course of our work, we challenged the rationale and calculation basis of post model adjustments. Overall, we assessed the methodologies and key assumptions made by the Group to estimate the ECL on non-credit-impaired loans to customers to be reasonable. *ECL on credit-impaired loans to customers* We assessed the design effectiveness and tested the operating effectiveness of key controls over credit grading, credit monitoring and management's determination of the ECL allowances for loans to customers. These controls include: • oversight and review of credit risk by the Credit Risk Management Committee; • credit portfolio review and monitoring; • collateral monitoring and valuation; • monitoring of loan covenants and breaches; and • classification of loans to customers in accordance with MAS Notice 612. We determined that we could rely on these controls for the purposes of our audit.

Key Audit Matter	How Our Audit Addressed the Key Audit Matter
Impairment of loans to customers (continued) *ECL on credit-impaired loans to customers* (continued) For GWB's credit-impaired loan portfolio, significant management judgement and estimation include: • identifying credit-impaired exposures; • assessing the future performance of the borrowers and recoverable cash flows; and • determining collateral values and timing of realisation. Current significant events (e.g. economic and geopolitical developments) added complexity to the estimation of the ECL allowances. The outcome and corresponding impact of these events are uncertain.	*ECL on credit-impaired loans to customers* (continued) We selected a sample of credit exposures in the GWB loan portfolio and performed credit file reviews to assess the appropriateness of credit grading in accordance with the requirements of MAS Notice 612. In that process, we have also considered management's assessment on the impact of current significant events in the identification of credit-impaired exposures. Where there was objective evidence of impairment, we assessed whether the ECL allowances were recognised on a timely basis and evaluated the amount of such impairment. Our work includes: • considering the background facts and the latest circumstances in relation to the borrower; • examining and challenging management's key assumptions applied on expected future cash flows of the borrower, including amounts and timing of recoveries; • comparing the realisable value of collateral against externally derived evidence including independent valuation reports, where available; and • testing the calculation of impairment. For a sample of non-credit-impaired loans to customers which had not been classified by management as credit-impaired, we challenged management's key assumptions on whether their classification was appropriate, based on our understanding of the customers, business environment and other external evidence where available. Based on the procedures performed, we have assessed that the ECL allowances for credit-impaired loans to customers were within an acceptable range of estimates.

Key Audit Matter	How Our Audit Addressed the Key Audit Matter
Valuation of financial instruments measured at fair value – Levels 2 and 3 *(Refer to Notes 2.25 and 41.3 to the financial statements)* As at 31 December 2022, the Group had financial assets of S$62 billion and financial liabilities of S$17 billion measured at fair value which were classified as Level 2. These represent 35% of the financial assets and 96% of the financial liabilities measured at fair value respectively. We considered valuation of Level 2 financial instruments to be a key audit matter due to their financial significance to the Group as well as the judgement required in relation to the application of the appropriate models, assumptions and inputs. The Group also had financial assets of S$7 billion and financial liabilities of S$283 million measured at fair value which were classified as Level 3. These represent 4% of the financial assets and 2% of the financial liabilities measured at fair value respectively.	We assessed the design and tested the operating effectiveness of key controls over the Group's financial instruments valuation processes, including the controls over: • management's testing and approval of valuation models; • the completeness and accuracy of the data feeds and other inputs into valuation models; • follow-up on collateral disputes, which takes into account counterparty valuations, to identify possible indicators of inappropriate valuations by the Group; and • governance mechanisms and monitoring over the valuation processes by the Market Risk Management Committee, including over valuation adjustments. We determined that we could rely on the controls for the purposes of our audit. Together with our valuation specialists, we compared the Group's valuation of Level 2 financial instruments to our own estimates on a sampling basis. This involved sourcing inputs from market data providers or external sources and using our own valuation models, and investigating the root cause for material variances at the instrument level.

Key Audit Matter	How Our Audit Addressed the Key Audit Matter
Valuation of financial instruments measured at fair value – Levels 2 and 3 (continued) We focused on the valuation of Level 3 financial assets and financial liabilities, as management makes significant judgements and assumptions (using valuation models) when valuing these financial instruments, as they are complex or illiquid and the external evidence supporting the Group's valuations are limited due to the lack of a liquid market.	For a sample of Level 3 financial instruments, with the assistance of our valuation specialists, we assessed the reasonableness of the methodologies used and the key assumptions made. For all financial instruments at Levels 2 and 3, we also performed: • procedures on collateral disputes, which takes into account counterparty valuations, to identify possible indicators of inappropriate valuations by the Group; and • assessed the adequacy of the Group's financial statements disclosures in the context of the relevant accounting standards. Overall, the valuation of Levels 2 and 3 financial instruments measured at fair value was within a reasonable range of outcomes.

Key Audit Matter	How Our Audit Addressed the Key Audit Matter
Impairment of goodwill *(Refer to Notes 2.25 and 36 to the financial statements)* The Group has a significant amount of goodwill arising from its business acquisitions. As at 31 December 2022, the carrying amount of goodwill on the Group's balance sheet amounted to S$4,440 million. In performing the impairment assessment of the carrying amount of goodwill, significant judgement is made by management in estimating the recoverable amounts of the relevant cash generating units ("CGUs"). For the Banking CGUs, this involves the estimation of discounted cash flows, where the significant assumptions used in the assessment include: • forecasts of future cash flows; • inputs to determine the risk-adjusted discount rates; and • perpetual growth rates. For the Insurance CGU, the Group applies the appraisal value technique, which comprises the embedded value of in-force business and the estimated value of projected distributable profits from new businesses. The key assumptions used in this assessment include: • investment returns based on long term strategic asset mix and expected future returns; and • risk-adjusted discount rates. Given the level of complexity and extent of judgement involved, we considered this to be a key audit matter.	We assessed the appropriateness of management's identification of the Group's CGUs and methodology used in the estimation of recoverable amounts. We also evaluated the key assumptions used and applied sensitivity analysis to the key assumptions to determine whether any possible change in these key assumptions would result in an impairment. *Banking CGUs* Together with our valuation specialists, we evaluated: • management's cash flow projections by comparing previous forecasts to actual results; • the methodology and external data sources used in deriving the discount rates and growth rates; and • the growth rate assumptions against the Group's historical performance and available external industry and economic indicators. *Insurance CGU* Together with our actuarial specialists, we evaluated: • the methodologies in estimating the appraisal value; and • the key assumptions including the investment returns and the risk-adjusted discount rates used in deriving the appraisal value. We found the key assumptions and estimates made by management to be reasonable based on our audit procedures performed.

Key Audit Matter	How Our Audit Addressed the Key Audit Matter
Valuation of life insurance contract liabilities *(Refer to Notes 2.25, 22 and 38.4 to the financial statements)* The Group's insurance operations are conducted through Great Eastern Holdings Limited and its subsidiaries ("GEH"). Management's valuation of life insurance contract liabilities uses complex actuarial methods and models. The valuation process involves significant judgement about the assumptions of uncertain future events, including: mortality, morbidity, expense, lapse, surrender and interest rates. In addition to historical experience, management judgement is involved in the application of these assumptions. Changes in these assumptions used could result in a material impact to the valuation of the life insurance contract liabilities and the related movements in the consolidated profit or loss statement of the Group.	We performed the following audit procedures to address this matter: • we understood the actuarial valuation process, including model changes and assumptions setting; • we tested the design and operating effectiveness of controls over the accuracy and completeness of the data used; • we understood the valuation methodologies used, identified changes in methodologies from the previous valuation and assessed the reasonableness and impact for material changes identified. We carried out these procedures by applying our industry knowledge and experience and assessed whether the methodologies and changes to those methodologies are consistent with recognised actuarial practices and expectations derived from market experience; • we performed an independent review of model inputs on a sample basis to assess that the methodologies and key assumptions have been applied appropriately; and • we assessed the reasonableness of the key assumptions used by management including: mortality, morbidity, expense, lapse, surrender and interest rates, by comparing against GEH's historical experiences and market observable data, where applicable. Based on the work performed and the evidence obtained, we found the methodologies and key assumptions used by management to be reasonable.

Other Information
Management is responsible for the other information. The other information comprises the Directors' Statement (but does not include the financial statements and our auditor's report thereon), which we obtained prior to the date of this auditor's report, and the other sections of the annual report ("the Other Sections"), which are expected to be made available to us after that date.

Our opinion on the financial statements does not cover the other information and we do not and will not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

If, based on the work we have performed on the other information that we obtained prior to the date of this auditor's report, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

When we read the Other Sections, if we conclude that there is a material misstatement therein, we are required to communicate the matter to the directors and take appropriate actions in accordance with SSAs.

Responsibilities of Management and Directors for the Financial Statements
Management is responsible for the preparation of financial statements that give a true and fair view in accordance with the provisions of the Act and SFRS(I)s, and for devising and maintaining a system of internal accounting controls sufficient to provide a reasonable assurance that assets are safeguarded against loss from unauthorised use or disposition; and transactions are properly authorised and that they are recorded as necessary to permit the preparation of true and fair financial statements and to maintain accountability of assets.

In preparing the financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

The directors' responsibilities include overseeing the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements
Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with SSAs, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the directors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the directors, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on Other Legal and Regulatory Requirements
In our opinion, the accounting and other records required by the Act to be kept by the Bank and by those subsidiary corporations incorporated in Singapore of which we are the auditors have been properly kept in accordance with the provisions of the Act.

The engagement partner on the audit resulting in this independent auditor's report is Lian Wee Cheow.

PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP
Public Accountants and Chartered Accountants
Singapore, 23 February 2023

Income Statements

For the financial year ended 31 December 2022

		GROUP		BANK	
		2022	2021	2022	2021
	Note	$ million	$ million	$ million	$ million
Interest income		**11,590**	7,425	**7,421**	3,919
Interest expense		**(3,902)**	(1,570)	**(2,869)**	(708)
Net interest income	3	**7,688**	5,855	**4,552**	3,211
Profit from life insurance [(1)]	4	**971**	1,137	**–**	–
Premium income from general insurance		**218**	197	**–**	–
Fees and commissions (net)	5	**1,851**	2,245	**879**	969
Dividends	6	**125**	113	**1,481**	1,049
Net trading income	7	**834**	763	**336**	249
Other income	8	**(12)**	286	**2**	143
Non-interest income		**3,987**	4,741	**2,698**	2,410
Total income		**11,675**	10,596	**7,250**	5,621
Staff costs		**(3,233)**	(3,028)	**(1,154)**	(1,093)
Other operating expenses		**(1,793)**	(1,736)	**(1,238)**	(1,131)
Total operating expenses	9	**(5,026)**	(4,764)	**(2,392)**	(2,224)
Operating profit before allowances and amortisation		**6,649**	5,832	**4,858**	3,397
Amortisation of intangible assets	36	**(104)**	(103)	**–**	–
Allowances for loans and other assets	10	**(584)**	(873)	**(210)**	(442)
Operating profit after allowances and amortisation		**5,961**	4,856	**4,648**	2,955
Share of results of associates, net of tax		**978**	824	**–**	–
Profit before income tax		**6,939**	5,680	**4,648**	2,955
Income tax expense	11	**(1,057)**	(648)	**(503)**	(229)
Profit for the year		**5,882**	5,032	**4,145**	2,726
Attributable to:					
Equity holders of the Bank		**5,748**	4,858		
Non-controlling interests		**134**	174		
		5,882	5,032		
Earnings per share ($)	12				
Basic		**1.27**	1.07		
Diluted		**1.27**	1.07		

(1) Comprised premium and investment income of $12,245 million (2021: $19,506 million) and insurance claims, commission and other expenses of $11,246 million (2021: $18,285 million) for the Group. Refer to Note 4.

The accompanying notes form an integral part of these financial statements.

Statements of Comprehensive Income

For the financial year ended 31 December 2022

	GROUP		BANK	
	2022 $ million	2021 $ million	2022 $ million	2021 $ million
Profit for the year	**5,882**	5,032	**4,145**	2,726
Other comprehensive income:				
Items that may be reclassified subsequently to income statement:				
Financial assets, at FVOCI [1]				
Fair value losses for the year	**(2,164)**	(694)	**(807)**	(326)
Reclassification of (gains)/losses to income statement				
– on disposal	**264**	(131)	**149**	(34)
– on impairment	**(#)**	3	**2**	4
Tax on net movements	**247**	98	**28**	11
Cash flow hedges	**(2)**	(#)	**(22)**	(7)
Currency translation on foreign operations	**(873)**	110	**(109)**	(34)
Other comprehensive income of associates	**(656)**	339	**–**	–
Items that will not be reclassified subsequently to income statement:				
Currency translation on foreign operations	**(54)**	(1)	**–**	–
Equity instruments, at FVOCI [1], net change in fair value	**(207)**	134	**(12)**	44
Defined benefit plans remeasurements	**2**	(1)	**–**	–
Own credit	**1**	1	**1**	1
Total other comprehensive income, net of tax	**(3,442)**	(142)	**(770)**	(341)
Total comprehensive income for the year, net of tax	**2,440**	4,890	**3,375**	2,385
Total comprehensive income attributable to:				
Equity holders of the Bank	**2,490**	4,735		
Non-controlling interests	**(50)**	155		
	2,440	4,890		

(1) Fair value through other comprehensive income.
(2) # represents amounts less than $0.5 million.

The accompanying notes form an integral part of these financial statements.

Balance Sheets

As at 31 December 2022

	Note	GROUP 2022 $ million	GROUP 2021 $ million	BANK 2022 $ million	BANK 2021 $ million
EQUITY					
Attributable to equity holders of the Bank					
Share capital	13	**18,048**	18,040	**18,048**	18,040
Other equity instruments	14	**1,696**	1,198	**1,696**	1,198
Capital reserves	15	**792**	782	**560**	559
Fair value reserves		**(1,006)**	848	**(674)**	(25)
Revenue reserves	16	**33,557**	31,795	**17,286**	15,825
		53,087	52,663	**36,916**	35,597
Non-controlling interests		**1,581**	1,675	**–**	–
Total equity		**54,668**	54,338	**36,916**	35,597
LIABILITIES					
Deposits of non-bank customers	17	**350,081**	342,395	**223,310**	221,213
Deposits and balances of banks	17	**10,046**	8,239	**7,691**	6,708
Due to subsidiaries		**–**	–	**36,522**	28,250
Due to associates		**236**	431	**197**	230
Trading portfolio liabilities		**212**	393	**212**	393
Derivative payables	18	**16,048**	9,070	**14,300**	7,656
Other liabilities	19	**8,525**	7,163	**2,844**	1,906
Current tax payables		**995**	905	**566**	458
Deferred tax liabilities	20	**2,261**	2,832	**125**	154
Debt issued	21	**21,938**	20,115	**21,294**	19,657
		410,342	391,543	**307,061**	286,625
Life insurance fund liabilities	22	**94,946**	96,306	**–**	–
Total liabilities		**505,288**	487,849	**307,061**	286,625
Total equity and liabilities		**559,956**	542,187	**343,977**	322,222
ASSETS					
Cash and placements with central banks	23	**34,966**	27,919	**27,812**	22,863
Singapore government treasury bills and securities	24	**17,096**	11,112	**15,889**	10,106
Other government treasury bills and securities	24	**22,271**	26,159	**8,165**	9,710
Placements with and loans to banks	25	**30,244**	25,462	**18,680**	17,516
Loans to customers	26	**291,467**	286,281	**201,110**	189,401
Debt and equity securities	29	**28,010**	34,015	**16,621**	20,031
Assets held for sale		**1**	11	**–**	1
Derivative receivables	18	**15,605**	9,267	**13,742**	7,812
Other assets	31	**6,635**	6,334	**2,538**	2,339
Deferred tax assets	20	**437**	280	**104**	88
Associates	32	**6,340**	6,170	**2,228**	2,262
Subsidiaries	33	**–**	–	**33,923**	37,018
Property, plant and equipment	34	**3,483**	3,506	**818**	735
Investment property	35	**763**	801	**480**	473
Goodwill and other intangible assets	36	**4,643**	4,774	**1,867**	1,867
		461,961	442,091	**343,977**	322,222
Life insurance fund investment securities and other assets	22	**97,995**	100,096	**–**	–
Total assets		**559,956**	542,187	**343,977**	322,222

The accompanying notes form an integral part of these financial statements.

Statement of Changes in Equity – Group

For the financial year ended 31 December 2022

In $ million	Attributable to equity holders of the Bank						
	Share capital and other equity	Capital reserves (1)	Fair value reserves	Revenue reserves	Total	Non-controlling interests	Total equity
Balance at 1 January 2022	**19,238**	**782**	**848**	**31,795**	**52,663**	**1,675**	**54,338**
Total comprehensive income for the year							
Profit for the year	**–**	**–**	**–**	**5,748**	**5,748**	**134**	**5,882**
Other comprehensive income							
Items that may be reclassified subsequently to income statement:							
Financial assets, at FVOCI							
Fair value losses for the year	**–**	**–**	**(2,027)**	**–**	**(2,027)**	**(137)**	**(2,164)**
Reclassification of (gains)/losses to income statement							
– on disposal	**–**	**–**	**254**	**–**	**254**	**10**	**264**
– on impairment	**–**	**–**	**#**	**–**	**#**	**(#)**	**(#)**
Tax on net movements	**–**	**–**	**224**	**–**	**224**	**23**	**247**
Cash flow hedges	**–**	**–**	**–**	**(2)**	**(2)**	**–**	**(2)**
Currency translation on foreign operations	**–**	**–**	**–**	**(873)**	**(873)**	**–**	**(873)**
Other comprehensive income of associates	**–**	**–**	**(87)**	**(569)**	**(656)**	**–**	**(656)**
Items that will not be reclassified subsequently to income statement:							
Currency translation on foreign operations	**–**	**–**	**–**	**–**	**–**	**(54)**	**(54)**
Equity instruments, at FVOCI, net change in fair value	**–**	**–**	**(218)**	**37**	**(181)**	**(26)**	**(207)**
Defined benefit plans remeasurements	**–**	**–**	**–**	**2**	**2**	**#**	**2**
Own credit	**–**	**–**	**–**	**1**	**1**	**–**	**1**
Total other comprehensive income, net of tax	**–**	**–**	**(1,854)**	**(1,404)**	**(3,258)**	**(184)**	**(3,442)**
Total comprehensive income for the year	**–**	**–**	**(1,854)**	**4,344**	**2,490**	**(50)**	**2,440**
Transactions with owners, recorded directly in equity							
Contributions by and distributions to owners							
Transfers	**7**	**12**	**–**	**(19)**	**–**	**–**	**–**
Buy-back of shares for holding as treasury shares	**(250)**	**–**	**–**	**–**	**(250)**	**–**	**(250)**
Dividends and distributions	**–**	**–**	**–**	**(2,576)**	**(2,576)**	**(44)**	**(2,620)**
DSP reserve from dividends on unvested shares	**–**	**–**	**–**	**13**	**13**	**–**	**13**
Perpetual capital securities issued	**498**	**–**	**–**	**–**	**498**	**–**	**498**
Share-based payments for staff costs	**–**	**8**	**–**	**–**	**8**	**–**	**8**
Shares issued to non-executive directors	**1**	**–**	**–**	**–**	**1**	**–**	**1**
Shares transferred to DSP Trust	**–**	**(13)**	**–**	**–**	**(13)**	**–**	**(13)**
Shares vested under DSP Scheme	**–**	**103**	**–**	**–**	**103**	**–**	**103**
Treasury shares transferred/sold	**250**	**(100)**	**–**	**–**	**150**	**–**	**150**
Total contributions by and distributions to owners	**506**	**10**	**–**	**(2,582)**	**(2,066)**	**(44)**	**(2,110)**
Balance at 31 December 2022	**19,744**	**792**	**(1,006)**	**33,557**	**53,087**	**1,581**	**54,668**
Included in the balances:							
Share of reserves of associates	**–**	**–**	**86**	**3,380**	**3,466**	**–**	**3,466**

(1) Included regulatory loss allowance reserve of $444 million at 1 January 2022 and $455 million at 31 December 2022.
(2) # represents amounts less than $0.5 million.

An analysis of the movements in each component within "Share capital", "Other equity instruments", "Capital reserves" and "Revenue reserves" is presented in Notes 13 to 16.

The accompanying notes form an integral part of these financial statements.

	Attributable to equity holders of the Bank						
In $ million	Share capital and other equity	Capital reserves [1]	Fair value reserves	Revenue reserves	Total	Non-controlling interests	Total equity
Balance at 1 January 2021	19,031	1,229	1,358	28,004	49,622	1,554	51,176
Total comprehensive income for the year							
Profit for the year	–	–	–	4,858	4,858	174	5,032
Other comprehensive income							
Items that may be reclassified subsequently to income statement:							
Financial assets, at FVOCI							
Fair value losses for the year	–	–	(664)	–	(664)	(30)	(694)
Reclassification of (gains)/losses to income statement							
– on disposal	–	–	(122)	–	(122)	(9)	(131)
– on impairment	–	–	3	–	3	(#)	3
Tax on net movements	–	–	91	–	91	7	98
Cash flow hedges	–	–	–	(#)	(#)	–	(#)
Currency translation on foreign operations	–	–	–	110	110	–	110
Other comprehensive income of associates	–	–	127	212	339	–	339
Items that will not be reclassified subsequently to income statement:							
Currency translation on foreign operations	–	–	–	–	–	(1)	(1)
Equity instruments, at FVOCI, net change in fair value	–	–	55	65	120	14	134
Defined benefit plans remeasurements	–	–	–	(1)	(1)	(#)	(1)
Own credit	–	–	–	1	1	–	1
Total other comprehensive income, net of tax	–	–	(510)	387	(123)	(19)	(142)
Total comprehensive income for the year	–	–	(510)	5,245	4,735	155	4,890
Transactions with owners, recorded directly in equity							
Contributions by and distributions to owners							
Transfers	13	(436)	–	423	–	–	–
Buy-back of shares for holding as treasury shares	(406)	–	–	–	(406)	–	(406)
Dividends and distributions	–	–	–	(1,886)	(1,886)	(34)	(1,920)
Shares issued in lieu of ordinary dividends	376	–	–	–	376	–	376
DSP reserve from dividends on unvested shares	–	–	–	10	10	–	10
Share-based payments for staff costs	–	9	–	–	9	–	9
Shares issued to non-executive directors	1	–	–	–	1	–	1
Shares issued under Share Option Scheme	1	–	–	–	1	–	1
Shares transferred to DSP Trust	83	(93)	–	–	(10)	–	(10)
Shares vested under DSP Scheme	–	73	–	–	73	–	73
Treasury shares transferred/sold	139	–	–	–	139	–	139
Total contributions by and distributions to owners	207	(447)	–	(1,453)	(1,693)	(34)	(1,727)
Changes in interests in subsidiaries that do not result in loss of control	–	–	–	(1)	(1)	(#)	(1)
Total changes in interests in subsidiaries	–	–	–	(1)	(1)	(#)	(1)
Balance at 31 December 2021	19,238	782	848	31,795	52,663	1,675	54,338
Included in the balances:							
Share of reserves of associates	–	–	174	3,115	3,289	–	3,289

(1) Included regulatory loss allowance reserve of $874 million at 1 January 2021 and $444 million at 31 December 2021.
(2) # represents amounts less than $0.5 million.

An analysis of the movements in each component within “Share capital”, “Other equity instruments”, “Capital reserves” and “Revenue reserves” is presented in Notes 13 to 16.

The accompanying notes form an integral part of these financial statements.

Statement of Changes in Equity – Bank

For the financial year ended 31 December 2022

In $ million	Share capital and other equity	Capital reserves [1]	Fair value reserves	Revenue reserves	Total equity
Balance at 1 January 2022	**19,238**	**559**	**(25)**	**15,825**	**35,597**
Profit for the year	**–**	**–**	**–**	**4,145**	**4,145**
Other comprehensive income	**–**	**–**	**(649)**	**(121)**	**(770)**
Total comprehensive income for the year [2]	**–**	**–**	**(649)**	**4,024**	**3,375**
Transfers	**7**	**(7)**	**–**	**–**	**–**
Buy-back of shares for holding as treasury shares	**(250)**	**–**	**–**	**–**	**(250)**
Dividends and distributions	**–**	**–**	**–**	**(2,576)**	**(2,576)**
DSP reserve from dividends on unvested shares	**–**	**–**	**–**	**13**	**13**
Perpetual capital securities issued	**498**	**–**	**–**	**–**	**498**
Share-based payments for staff costs	**–**	**8**	**–**	**–**	**8**
Shares issued to non-executive directors	**1**	**–**	**–**	**–**	**1**
Treasury shares transferred/sold	**250**	**–**	**–**	**–**	**250**
Balance at 31 December 2022	**19,744**	**560**	**(674)**	**17,286**	**36,916**
Balance at 1 January 2021	19,031	994	300	14,560	34,885
Profit for the year	–	–	–	2,726	2,726
Other comprehensive income	–	–	(325)	(16)	(341)
Total comprehensive income for the year [2]	–	–	(325)	2,710	2,385
Transfers	13	(444)	–	431	–
Buy-back of shares for holding as treasury shares	(406)	–	–	–	(406)
Dividends and distributions	–	–	–	(1,886)	(1,886)
Shares issued in lieu of ordinary dividends	376	–	–	–	376
DSP reserve from dividends on unvested shares	–	–	–	10	10
Share-based payments for staff costs	–	9	–	–	9
Shares issued to non-executive directors	1	–	–	–	1
Shares issued under Share Option Scheme	1	–	–	–	1
Shares transferred to DSP Trust	83	–	–	–	83
Treasury shares transferred/sold	139	–	–	–	139
Balance at 31 December 2021	19,238	559	(25)	15,825	35,597

(1) Included regulatory loss allowance reserve of $444 million at 1 January 2022 (1 January 2021: $874 million) and $444 million at 31 December 2022 (31 December 2021: $444 million).
(2) Refer to Statements of Comprehensive Income for detailed breakdown.

An analysis of the movements in each component within “Share capital”, “Other equity instruments”, “Capital reserves” and “Revenue reserves” is presented in Notes 13 to 16.

The accompanying notes form an integral part of these financial statements.

Consolidated Cash Flow Statement

For the financial year ended 31 December 2022

In $ million	2022	2021
Cash flows from operating activities		
Profit before income tax	**6,939**	5,680
Adjustments for non-cash items:		
Allowances for loans and other assets	**584**	873
Amortisation of intangible assets	**104**	103
Change in hedging transactions, fair value through profit or loss securities and debt issued	**130**	104
Depreciation of property and equipment and interest expense on lease liabilities	**429**	416
Net loss/(gain) on disposal of government, debt and equity securities	**206**	(92)
Net gain on disposal of property and equipment	**(99)**	(107)
Share-based costs	**80**	73
Share of results of associates, net of tax	**(978)**	(824)
Items relating to life insurance fund		
Surplus before income tax	**999**	1,221
Surplus transferred from life insurance fund	**(971)**	(1,137)
Operating profit before change in operating assets and liabilities	**7,423**	6,310
Change in operating assets and liabilities:		
Deposits of non-bank customers	**7,518**	27,510
Deposits and balances of banks	**1,807**	(1,347)
Derivative payables and other liabilities	**7,798**	(6,908)
Trading portfolio liabilities	**(181)**	55
Restricted balances with central banks	**229**	(764)
Government securities and treasury bills	**(2,913)**	1,614
Fair value through profit or loss securities	**1,931**	(7,059)
Placements with and loans to banks	**(4,782)**	7,354
Loans to customers	**(5,795)**	(23,685)
Derivative receivables and other assets	**(5,443)**	4,087
Net change in other assets and liabilities of life insurance fund	**2,507**	8,029
Cash provided by operating activities	**10,099**	15,196
Income tax paid [1]	**(1,167)**	(913)
Net cash provided by operating activities	**8,932**	14,283
Cash flows from investing activities		
Dividends from associates	**145**	138
Investment in associates	**–**	(514)
Purchases of debt and equity securities	**(11,622)**	(12,475)
Purchases of life insurance fund investment securities	**(37,237)**	(41,636)
Purchases of property and equipment	**(479)**	(443)
Proceeds from disposal of debt and equity securities	**13,582**	12,642
Proceeds from disposal of life insurance fund investment securities	**33,970**	34,345
Proceeds from disposal of property and equipment	**128**	152
Net cash used in investing activities	**(1,513)**	(7,791)
Cash flows from financing activities		
Changes in non-controlling interests	**–**	(1)
Buy-back of shares for holding as treasury shares	**(250)**	(406)
Dividends and distributions paid	**(2,620)**	(1,544)
Net issue/(redemption) of other debt issued (Note 21.6)	**1,897**	(3,840)
Net proceeds from perpetual capital securities issued	**498**	–
Repayments of lease liabilities	**(89)**	(91)
Proceeds from subordinated debt issued (Note 21.6)	**1,042**	–
Proceeds from treasury shares transferred/sold under the Bank's employee share schemes	**150**	140
Redemption of subordinated debt issued (Note 21.6)	**–**	(400)
Net cash provided by/(used in) financing activities	**628**	(6,142)
Net change in cash and cash equivalents	**8,047**	350
Net currency translation adjustments	**(773)**	282
Cash and cash equivalents at 1 January	**22,710**	22,078
Cash and cash equivalents at 31 December (Note 23)	**29,984**	22,710

(1) In 2022, the Group paid income tax of $1,167 million (2021: $913 million), of which $576 million (2021: $280 million) was paid in Singapore and $591 million (2021: $633 million) in other jurisdictions.

The accompanying notes form an integral part of these financial statements.

Notes to the Financial Statements

For the financial year ended 31 December 2022

These notes form an integral part of the financial statements.

The Board of Directors of Oversea-Chinese Banking Corporation Limited authorised these financial statements for issue on 23 February 2023.

1. General

Oversea-Chinese Banking Corporation Limited (the Bank) is incorporated and domiciled in Singapore and is listed on the Singapore Exchange Securities Trading Limited. The address of the Bank's registered office is 63 Chulia Street, #10-00 OCBC Centre East, Singapore 049514.

The consolidated financial statements relate to the Bank and its subsidiaries (together referred to as the Group) and the Group's interests in associates. The Group is principally engaged in the business of banking, life insurance, general insurance, asset management, investment holding, futures and stockbroking.

2. Summary of Significant Accounting Policies

2.1 Basis of Preparation

The financial statements have been prepared in accordance with Singapore Financial Reporting Standards (International) (SFRS(I)) as required by the Singapore Companies Act 1967 (the Act).

The financial statements are presented in Singapore Dollar, rounded to the nearest million unless otherwise stated. # represents amounts less than $0.5 million. The financial statements have been prepared under the historical cost convention, except as disclosed in the accounting policies below.

The preparation of financial statements in conformity with SFRS(I) requires management to exercise its judgement, use estimates and make assumptions in the application of accounting policies on the reported amounts of assets, liabilities, revenues and expenses. Although these estimates are based on management's best knowledge of current events and actions, actual results may ultimately differ from these estimates. Critical accounting estimates and assumptions used that are significant to the financial statements, and areas involving a high degree of judgement or complexity, are disclosed in Note 2.25.

The following new/revised financial reporting standards and interpretations were applied with effect from 1 January 2022:

SFRS(I)	Title
Various	*Annual Improvements to SFRS(I)s 2018-2020*
SFRS(I) 3 (Amendments)	*Reference to the Conceptual Framework*
SFRS(I) 1-16 (Amendments)	*Property, Plant and Equipment – Proceeds before Intended Use*
SFRS(I) 1-37 (Amendments)	*Onerous Contracts – Cost of Fulfilling a Contract*

The initial application of the above standards (including their consequential amendments) and interpretations did not have any material impact on the Group's financial statements.

2.2 Basis of Consolidation

2.2.1 Subsidiaries

Subsidiaries are entities over which the Group controls when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

Subsidiaries are consolidated from the date when control is transferred to the Group and cease to be consolidated on the date when that control ceases. The Group reassesses whether it controls an investee if facts and circumstances indicate that there have been changes to its power, its rights to variable returns or its ability to use its power to affect its returns.

In preparing the consolidated financial statements, intra-group transactions and balances, together with unrealised income and expenses arising from the intra-group transactions among group companies are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Where necessary, adjustments are made to the financial statements of subsidiaries to ensure consistency of accounting policies within the Group.

Non-controlling interests (NCI) represent the equity in subsidiaries not attributable, directly or indirectly, to shareholders of the Bank, and are presented separately from equity attributable to equity holders of the Bank. For NCI that arise through minority unit holders' interest in the insurance subsidiaries of Great Eastern Holdings Limited (GEH) consolidated investment funds, they are recognised as a liability. These interests qualify as a financial liability as they give the holder the right to put the instrument back to the issuer for cash. Changes in these liabilities are recognised in the income statement as expenses.

The Group applies the acquisition method to account for business combinations. The cost of an acquisition is measured at the fair value of the assets given, equity instruments issued or liabilities incurred or assumed at the date of exchange. Acquisition-related costs are expensed as incurred. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. The Group recognises any NCI either at fair value or at the NCI's proportionate share of the recognised amounts of the acquiree's identifiable net assets at the date of acquisition on an acquisition-by-acquisition basis.

The excess of the fair value of the sum of consideration transferred, the recognised amount of any NCI in the acquiree and the acquisition-date fair values of any previously held equity interest in the acquiree over the fair value of the identifiable net assets acquired is recognised as goodwill at the date of acquisition. When the excess is negative, a bargain purchase gain is recognised immediately in the income statements.

2. Summary of Significant Accounting Policies (continued)

2.2 Basis of Consolidation (continued)

2.2.1 Subsidiaries (continued)

Business combinations arising from transfers of interests in entities that are under the control of the shareholder that controls the Group are accounted for as if the acquisition has occurred at the beginning of the earliest comparative year presented or, if later, at the date that common control was established; for this purpose comparatives are reclassified. The assets and liabilities acquired are recognised at the carrying amounts recognised previously in the Group controlling shareholder's consolidated financial statements. The components of equity of the acquired entities are added to the same components within the Group's equity and any gain/loss arising is recognised directly in equity.

2.2.2 Structured Entities

A structured entity is an entity in which voting or similar rights are not the dominant factor in deciding control and is generally established for a narrow and well-defined objective.

For the purpose of disclosure, the Group is considered to be the sponsor of a structured entity if it has a key role in establishing the structured entity or its name appears in the overall structure of the structured entity.

2.2.3 Associates and Joint Ventures

Associates are entities over which the Group has significant influence, but not control or joint control, over the financial and operating policies of these entities. Significant influence is presumed to exist when the Group holds 20% or more of the voting power of another entity.

Joint ventures are arrangements to undertake economic activities in which the Group has joint control and rights to the net assets of the entities.

Investments in associates and joint ventures are accounted for in the consolidated financial statements using the equity method of accounting. If the investment in an associate is held by, or is held indirectly through, an entity that is a venture capital organisation, or a mutual fund, unit trust and similar entities including investment-linked insurance funds, the Group may elect to measure that investment at fair value through profit or loss in accordance with SFRS(I) 9 *Financial Instruments*. The Group will make this election separately for each associate, at initial recognition of the associate.

Under equity accounting, the investment is initially recognised at cost, and the carrying amount is adjusted for post-acquisition changes of the Group's share of the net assets of the entity until the date the significant influence or joint control ceases. The Group's investment in associates and joint ventures includes goodwill identified on acquisition, where applicable. When the Group's share of losses equals or exceeds its interests in the associates and joint ventures, including any other unsecured receivables, the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the entities.

In applying the equity method of accounting, unrealised gains on transactions between the Group and its associates and joint ventures are eliminated to the extent of the Group's interests in these entities. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Where necessary, adjustments are made to the financial statements of associates and joint ventures to ensure consistency of accounting policies with those of the Group.

The results of associates and joint ventures are taken from audited financial statements or unaudited management accounts of the entities concerned, made up to dates of not more than three months prior to the reporting date of the Group.

The investment in an associate or joint venture is derecognised when the Group ceases to have significant influence or joint control, respectively, over the investee. Amounts previously recognised in other comprehensive income (OCI) in respect of the investee are transferred to the income statement. Any retained interest in the entity is re-measured at its fair value. The difference between the carrying amount of the retained interest at the date when significant influence or joint control ceases, and its corresponding fair value, is recognised in the income statement.

2.2.4 Life Insurance Companies

Certain subsidiaries of the Group engaged in life insurance business are structured into one or more long-term life insurance funds, and shareholders' funds. All premiums received, investment returns, claims and expenses, and changes in liabilities to policyholders are accounted for within the related life insurance fund. Any surplus, which is determined by the appointed Actuary after taking into account these items, may either be distributed to the shareholders and the policyholders according to a predetermined formula or retained within the life insurance funds. The amount is presented as "Profit from life insurance" in the Group's consolidated income statement.

2.2.5 Investments in Subsidiaries, Associates and Joint Ventures by the Bank

These investments are stated in the Bank's balance sheet at cost less any impairment in value after the date of acquisition.

2.3 Currency Translation

2.3.1 Foreign Currency Transactions

Transactions in foreign currencies are recorded in the respective functional currencies of the Bank and its subsidiaries at the exchange rates prevailing on the transaction dates. Monetary items denominated in foreign currencies are translated to the respective entities' functional currencies at the exchange rates prevailing at the reporting date. Exchange differences arising on settlement and translation of such items are recognised in the income statement.

2. Summary of Significant Accounting Policies (continued)

2.3 Currency Translation (continued)

2.3.1 Foreign Currency Transactions (continued)

Non-monetary items denominated in foreign currencies that are measured at fair value are translated at the exchange rate on the date the fair value is determined. Exchange differences on non-monetary items such as equity investments classified as fair value through other comprehensive income (FVOCI) financial assets are recognised in OCI and presented in the fair value reserve within equity.

2.3.2 Foreign Operations

The assets and liabilities of foreign operations, including goodwill and fair value adjustment arising on the acquisition of a foreign operation, are translated to Singapore Dollar at exchange rates prevailing at the reporting date. The income and expenses of foreign operations are translated to Singapore Dollar at average exchange rates for the year, which approximate the exchange rates at the dates of the transactions.

Differences arising from the translation of a foreign operation are recognised in OCI and presented in the currency translation reserve within equity. When a foreign operation is disposed of, in part or in full, the relevant amount in the currency translation reserve is included in the income statement on disposal of the operation.

2.4 Cash and Cash Equivalents

In the consolidated cash flow statement, cash and cash equivalents comprise cash on hand, money market placements, reverse repo and other balances with central banks which are generally short-term financial instruments or repayable on demand.

2.5 Financial Instruments

2.5.1 Recognition

The Group initially recognises derivative financial instruments (forwards, futures, swaps and options) on the trade date. It initially recognises non-derivative financial instruments (loans and advances, deposits and debts issued, and regular way purchases and sales of financial assets) on the settlement date. Regular-way purchases and sales are those settled within the time period established by regulation or market convention.

2.5.2 De-Recognition

Financial assets are de-recognised when the Group's contractual rights to the cash flows from the financial assets expire or when the Group transfers the financial asset to another party without retaining control or transfers substantially all the risks and rewards of ownership of the asset. Financial liabilities are de-recognised when the Group's obligations specified in the contract expire or are discharged or cancelled.

2.5.3 Modifications

The original terms of a financial instrument may be renegotiated or otherwise modified, resulting in changes to its contractual cash flows. Where the extent of changes as a result of the modification or renegotiation is substantial, the existing financial instrument is derecognised and a new instrument (with new terms including a new effective interest rate) recognised. In all other cases, the modified contractual cash flows of the existing instrument are discounted at the original effective interest rate to arrive at a new carrying amount and the resulting modification gain or loss is recognised in profit or loss.

Interest Rate Benchmark Reform (IBOR Reform)

If the basis for determining the contractual cash flows of a financial asset or financial liability measured at amortised cost changes as a result of IBOR reform, the Group updates the effective interest rate of the financial asset or financial liability to reflect the change that is required by the reform. A change in the basis for determining the contractual cash flows is required by IBOR reform if the following conditions are met:

- the change is necessary as a direct consequence of the reform; and
- the new basis for determining the contractual cash flows is economically equivalent to the previous basis – i.e. the basis immediately before the change.

If there are changes to the terms of a financial asset or financial liability in addition to changes to the basis for determining the contractual cash flows required by interest rate benchmark reform, the Group first updates the effective interest rate of the financial asset or financial liability to reflect the change that is required by interest rate benchmark reform. After that, the Group applies the accounting policy for modifications set out above to account for the additional changes.

2.5.4 Offsetting

Financial assets and liabilities are offset and the net amount presented in the balance sheet when there is a legally enforceable right to offset the amounts and an intention to settle on a net basis or realise the asset and settle the liability simultaneously. Income and expenses are presented on a net basis only when permitted by the accounting standards.

2.5.5 Sale and Repurchase Agreements (Including Securities Lending and Borrowing)

Repurchase agreements (repos) are regarded as collateralised borrowing. The securities sold under repos are treated as pledged assets and remain as assets on the balance sheets. The amount borrowed is recorded as a liability. Reverse repos are treated as collateralised lending and the amount of securities purchased is included in placements with central banks, loans to banks and non-bank customers. The difference between the amount received and the amount paid under repos and reverse repos is amortised as interest expense and interest income respectively.

Securities lending and borrowing transactions are generally secured, with collateral taking the form of securities or cash. The transfer of securities to or from counterparties is not reflected on the balance sheet. Cash collateral paid or received is recorded as an asset or a liability respectively.

2. Summary of Significant Accounting Policies (continued)

2.6 Non-Derivative Financial Assets

Classification and Measurement of Financial Assets

A non-derivative financial asset is initially recognised at fair value and is subsequently measured either at amortised cost, fair value through other comprehensive income (FVOCI) or fair value through profit or loss (FVTPL). Directly attributable transaction costs are included as part of the initial cost for financial instruments that are not subsequently measured at fair value through profit or loss.

(a) Business Model Assessment

The Group makes an assessment of the objective of a business model in which an asset is held at a portfolio level because this best reflects the way the business is managed, and information is provided to management. The information considered includes:

- the stated policies and objectives for the portfolio and the operation of those policies in practice. In particular, whether management's strategy focuses on earning contractual interest income, maintaining a particular interest rate profile, matching the duration of the financial assets to the duration of the liabilities that are funding those assets or realising cash flows through the sale of the assets;
- how the performance of the portfolio is evaluated and reported to the Group's management;
- the risks that affect the performance of the business model (and the financial assets held within that business model) and its strategy of how those risks are managed;
- how managers of the business are compensated (e.g. whether compensation is based on the fair value of the assets managed or the contractual cash flows collected); and
- the frequency, volume and timing of sales in prior periods, the reasons for such sales and its expectations about future sales activity. However, information about sales activity is not considered in isolation, but as part of an overall assessment of how the Group's stated objective for managing the financial assets is achieved and how cash flows are realised.

Financial assets that are held for trading and whose performance is evaluated or managed on a fair value basis are measured at FVTPL because they are neither within the business model to hold the assets to collect contractual cash flows, nor within the business model to hold the assets both to collect contractual cash flows and to sell.

(b) Assessment of Whether Contractual Cash Flows are Solely Payments of Principal and Interest

For the purposes of this assessment, "principal" is defined as the fair value of the financial asset on initial recognition. "Interest" is defined as consideration for the time value of money and for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and costs (e.g. liquidity risk and administrative costs), as well as a profit margin.

2.6.1 Debt Instruments Measured at Amortised Cost

A debt financial instrument is measured at amortised cost if it meets both of the following conditions and is not designated at FVTPL:

- it is held within a business model whose objective is to hold the asset until maturity to collect contractual cash flows; and
- its contractual terms give rise to cash flows that are solely payments of principal and interest on the principal outstanding.

Debt instruments classified as amortised cost are subject to impairment assessment using the expected credit loss model in accordance with SFRS(I) 9. Interest earned whilst holding the financial assets is included in interest income.

2.6.2 Debt Instruments Measured at FVOCI

A debt financial instrument is measured at FVOCI if it meets both of the following conditions and is not designated at FVTPL:

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

Debt instruments classified as FVOCI are subject to impairment assessment using the expected credit loss model in accordance with SFRS(I) 9. Interest earned while holding the financial assets is included in interest income.

At the reporting date, the Group recognises unrealised fair value gains and losses on revaluing these assets in OCI and presents the cumulative gains and losses in fair value reserve within equity, except for the recognition of impairment gains or losses, interest income and foreign exchange gains and losses, which are recognised in the income statement. At maturity or upon disposal, the cumulative gain or loss previously recognised in OCI is reclassified from fair value reserve to the income statement.

2.6.3 Debt Instruments Measured at FVTPL

Debt instruments that do not meet the requirements to be measured at amortised cost or at FVOCI are measured at FVTPL. At the reporting date, the Group recognises realised and unrealised gains and losses as trading income in the income statement. Interest earned while holding the assets is included in interest income.

2. Summary of Significant Accounting Policies (continued)

2.6 Non-Derivative Financial Assets (continued)

Classification and Measurement of Financial Assets (continued)

(b) Assessment of Whether Contractual Cash Flows are Solely Payments of Principal and Interest (continued)

2.6.4 Designation at FVTPL

On initial recognition, the Group may irrevocably designate a financial asset at FVTPL notwithstanding that it would otherwise meet the requirements to be measured at amortised cost or at FVOCI, if doing so, it eliminates or significantly reduces an accounting mismatch that would otherwise arise. Upon designation, financial assets are measured at fair value on each reporting date until maturity or derecognition. Realised and unrealised fair value changes are recognised in the income statement.

2.6.5 Equity Instruments

Equity instruments held for trading are classified as FVTPL. Equity instruments that are not held for trading may be classified as FVOCI based on an irrevocable election on initial recognition on an investment-by-investment basis.

At the reporting date, realised and unrealised fair value gains or losses on revaluing the equity instruments classified as FVTPL are recognised in the income statement. Realised and unrealised fair value gains or losses on revaluing the equity instruments classified as FVOCI are recognised in OCI and are never reclassified to the income statement.

Dividend earned while holding the equity instruments classified as FVTPL is recognised as dividend income in the income statement. Dividend from equity instruments classified as FVOCI is recognised as dividend income in the income statement unless the dividend clearly represents a recovery of part of the cost of the investment.

2.6.6 Reclassification

Financial assets are not reclassified subsequent to their initial recognition, except in the period when the Group changes its business model for managing its financial assets.

2.7 Derivative Financial Instruments

All derivative financial instruments are recognised initially and subsequently measured at fair value on the balance sheet as an asset or liability depending on whether it is a receivable or a payable, respectively. The resulting gain or loss is recognised immediately in profit or loss unless it qualifies for recognition in other comprehensive income under cash flow or net investment hedge accounting.

Fair values reflect the exit price of the instrument and include adjustments to take into account the credit risk of the Group and the counterparty where appropriate. An embedded derivative is not separated from the host contract that is a financial asset. However, it is separated from the host contract that is a financial liability or a non-financial and treated as a stand-alone financial derivative.

The Group enters into hedging derivative transactions to manage exposures to interest rate, foreign currency and credit risks arising from its core banking activities of lending and accepting deposits. The Group applies fair value, cash flow or net investment hedge accounting when the transactions meet the specified criteria for hedge accounting.

Before applying any hedge accounting, the Group determines whether an economic relationship exists between the hedged item and the hedging instrument by considering qualitative characteristics or quantitative analysis of these items. In its qualitative assessment, the Group considers whether the critical terms of its hedged item and the hedging instrument are closely aligned and evaluates whether the fair values of the hedged item and the hedging instrument respond in an offsetting manner to similar risks. Where economic hedge relationships meet the hedge accounting criteria, the Group establishes its hedge ratio by aligning the principal amount of the hedging instrument to the extent of its hedged item.

In a fair value hedging relationship, the Group mainly uses interest rate swaps, interest rate futures and cross currency swaps to hedge its exposure to changes in the fair value of fixed rate instruments and its foreign currency risk exposure. For qualifying fair value hedges, changes in the fair values of the derivative and of the hedged item relating to the hedged risk are recognised in the income statement. If the hedge relationship is terminated, the fair value adjustment to the hedged item continues to be reported as part of the carrying amount of the asset or liability and is amortised to the income statement as a yield adjustment over the remaining maturity of the asset or liability.

In a cash flow hedging relationship, the Group mainly uses interest rate swaps to hedge the variability in the cash flows of variable rate asset or liability resulting from changes in interest rates. For qualifying cash flow hedges, the effective portion of the change in fair value of the derivative is recognised in the cash flow hedge reserve in equity. The gain or loss relating to the ineffective portion is recognised immediately in the income statement. Amounts accumulated in the cash flow hedge reserve remain in equity until the hedged cash flows is recognised in the income statement. When the hedged cash flows are no longer expected to occur, the cumulative gain or loss in the hedge reserve is immediately transferred to the income statement.

“Hedge ineffectiveness” represents the amount by which the changes in the fair value of the hedging instrument differ from changes in the fair value of a benchmark hedging instrument that is a perfect match. The amount of hedge ineffectiveness is recognised immediately in profit or loss. The sources of ineffectiveness for both fair value hedges and cash flow hedges include imperfect economic relationship or mis-matching of key terms between the hedging instrument and the hedged item as well as the effect of credit risk existing in the hedging instrument.

2. Summary of Significant Accounting Policies (continued)

2.7 Derivative Financial Instruments (continued)

The hedged risk in the Group's net investment hedges is the foreign currency exposure that arises from a net investment in subsidiaries and foreign operations that have a different functional currency from that of the Bank. The risk arises from the fluctuation in spot exchange rates between the functional currency of the subsidiaries and the Bank's functional currency. The Group uses a mixture of derivative financial instruments and liabilities to manage its foreign currency exposure in its net investment hedges. For hedges of net investments in foreign operations which are accounted for in a similar way as cash flow hedges, the gain or loss relating to the effective portion of the hedging instrument is recognised in equity and that relating to the ineffective portion is recognised in the income statement immediately. Gains and losses accumulated in equity are transferred to income statement on disposal of the foreign operations. The main source of ineffectiveness for the Group's net investment hedge is the use of a hedging instrument denominated in a proxy currency that is not perfectly correlated to the actual currency to which the Group is exposed.

Specific Policies for Hedges Affected by IBOR Reform (As Defined in Note 2.5.3)

For the purpose of evaluating whether there is an economic relationship between the hedged item and the hedging instrument, the Group assumes that the benchmark interest rate is not altered as a result of IBOR reform. The Group will cease to apply the specific policy for assessing the economic relationship between the hedged item and the hedging instrument when the uncertainty arising from IBOR reform is no longer present with respect to the timing and the amount of the interest rate benchmark-based cash flows of the hedged item or hedging instrument, or when the hedging relationship is discontinued.

When the basis for determining the contractual cash flows of the hedged item or hedging instrument changes as a result of IBOR reform, the Group amends the hedge documentation of that hedging relationship to reflect the change(s) required by IBOR reform. For this purpose, the hedge designation is amended only to make one or more of the following changes:

- designating an alternative benchmark rate as the hedged risk;
- updating the description of the hedged item, including the description of the designated portion of the cash flows or fair value being hedged;
- updating the description of the hedging instrument; or
- updating the description of how the entity will assess hedge effectiveness.

The Group amends the formal hedge documentation by the end of the reporting period during which a change required by IBOR reform is made to the hedged risk, hedged item or hedging instrument. These amendments in the formal hedge documentation do not constitute the discontinuation of the hedging relationship or the designation of a new hedging relationship.

If changes are made in addition to those changes required by IBOR reform described above, the Group first considers whether those additional changes result in the discontinuation of the hedge accounting relationship. If the additional changes do not result in the discontinuation of the hedge accounting relationship, then the Group amends the formal hedge documentation for changes required by IBOR reform as mentioned above.

2.8 Property, Plant and Equipment

Property, plant and equipment are stated at cost less accumulated depreciation and impairment losses. The cost of an item of property, plant and equipment includes the purchase price and costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management.

Subsequent expenditure relating to property, plant and equipment is added to the carrying amount of the asset when it is probable that future economic benefits, in excess of the standard of performance of the asset before the expenditure was made, will flow to the Group and the cost can be reliably measured. Other subsequent expenditure is recognised in the income statement during the financial year in which the expenditure is incurred.

The residual values, useful lives and depreciation methods of property, plant and equipment are reviewed and adjusted as appropriate, at each reporting date, to ensure that they reflect the expected economic benefits derived from these assets.

Property, plant and equipment are depreciated on a straight-line basis over their estimated useful lives as follows:

Furniture and fixtures	–	5 to 10 years
Office equipment	–	5 to 10 years
Computers	–	3 to 10 years
Renovation	–	8 years or remaining lease term, whichever is shorter
Motor vehicles	–	5 years

Freehold land and leasehold land with leases of more than 100 years to expiry are not depreciated. Buildings and other leasehold land are depreciated over 50 years or the period of the lease, whichever is shorter.

An item of property, plant and equipment is de-recognised upon disposal or when no future economic benefit is expected from its use. Any gain or loss arising on de-recognition of the asset is included in the income statement in the year the asset is de-recognised.

2.9 Investment Property

Investment property is property held either for rental income or for capital appreciation or for both. Investment properties, other than those held under the Group's life insurance funds, are stated at cost less accumulated depreciation and impairment losses. Freehold land and leasehold land with leases of more than 100 years to expiry are not depreciated. Buildings and other leasehold land are depreciated over 50 years or the period of the lease, whichever is shorter.

2. Summary of Significant Accounting Policies (continued)

2.9 Investment Property (continued)

Investment property held under the Group's life insurance fund is stated at fair value at the reporting date and collectively form an asset class which is an integral part of the overall investment strategy for the asset-liability management of the life insurance business. The fair value of the investment property is determined based on objective valuations undertaken by independent valuers at the reporting date. Changes in the carrying amount resulting from revaluation are recognised in the income statement of the life insurance fund.

2.10 Goodwill and Other Intangible Assets

2.10.1 Goodwill

Goodwill on acquisition of subsidiaries represents the excess of the sum of the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition-date fair value of any previously held equity interest over the fair value of the identifiable net assets acquired.

Goodwill is stated at cost less impairment loss. Impairment test is carried out annually, or when there is indication that the goodwill may be impaired.

Gains or losses on disposal of subsidiaries and associates include the carrying amount of goodwill relating to the entity sold.

2.10.2 Intangible Assets

Intangible assets other than goodwill are separately identifiable intangible items arising from acquisitions and are stated at cost less accumulated amortisation and impairment losses. Intangible assets with finite useful lives are amortised over their estimated useful lives. The estimated useful lives range from 6 to 20 years. The useful life of an intangible asset is reviewed at least at each financial year end.

2.11 Non-Current Assets Held for Sale

Non-current assets that are expected to be recovered through sale rather than through continuing use are classified as held for sale. Immediately before classification as held for sale, the assets are measured in accordance with the Group's accounting policies. Thereafter, the assets are generally measured at the lower of their carrying amount and fair value less cost to sell.

2.12 Impairment of Assets

(I) Financial Assets

Impairment allowances for financial assets are assessed using a forward-looking expected credit loss (ECL) model in accordance with the requirements of SFRS(I) 9.

2.12.1 Scope

Under SFRS(I) 9, the ECL model is applied to debt financial assets measured at amortised cost or FVOCI and off-balance sheet loan commitments and financial guarantees.

2.12.2 Expected Credit Loss Impairment Model

Under SFRS(I) 9, credit loss allowances are measured on each reporting date according to a three-stage expected credit loss impairment model:

- Stage 1 – On initial recognition and at a subsequent reporting date, where there is no significant increase in credit risk, the expected credit loss will be that resulting from default events that are possible over the next 12 months.
- Stage 2 – Where there is a significant increase in credit risk since the initial recognition, the expected credit loss will be that resulting from default events that are possible over the expected life of the asset.
- Stage 3 – When a financial asset exhibits objective evidence of impairment and is considered to be credit-impaired, the credit loss allowance will be the full lifetime expected credit loss.

2.12.3 Measurement

ECLs are a probability-weighted estimate of credit losses. They are measured based on the cash shortfalls as elaborated below:

(a) Financial assets that are not credit-impaired (Stage 1 and Stage 2) at the reporting date: The present value of all cash shortfalls (i.e. the cash flows due to the entity in accordance with the contract less the cash flows that the Group expects to receive);

(b) Financial assets that are credit-impaired (Stage 3) at the reporting date: The gross carrying amount less the present value of cash flows that the Group expects to receive;

(c) Undrawn loan commitments: The contractual cash flows that are due to the Group if the commitment is drawn down less the cash flows that the Group expects to receive; and

(d) Financial guarantee contracts: The expected payments to reimburse the holder less any amounts that the Group expects to recover.

The key inputs used in the measurement of ECL are:

- Probability of default (PD) – This is an estimate (as a percentage) of the likelihood of default over a time period such as one year or the exposure's expected life time.
- Loss given default (LGD) – This is an estimate (as a percentage) of the loss arising on default. It is based on the difference between the contractual cash flows due and those that the Group would expect to receive, including from any collateral.
- Exposure at default (EAD) – This is an estimate (as an amount) of the exposure at a future default date, taking into account expected changes in the exposure after the reporting date, including repayments of principal and interest as well as expected drawdowns on committed facilities.

For Stage 1 exposures, ECL is calculated by multiplying the 12-month PD by LGD and EAD. For Stage 2 and Stage 3 exposures, ECL is calculated by multiplying lifetime PD by LGD and EAD.

Loans to customers that are collectively assessed are grouped on the basis of shared credit risk characteristics such as loan type, industry, geographical location of the borrower, collateral type and other relevant factors.

2. Summary of Significant Accounting Policies (continued)

2.12 Impairment of Assets (continued)

(I) Financial Assets (continued)

2.12.3 Measurement (continued)

All key inputs (PD, LGD and EAD) used to estimate Stage 1 and Stage 2 credit loss allowances are modelled based on three macroeconomic scenarios (or changes in macroeconomic variables) that are most closely correlated with credit losses in the relevant portfolio.

The three macroeconomic scenarios represent a most likely "Base" outcome, and two other less likely "Upside" and "Downside" scenarios. These scenarios are probability-weighted and underlying key macroeconomic assumptions are based on independent external and in-house views. The assumptions are subject to regular management reviews to reflect current economic situations.

Each macroeconomic scenario used in the expected credit loss calculation includes a projection of all relevant macroeconomic variables used in the models for the lifetime period, reverting to long-run averages generally after 3 to 5 year periods. Depending on their usage in the models, macroeconomic variables are projected at a country or more granular level which differ by portfolio. The primary macroeconomic variables adopted are Gross Domestic Product, Unemployment rate, Property Price Index and Interest rate.

The definition of default used in the measurement of expected credit losses is consistent with the definition of default used for credit risk management purposes. The default definition has been applied consistently to model the PD, LGD and EAD throughout Group's expected credit loss calculations.

The Group considers a financial asset to be in default by assessing both quantitative and qualitative criteria such as days past due and the terms of financial covenants. A default occurs when the borrower or bond issuer is unlikely to pay its credit obligations to the Group in full, without recourse by the Group to actions such as realising security (if any is held) or when the financial asset is more than 90 days past due.

A financial asset is considered to be no longer in default when there is an established trend of credit improvement, supported by an assessment of the borrower's repayment capability, cash flows and financial position.

The maximum period considered when estimating ECLs is the maximum contractual period over which the Group is exposed to credit risk.

Financial assets are written off against their related impairment allowances when all feasible recovery actions have been exhausted or when the recovery prospects are considered remote.

2.12.4 Movement Between Stages

Movements between Stage 1 and Stage 2 are based on whether an instrument's credit risk as at the reporting date has increased significantly since its initial recognition.

The Group considers both qualitative and quantitative parameters in the assessment of whether this is a significant increase in credit risk. These include the following:

(a) The Group has established thresholds for significant increases in credit risk based on both a relative and absolute change in lifetime PD relative to initial recognition.
(b) The Group conducts qualitative assessment to ascertain if there has been significant increase in credit risk.
(c) The Group uses days past due as a further indication of significant increase in credit risk.

Movements between Stage 2 and Stage 3 are based on whether financial assets are credit-impaired as at the reporting date. The determination of whether a financial asset is credit-impaired under SFRS(I) 9 will be based on objective evidence of impairment.

The assessments for a significant increase in credit risk since initial recognition and credit-impairment are performed independently as at each reporting period. Assets can move in both directions through the stages of the impairment model. After a financial asset has migrated to Stage 2, if it is no longer considered that credit risk has significantly increased relative to initial recognition in a subsequent reporting period, it will move back to Stage 1. A modification of the terms of a financial asset that does not result in derecognition will result in the financial asset being transferred out of Stage 3 if the indicators of it being identified as credit-impaired is no longer met and that the evidence for its transfer out of Stage 3 solely relates to events such as up-to-date and timely payment occurring in the subsequent periods.

If a modified financial asset results in derecognition, the new financial asset will be recognised under Stage 1, unless it is assessed to be credit-impaired at the time of the modification.

2.12.5 Regulatory Requirement

Under MAS 612 requirement, the Group is required to maintain a minimum regulatory loss allowance (MRLA) of 1% of the gross carrying amount of selected credit exposures, net of collateral. Where the accounting loss allowance of selected non-credit-impaired exposures computed under SFRS(I) 9 is less than the MRLA, the Group shall maintain the difference in a non-distributable regulatory loss allowance reserve (RLAR) account through the appropriation of revenue reserves. Where the aggregated accounting loss allowance and RLAR exceeds the MRLA, the Group may transfer the excess amount in the RLAR to revenue reserves.

2. Summary of Significant Accounting Policies (continued)

2.12 Impairment of Assets (continued)

(II) Other Assets

2.12.6 Goodwill

For the purpose of impairment testing, goodwill is allocated to each of the Group's Cash Generating Units (CGU) expected to benefit from synergies of the business combination. The Group's CGUs correspond with the business segments identified in the primary segment report.

Impairment loss on goodwill cannot be reversed in subsequent periods.

2.12.7 Investments in Subsidiaries and Associates Property, Plant and Equipment Investment Property Intangible Assets

Investments in subsidiaries and associates, property, plant and equipment, investment property and intangible assets, are reviewed for impairment on the reporting date or whenever there is any indication that the carrying amount of an asset may not be recoverable. If such an indication exists, the carrying amount of the asset is written down to its recoverable amount (i.e. the higher of the fair value less cost to sell and the value in use).

The impairment loss is recognised in the income statement, and is reversed only if there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognised. The carrying amount of an asset is increased to its revised recoverable amount, provided that this amount does not exceed the carrying amount that would have been determined (net of amortisation or depreciation) if no impairment loss had been recognised for the asset in prior years.

2.13 Insurance Receivables

Insurance receivables are recognised when due. They are measured at initial recognition at the fair value received or receivable. Subsequent to initial recognition, insurance receivables are measured at amortised cost, using the effective interest method. A loss allowance is measured at an amount equal to lifetime expected credit losses, with the impairment loss recognised in the income statement. Insurance receivables are derecognised when the derecognition criteria for financial assets has been met. The Group's insurance receivables include outstanding premiums, policy loans and reinsurance receivables. Policy loans are loans and advances made to policyholders, and are collateralised by the underlying policies.

2.14 Financial Liabilities

A non-derivative financial liability is initially recognised at fair value less transaction costs and is subsequently measured at amortised cost using the effective interest method except where it is designated as FVTPL.

For financial liabilities designated at fair value, gains and losses arising from changes in fair value are recognised in the net trading income line in the income statement except for changes in fair value attributable to the Group's own credit risk where it is presented directly within other comprehensive income. Amounts recorded in OCI related to this credit risk are not subject to recycling in profit or loss, but are transferred to unappropriated profit when realised. Financial liabilities are held at fair value through profit or loss when:

(a) they are acquired or incurred for the purpose of selling or repurchasing in the near term;
(b) the fair value option designation eliminates or significantly reduces accounting mismatch that would otherwise arise; or
(c) the financial liability contains an embedded derivative that would otherwise need to be separately recorded.

2.15 Provisions and Other Liabilities

2.15.1 Provisions

Provisions are recognised when there is a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate of the amount can be made. Where a provision is expected to be reimbursed, for example under an insurance contract, the reimbursement is recognised as a separate asset only when it is virtually certain that reimbursement will be received.

Provision for insurance agents' retirement benefits, including deferred benefits, is calculated according to terms and conditions stipulated in the respective agent's agreement. The deferred/ retirement benefit accumulated at the reporting date includes accrued interest.

2.15.2 Policy Benefits

Policy benefits are recognised when a policyholder exercises the option to deposit the survival benefits with the life insurance subsidiaries when the benefit falls due. Policy benefits are interest bearing at rates adjusted from time to time by the life insurance subsidiaries. Interest payable on policy benefits is recognised in the income statements as incurred.

2.16 Insurance Contracts

Insurance contracts are those contracts where the Group (the insurer), mainly the insurance subsidiaries of GEH, has accepted significant insurance risk from the policyholders by agreeing to compensate the policyholders if a specified uncertain future event (the insured event) adversely affects the policyholders. As a general guideline, the Group determines whether it has significant insurance risk, by comparing benefits paid with benefits payable if the insured event did not occur. Insurance contracts can also transfer financial risk.

Once a contract has been classified as an insurance contract, it remains an insurance contract for the remainder of its lifetime, even if the insurance risk reduces significantly during this period, unless all rights and obligations are extinguished or expired.

2. Summary of Significant Accounting Policies (continued)

2.16 Insurance Contracts (continued)

For the purpose of SFRS(I) 4 *Insurance Contracts*, the Group adopts maximum policy benefits as the proxy for insurance risk and cash surrender value or discounted maturity value as the proxy for the realisable value of the insurance contract. The Group defines insurance risk to be significant when the ratio of the insurance risk over the deposit component is not less than 105% of the deposit component at inception of the insurance contract. Based on this definition, all policy contracts issued by insurance subsidiaries within the Group are considered insurance contracts as at the reporting date.

Certain subsidiaries within the Group, primarily GEH and its subsidiaries (GEH Group), write insurance contracts in accordance with insurance regulations prevailing in their respective jurisdictions. Disclosures on the various insurance contract liabilities are classified into the principal components, as follows:

(a) Life insurance contract liabilities, comprising
  - Participating Fund contract liabilities;
  - Non-participating Fund contract liabilities; and
  - Investment-linked Fund contract liabilities.

(b) Non-life insurance contract liabilities

(c) Reinsurance contracts

Life Insurance Contract Liabilities

Insurance contracts are recognised and measured in accordance with the terms and conditions of the respective contracts and are based on guidelines laid down by the respective insurance regulations. Premiums, claims and benefit payments, acquisition and management expenses and valuation of future policy benefit payments or premium reserves as the case may be, are recognised in the income statements of the respective insurance subsidiaries.

The valuation of insurance contract liabilities is determined according to the Insurance Regulations:

(a) Singapore Insurance Act 1966, Insurance (Valuation and Capital) Regulations 2004 for insurance funds regulated in Singapore (MAS Regulations); and

(b) Risk-Based Capital Framework for Insurers for insurance funds regulated in Malaysia.

Life insurance contract liabilities are recognised when contracts are entered into and premiums are charged. These liabilities are measured by using the gross premium valuation method. The liability is determined as the sum of the present value of future guaranteed and, where relevant, appropriate level of non-guaranteed benefits and expenses, less the present value of future gross considerations arising from the policy discounted at the appropriate discount rate. The liability is based on best estimate assumptions and with due regard to significant recent experience. An appropriate risk margin allowance for adverse deviation from expected experience is made in the valuation of non-participating life policies, the guaranteed benefit liabilities of participating life policies and liabilities of non-unit investment-linked policies.

The liability in respect of participating insurance contracts is based on the higher of the guaranteed benefit liabilities or the total benefit liabilities at the contract level derived as stated above.

In the case of life policies where part of, or all the premiums are accumulated in a fund, the accumulated amounts, as declared to policyholders are shown as liabilities if the accumulated amounts are higher than the amounts as calculated using the gross premium valuation method.

In the case of short-term life policies covering contingencies other than death or survival, the liability for such life insurance contracts comprises the provision for unearned premiums and unexpired risks, together with provision for claims outstanding, including an estimate of the incurred claims that have not yet been reported to the Group.

Risk Transfer

The Group issues a variety of short and long duration insurance contracts which transfer risks from the policyholders to the Group to protect policyholders from the consequences of insured events such as death, disability, illness, accident, including survival. These contracts may transfer both insurance and investment risk or insurance risk alone, from the policyholders to the Group.

For non-participating policy contracts other than medical insurance policy contracts, the payout to policyholders upon the occurrence of the insured event is pre-determined and the transfer of risk is absolute. For medical insurance policy contracts, the payout is dependent on the actual medical costs incurred upon the occurrence of the insured event.

Contracts which transfer insurance risk alone from policyholders to the Group are commonly known as investment linked policies. As part of the pricing for these contracts, the insurance subsidiaries within the Group include certain charges and fees to cover for expenses and insured risk. The net investment returns derived from the variety of investment funds as selected by the policyholders accrue directly to the policyholders.

The Group issues investment linked contracts as an insurance contract which insure human life events such as death or survival over a long duration; coupled with an embedded derivative linking death benefit payments on the contract to the value of a pool of investments within the investment linked fund set up by the insurance subsidiary. As an embedded derivative meets the definition of an insurance contract it need not be separately accounted for from the host insurance contract. The liability valuation for such contracts is adjusted for changes in the fair value of the underlying assets at frequencies in accordance with the terms and conditions of the insurance contracts.

2. Summary of Significant Accounting Policies (continued)

2.16 Insurance Contracts (continued)

Life Insurance Contract Liabilities (continued)

The table below provides the key underlying assumptions used for valuation of life insurance contract liabilities.

	Singapore	**Malaysia**
Valuation method [(1)]	Gross premium valuation For Participating Fund, the method that produces the higher reserves of: (i) Guaranteed and non-guaranteed cash flows discounted at the appropriate rate of return reflecting the strategic asset allocation; (ii) Guaranteed cash flows discounted using the interest rate outlined below; and (iii) Total assets less all liabilities except insurance contract liabilities of the Participant fund.	Gross premium valuation For Participating Fund, the method that produces the higher reserves of: (i) Guaranteed and non-guaranteed cash flows discounted at the appropriate rate of return reflecting the strategic asset allocation, i.e. Total Benefit Reserves; and (ii) Guaranteed cash flows discounted using Malaysia Government Securities zero coupon spot yields (as outlined below). For Asset Share Participating Products, the Total Benefit Reserves will be further adjusted in accordance with the value of Policy Asset.
Discount rate [(1)]	For policies denominated in SGD/USD: (i) Singapore Government Securities/ US Treasury yields for cash flows up to 20 years and 30 years respectively; (ii) Ultimate forward rate of 3.8% applicable for cash flows beyond 60 years; (iii) Extrapolated yields in between; and (iv) Adjustments for matching adjustment and illiquidity premium according to MAS Notice 133, if any.	Malaysia Government Securities yields determined based on the following: (i) For cash flows with duration less than 15 years, Malaysia Government Securities zero coupon spot yields of matching duration; and (ii) For cash flows with duration 15 years or more, Malaysia Government Securities zero coupon spot yields of 15 years to maturity.
Mortality, Disability, Dread disease, Expenses, Lapse and surrenders [(1)]	Participating Fund: – Best estimates for Gross Premium Valuation method (i); and – Best estimates plus provision for adverse deviation (PAD) for Gross Premium Valuation method (ii). Non-Participating and Non-Unit reserves of Investment-linked Fund: Best estimates plus provision for adverse deviation (PAD).	Participating Fund: – Best estimates for Gross Premium Valuation method (i); and – Best estimates plus provision for risk of adverse deviation (PRAD) for Gross Premium Valuation method (ii). Non-Participating and Non-Unit reserves of Investment-linked Fund: Best estimates plus provision for risk of adverse deviation (PRAD).

[(1)] Refer to Note 2.25 on Critical Accounting Estimates and Judgements.

2. Summary of Significant Accounting Policies (continued)

2.16 Insurance Contracts (continued)

Life Insurance Contract Liabilities (continued)

Subsequent Measurement of Life Insurance Contract Liabilities

Adjustments to liabilities at each reporting date are recorded in the income statement. Profits originating from the release in margins for adverse deviations are recognised in the income statement over the lives of the contracts, whereas losses are fully recognised in the income statements during the first year.

Derecognition of Life Insurance Contract Liabilities

The liability is extinguished when the contract expires, is discharged or is cancelled.

Benefits and Claims

Insurance contract benefits reflect the cost of all maturities, surrenders, withdrawals and claims arising during the period, as well as policyholder dividends accrued in anticipation of dividend declarations. Accident and health claims incurred include all losses occurring during the period, whether reported or not, related handling costs, a reduction for recoveries, and any adjustments to claims outstanding from previous years.

Claims handling costs include internal and external costs incurred in connection with the negotiation and settlement of claims and are included in operating expenses.

Insurance Contracts and Investment Contracts with Discretionary Participating Features (DPF)

A significant portion of insurance contracts issued by subsidiaries within the Group contain discretionary participating features. These contracts are classified as participating policies. In addition to guaranteed benefits payable upon insured events associated with human life such as death or disability, the contracts entitle the policyholder to receive benefits, which could vary according to investment performance of the fund. The Group does not recognise the guaranteed components separately from the discretionary participating features.

Profits to shareholders from the participating fund are allocated from the surplus or surplus capital, determined from the results of the annual actuarial valuation parameters which are set out in the insurance regulations of the respective jurisdiction in which the insurance subsidiaries operate. The results of the annual actuarial valuation also determine the liabilities relating to all the policyholders' benefits of the participating fund. The provisions in the Articles of Association of the Group's insurance subsidiaries are applied in conjunction with the prescriptions in the respective insurance regulations, such that the distribution for any year to policyholders of the participating fund and shareholders approximate 90% and 10% respectively of total distribution from the participating fund. Any surplus that is not allocated is recognised as unallocated surplus. The unallocated surplus forms part of the life insurance contract liabilities. The annual declaration of the quantum of policyholder bonus and correspondingly the profits to shareholders to be distributed out of the participating fund is approved by the board of directors of each insurance subsidiary under the advice of the Appointed Actuary of the respective subsidiary, in accordance with the insurance regulations and the Articles of Association of the respective subsidiaries.

Liability Adequacy Test

Each insurance subsidiary within the Group is required by the respective insurance regulations and accounting standards to carry out a liability adequacy test using current estimates of future cash flows relating to its insurance contracts; the process is referred to as the gross premium valuation or bonus reserve valuation, depending on the jurisdiction in which the insurance subsidiary operates.

The liability adequacy test is applied to both the guaranteed benefits and the discretionary participating features; the assumptions are based on best estimates, the basis adopted is prescribed by the insurance regulations of the respective jurisdiction in which the insurance subsidiary operates. The Group performs liability adequacy tests on its actuarial reserves to ensure that the carrying amount of provisions is sufficient to cover estimated future cash flows. When performing the liability adequacy test, the Group discounts all contractual cash flows and compares this amount against the carrying amount of the liability. Any deficiency is charged to the income statement.

Non-Life Insurance Contract Liabilities

The Group caters to the protection needs of individuals and business owners through a wide range of general insurance products including but not limited to fire, motor, marine and aviation, workmen's compensation, personal accident, health, and other property and casualty lines.

Non-life insurance contract liabilities include claim liabilities and premium liabilities.

Claim Liabilities

Claim liabilities are based on the estimated ultimate cost of all claims incurred but not settled at the reporting date, whether reported or not, together with related claims handling costs and reduction for the expected value of salvage and other recoveries. Delays can be experienced in the notification and settlement of certain types of claims, therefore, the ultimate cost of these claims cannot be known with certainty at the reporting date. The liabilities are calculated at the reporting date using a range of standard actuarial claim projection techniques based on empirical data and current assumptions that may include a provision for adverse deviation. The liabilities are derecognised when the contracts expire, are discharged or are cancelled.

2. Summary of Significant Accounting Policies (continued)

2.16 Insurance Contracts (continued)

Non-Life Insurance Contract Liabilities (continued)

Claim Liabilities (continued)

The valuation of non-life insurance claim liabilities at the reporting date is based on best estimates of the ultimate settlement cost of claims plus a provision for adverse deviation. The provision for adverse deviation is set at 75% level of sufficiency for Singapore, Malaysia and Indonesia. The valuation methods used include the Paid and Incurred Loss Development methods (also known as the Link Ratio methods), the Paid and Incurred Bornhuetter-Ferguson methods and the Expected Loss Ratio method. For Singapore and Malaysia, the claim liabilities are not discounted for the time value of money. However, for Indonesia, the claim liabilities are discounted for the time value of money.

Premium Liabilities

Premium liabilities are the higher of the aggregate of the Unearned Premium Reserves (UPR) for all lines of business and the best estimate value of the Unexpired Risk Reserves (URR) plus the required provision of risk margin for adverse deviation as required by the regulations.

In determining the unearned premium reserve at the reporting date, the method that most accurately reflects the actual unearned premium is used. For Singapore, the 1/365th method for all classes of business is used, and for Malaysia and Indonesia, the 25% method is used for marine cargo, and the 1/365th method is used for all other classes of business.

Further provisions are made if expected future cash flows of unexpired insurance contracts with a provision for adverse deviation exceed the unearned premiums of these contracts.

Reinsurance Contracts

The Group cedes insurance risk in the normal course of business for all of its businesses. Reinsurance assets represent amounts receivable in respect of ceded insurance liabilities. These amounts are estimated in a manner consistent with the reinsured insurance contract liabilities, the outstanding claims provision or settled claims associated with the reinsurer's policies and are in accordance with the related reinsurance contract. Reinsurance assets arising from ceding of an in-force book and gross onerous contracts are recognised in the same period when the gross liabilities are accrued.

Reinsurance assets are reviewed for impairment at each reporting date or more frequently when an indication of impairment arises during the financial year. Impairment occurs when there is objective evidence as a result of an event that occurred after initial recognition of the reinsurance asset that the Group may not receive part or all outstanding amounts under the terms of the contract. The impairment loss is recorded in the income statements. Gains or losses on reinsurance are recognised in the income statements immediately at the date of contract and are not amortised. Ceded reinsurance arrangements do not relieve the Group from its obligations to policyholders.

The Group also assumes reinsurance risk in the normal course of business for life insurance and non-life insurance contracts where applicable. Premiums and claims on assumed reinsurance are recognised as revenue or expenses in the same manner as they would be if the reinsurance were considered direct business, taking into account the product classification of the reinsured business. Reinsurance liabilities represent balances due under reinsurance contracts. Amounts payable are estimated in a manner consistent with the related reinsurance contract. Premiums and claims are presented on a gross basis for both ceded and assumed reinsurance. Reinsurance assets or liabilities are derecognised when the contractual rights are extinguished or expire or when the contract is transferred to another party.

2.17 Share Capital and Dividend

Ordinary shares, non-cumulative non-convertible preference shares and perpetual capital securities are classified as equity on the balance sheet.

Incremental costs directly attributable to the issue of new capital securities are shown in equity as a deduction from the proceeds.

Where share capital recognised as equity is repurchased (treasury shares), the amount of the consideration paid, including directly attributable costs, is presented as a deduction from equity. Treasury shares which are subsequently reissued, sold or cancelled, are recognised as changes in equity.

Interim dividends on ordinary shares and dividends on preference shares are recorded in the year in which they are declared payable by the Board of Directors. Final dividends are recorded in the year when the dividends are approved by shareholders at the annual general meeting.

2.18 Leases

2.18.1 As Lessee

At the inception of a contract, the Group assesses if the contract contains a lease. A contract contains a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. Reassessment is only required when the terms and conditions of the contract are changed.

Right-of-Use Assets

The Group recognises a right-of-use (ROU) asset and lease liability at the date which the underlying asset is available for use. ROU assets are measured at cost which comprises the initial measurement of lease liabilities adjusted for any lease payments made at or before the commencement date and lease incentive received. Any initial direct costs that would not have been incurred if the lease had not been obtained are added to the carrying amount of the ROU assets.

2. Summary of Significant Accounting Policies (continued)

2.18 Leases (continued)

2.18.1 As Lessee (continued)

Right-of-Use Assets (continued)

These ROU assets are subsequently depreciated using the straight-line method from the commencement date to the earlier of the end of the useful life of the ROU asset or the end of the lease term.

ROU assets are presented within "Property, plant and equipment".

Lease Liabilities

The initial measurement of lease liability is measured at the present value of the lease payments discounted using the implicit rate in the lease, if the rate can be readily determined. If that rate cannot be readily determined, the Group shall use its incremental borrowing rate.

Lease liability is subsequently measured at amortised cost using the effective interest method. Lease liability shall be remeasured when there is modification in the scope or the consideration of the lease that was not part of the original term.

Short-Term Leases and Low-Value Assets

The Group has elected to not recognise ROU assets and lease liabilities for short-term leases that have lease terms of 12 months or less and leases of low-value leases, except for sublease arrangements. Lease payments relating to these leases are expensed to profit or loss on a straight-line basis over the lease term.

2.18.2 As Lessor

Rental income on tenanted areas of the buildings owned by the Group is recognised in the income statement on a straight-line basis over the term of the lease. Lease incentives granted are recognised as an integral part of the total rental income, over the term of the lease.

2.19 Recognition of Income and Expense

2.19.1 Interest Income and Expense

Interest income or expense is recognised using the effective interest method.

The effective interest rate is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument to the gross carrying amount of the financial asset or amortised cost of the financial liability.

In calculating the interest income and expense, the effective interest rate is applied to the gross carrying amount of the asset (when the asset is not credit-impaired) or to the amortised cost of the liability. However, for financial assets that have become credit-impaired subsequent to initial recognition, interest income is calculated by applying the effective interest rate to the amortised cost of the financial asset. If the asset is no longer credit-impaired, then the calculation of interest income reverts to the gross basis.

2.19.2 Premiums and Commissions from Insurance Business

Life Insurance Business

First year premiums of insurance policies are recognised from inception date and subsequent renewal premiums are recognised when due. Single premiums are recognised on the dates on which the policies are effective. Premiums from the investment-linked business, universal life and certain Takaful non-participating products are recognised as revenue when payment is received. Commission is recognised as an expense when incurred.

Non-Life Insurance Business

Premiums from the non-life insurance business are recognised as revenue upon commencement of insurance cover. Premiums pertaining to periods after the reporting date are adjusted through the movement in premium liabilities. Commission is recognised as an expense when incurred, typically upon the risk underwritten as reflected in the premium recognised.

Premiums ceded out and the corresponding commission income from non-life insurance contracts are recognised in the income statement upon receipt of acceptance confirmation from the ceding company or in accordance with provisions incorporated in the treaty contracts. Premiums ceded out pertaining to periods after the reporting date are adjusted through the movement in unexpired risk reserve.

2.19.3 Fees and Commissions

The Group earns fees and commissions from a range of services rendered to its customers. Fees and commissions are recognised when the Group has satisfied its performance obligations in providing the services to the customer. Transaction based fees and commissions are generally recognised upon the completion of a transaction. For services provided over a period of time or credit risk undertaken, fees and commissions are amortised over the relevant period.

Expenses are offset against gross fees and commissions in the income statement only when they are directly related.

2.19.4 Dividends

Dividends from equity securities, subsidiaries and associates are recognised when the right to receive payment is established.

2.19.5 Employee Benefits

The Group's compensation package for staff consists of base salaries, allowances, defined contribution plans such as the Central Provident Fund, defined benefit plans, commissions, cash bonuses, and share-based compensation plans. These are recognised in the income statement when incurred. Employee leave entitlements are estimated according to the terms of employment contract and accrued on the reporting date.

For defined benefit plans, the liability recognised in the balance sheet is the present value of the defined benefit obligation at the reporting date less the fair value of plan assets, adjusted for unrecognised actuarial gains or losses and past service costs. Remeasurements of defined benefit plans are recognised in OCI in the period in which they arise.

2. Summary of Significant Accounting Policies (continued)

2.19 Recognition of Income and Expense (continued)

2.19.5 Employee Benefits (continued)

Share-based compensation plans include the Bank's Share Option Schemes, the Employee Share Purchase Plan (ESP Plan) and the Deferred Share Plan (DSP). Equity instruments granted are recognised as expense in the income statement based on the fair value of the equity instrument at the date of the grant. The expense is recognised over the vesting period of the grant, with corresponding entries to equity.

At each reporting date, the Group revises its estimates of the number of equity instruments expected to be vested, and the impact of the change to the original estimates, if any, is recognised in the income statement, with a corresponding adjustment to equity over the remaining vesting period.

The Group accrues for interest on the monthly contributions made by employees to the savings-based ESP Plan. For the DSP, a trust is set up to administer the shares. The DSP Trust is consolidated in the Group's financial statements.

Proceeds received upon the exercise of options and acquisition rights, net of any directly attributable transaction costs, are credited to share capital.

2.20 Income Tax Expense

Income tax expense is recognised in the income statement except to the extent that it relates to items recognised directly in equity, in which case it is recognised in equity or in other comprehensive income.

Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

Deferred tax is recognised on temporary differences between the carrying amounts of assets and liabilities and the amounts used for tax computation. Deferred tax is not recognised for the following temporary differences: the initial recognition of goodwill, the initial recognition of assets or liabilities in a transaction that is not a business combination and that does not affect accounting or taxable profit, and differences relating to investments in subsidiaries, associates and joint ventures to the extent that they probably will not reverse in the foreseeable future. Deferred tax is measured at the tax rates that are expected to be applied to the temporary differences when they reverse, based on the laws that have been enacted or substantively enacted by the reporting date.

A deferred tax asset is recognised to the extent that it is probable that future taxable profits will be available for utilisation against the temporary differences. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

Unrecognised deferred tax assets are reassessed at each reporting date and recognised to the extent that it has become probable that future taxable profits will be available against which they can be used.

In determining the amount of current and deferred tax, the Group takes into account the impact of uncertain tax positions and whether additional taxes and interest may be due. The Group believes that its accruals for tax liabilities are adequate for all open tax years based on its assessment of many factors, including interpretations of tax law and prior experience. This assessment relies on estimates and assumptions and may involve a series of judgements about future events. New information may become available that causes the Group to change its judgement regarding the adequacy of existing tax liabilities; such changes to tax liabilities will impact tax expense in the period that such a determination is made.

2.21 Fiduciary Activities

The Group acts as trustees and in other fiduciary capacities that result in the holding or placing of assets on behalf of individuals, trusts, retirement benefit plans and other institutions. The assets and income from these assets do not belong to the Group, and are therefore excluded from these financial statements.

2.22 Earnings Per Share

The Group presents basic and diluted earnings per share data for its ordinary shares. Basic earnings per share is calculated by dividing the profit or loss attributable to ordinary shareholders of the Bank by the weighted-average number of ordinary shares outstanding during the year, adjusted for own shares held. Diluted earnings per share is determined by adjusting the profit or loss attributable to ordinary shareholders and the weighted-average number of ordinary shares outstanding, adjusted for own shares held, for the effects of all dilutive potential ordinary shares, which comprise share options granted to employees.

2.23 Segment Reporting

The Group's business segments represent the key customer and product groups, as follows: Global Consumer/Private Banking, Global Wholesale Banking, Global Treasury and Markets and Insurance. All operating segments' results are reviewed regularly by the senior management to make decisions about resources to be allocated to the segment and to assess its performance, and for which discrete financial information is available. In determining the segment results, balance sheet items are internally transfer priced and revenues and expenses are attributed to each segment based on internal management reporting policies. Transactions between business segments are recorded within the segment as if they are third party transactions and are eliminated on consolidation.

A geographical segment engages in providing products and services within a particular economic environment that is subject to different risks from those of other economic environments. Geographical segment information is prepared based on the country in which the transactions are booked and presented after elimination of intra-group transactions and balances.

2. Summary of Significant Accounting Policies (continued)

2.24 Government Grants

Government grants related to assets are initially recognised by deducting the grant in arriving at the carrying amount of the asset if there is reasonable assurance that they will be received and the Group will comply with the conditions associated with the grant. The grant is recognised in profit or loss over the life of a depreciable asset through reduced depreciation expense.

Grants that compensate the Group for expenses incurred are recognised in profit or loss by deducting the grant from the related expense.

Grants that are not related to assets or expenses incurred are recognised in profit or loss as other income.

2.25 Critical Accounting Estimates and Judgements

Certain estimates are made in the preparation of the financial statements. These often require management judgement in determining the appropriate methodology for valuation of assets and liabilities. A brief description of the Group's critical accounting estimates is set out below.

2.25.1 Impairment of Financial Assets

In determining whether the credit risk of the Group's financial exposures has increased significantly since initial recognition, the Group considers quantitative and qualitative information such as the Group's historical credit assessment experience and available forward-looking information. Expected credit losses (ECL) estimates are based on probability-weighted forward-looking economic scenarios. The parameters used in ECL measurement (probability of default, loss given default and exposure at default) incorporates forward-looking information. The determination of the forward-looking economic scenarios and incorporation of forward-looking information into ECL measurement requires management to exercise judgement based on its assessment of current macroeconomic conditions.

Allowances for Non-Credit-Impaired Loans to Customers

As of 31 December 2022, the forward-looking scenarios used in the ECL model have been updated from those as of 31 December 2021, which reflects the latest macroeconomic view. Additionally, post-model adjustments were made to address events that are not incorporated in the baseline ECL. These post-model adjustments were reviewed and approved in accordance with the Group's ECL framework, and include:

- Post-model adjustments were made to more accurately reflect the continued weakness of certain industries and segments due to either travel restrictions or geopolitical events.
- As indicated in Note 2.12.3, Stages 1 and 2 ECL are modelled based on a central baseline forecast with its upper and lower bound to represent forecasting ranges. However, the central forecast with its upper/lower range may not factor in significant emerging risks and macroeconomic events that are expected but uncertain in terms of impact and timing. Such events have the potential to trigger a recession but are not adequately captured in existing forecasts. Therefore, the Group added an additional scenario in the computation of ECL. As such events are global in nature, these are modelled as a top-down post-model adjustment.

Sensitivity of ECL

ECL is estimated to increase by $1,310 million (2021: $1,286 million) should all the exposures in Stage 1 (12-month ECL) move to Stage 2 (lifetime ECL).

The Group's allowances for financial assets are disclosed in Note 30.

Allowances for Credit-Impaired Loans to Customers

In respect of credit-impaired exposures, management judgement and estimation are applied in, amongst others, identifying impaired exposures, estimating the related recoverable cash flows and where applicable, determining collateral values and timing of realisation. Judgements and assumptions in respect of these matters have been updated to reflect the relevant information as of 31 December 2022.

The Group's allowances for credit-impaired loans to customers are disclosed in Note 28.

2.25.2 Fair Value Estimation

Fair value is derived from quoted market prices or valuation techniques which maximise the use of relevant observable inputs and minimise the use of unobservable inputs. The fair values of financial instruments that are not traded in an active market (for example, over-the-counter derivatives) are determined by using valuation techniques. Where unobservable data inputs have a significant impact on the value obtained from the valuation model, such a financial instrument is initially recognised at the transaction price, which is the best indicator of fair value. The difference between the transaction price and the model value, commonly referred to as "day one profit or loss" is not recognised immediately in the income statement.

The timing of recognition of deferred day one profit or loss is determined individually. It is amortised over the life of the transaction, released when the instrument's fair value can be determined using market observable inputs, or when the transaction is derecognised.

2. Summary of Significant Accounting Policies (continued)

2.25 Critical Accounting Estimates and Judgements (continued)

2.25.3 Liabilities of Insurance Business

The estimation of the ultimate liabilities arising from claims made under life and non-life insurance contracts is one of the Group's critical accounting estimates. There are several sources of uncertainty that need to be considered in the estimation of the liabilities that the Group will ultimately be required to pay as claims.

For life insurance contracts, estimates are made for future deaths, morbidity, disabilities, lapses, voluntary terminations, investment returns, administration expenses and discount rates. The Group relies on standard industry and national mortality and morbidity tables which represent historical experience, and makes appropriate adjustments for its respective risk exposures and portfolio experience in deriving the mortality and morbidity estimates. These estimates provide the basis for the valuation of the future benefits to be paid to policyholders, and to ensure adequate provisions which are monitored against current and future premiums. For those contracts that insure risk on longevity and disability, estimates are made based on recent past experience and emerging trends. Epidemics and changing patterns of lifestyle could result in significant changes to the expected future exposures. Each year, these estimates are assessed for adequacy and changes will be reflected as adjustments to insurance contract liabilities.

For non-life insurance contracts, estimates have to be made for both the expected ultimate cost of claims reported at the reporting date and for the expected ultimate cost of claims incurred but not yet reported (IBNR) at the reporting date.

Generally, claim liabilities are determined based upon the Group's past claims experience, existing knowledge of events, the terms and conditions of the relevant policies and interpretation of circumstances. Estimations are made with reference to the past experience with similar cases, historical claims development trends, legislative changes, judicial decisions and economic conditions. It is certain that actual claim liabilities will not exactly develop as projected and may vary from the Group's projections.

The estimates of claim liabilities are therefore sensitive to various factors and uncertainties. The establishment of technical provisions is an inherently uncertain process and, as a consequence of this uncertainty, the eventual settlement of claim liabilities may vary from the initial estimates.

2.25.4 Impairment of Goodwill and Other Intangible Assets

The Group performs an annual review of the carrying amount of its goodwill and other intangible assets, against the recoverable amounts of the CGU to which the goodwill and other intangible assets have been allocated. Recoverable amounts of banking CGUs are determined based on the present value of estimated future cash flows expected to arise from the respective CGUs' continuing operations. The recoverable amount of insurance CGU is determined using the appraisal value method. Management exercises its judgement in estimating the future cash flows, growth rates and discount rates used in computing the recoverable amounts of the CGUs.

In light of current macroeconomic conditions, management reassessed the assumptions applied in estimating the future cash flows, including growth rates and discount rates used in computing the recoverable amount, and determined that no impairment should be recognised during the year.

2.25.5 Income Taxes

The Group is subject to income taxes in several jurisdictions. Significant judgement is required in determining the capital allowances and deductibility of certain expenses in estimating the income tax liabilities. There are many transactions and calculations for which the ultimate tax determination is uncertain during the ordinary course of business. The Group recognises liabilities for anticipated tax issues based on estimates of whether additional taxes will be due. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact the income tax and deferred tax balances in the period in which the determination is made.

2.25.6 Insurance Contract Classification

Contracts are classified as insurance contracts where significant insurance risk is transferred from the policyholder to the Group. The Group exercises judgement about the level of insurance risk transferred. The level of insurance risk is assessed by considering whether upon the occurrence of the insured event, the Group is required to pay significant additional benefits. These additional benefits include claims liability and assessment costs, but exclude the loss of the ability to charge the policyholder for future services. The assessment covers the whole of the expected term of the contract where such additional benefits could be payable. Some contracts contain options for the policyholder to purchase insurance risk protection at a later date; these insurance risks are deemed not significant.

3. Net Interest Income

	GROUP		BANK	
	2022	2021	2022	2021
	$ million	$ million	$ million	$ million
Interest income				
Loans to customers	**8,852**	5,786	**5,555**	3,103
Placements with and loans to banks	**1,314**	448	**1,153**	318
Other interest-earning assets	**1,424**	1,191	**713**	498
	11,590	7,425	**7,421**	3,919
Interest expense				
Deposits of non-bank customers	**(3,223)**	(1,300)	**(1,866)**	(468)
Deposits and balances of banks	**(195)**	(68)	**(541)**	(66)
Other borrowings	**(484)**	(202)	**(462)**	(174)
	(3,902)	(1,570)	**(2,869)**	(708)
Analysed by classification of financial instruments				
Income – Assets at amortised cost	**9,976**	5,963	**6,620**	3,249
Income – Assets at FVOCI	**1,322**	1,173	**576**	455
Income – Assets mandatorily measured at FVTPL	**292**	289	**225**	215
Expense – Liabilities not at fair value through profit or loss	**(3,892)**	(1,565)	**(2,859)**	(703)
Expense – Liabilities mandatorily measured at FVTPL	**(10)**	(5)	**(10)**	(5)
Net interest income	**7,688**	5,855	**4,552**	3,211

Included in interest income were interest of $28 million (2021: $31 million) and $13 million (2021: $15 million) on impaired assets for the Group and Bank respectively.

The Group's and Bank's interest expenses on lease liabilities were not significant for the financial years ended 31 December 2022 and 31 December 2021.

4. Profit from Life Insurance

	GROUP 2022 $ million	GROUP 2021 $ million
Income		
Annual	**8,332**	8,209
Single	**9,840**	10,380
Gross premiums	**18,172**	18,589
Reinsurance	**(695)**	(602)
Premium income (net)	**17,477**	17,987
Investment income (net) [1]	**(5,232)**	1,519
Total income	**12,245**	19,506
Expenses		
Gross claims, surrenders and annuities	**(10,933)**	(11,215)
Claims, surrenders and annuities recovered from reinsurers	**535**	443
Net claims, surrenders and annuities	**(10,398)**	(10,772)
Net change in life insurance contract liabilities	**832**	(4,196)
Commission and agency expenses	**(1,292)**	(1,401)
Depreciation – property, plant and equipment (Note 34)	**(78)**	(71)
Other expenses	**(310)**	(1,845)
Total expenses	**(11,246)**	(18,285)
Surplus from operations	**999**	1,221
Income tax expense	**(28)**	(84)
Profit from life insurance	**971**	1,137

(1) Includes net loss from financial instruments measured at fair value through profit or loss of $5.58 billion (2021: net gain of $1.05 billion).

Profit from life insurance is presented net of tax in the income statement as the tax liability is borne by the respective life funds.

5. Fees and Commissions (Net)

	GROUP		BANK	
	2022 $ million	2021 $ million	2022 $ million	2021 $ million
Gross fee and commission income				
Brokerage	**103**	141	**2**	2
Credit card	**337**	287	**295**	246
Fund management	**119**	133	**–**	–
Guarantees	**14**	14	**6**	7
Investment banking	**100**	106	**87**	89
Loan-related	**180**	179	**118**	116
Service charges	**87**	79	**64**	60
Trade-related and remittances	**298**	286	**208**	199
Wealth management [1]	**919**	1,310	**302**	406
Others	**50**	46	**10**	6
	2,207	2,581	**1,092**	1,131
Fee and commission expense	**(356)**	(336)	**(213)**	(162)
Fees and commissions (net)	**1,851**	2,245	**879**	969

(1) Includes trust and custodian fees.

6. Dividends

	GROUP		BANK	
	2022 $ million	2021 $ million	2022 $ million	2021 $ million
Subsidiaries	**–**	–	**1,261**	861
Associates	**–**	–	**138**	130
FVTPL securities	**95**	75	**82**	57
FVOCI securities	**30**	38	**#**	1
	125	113	**1,481**	1,049

7. Net Trading Income

	GROUP		BANK	
	2022	2021	2022	2021
	$ million	$ million	$ million	$ million
Foreign exchange [1]	**761**	389	**308**	52
Hedging activities [2]				
Hedging instruments	**65**	(145)	**(52)**	(232)
Hedged items	**(61)**	145	**56**	231
Net gain/(loss) from fair value hedge ineffectiveness	**4**	(#)	**4**	(1)
Net gain from interest rate and other derivative financial instruments [3]	**259**	341	**127**	202
Net (loss)/gain from non-derivative financial instruments [4]	**(191)**	45	**(104)**	8
Others	**1**	(12)	**1**	(12)
	834	763	**336**	249

(1) "Foreign exchange" include gains and losses from spot and forward contracts and translation of foreign currency denominated assets and liabilities.
(2) "Hedging activities" arise from the use of derivatives to hedge exposures to interest rate and foreign exchange risks, which are inherent in the underlying "Hedged items".
(3) "Interest rate and other derivatives" include gains and losses from interest rate derivative instruments, equity options and other derivative instruments.
(4) "Non-derivative financial instruments" include trading gains and losses from fair value financial instruments which are either designated at initial recognition or mandatorily measured at FVTPL.

8. Other Income

	GROUP		BANK	
	2022	2021	2022	2021
	$ million	$ million	$ million	$ million
Disposal of investment securities	**(206)**	92	**(149)**	34
Disposal of plant and equipment	**(1)**	(1)	**(1)**	(1)
Disposal of properties	**100**	108	**25**	29
Rental and property-related income	**78**	66	**55**	33
Others	**17**	21	**72**	48
	(12)	286	**2**	143

9. Staff Costs and Other Operating Expenses

		GROUP		BANK	
		2022 $ million	2021 $ million	2022 $ million	2021 $ million
9.1	**Staff costs** [1]				
	Salaries and other costs	**2,909**	2,723	**1,031**	974
	Share-based expenses	**79**	72	**28**	26
	Contribution to defined contribution plans	**236**	223	**88**	85
		3,224	3,018	**1,147**	1,085
	Directors' emoluments:				
	Remuneration of Bank's directors	**2**	4	**2**	4
	Fees of Bank's directors [2]	**7**	6	**5**	4
		9	10	**7**	8
	Total staff costs	**3,233**	3,028	**1,154**	1,093
9.2	**Other operating expenses**				
	Property and equipment: [3]				
	Depreciation	**426**	412	**201**	190
	Maintenance and rental [4]	**163**	152	**104**	97
	Others [5]	**330**	304	**201**	178
		919	868	**506**	465
	Auditors' remuneration:				
	Payable to auditor of the Bank	**7**	6	**3**	3
	Payable to associated firms of auditor of the Bank	**4**	4	**1**	#
	Payable to other auditors	**#**	#	**#**	#
		11	10	**4**	3
	Other fees:				
	Payable to auditor of the Bank [6]	**3**	2	**2**	#
	Payable to associated firms of auditor of the Bank	**1**	1	**#**	1
		4	3	**2**	1
	Hub processing charges	**–**	–	**326**	287
	General insurance claims	**119**	98	**–**	–
	Others [7]	**740**	757	**400**	375
		859	855	**726**	662
	Total other operating expenses	**1,793**	1,736	**1,238**	1,131
9.3	**Staff costs and other operating expenses**	**5,026**	4,764	**2,392**	2,224

(1) Grants provided by governments to provide wage support to employers due to the COVID-19 pandemic are recognised as a reduction in staff costs.
(2) Includes remuneration shares amounting to $1 million (2021: $1 million) issued to directors.
(3) Direct operating expenses on investment property that generated rental income for the Group and the Bank amounted to $18 million and $5 million (2021: $18 million and $6 million) respectively. Direct operating expenses on investment property that did not generate rental income for the Group and the Bank amounted to $2 million and $# million (2021: $3 million and $2 million) respectively.
(4) Includes expenses relating to short-term leases of $11 million and $5 million for the Group and the Bank (2021: $11 million and $5 million) respectively, and low-value assets of $4 million and $1 million (2021: $5 million and $1 million) for the Group and the Bank respectively.
(5) Property tax rebates received from government are recognised as a reduction in property and equipment expense.
(6) Other fees payable to auditor of the Bank relate mainly to engagements in connection with the Bank's note issuances, taxation compliance and advisory services, miscellaneous attestations and audit certifications.
(7) Included in other expenses were printing, stationery, communication, advertisement and promotion expenses and legal and professional fees.

10. Allowances for Loans and Other Assets

	GROUP		BANK	
	2022 $ million	2021 $ million	2022 $ million	2021 $ million
Allowances/(write-back):				
Impaired loans (Note 28)	**136**	852	**40**	354
Impaired other assets	**80**	3	**1**	3
Non-impaired loans	**369**	15	**169**	81
Non-impaired other assets	**(1)**	3	**#**	4
Allowances for loans and other assets	**584**	873	**210**	442

11. Income Tax Expense

	GROUP		BANK	
	2022 $ million	2021 $ million	2022 $ million	2021 $ million
Current tax expense	**1,144**	883	**533**	386
Deferred tax credit (Note 20)	**(52)**	(173)	**(24)**	(106)
	1,092	710	**509**	280
Over provision in prior years	**(35)**	(62)	**(6)**	(51)
Charge to income statements	**1,057**	648	**503**	229

The tax on operating profit differs from the amount that would arise using the Singapore corporate tax rate as follows:

	GROUP		BANK	
	2022 $ million	2021 $ million	2022 $ million	2021 $ million
Operating profit after allowances and amortisation	**5,961**	4,856	**4,648**	2,955
Prima facie tax calculated at tax rate of 17%	**1,013**	826	**790**	502
Effect of:				
Different tax rates in other countries	**190**	103	**43**	22
Income not subject to tax	**(12)**	(35)	**(219)**	(176)
Income taxed at concessionary rates	**(135)**	(94)	**(126)**	(80)
Singapore life insurance funds	**(51)**	(89)	**–**	–
Non-deductible expenses and losses	**17**	(19)	**#**	(8)
Others	**70**	18	**21**	20
	1,092	710	**509**	280
The deferred tax credit comprised:				
Accelerated tax depreciation	**3**	7	**(2)**	7
Depreciable assets acquired in business combinations	**(10)**	(11)	**(1)**	(2)
Tax losses	**(29)**	1	**(7)**	–
Unrealised losses on financial assets	**(9)**	(18)	**(4)**	(7)
Allowances for assets	**(53)**	(146)	**(24)**	(101)
Other temporary differences	**46**	(6)	**14**	(3)
	(52)	(173)	**(24)**	(106)

12. Earnings Per Share

	GROUP	
	2022 $ million	2021 $ million
Profit attributable to equity holders of the Bank	**5,748**	4,858
Perpetual capital securities distributions declared in respect of the period	**(56)**	(46)
Profit attributable to ordinary equity holders of the Bank after other equity distributions	**5,692**	4,812
Weighted average number of ordinary shares (million)		
For basic earnings per share	**4,494**	4,489
Adjustment for assumed conversion of share options and acquisition rights	**3**	5
For diluted earnings per share	**4,497**	4,494
Earnings per share ($)		
Basic	**1.27**	1.07
Diluted	**1.27**	1.07

Basic earnings per share is calculated by dividing profit attributable to ordinary equity holders of the Bank net of preference dividends and perpetual capital securities distributions by the weighted average number of ordinary shares in issue during the financial year.

For the purpose of calculating the diluted earnings per ordinary share, the weighted average number of ordinary shares in issue is adjusted to take into account the dilutive effect arising from share options and acquisition rights, with the potential ordinary shares weighted for the period outstanding.

13. Share Capital

13.1 Share Capital

GROUP AND BANK	2022 Shares (million)	2021 Shares (million)
Ordinary shares		
At 1 January	**4,515**	4,476
Shares issued in lieu of ordinary dividends	**–**	32
Shares issued to non-executive directors	**#**	#
Deferred Share Plan	**–**	7
Share Option Scheme	**–**	#
At 31 December	**4,515**	4,515
Treasury shares		
At 1 January	**(23)**	(2)
Share buyback	**(21)**	(34)
Share Option Scheme	**6**	7
Share Purchase Plan	**10**	6
Treasury shares transferred to DSP Trust	**8**	–
At 31 December	**(20)**	(23)

GROUP AND BANK	2022 $ million	2021 $ million
Issued share capital, at 31 December	**18,048**	18,040

(1) # represents less than 500,000 shares.

The holders of ordinary shares (excluding treasury shares) are entitled to receive dividends as declared from time to time and to one vote per share at meetings of the Bank. All shares (excluding treasury shares) rank equally with regard to the Bank's residual assets.

The issued ordinary shares have no par value and qualify as Common Equity Tier 1 capital for the Group.

All issued shares were fully paid.

Subsidiaries and associates of the Group did not hold shares in the capital of the Bank as at 31 December 2022 and 31 December 2021.

13.2 Share Option Scheme

Executives of the Group ranked Manager and above and non-executive directors of the Group are eligible to participate in the OCBC Share Option Scheme 2001 (2001 Scheme). The Bank has ceased granting share options under the 2001 Scheme effective from financial year 2018 remuneration. Share options granted in prior years continue to be outstanding until the options lapse or are exercised by the recipients. Options granted to Group executives are exercisable for up to 10 years, while options granted to non-executive Directors are exercisable for up to five years.

For the financial years ended 31 December 2022 and 31 December 2021, no options were granted under the 2001 Scheme.

13. Share Capital (continued)

13.2 Share Option Scheme (continued)

Movements in the number of shares under options and the average acquisition prices are as follows:

	2022		2021	
	Number of shares under options ('000)	Average price	Number of shares under options ('000)	Average price
At 1 January	**25,111**	**$10.450**	32,914	$10.239
Exercised	**(6,542)**	**$9.520**	(7,364)	$9.367
Forfeited/lapsed	**(192)**	**$12.585**	(439)	$12.753
At 31 December	**18,377**	**$10.760**	25,111	$10.450
Exercisable options at 31 December	**18,377**	**$10.760**	25,111	$10.450
Average share price underlying the options exercised		**$12.245**		$11.841

At 31 December 2022, the weighted average remaining contractual life of outstanding share options was 3.5 years (2021: 4.2 years). The aggregate number of shares under outstanding options held by a director of the Bank was 310,824 (2021: nil).

13.3 Employee Share Purchase Plan

The OCBC Employee Share Purchase Plan (ESP Plan) was implemented for all employees of the participating companies in the Group, including executive Directors.

The ESP Plan is a saving-based share ownership plan to help employees own ordinary shares in the Bank through their monthly contributions via deductions from payroll and/or from Central Provident Fund. The employees have the option to convert the contributions to ordinary shares after one year or to withdraw the contributions at any time. As a further incentive to employees to enrol in the ESP Plan, the Bank pays interest on the amounts saved at a preferential interest rate. The duration of the offering period is 24 months.

In July 2022, the Bank launched its seventeenth offering of ESP Plan for Group employees, which commenced on 1 September 2022 and will expire on 31 August 2024. Under the offering, the Bank granted rights to acquire 8,738,996 (2021: 8,469,427) ordinary shares in the Bank. For the financial years ended 31 December 2022 and 31 December 2021, no rights were granted to directors of the Bank to acquire ordinary shares in the Bank. The fair value of rights, determined using the binomial valuation model, was $7.9 million (2021: $10.8 million). Significant inputs to the valuation model are set out below:

	2022	2021
Acquisition price ($)	**12.07**	11.58
Share price ($)	**12.24**	12.42
Expected volatility based on last 250 days historical volatility as of acceptance date (%)	**16.51**	17.11
Risk-free rate based on 2-year swap rate (%)	**2.45**	0.35
Expected dividend yield (%)	**4.05**	4.00

13. Share Capital (continued)

13.3 Employee Share Purchase Plan (continued)

Movements in the number of acquisition rights of the ESP Plan are as follows:

	2022		2021	
	Number of acquisition rights ('000)	Average price	Number of acquisition rights ('000)	Average price
At 1 January	**17,850**	**$10.147**	18,090	$9.761
Exercised and conversion upon expiry	**(9,581)**	**$9.036**	(6,467)	$10.982
Forfeited	**(2,100)**	**$11.129**	(2,242)	$10.039
Subscription	**8,739**	**$12.070**	8,469	$11.580
At 31 December	**14,908**	**$11.851**	17,850	$10.147
Average share price underlying acquisition rights exercised/converted		**$11.986**		$12.041

At 31 December 2022, the weighted average remaining contractual life of outstanding acquisition rights was 1.2 years (2021: 1.0 years). At 31 December 2022 and 31 December 2021, no acquisition rights were held by directors of the Bank.

13.4 Deferred Share Plan

The OCBC Deferred Share Plan (DSP) aims to increase the performance-orientation and retention factor in compensation packages of executives, and foster an ownership culture within the organisation. It also aligns the interests of executives with the sustained business performance of the Bank. Group executives holding the rank or equivalent rank of Assistant Manager and above, and any Group Executive Director selected by the Remuneration Committee, are eligible to participate in the DSP.

Half (50%) of the share awards will vest after two years with the remaining 50% vesting at the end of three years in accordance with the guidelines established under the DSP. Prior to the vesting date, the executives will not be accorded voting rights for the shares.

The Bank adopted the OCBC Deferred Share Plan 2021 (DSP 2021) on 29 April 2021 to replace the DSP, which was terminated on the same day. The termination of the DSP does not affect the awards which have been granted, whether such awards have been released (whether fully or partially) or not. By implementing the DSP 2021, which permits new ordinary shares to be issued, the Bank has greater flexibility in its methods for delivery of ordinary shares, as this can be effected through an issue of new ordinary shares, in addition to the transfer of existing ordinary shares (including treasury shares).

During the year, 9,734,401 (2021: 7,188,161) deferred shares were released to employees under the DSP. No deferred shares were released to directors of the Bank who held office at 31 December 2022 and 31 December 2021. At 31 December 2022 and 31 December 2021, no directors of the Bank had deemed interest in deferred shares.

Total awards of 9,232,761 (2021: 7,763,260) ordinary shares were granted and accepted by eligible executives under the DSP 2021 for the financial year ended 31 December 2022. No awards of ordinary shares were granted and accepted by directors of the Bank for the financial year ended 31 December 2022 and 31 December 2021. The fair value of the shares at grant date was $108.1 million (2021: $94.2 million).

The accounting treatment of share-based compensation plan is set out in Note 2.19.5.

14. Other Equity Instruments

	Note	GROUP AND BANK 2022 $ million	2021 $ million
SGD1,000 million 4.0% non-cumulative non-convertible perpetual capital securities (4.0% Capital Securities)	(a)	**998**	998
SGD200 million 3.0% non-cumulative non-convertible perpetual capital securities (3.0% Capital Securities)	(b)	**200**	200
SGD500 million 3.9% non-cumulative non-convertible perpetual capital securities (3.9% Capital Securities)	(c)	**498**	–
		1,696	1,198

(a) The 4.0% Capital Securities issued by the Bank on 24 August 2018 are non-cumulative non-convertible perpetual capital securities. They qualify as Additional Tier 1 capital of the Bank under the requirements of MAS.

The 4.0% Capital Securities may, subject to MAS approval, be redeemed at the option of the Bank: (i) on 24 August 2023 (the First Reset Date) or any distribution payment date falling after the First Reset Date; (ii) upon the occurrence of a tax event; or (iii) if the 4.0% Capital Securities would no longer qualify as eligible capital. The terms of the 4.0% Capital Securities may also be varied, subject to MAS approval, so that the 4.0% Capital Securities remain as Additional Tier 1 capital of the Bank. If the Bank is determined by the MAS to be non-viable, the 4.0% Capital Securities will be written off in whole or in part.

The 4.0% Capital Securities pay distributions to holders semi-annually in arrear in February and August at a fixed rate of 4.0% per annum from the issue date to the First Reset Date. If the 4.0% Capital Securities are not redeemed on the First Reset Date, the distribution rate will be reset on the First Reset Date and each date falling every five years thereafter to a fixed rate per annum equal to the aggregate of the then-prevailing five-year SGD Swap Offer Rate and the initial spread of 1.811%. Distributions may be cancelled by the Bank at its sole discretion, subject to the provisions of the terms and conditions. The Bank is also not obliged to pay distributions to holders under certain circumstances. Any distributions which are not paid, in accordance with the terms and conditions of the 4.0% Capital Securities, are non-cumulative and will not compound. These constitute unsecured and subordinated obligations, ranking senior only to ordinary shares of the Bank.

(b) The 3.0% Capital Securities issued by the Bank on 30 September 2020 are non-cumulative non-convertible perpetual capital securities. They qualify as Additional Tier 1 capital of the Bank under the requirements of MAS.

The 3.0% Capital Securities may, subject to MAS approval, be redeemed at the option of the Bank on or after 30 September 2030 (First Reset Date), and each date falling every 10 years after the First Reset Date. The terms include a non-viability loss-absorbing feature. Under this feature, OCBC must write off the securities when: (1) the MAS notifies the Bank in writing that it is of the opinion that a write-off is necessary, without which the Bank would become non-viable; or (2) a decision by the MAS to make a public sector injection of capital, or equivalent support, without which the Bank would have become non-viable, as determined by the MAS. The Bank will, in consultation with or as directed by MAS, determine the amount to be written off in order for the non-viability event to cease to continue. In addition to the first call in 2030, the 3.0% Capital Securities may also be redeemed if a qualifying tax event or a change of qualification event occurs.

The 3.0% Capital Securities bear a fixed distribution rate of 3.0% per annum from the issue date to the First Reset Date and will be reset every 10 years thereafter to a fixed rate equal to the then-prevailing 10-year SGD Swap Offer Rate plus 2.19%. The non-cumulative distributions may only be paid out of distributable reserves semi-annually in March and September, unless cancelled by the Bank at its option. These constitute unsecured and subordinated obligations, ranking senior only to ordinary shares of the Bank.

14. Other Equity Instruments (continued)

(c) The 3.9% Capital Securities issued by the Bank on 8 June 2022 are non-cumulative non-convertible perpetual capital securities. They qualify as Additional Tier 1 capital of the Bank under the requirements of MAS.

The 3.9% Capital Securities may, subject to MAS approval, be redeemed at the option of the Bank on 8 June 2027 (First Reset Date), or any distribution payment date falling after the First Reset Date. The terms include a non-viability loss-absorbing feature. Under this feature, OCBC must write off the securities when: (1) the MAS notifies the Bank in writing that it is of the opinion that a write-off is necessary, without which the Bank would become non-viable; or (2) a decision by the MAS to make a public sector injection of capital, or equivalent support, without which the Bank would have become non-viable, as determined by the MAS. The Bank will, in consultation with or as directed by MAS, determine the amount to be written off in order for the non-viability event to cease to continue. In addition to the first call in 2027, the 3.9% Capital Securities may also be redeemed if a qualifying tax event or a change of qualification event occurs.

The 3.9% Capital Securities bear a fixed distribution rate of 3.9% per annum from the issue date to the First Reset Date and will be reset every five years thereafter to a fixed rate equal to the then-prevailing five-year SORA-OIS rate plus 1.416%. The non-cumulative distributions may only be paid out of distributable reserves semi-annually in June and December, unless cancelled by the Bank at its option. These constitute unsecured and subordinated obligations, ranking senior only to ordinary shares of the Bank.

15. Capital Reserves

	GROUP		BANK	
	2022 $ million	2021 $ million	2022 $ million	2021 $ million
At 1 January	**782**	1,229	**559**	994
Share-based payments for staff costs	**8**	9	**8**	9
Shares transferred to DSP Trust	**(113)**	(93)	**–**	–
Shares vested under DSP Scheme	**103**	73	**–**	–
Transfer from/(to) unappropriated profit (Note 16.1)	**19**	(423)	**–**	(431)
Transfer to share capital	**(7)**	(13)	**(7)**	(13)
At 31 December	**792**	782	**560**	559

Capital reserves include regulatory loss allowance reserve and statutory reserves set aside by the Group's banking and stockbroking entities in accordance with the respective laws and regulations. Capital reserves also include the Bank's employee share schemes' reserves and deferred shares held by DSP Trust.

16. Revenue Reserves

		GROUP		BANK	
	Note	2022 $ million	2021 $ million	2022 $ million	2021 $ million
Unappropriated profit	16.1	**33,984**	30,785	**16,119**	14,535
General reserves	16.2	**1,355**	1,349	**1,406**	1,400
Cash flow hedge reserves	16.3	**(3)**	(1)	**(28)**	(7)
Currency translation reserves	16.4	**(1,778)**	(336)	**(210)**	(101)
Own credit reserves		**(1)**	(2)	**(1)**	(2)
At 31 December		**33,557**	31,795	**17,286**	15,825

16. Revenue Reserves (continued)

16.1 Unappropriated Profit

	GROUP		BANK	
	2022 $ million	2021 $ million	2022 $ million	2021 $ million
Profit attributable to equity holders of the Bank	**5,748**	4,858	**4,145**	2,726
Add:				
Unappropriated profit at 1 January	**30,785**	27,321	**14,535**	13,235
Total amount available for appropriation	**36,533**	32,179	**18,680**	15,961
Appropriated as follows:				
Ordinary dividends:				
Final tax-exempt dividend of 28 cents paid for the previous financial year (2021: tax-exempt dividend of 15.9 cents)	**(1,260)**	(712)	**(1,260)**	(712)
Interim tax-exempt dividend of 28 cents paid for the current financial year (2021: tax-exempt dividend of 25 cents)	**(1,260)**	(1,128)	**(1,260)**	(1,128)
Distributions for other equity instruments:				
4.0% perpetual capital securities	**(40)**	(40)	**(40)**	(40)
3.0% perpetual capital securities	**(6)**	(6)	**(6)**	(6)
3.9% perpetual capital securities	**(10)**	–	**(10)**	–
Transfer (to)/from:				
Capital reserves (Note 15)	**(19)**	423	**–**	431
Fair value reserves	**37**	64	**8**	23
General reserves (Note 16.2)	**7**	6	**7**	6
Others	**2**	(1)	**(#)**	–
	(2,549)	(1,394)	**(2,561)**	(1,426)
At 31 December	**33,984**	30,785	**16,119**	14,535

At the annual general meeting to be held, a final tax-exempt dividend of 40 cents per ordinary share in respect of the financial year ended 31 December 2022, totalling $1,798 million, will be proposed. The dividends will be accounted for as a distribution in the 2023 financial statements.

16. Revenue Reserves (continued)

16.2 General Reserves

	GROUP		BANK	
	2022 $ million	2021 $ million	2022 $ million	2021 $ million
At 1 January	**1,349**	1,345	**1,400**	1,396
DSP reserve from dividends on unvested shares	**13**	10	**13**	10
Transfer to unappropriated profit (Note 16.1)	**(7)**	(6)	**(7)**	(6)
At 31 December	**1,355**	1,349	**1,406**	1,400

The general reserves have not been earmarked for any specific purpose, and include merger reserves arising from common control transactions, as well as dividends on unvested shares under the DSP.

16.3 Cash Flow Hedge Reserves

The cash flow hedge reserves comprise the effective portion of the cumulative net change in the fair value of hedging instruments used in cash flow hedges pending subsequent recognition of the hedged cash flows. The cash flow hedges principally consist of interest rate contracts that are used to hedge against the variability in cash flows of certain floating rate liabilities.

16.4 Currency Translation Reserves

	GROUP		BANK	
	2022 $ million	2021 $ million	2022 $ million	2021 $ million
At 1 January	**(336)**	(658)	**(101)**	(67)
Movements for the year	**(1,471)**	389	**(111)**	(33)
Gain/(loss) from foreign currency net investment hedges	**29**	(67)	**2**	(1)
At 31 December	**(1,778)**	(336)	**(210)**	(101)

Currency translation reserves comprise differences arising from the translation of the net assets of foreign operations and the effective portion of the hedge on exposure in foreign operations.

Refer to Note 38.3 Currency risk – Structural foreign exchange risk for management of structural foreign exchange risk.

17. Deposits and Balances of Non-Bank Customers and Banks

	GROUP		BANK	
	2022 $ million	2021 $ million	2022 $ million	2021 $ million
Deposits of non-bank customers				
Current accounts	**112,245**	138,077	**65,250**	72,297
Savings deposits	**69,036**	78,566	**57,364**	64,711
Term deposits	**128,443**	86,046	**65,764**	49,008
Structured deposits	**4,972**	5,292	**1,693**	2,605
Certificates of deposit issued	**23,979**	25,566	**23,445**	25,060
Other deposits	**11,406**	8,848	**9,794**	7,532
	350,081	342,395	**223,310**	221,213
Deposits and balances of banks	**10,046**	8,239	**7,691**	6,708
	360,127	350,634	**231,001**	227,921

18. Derivative Financial Instruments

The derivative financial instruments shown in the following tables are held for both trading and hedging purposes. The contractual or underlying principal amounts of these derivative financial instruments and their corresponding gross positive (derivative receivables) and negative (derivative payables) fair values at the reporting date are analysed below.

	2022			2021		
GROUP ($ million)	Principal notional amount	Derivative receivables	Derivative payables	Principal notional amount	Derivative receivables	Derivative payables
Foreign exchange derivatives (FED)						
Forwards	**45,985**	**473**	**512**	46,848	344	339
Swaps	**437,131**	**5,734**	**6,076**	433,075	3,359	3,071
OTC options	**66,376**	**495**	**476**	72,241	241	240
Exchange traded futures	**–**	**–**	**–**	27	#	–
	549,492	**6,702**	**7,064**	552,191	3,944	3,650
Interest rate derivatives (IRD)						
Swaps	**506,660**	**8,110**	**8,069**	450,397	4,231	4,342
OTC options	**12,276**	**62**	**72**	4,243	24	28
Exchange traded options	**67**	**1**	**–**	–	–	–
Exchange traded futures	**12,499**	**10**	**1**	8,625	1	2
	531,502	**8,183**	**8,142**	463,265	4,256	4,372
Equity derivatives						
Swaps	**3,688**	**369**	**508**	5,685	443	470
OTC options	**5,339**	**231**	**200**	10,945	543	498
Exchange traded futures	**216**	**1**	**1**	286	#	#
Others	**103**	**#**	**7**	–	–	–
	9,346	**601**	**716**	16,916	986	968
Credit derivatives						
Swaps – protection buyer	**3,993**	**6**	**37**	1,552	3	20
Swaps – protection seller	**3,310**	**30**	**6**	1,171	19	3
	7,303	**36**	**43**	2,723	22	23
Other derivatives						
Precious metals	**741**	**9**	**9**	800	7	8
OTC options	**8,544**	**74**	**74**	8,399	50	47
Commodity swaps	**3**	**#**	**#**	20	2	2
	9,288	**83**	**83**	9,219	59	57
Total	**1,106,931**	**15,605**	**16,048**	1,044,314	9,267	9,070
Included items designated for hedges:						
Fair value/cash flow hedge – FED	**2,735**	**80**	**73**	2,415	32	77
Fair value/cash flow hedge – IRD	**15,596**	**203**	**277**	10,215	90	87
Hedge of net investments – FED	**1,430**	**–**	**238**	3,642	49	180
	19,761	**283**	**588**	16,272	171	344

For the fair value hedges, the carrying amount at 31 December 2022 relating to the assets and liabilities designated as hedged items were $9,563 million and $8,601 million (2021: $6,550 million and $6,169 million) respectively. The hedged items were mainly fixed-rate debt securities held (financial assets) and debt securities issued (financial liabilities).

For the cash flow hedges, the carrying amount at 31 December 2022 relating to the assets and liabilities designated as hedged items were $nil (2021: $2,379 million and $2,186 million respectively). The hedged items were mainly bonds, variable rate loans (financial assets) and deposits (financial liabilities) at 31 December 2021.

18. Derivative Financial Instruments (continued)

BANK ($ million)	2022 Principal notional amount	2022 Derivative receivables	2022 Derivative payables	2021 Principal notional amount	2021 Derivative receivables	2021 Derivative payables
Foreign exchange derivatives (FED)						
Forwards	**30,624**	**294**	**361**	27,759	176	163
Swaps	**362,328**	**4,482**	**4,813**	377,160	2,772	2,583
OTC options	**63,795**	**472**	**463**	50,077	163	162
Exchange traded futures	**–**	**–**	**–**	27	#	–
	456,747	**5,248**	**5,637**	455,023	3,111	2,908
Interest rate derivatives (IRD)						
Swaps	**375,121**	**7,754**	**7,795**	330,104	3,878	3,954
OTC options	**11,431**	**63**	**72**	3,597	25	28
Exchange traded options	**67**	**1**	**–**	–	–	–
Exchange traded futures	**11,807**	**9**	**#**	8,247	#	1
	398,426	**7,827**	**7,867**	341,948	3,903	3,983
Equity derivatives						
Swaps	**3,581**	**366**	**501**	5,233	406	434
OTC options	**4,708**	**192**	**170**	8,250	345	282
Exchange traded futures	**176**	**#**	**1**	265	#	#
Others	**103**	**#**	**7**	–	–	–
	8,568	**558**	**679**	13,748	751	716
Credit derivatives						
Swaps – protection buyer	**3,779**	**5**	**37**	1,440	#	20
Swaps – protection seller	**3,106**	**30**	**5**	1,060	19	–
	6,885	**35**	**42**	2,500	19	20
Other derivatives						
Precious metals	**79**	**1**	**2**	121	1	2
OTC options	**8,372**	**73**	**73**	6,686	27	27
	8,451	**74**	**75**	6,807	28	29
Total	**879,077**	**13,742**	**14,300**	820,026	7,812	7,656
Included items designated for hedges:						
Fair value/cash flow hedge – FED	**3,254**	**64**	**257**	4,873	68	229
Fair value hedge – IRD	**9,874**	**107**	**251**	5,529	78	45
Hedge of net investments – FED	**174**	**–**	**29**	770	2	19
	13,302	**171**	**537**	11,172	148	293

19. Other Liabilities

	GROUP		BANK	
	2022 $ million	2021 $ million	2022 $ million	2021 $ million
Bills payable	**473**	490	**400**	337
Interest payable	**1,121**	328	**726**	193
Lease liabilities	**216**	228	**70**	49
Precious metal liabilities	**1,281**	1,363	**21**	23
Sundry creditors	**3,606**	3,138	**862**	659
Others	**1,828**	1,616	**765**	645
	8,525	7,163	**2,844**	1,906

At 31 December 2022, reinsurance liabilities included in "Others" amounted to $116 million (2021: $108 million) for the Group.

20. Deferred Tax

	GROUP		BANK	
	2022 $ million	2021 $ million	2022 $ million	2021 $ million
At 1 January	**2,552**	1,685	**66**	182
Currency translation and others	**14**	2	**6**	1
Net credit to income statements (Note 11)	**(52)**	(173)	**(24)**	(106)
(Over)/under provision in prior years	**(1)**	2	**–**	1
Net credit to equity	**(294)**	(87)	**(27)**	(12)
Net change in life insurance fund tax	**(395)**	1,123	**–**	–
At 31 December	**1,824**	2,552	**21**	66

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when the deferred income taxes relate to the same fiscal authority.

20. Deferred Tax (continued)

The deferred tax assets and liabilities are to be recovered and settled after one year and the following amounts, determined after appropriate offsetting, are shown in the balance sheets:

	GROUP		BANK	
	2022 $ million	2021 $ million	2022 $ million	2021 $ million
Deferred tax liabilities				
Accelerated tax depreciation	**123**	114	**71**	73
Unrealised gains on investments	**26**	216	**–**	#
Depreciable assets acquired in business combination	**110**	121	**34**	36
Provision for policy liabilities	**1,898**	2,244	**–**	–
Regulatory loss allowance reserve	**63**	62	**63**	62
Others	**199**	197	**4**	2
	2,419	2,954	**172**	173
Amount offset against deferred tax assets	**(158)**	(122)	**(47)**	(19)
	2,261	2,832	**125**	154
Deferred tax assets				
Allowances for impairment of assets	**(281)**	(254)	**(85)**	(64)
Tax losses	**(34)**	(8)	**(13)**	(6)
Unrealised losses on financial assets	**(179)**	(16)	**(38)**	(8)
Others	**(101)**	(124)	**(15)**	(29)
	(595)	(402)	**(151)**	(107)
Amount offset against deferred tax liabilities	**158**	122	**47**	19
	(437)	(280)	**(104)**	(88)
Net deferred tax liabilities	**1,824**	2,552	**21**	66

Deferred income tax assets are recognised for tax losses carried forward only to the extent that realisation of the related tax benefit through future taxable profits is probable. At 31 December 2022, unutilised tax losses carried forward for which no deferred income tax has been recognised amounted to $63 million (2021: $68 million) for the Group, $6 million (2021: nil) for the Bank. These tax losses have no expiry date except for an amount of $61 million (2021: $57 million) which will expire between the years 2023 and 2030 (2021: years 2022 and 2029).

21. Debt Issued

	Note	GROUP 2022 $ million	GROUP 2021 $ million	BANK 2022 $ million	BANK 2021 $ million
Unsecured					
Subordinated debt	21.1	**3,484**	2,730	**3,484**	2,730
Fixed and floating rate notes	21.2	**3,202**	2,771	**2,558**	2,313
Commercial paper	21.3	**10,759**	8,668	**10,759**	8,668
Structured notes	21.4	**2,713**	2,425	**2,713**	2,425
		20,158	16,594	**19,514**	16,136
Secured					
Covered bonds	21.5	**1,780**	3,521	**1,780**	3,521
Total debt issued		**21,938**	20,115	**21,294**	19,657

21.1 Subordinated Debt

	Note	Issue date	Maturity date	GROUP 2022 $ million	GROUP 2021 $ million
Issued by the Bank:					
USD1 billion 4.25% notes	(a)	19 Jun 2014	19 Jun 2024	**1,298**	1,402
USD1 billion 1.832% notes	(b)	10 Sep 2020	10 Sep 2030	**1,220**	1,328
USD0.75 billion 4.602% notes	(c)	15 Jun 2022	15 Jun 2032	**966**	–
Total subordinated debt				**3,484**	2,730

(a) The subordinated notes can be written off in whole or in part if the MAS determines that the Bank would become non-viable. Interest is payable semi-annually on 19 June and 19 December each year at 4.25% per annum. The Bank had entered into interest rate swaps to manage the risk of the subordinated notes and the cumulative fair value change of the risk hedged is included in the carrying amount. The subordinated notes qualify as Tier 2 capital for the Group.

(b) The subordinated notes are redeemable in whole at the option of the Bank on 10 September 2025. They can be written off in whole or in part if the MAS determines that the Bank would become non-viable. Interest is payable semi-annually on 10 March and 10 September each year at 1.832% per annum up to 10 September 2025, and thereafter at a fixed rate per annum equal to the then prevailing 5-year U.S. Treasury Rate plus 1.58% if the redemption option is not exercised. The Bank had entered into interest rate swaps to manage the risk of the subordinated notes and the cumulative fair value change of the risk hedged is included in the carrying amount. The subordinated notes qualify as Tier 2 capital for the Group.

(c) The subordinated notes are redeemable in whole at the option of the Bank on 15 June 2027. They can be written off in whole or in part if the MAS determines that the Bank would become non-viable. Interest is payable semi-annually on 15 June and 15 December each year at 4.602% per annum up to 15 June 2027, and thereafter at a fixed rate per annum equal to the then prevailing 5-year U.S. Treasury Rate plus 1.575% if the redemption option is not exercised. The Bank had entered into interest rate swaps to manage the risk of the subordinated notes and the cumulative fair value change of the risk hedged is included in the carrying amount. The subordinated notes qualify as Tier 2 capital for the Group.

21. Debt Issued (continued)

21.2 Fixed and Floating Rate Notes

	Note	Issue date	Maturity date	GROUP 2022 $ million	2021 $ million
Issued by the Bank:					
AUD250 million fixed rate notes	(a)	20 Jan 2022	20 Jan 2023	**228**	–
AUD700 million floating rate notes	(b)	23 May 2019 – 15 Jan 2020	23 May 2022	**–**	686
AUD500 million floating rate notes	(b)	5 Dec 2019	5 Dec 2022	**–**	490
AUD200 million floating rate notes	(c)	4 Sep 2020	4 Sep 2023	**182**	196
AUD460 million floating rate notes	(c)	18 Mar 2021 – 25 Mar 2021	18 Mar 2024	**419**	451
AUD500 million floating rate notes	(c)	12 Aug 2021	12 Aug 2024	**455**	490
AUD700 million floating rate notes	(c)	14 Apr 2022	14 Apr 2025	**637**	–
AUD500 million floating rate notes	(c)	11 Aug 2022	11 Aug 2025	**455**	–
AUD200 million floating rate notes	(c)	19 Aug 2022 – 30 Aug 2022	20 Nov 2023	**182**	–
				2,558	2,313
Issued by Pac Lease Berhad:					
MYR50 million 3.45% fixed rate notes	(b)	6 Mar 2020	7 Mar 2022	**–**	16
MYR50 million 3.00% fixed rate notes	(b)	22 Dec 2020	22 Jun 2022	**–**	16
MYR50 million 3.20% fixed rate notes	(d)	30 Jul 2021	2 Aug 2023	**15**	16
MYR30 million 3.28% fixed rate notes	(d)	13 Aug 2021	14 Feb 2024	**9**	10
MYR80 million 3.48% fixed rate notes	(d)	17 Dec 2021	18 Jun 2024	**25**	26
MYR50 million 4.05% fixed rate notes	(d)	28 Jun 2022	10 Jan 2024	**15**	–
				64	84
Issued by OCBC Wing Hang Bank (China) Limited:					
CNY730 million 3.50% fixed rate bonds	(e)	24 May 2021	24 May 2024	**142**	157
CNY1.02 billion 3.32% fixed rate bonds	(e)	22 Nov 2021	22 Nov 2024	**198**	217
CNY750 million 2.99% fixed rate bonds	(e)	30 May 2022	30 May 2025	**144**	–
CNY500 million 3.24% fixed rate bonds	(e)	17 Nov 2022	17 Nov 2025	**96**	–
				580	374
Total fixed and floating rate notes				**3,202**	2,771

(a) Interest is payable quarterly at 0.705% per annum.

(b) The notes and bonds were fully redeemed on their respective maturity dates.

(c) Interest is payable quarterly at the 3-month Bank Bill Swap reference rate plus 0.26% to 0.82% per annum.

(d) Interest is payable semi-annually.

(e) Interest is payable annually.

21. Debt Issued (continued)

21.3 Commercial Paper

	GROUP 2022 $ million	2021 $ million
Issued by the Bank	**10,759**	8,668

The Bank issued the commercial paper under its USD10 billion ECP programme and USD25 billion USCP programme. The notes outstanding as at 31 December 2022 (2021: 31 December 2021) were issued between 9 February 2022 (2021: 14 April 2021) and 12 December 2022 (2021: 10 November 2021), and mature between 3 January 2023 (2021: 3 January 2022) and 22 May 2023 (2021: 23 September 2022). The commercial papers are zero-coupon papers, or floating coupon rate papers pegged to monthly or quarterly market rates.

21.4 Structured Notes

	Issue date	Maturity date	GROUP 2022 $ million	2021 $ million
Issued by the Bank:				
Credit linked notes	1 Oct 2012 – 30 Dec 2022	17 Jan 2023 – 9 Dec 2027	**912**	986
Fixed rate notes	9 Oct 2012 – 27 Dec 2012	9 Oct 2037 – 28 Dec 2037	**107**	108
Bond linked notes	12 Oct 2016 – 27 Dec 2022	20 Dec 2022 – 24 May 2027	**130**	109
Index linked notes	Not applicable	Not applicable	**–**	2
Fund linked notes	27 Sep 2018 – 11 Nov 2022	30 Mar 2023 – 20 Mar 2029	**71**	49
Participation notes	14 Jun 2019 – 29 Dec 2022	17 Jan 2023 – 7 Jul 2028	**1,491**	1,171
Equity linked notes	6 Sep 2022 – 19 Dec 2022	16 Mar 2023 – 22 Dec 2023	**2**	–
			2,713	2,425

The structured notes were issued by the Bank under its Structured Note and Global Medium Term Notes Programmes and were measured at amortised cost, except for $909 million (2021: $983 million) included under credit linked notes and $131 million (2021: $109 million) included under bond linked notes as at 31 December 2022 which were measured at fair value through profit or loss.

In accordance with SFRS(I) 9, to the extent that the underlying economic characteristics and risks of the embedded derivatives were not closely related to the economic characteristics and risks of the host contract, and where such embedded derivatives would meet the definition of a derivative, the Group bifurcated such embedded derivatives and recognised these separately from the host contracts. The bifurcated embedded derivatives were fair valued through profit or loss, and were included as part of the Group's derivatives in the financial statements.

21. Debt Issued (continued)

21.5 Covered Bonds

	Issue date	Maturity date	GROUP 2022 $ million	GROUP 2021 $ million
Issued by the Bank:				
EUR1 billion 0.25% fixed rate bonds	21 Mar 2017 – 5 Oct 2017	21 Mar 2022 – 5 Oct 2022	**–**	1,531
EUR500 million 0.375% fixed rate bonds	1 Mar 2018	1 Mar 2023	**712**	767
EUR500 million 0.625% fixed rate bonds	18 Apr 2018	18 Apr 2025	**663**	767
GBP250 million floating rate bonds	14 Mar 2018	14 Mar 2023	**405**	456
			1,780	3,521

The covered bonds were issued by the Bank under its USD10 billion Global Covered Bond Programme. The Covered Bond Guarantor, Red Sail Pte. Ltd., guarantees the payments of interest and principal. The guarantee is secured by a portfolio of Singapore housing loans transferred from OCBC Bank to Red Sail Pte. Ltd. (Note 46.2). Interest for the EUR and GBP covered bonds is payable annually and quarterly, respectively, and in arrear.

21.6 Reconciliation of Movements of Liabilities to Cash Flow Arising from Financing Activities

GROUP ($ million)	Subordinated debt	Fixed and floating rate notes	Commercial paper	Structured notes	Covered bonds	Total
At 1 January 2021	3,145	3,551	12,057	1,869	3,733	24,355
Cash flows	(400)	(754)	(3,643)	557	–	(4,240)
Non-cash changes						
Currency translation	59	(26)	242	(3)	61	333
Others	(74)	(#)	12	2	(273)	(333)
At 31 December 2021/1 January 2022	**2,730**	**2,771**	**8,668**	**2,425**	**3,521**	**20,115**
Cash flows	**1,042**	**635**	**2,341**	**377**	**(1,456)**	**2,939**
Non-cash changes						
Currency translation	**(52)**	**(204)**	**(290)**	**(73)**	**(118)**	**(737)**
Others	**(236)**	**(#)**	**40**	**(16)**	**(167)**	**(379)**
At 31 December 2022	**3,484**	**3,202**	**10,759**	**2,713**	**1,780**	**21,938**

22. Life Insurance Fund Liabilities and Assets

	GROUP	
	2022 $ million	2021 $ million
Life insurance fund liabilities		
Movements in life insurance fund		
At 1 January	**87,246**	83,469
Currency translation	**(1,429)**	(427)
Net change in life insurance contract liabilities	**(832)**	4,204
At 31 December	**84,985**	87,246
Policy benefits	**5,794**	5,487
Others	**4,167**	3,573
	94,946	96,306
Life insurance fund investment securities and other assets		
Deposits with banks and financial institutions	**8,709**	5,973
Loans	**479**	591
Securities	**80,765**	86,806
Investment property	**1,881**	1,884
Others [1]	**6,161**	4,842
	97,995	100,096
Life insurance fund balances included under the following balance sheet items:		
Liabilities		
Current tax	**133**	188
Deferred tax	**1,906**	2,467
Other liabilities	**65**	76
Assets		
Cash and placements with central banks	**#**	#
Placements with and loans to banks	**2,136**	2,228
Property, plant and equipment and intangible assets	**654**	681
The following contracts were entered into under the life insurance fund:		
Capital commitment authorised and contracted	**162**	149
Derivative financial instruments (principal notional amount)	**34,316**	36,740
Derivative receivables	**723**	356
Derivative payables	**275**	109
Minimum lease payment receivable	**72**	75

(1) Others mainly comprise interest receivable, deposits collected, prepayments, investment debtors and sundry debtors.

23. Cash and Placements with Central Banks

	GROUP		BANK	
	2022 $ million	2021 $ million	2022 $ million	2021 $ million
Cash on hand	**778**	633	**422**	330
Non-restricted balances with central banks	**852**	1,810	**840**	1,780
Money market placements and reverse repos with central banks	**28,354**	20,267	**23,028**	16,988
Cash and cash equivalents	**29,984**	22,710	**24,290**	19,098
Restricted balances with central banks – mandatory reserve deposits	**4,983**	5,211	**3,523**	3,767
Gross cash and placements with central banks	**34,967**	27,921	**27,813**	22,865
Allowances for non-impaired placements with central banks	**(1)**	(2)	**(1)**	(2)
Net cash and placements with central banks	**34,966**	27,919	**27,812**	22,863

24. Government Treasury Bills and Securities

	GROUP		BANK	
	2022 $ million	2021 $ million	2022 $ million	2021 $ million
Singapore government treasury bills and securities	**17,096**	11,112	**15,889**	10,106
Other government treasury bills and securities	**22,271**	26,159	**8,165**	9,710
Total government treasury bills and securities	**39,367**	37,271	**24,054**	19,816

25. Placements with and Loans to Banks

	GROUP		BANK	
	2022 $ million	2021 $ million	2022 $ million	2021 $ million
Certificates of deposit held	**13,202**	7,867	**7,402**	5,877
Placements with and loans to banks	**12,551**	14,440	**9,062**	10,845
Market bills purchased	**1,223**	732	**1,223**	732
Reverse repos	**1,137**	201	**997**	67
Balances with banks	**28,113**	23,240	**18,684**	17,521
Bank balances of life insurance fund	**2,136**	2,228	**–**	–
Placements with and loans to banks	**30,249**	25,468	**18,684**	17,521
Allowances for non-impaired placements with and loans to banks	**(5)**	(6)	**(4)**	(5)
Net placements with and loans to banks	**30,244**	25,462	**18,680**	17,516

26. Loans to Customers

	GROUP		BANK	
	2022 $ million	2021 $ million	2022 $ million	2021 $ million
Gross loans	**294,980**	289,716	**203,092**	191,370
Allowances				
Impaired loans (Note 28)	**(1,308)**	(1,535)	**(583)**	(722)
Non-impaired loans (Note 30)	**(2,205)**	(1,900)	**(1,399)**	(1,247)
Net loans	**291,467**	286,281	**201,110**	189,401

26.1 Analysed by Product

	GROUP 2022	GROUP 2021	BANK 2022	BANK 2021
Overdrafts	**5,200**	5,028	**364**	390
Short-term and revolving loans	**63,162**	66,748	**34,345**	32,703
Syndicated and term loans	**127,867**	119,632	**103,346**	94,273
Housing and commercial property loans	**69,152**	68,849	**46,079**	44,661
Car, credit card and share margin loans	**4,551**	4,614	**3,159**	3,174
Bills receivable	**4,849**	7,351	**3,437**	5,923
Others	**20,199**	17,494	**12,362**	10,246
	294,980	289,716	**203,092**	191,370

26.2 Analysed by Industry

	GROUP 2022	GROUP 2021	BANK 2022	BANK 2021
Agriculture, mining and quarrying	**8,193**	8,094	**5,835**	5,330
Manufacturing	**15,052**	15,642	**7,548**	8,383
Building and construction	**89,299**	81,375	**73,765**	66,198
Housing loans	**62,015**	61,733	**44,065**	42,812
General commerce	**29,209**	30,159	**22,162**	23,032
Transport, storage and communication	**13,017**	13,423	**10,993**	10,913
Financial institutions, investment and holding companies	**24,387**	25,365	**7,144**	6,854
Professionals and individuals	**34,752**	36,854	**16,381**	14,635
Others	**19,056**	17,071	**15,199**	13,213
	294,980	289,716	**203,092**	191,370

27. Non-Performing Assets

Non-performing assets (NPAs) comprise non-performing loans, debt securities and contingents that are classified as Substandard, Doubtful and Loss in accordance with MAS Notice 612 (2021: MAS Notices 612 and 612A).

$ million	Substandard	Doubtful	Loss	Total
GROUP				
2022				
Classified loans	**1,543**	**1,282**	**558**	**3,383**
Classified debt securities	**–**	**–**	**–**	**–**
Classified contingents	**39**	**60**	**4**	**103**
Total classified assets	**1,582**	**1,342**	**562**	**3,486**
Allowances for impaired assets	**(218)**	**(863)**	**(229)**	**(1,310)**
Net classified assets	**1,364**	**479**	**333**	**2,176**
2021				
Classified loans	2,351	1,331	533	4,215
Classified debt securities	4	–	2	6
Classified contingents	43	74	#	117
Total classified assets	2,398	1,405	535	4,338
Allowances for impaired assets	(531)	(831)	(175)	(1,537)
Net classified assets	1,867	574	360	2,801
BANK				
2022				
Classified loans	**337**	**749**	**83**	**1,169**
Classified debt securities	**–**	**–**	**–**	**–**
Classified contingents	**12**	**51**	**–**	**63**
Total classified assets	**349**	**800**	**83**	**1,232**
Allowances for impaired assets	**(38)**	**(540)**	**(5)**	**(583)**
Net classified assets	**311**	**260**	**78**	**649**
2021				
Classified loans	494	917	99	1,510
Classified debt securities	–	–	–	–
Classified contingents	11	50	–	61
Total classified assets	505	967	99	1,571
Allowances for impaired assets	(73)	(642)	(7)	(722)
Net classified assets	432	325	92	849

27. Non-Performing Assets (continued)

	GROUP		BANK	
	2022 $ million	2021 $ million	2022 $ million	2021 $ million
27.1 Analysed by Period Overdue				
Over 180 days	**968**	927	**364**	386
Over 90 days to 180 days	**396**	145	**106**	48
30 days to 90 days	**296**	179	**52**	55
Less than 30 days	**383**	1,018	**20**	189
No overdue	**1,443**	2,069	**690**	893
	3,486	4,338	**1,232**	1,571

	GROUP		BANK	
	2022 $ million	2021 $ million	2022 $ million	2021 $ million
27.2 Analysed by Collateral Type				
Property	**1,628**	2,031	**171**	269
Fixed deposit	**16**	16	**11**	#
Stock and shares	**4**	50	**2**	34
Motor vehicles	**13**	17	**#**	#
Secured – Others	**598**	421	**410**	345
Unsecured – Corporate and other guarantees	**286**	497	**280**	484
Unsecured – Clean	**941**	1,306	**358**	439
	3,486	4,338	**1,232**	1,571

	GROUP		BANK	
	2022 $ million	2021 $ million	2022 $ million	2021 $ million
27.3 Analysed by Industry				
Agriculture, mining and quarrying	**56**	96	**36**	41
Manufacturing	**614**	852	**72**	91
Building and construction	**615**	368	**55**	75
Housing loans	**579**	1,002	**137**	253
General commerce	**434**	637	**86**	148
Transport, storage and communication	**403**	501	**377**	448
Financial institutions, investment and holding companies	**138**	93	**–**	–
Professionals and individuals	**128**	179	**31**	43
Others	**519**	610	**438**	472
	3,486	4,338	**1,232**	1,571

27. Non-Performing Assets (continued)

27.4 Restructured/Renegotiated Loans

Non-performing restructured loans by loan classification and the related allowances are shown below. The restructured loans as a percentage of total non-performing loans were 26.0% (2021: 31.0%) and 22.4% (2021: 24.8%) for the Group and the Bank respectively.

	2022		2021	
	Amount $ million	Allowance $ million	Amount $ million	Allowance $ million
GROUP				
Substandard	**389**	**150**	816	295
Doubtful	**350**	**211**	407	238
Loss	**140**	**98**	85	37
	879	**459**	1,308	570
BANK				
Substandard	**121**	**49**	156	29
Doubtful	**140**	**119**	218	200
Loss	**1**	**#**	1	#
	262	**168**	375	229

28. Allowances for Impaired Loans to Customers

	GROUP		BANK	
	2022 $ million	2021 $ million	2022 $ million	2021 $ million
At 1 January	**1,535**	1,812	**722**	1,393
Currency translation	**(63)**	44	**(30)**	26
Net write-offs [(1)]	**(282)**	(1,153)	**(144)**	(1,042)
Net allowances (Note 10)	**136**	852	**40**	354
Interest recognition on impaired loans	**(28)**	(31)	**(13)**	(15)
Transfers	**10**	11	**8**	6
At 31 December (Note 26)	**1,308**	1,535	**583**	722

(1) Comprise mainly bad debts written off for the Group and the Bank of $406 million and $201 million (2021: $1,267 million and $1,107 million) respectively, and bad debts recovered for the Group and Bank of $91 million and $58 million (2021: $85 million and $66 million) respectively.

28. Allowances for Impaired Loans to Customers (continued)

Analysed by Industry

	Cumulative allowances for impaired loans		Net allowances for impaired loans charged/(write-back) to income statements	
	2022 $ million	2021 $ million	2022 $ million	2021 $ million
GROUP				
Agriculture, mining and quarrying	**33**	67	**(17)**	(7)
Manufacturing	**277**	283	**59**	138
Building and construction	**104**	136	**56**	116
Housing loans	**95**	155	**(32)**	110
General commerce	**156**	226	**(9)**	198
Transport, storage and communication	**228**	283	**10**	(4)
Financial institutions, investment and holding companies	**104**	31	**73**	1
Professionals and individuals	**48**	70	**(13)**	40
Others	**263**	284	**9**	260
	1,308	1,535	**136**	852
BANK				
Agriculture, mining and quarrying	**30**	32	**(18)**	(21)
Manufacturing	**18**	35	**(18)**	24
Building and construction	**9**	44	**32**	35
Housing loans	**1**	5	**(5)**	1
General commerce	**57**	82	**(2)**	87
Transport, storage and communication	**214**	252	**15**	(13)
Financial institutions, investment and holding companies	**–**	–	**–**	(#)
Professionals and individuals	**21**	33	**(4)**	4
Others	**233**	239	**40**	237
	583	722	**40**	354

29. Debt and Equity Securities

	GROUP		BANK	
	2022 $ million	2021 $ million	2022 $ million	2021 $ million
Debt securities	**22,956**	28,045	**13,635**	16,763
Equity securities	**1,696**	2,568	**548**	1,065
Investment funds	**3,358**	3,402	**2,438**	2,203
Total securities	**28,010**	34,015	**16,621**	20,031
Allowances for non-impaired debt securities	**(#)**	(#)	**(#)**	(#)
	28,010	34,015	**16,621**	20,031

Debt Securities Analysis:

29.1 By Credit Ratings

Investment grade (AAA to BBB)	**15,640**	18,983	**10,306**	12,718
Non-investment grade (BB to C)	**28**	66	**28**	66
Non-rated	**7,288**	8,996	**3,301**	3,979
	22,956	28,045	**13,635**	16,763

29.2 By Credit Quality

Pass	**22,954**	28,038	**13,635**	16,763
Special mention	**2**	1	**–**	–
Substandard	**–**	4	**–**	–
Doubtful	**–**	–	**–**	–
Loss	**–**	2	**–**	–
	22,956	28,045	**13,635**	16,763

Debt and Equity Securities Analysis:

29.3 By Industry

Agriculture, mining and quarrying	**309**	538	**219**	284
Manufacturing	**1,413**	2,073	**1,170**	1,627
Building and construction	**1,966**	2,234	**1,256**	1,421
General commerce	**658**	733	**327**	395
Transport, storage and communication	**1,665**	2,421	**1,047**	1,447
Financial institutions, investment and holding companies	**18,873**	21,484	**10,811**	12,231
Others	**3,126**	4,532	**1,791**	2,626
	28,010	34,015	**16,621**	20,031

30. Allowances for Financial Assets

The following tables show reconciliations from the opening to the closing balance of expected credit loss (ECL).

$ million	Stage 1	Stage 2	Stage 3	Total
GROUP				
At 1 January 2021	967	940	1,815	3,722
Transfer to Stage 1	563	(546)	(17)	–
Transfer to Stage 2 (1)	(617)	665	(48)	–
Transfer to Stage 3	(3)	(206)	209	–
Remeasurement (2)	(554)	592	687	725
New financial assets originated or purchased (1)	933	–	–	933
Financial assets that have been derecognised	(387)	(436)	–	(823)
Changes in models (3)	(10)	18	–	8
Write-offs	–	–	(1,153)	(1,153)
Foreign exchange and other movements	2	2	44	48
At 31 December 2021/1 January 2022	**894**	**1,029**	**1,537**	**3,460**
Transfer to Stage 1	**584**	**(561)**	**(23)**	**–**
Transfer to Stage 2	**(520)**	**582**	**(62)**	**–**
Transfer to Stage 3	**(1)**	**(113)**	**114**	**–**
Remeasurement (2)	**(408)**	**538**	**89**	**219**
New financial assets originated or purchased	**1,079**	**–**	**–**	**1,079**
Financial assets that have been derecognised	**(510)**	**(340)**	**–**	**(850)**
Changes in models (3)	**(1)**	**4**	**–**	**3**
Write-offs	**–**	**–**	**(282)**	**(282)**
Foreign exchange and other movements	**(10)**	**(20)**	**(63)**	**(93)**
At 31 December 2022	**1,107**	**1,119**	**1,310**	**3,536**

$ million	Stage 1	Stage 2	Stage 3	Total
BANK				
At 1 January 2021	717	460	1,393	2,570
Transfer to Stage 1	371	(358)	(13)	–
Transfer to Stage 2 (1)	(389)	402	(13)	–
Transfer to Stage 3	(2)	(104)	106	–
Remeasurement (2)	(400)	429	265	294
New financial assets originated or purchased (1)	620	–	–	620
Financial assets that have been derecognised	(218)	(279)	–	(497)
Changes in models (3)	3	2	–	5
Write-offs	–	–	(1,042)	(1,042)
Foreign exchange and other movements	3	3	26	32
At 31 December 2021/1 January 2022	**705**	**555**	**722**	**1,982**
Transfer to Stage 1	**378**	**(363)**	**(15)**	**–**
Transfer to Stage 2	**(279)**	**307**	**(28)**	**–**
Transfer to Stage 3	**(1)**	**(22)**	**23**	**–**
Remeasurement (2)	**(284)**	**267**	**55**	**38**
New financial assets originated or purchased	**640**	**–**	**–**	**640**
Financial assets that have been derecognised	**(267)**	**(208)**	**–**	**(475)**
Changes in models (3)	**–**	**–**	**–**	**–**
Write-offs	**–**	**–**	**(144)**	**(144)**
Foreign exchange and other movements	**(5)**	**(10)**	**(30)**	**(45)**
At 31 December 2022	**887**	**526**	**583**	**1,996**

(1) Comparatives have been reclassified to conform to current year's presentation.
(2) Remeasurement includes the changes in model inputs or assumptions such as changes in the forward-looking macroeconomic variables, partial repayments, additional drawdowns on existing facilities, changes in the measurement after a transfer between stages 1, 2 and 3, and the unwinding impact of time value of money.
(3) Changes in models include significant changes to the quantitative models used to estimate the impacts of the expected credit losses.

30. Allowances for Financial Assets (continued)

Analysed by Main Class of Financial Instruments

Loans to customers at amortised cost [1]

$ million	Stage 1	Stage 2	Stage 3	Total
GROUP				
At 1 January 2021	954	936	1,812	3,702
Transfer to Stage 1	562	(545)	(17)	–
Transfer to Stage 2 [2]	(613)	661	(48)	–
Transfer to Stage 3	(3)	(204)	207	–
Remeasurement [3]	(553)	579	690	716
New financial assets originated or purchased [2]	913	–	–	913
Financial assets that have been derecognised	(373)	(429)	–	(802)
Changes in models [4]	(8)	18	#	10
Write-offs	–	–	(1,153)	(1,153)
Foreign exchange and other movements	2	3	44	49
At 31 December 2021/1 January 2022	**881**	**1,019**	**1,535**	**3,435**
Transfer to Stage 1	**582**	**(559)**	**(23)**	**–**
Transfer to Stage 2	**(519)**	**581**	**(62)**	**–**
Transfer to Stage 3	**(1)**	**(113)**	**114**	**–**
Remeasurement [3]	**(407)**	**537**	**89**	**219**
New financial assets originated or purchased	**1,063**	**–**	**–**	**1,063**
Financial assets that have been derecognised	**(495)**	**(337)**	**–**	**(832)**
Changes in models [4]	**(1)**	**4**	**–**	**3**
Write-offs	**–**	**–**	**(282)**	**(282)**
Foreign exchange and other movements	**(10)**	**(20)**	**(63)**	**(93)**
At 31 December 2022	**1,093**	**1,112**	**1,308**	**3,513**
BANK				
At 1 January 2021	713	459	1,393	2,565
Transfer to Stage 1	370	(357)	(13)	–
Transfer to Stage 2 [2]	(385)	398	(13)	–
Transfer to Stage 3	(2)	(104)	106	–
Remeasurement [3]	(400)	426	265	291
New financial assets originated or purchased [2]	603	–	–	603
Financial assets that have been derecognised	(208)	(277)	–	(485)
Changes in models [4]	3	2	–	5
Write-offs	–	–	(1,042)	(1,042)
Foreign exchange and other movements	2	4	26	32
At 31 December 2021/1 January 2022	**696**	**551**	**722**	**1,969**
Transfer to Stage 1	**377**	**(362)**	**(15)**	**–**
Transfer to Stage 2	**(278)**	**306**	**(28)**	**–**
Transfer to Stage 3	**(1)**	**(22)**	**23**	**–**
Remeasurement [3]	**(281)**	**264**	**55**	**38**
New financial assets originated or purchased	**625**	**–**	**–**	**625**
Financial assets that have been derecognised	**(256)**	**(206)**	**–**	**(462)**
Changes in models [4]	**–**	**–**	**–**	**–**
Write-offs	**–**	**–**	**(144)**	**(144)**
Foreign exchange and other movements	**(4)**	**(10)**	**(30)**	**(44)**
At 31 December 2022	**878**	**521**	**583**	**1,982**

(1) Includes ECL on contingent liabilities and other credit commitments.
(2) Comparatives have been reclassified to conform to current year's presentation.
(3) Remeasurement includes the changes in model inputs or assumptions such as changes in the forward-looking macroeconomic variables, partial repayments, additional drawdowns on existing facilities, changes in the measurement after a transfer between stages 1, 2 and 3, and the unwinding impact of time value of money.
(4) Changes in models include significant changes to the quantitative models used to estimate the impacts of the expected credit losses.

30. Allowances for Financial Assets (continued)

The following tables set out information about the credit quality of financial assets.

	2022				2021			
$ million	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
GROUP								
Cash and placements with central banks (Note 23)								
Pass	**34,143**	**46**	**–**	**34,189**	27,232	56	–	27,288
Loss allowances	**(#)**	**(1)**	**–**	**(1)**	(#)	(2)	–	(2)
Carrying amount	**34,143**	**45**	**–**	**34,188**	27,232	54	–	27,286
Government treasury bills and securities – Amortised cost (Note 39)								
Pass/Carrying amount	**705**	**251**	**–**	**956**	334	13	–	347
Government treasury bills and securities – FVOCI [1] (Note 39)								
Pass	**34,826**	**188**	**–**	**35,014**	32,909	83	–	32,992
Loss allowances	**(#)**	**(#)**	**–**	**(#)**	(#)	–	–	(#)
Placements with and loans to banks – Amortised cost (Note 39)								
Pass	**16,927**	**120**	**–**	**17,047**	17,454	139	–	17,593
Special mention	**–**	**–**	**–**	**–**	–	8	–	8
	16,927	**120**	**–**	**17,047**	17,454	147	–	17,601
Loss allowances	**(5)**	**(#)**	**–**	**(5)**	(6)	(#)	–	(6)
Carrying amount	**16,922**	**120**	**–**	**17,042**	17,448	147	–	17,595
Placements with and loans to banks – FVOCI [1] (Note 39)								
Pass	**11,722**	**603**	**–**	**12,325**	5,573	1,536	–	7,109
Loss allowances	**(2)**	**(#)**	**–**	**(2)**	(2)	(#)	–	(2)
Loans to customers – Amortised cost (Note 39)								
Pass	**255,421**	**33,948**	**–**	**289,369**	252,523	26,685	–	279,208
Special mention	**–**	**2,205**	**–**	**2,205**	–	6,244	–	6,244
Substandard	**–**	**–**	**1,543**	**1,543**	–	–	2,351	2,351
Doubtful	**–**	**–**	**1,282**	**1,282**	–	–	1,331	1,331
Loss	**–**	**–**	**558**	**558**	–	–	533	533
	255,421	**36,153**	**3,383**	**294,957**	252,523	32,929	4,215	289,667
Loss allowances	**(896)**	**(803)**	**(1,252)**	**(2,951)**	(776)	(779)	(1,482)	(3,037)
Carrying amount	**254,525**	**35,350**	**2,131**	**292,006**	251,747	32,150	2,733	286,630
Loans to customers – FVOCI [1] (Note 39)								
Pass	**–**	**–**	**–**	**–**	2	–	–	2
Loss allowances	**–**	**–**	**–**	**–**	(#)	–	–	(#)
Debt securities – Amortised cost (Note 39)								
Pass	**307**	**–**	**–**	**307**	331	–	–	331
Loss allowances	**(#)**	**–**	**–**	**(#)**	(#)	–	–	(#)
Carrying amount	**307**	**–**	**–**	**307**	331	–	–	331
Debt securities – FVOCI [1] (Note 39)								
Pass	**19,020**	**908**	**–**	**19,928**	22,478	1,124	–	23,602
Special mention	**–**	**–**	**–**	**–**	–	–	–	–
Substandard	**–**	**–**	**–**	**–**	–	–	4	4
Doubtful	**–**	**–**	**–**	**–**	–	–	2	2
	19,020	**908**	**–**	**19,928**	22,478	1,124	6	23,608
Loss allowances	**(7)**	**(6)**	**(2)**	**(15)**	(6)	(7)	(2)	(15)

For loan commitments and financial guarantee contracts, the amounts in the table represent the amounts committed or guaranteed, respectively.

Loan commitments and contingent liabilities								
Pass	**129,666**	**14,205**	**–**	**143,871**	118,370	12,922	–	131,292
Special mention	**–**	**388**	**–**	**388**	–	654	–	654
Substandard	**–**	**–**	**605**	**605**	–	–	641	641
Doubtful	**–**	**–**	**530**	**530**	–	–	487	487
Loss	**–**	**–**	**184**	**184**	–	–	188	188
	129,666	**14,593**	**1,319**	**145,578**	118,370	13,576	1,316	133,262
Allowances for contingent liabilities and credit commitments (Note 39)	**(197)**	**(309)**	**(56)**	**(562)**	(105)	(240)	(53)	(398)

[1] In accordance with SFRS(I) 9, for financial asset measured at FVOCI, any impairment is recognised in profit or loss together with a credit to fair value reserves within equity (without adjusting the carrying amount of the financial asset).

30. Allowances for Financial Assets (continued)

	2022				2021			
$ million	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
BANK								
Cash and placements with central banks (Note 23)								
Pass	**27,345**	**46**	**–**	**27,391**	22,478	57	–	22,535
Loss allowances	**(#)**	**(1)**	**–**	**(1)**	(#)	(2)	–	(2)
Carrying amount	**27,345**	**45**	**–**	**27,390**	22,478	55	–	22,533
Government treasury bills and securities – Amortised cost (Note 39)								
Pass/Carrying amount	**705**	**251**	**–**	**956**	334	13	–	347
Government treasury bills and securities – FVOCI [(1)] (Note 39)								
Pass	**20,259**	**187**	**–**	**20,446**	16,585	83	–	16,668
Loss allowances	**(#)**	**(#)**	**–**	**(#)**	(#)	(#)	–	(#)
Placements with and loans to banks – Amortised cost (Note 39)								
Pass [(2)]	**11,171**	**111**	**–**	**11,282**	11,506	138	–	11,644
Loss allowances	**(4)**	**(#)**	**–**	**(4)**	(5)	(#)	–	(5)
Carrying amount	**11,167**	**111**	**–**	**11,278**	11,501	138	–	11,639
Placements with and loans to banks – FVOCI [(1)] (Note 39)								
Pass	**6,020**	**526**	**–**	**6,546**	3,845	1,274	–	5,119
Loss allowances	**(2)**	**(#)**	**–**	**(2)**	(#)	(#)	–	(#)
Loans to customers – Amortised cost (Note 39)								
Pass	**178,340**	**22,384**	**–**	**200,724**	167,580	20,139	–	187,719
Special mention	**–**	**1,176**	**–**	**1,176**	–	2,094	–	2,094
Substandard	**–**	**–**	**337**	**337**	–	–	494	494
Doubtful	**–**	**–**	**749**	**749**	–	–	917	917
Loss	**–**	**–**	**83**	**83**	–	–	99	99
	178,340	**23,560**	**1,169**	**203,069**	167,580	22,233	1,510	191,323
Loss allowances	**(753)**	**(365)**	**(540)**	**(1,658)**	(638)	(392)	(679)	(1,709)
Carrying amount	**177,587**	**23,195**	**629**	**201,411**	166,942	21,841	831	189,614
Debt securities – Amortised cost (Note 39)								
Pass	**307**	**–**	**–**	**307**	331	–	–	331
Loss allowances	**(#)**	**–**	**–**	**(#)**	(#)	–	–	(#)
Carrying amount	**307**	**–**	**–**	**307**	331	–	–	331
Debt securities – FVOCI [(1)] (Note 39)								
Pass	**10,868**	**566**	**–**	**11,434**	12,495	568	–	13,063
Loss allowances	**(3)**	**(4)**	**–**	**(7)**	(2)	(3)	–	(5)

For loan commitments and financial guarantee contracts, the amounts in the table represent the amounts committed or guaranteed, respectively.

	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
Loan commitments and contingent liabilities								
Pass	**97,201**	**9,149**	**–**	**106,350**	86,416	9,510	–	95,926
Special mention	**–**	**1,421**	**–**	**1,421**	–	480	–	480
Substandard	**–**	**–**	**562**	**562**	–	–	581	581
Doubtful	**–**	**–**	**488**	**488**	–	–	441	441
Loss	**–**	**–**	**161**	**161**	–	–	177	177
	97,201	**10,570**	**1,211**	**108,982**	86,416	9,990	1,199	97,605
Allowances for contingent liabilities and credit commitments (Note 39)	**(125)**	**(156)**	**(43)**	**(324)**	(59)	(158)	(43)	(260)

(1) In accordance with SFRS(I) 9, for financial asset measured at FVOCI, any impairment is recognised in profit or loss together with a credit to fair value reserves within equity (without adjusting the carrying amount of the financial asset).

(2) Comparatives have been reclassified to conform to current year's presentation.

31. Other Assets

	GROUP		BANK	
	2022	2021	2022	2021
	$ million	$ million	$ million	$ million
Interest receivable	**1,514**	889	**1,070**	481
Sundry debtors (net)	**1,000**	922	**22**	87
Deposits and prepayments	**1,424**	1,911	**967**	1,391
Others	**2,697**	2,612	**479**	380
	6,635	6,334	**2,538**	2,339

At 31 December 2022, reinsurance assets included in "Others" amounted to $463 million (2021: $467 million) for the Group.

32. Associates

	GROUP		BANK	
	2022	2021	2022	2021
	$ million	$ million	$ million	$ million
Quoted equity security, at cost	**2,601**	2,601	**2,157**	2,157
Unquoted equity securities, at cost	**144**	145	**65**	65
	2,745	2,746	**2,222**	2,222
Share of post-acquisition reserves	**3,466**	3,289	**–**	–
Unquoted equity security, at fair value	**122**	95	**–**	–
Net carrying amount	**6,333**	6,130	**2,222**	2,222
Amounts due from associates (unsecured)	**7**	40	**6**	40
Allowances for non-impaired amounts due from associates	**(#)**	(#)	**(#)**	(#)
	7	40	**6**	40
Investments in and amounts due from associates	**6,340**	6,170	**2,228**	2,262

32. Associates (continued)

32.1 List of Principal Associates

The Group's principal associates are as follows:

Name of associates	Country of incorporation/ Principal place of business	Nature of the relationship with the Group	Effective % interest held [3] 2022	2021
Quoted				
Bank of Ningbo Co., Ltd. [1]	People's Republic of China	A commercial bank, which enables the Group to expand its bilateral business in offshore financing, trade finance and private banking.	**20**	20
Unquoted				
Maxwealth Fund Management Company Limited [1]	People's Republic of China	A privately held asset manager that manufactures and distributes mutual funds in Greater China.	**29**	29
Network for Electronic Transfers (Singapore) Pte Ltd [2]	Singapore	An electronic payment services company, which enables the Group to extend funds transfer services to its broad customer base.	**33**	33

(1) Audited by PricewaterhouseCoopers for the financial year ended 31 December 2022 (31 December 2021: Ernst & Young).
(2) Audited by KPMG LLP.
(3) Rounded to the nearest percentage.

As at 31 December 2022, the fair value (Level 1 of the fair value hierarchy) of the investments in Bank of Ningbo was $8.28 billion (2021: $10.74 billion). The carrying amount of the Group's interests was $5.89 billion (2021: $5.70 billion).

Bank of Ningbo is listed on the Shenzhen Stock Exchange and its ability to transfer funds to the Group is subject to local listing and statutory regulations.

32. Associates (continued)

32.2 Financial Information of Material Associate

The table below provides the financial information of the Group's material associate:

	Bank of Ningbo Co., Ltd.	
$ million	2022	2021
Selected income statement information		
Revenue	**11,827**	11,007
Net profit attributable to equity holders	**4,734**	4,087
Selected balance sheet information		
Total assets	**451,307**	427,123
Equity attributable to shareholders	**32,459**	31,785
Equity attributable to ordinary shareholders	**29,426**	28,519
Reconciliation of associate's total ordinary shareholders' equity to the carrying amount in the Group's financial statements		
Group's interests in net assets of investee at beginning of the year	**5,704**	4,199
Group's share of:		
– shareholders' equity in current year	**320**	1,119
Dividends	**(134)**	(128)
Subscription of shares	**–**	514
Carrying amount of interest in investee at end of the year	**5,890**	5,704
Dividends received during the year	**134**	128

32. Associates (continued)

32.2 Financial Information of Material Associate (continued)

In addition to the interests in associate disclosed above, the Group also has interests in individually immaterial associates that are accounted for using the equity method.

$ million	2022	2021
At 31 December:		
Aggregate carrying amount of individually immaterial associates	**321**	331
For the year ended:		
Aggregate amounts of the Group's share of:		
Net profit from continuing operations	**63**	40
Other comprehensive income	**(61)**	3
Total comprehensive income	**2**	43
Dividends received during the year	**11**	9

The Group's share of contingent liabilities in respect of all its associates is as follows:

$ million	2022	2021
At 31 December:		
Share of contingent liabilities incurred jointly with other investors of associates	**16,748**	13,029

33. Subsidiaries

	BANK	
	2022 $ million	2021 $ million
Investments in subsidiaries, at cost		
Quoted securities	**1,970**	1,970
Unquoted securities	**13,142**	13,149
Allowance for impairment	**(33)**	(31)
Net carrying amount	**15,079**	15,088
Amount due from subsidiaries		
Term to maturity of one year or less	**8,951**	8,842
Term to maturity of more than one year	**9,893**	13,088
	18,844	21,930
Of which:		
Unsecured	**18,268**	21,354
Secured	**576**	576
	18,844	21,930
Investments in and amount due from subsidiaries	**33,923**	37,018

At 31 December 2022, the fair values (Level 1 of the fair value hierarchy) of the Group's interests in its quoted subsidiaries, Great Eastern Holdings Limited and PT Bank OCBC NISP Tbk, were $7.70 billion (2021: $8.38 billion) and $1.25 billion (2021: $1.23 billion) respectively.

33. Subsidiaries (continued)

33.1 List of Principal Subsidiaries

Principal subsidiaries of the Group are as follows:

Name of subsidiaries	Country of incorporation/ Principal place of business	Proportion of ownership interests and voting rights held by the Group (%)		Proportion of ownership interests and voting rights held by non-controlling interests (%)	
		2022 [1]	2021 [1]	2022 [1]	2021 [1]
Banking					
Banco OCBC Weng Hang, S.A.	Macau SAR	**100**	100	**–**	–
Bank of Singapore Limited	Singapore	**100**	100	**–**	–
OCBC Al-Amin Bank Berhad	Malaysia	**100**	100	**–**	–
OCBC Bank (Malaysia) Berhad	Malaysia	**100**	100	**–**	–
OCBC Wing Hang Bank (China) Limited	People's Republic of China	**100**	100	**–**	–
OCBC Wing Hang Bank Limited	Hong Kong SAR	**100**	100	**–**	–
PT Bank OCBC NISP Tbk	Indonesia	**85**	85	**15**	15
Insurance					
Great Eastern General Insurance Limited	Singapore	**88**	88	**12**	12
Great Eastern General Insurance (Malaysia) Berhad	Malaysia	**88**	88	**12**	12
Great Eastern Life Assurance (Malaysia) Berhad	Malaysia	**88**	88	**12**	12
The Great Eastern Life Assurance Company Limited	Singapore	**88**	88	**12**	12
Asset management and investment holding					
Lion Global Investors Limited	Singapore	**92**	92	**8**	8
Great Eastern Holdings Limited	Singapore	**88**	88	**12**	12
Stockbroking					
OCBC Securities Private Limited	Singapore	**100**	100	**–**	–

(1) Rounded to the nearest percentage.

The principal subsidiaries listed above are audited by PricewaterhouseCoopers LLP Singapore and its associated firms.

The Group's subsidiaries do not have significant restrictions on its ability to access or use its assets and settle its liabilities other than those resulting from their respective local statutory, regulatory, supervisory and banking requirements within which its subsidiaries operate. These requirements require the Group's subsidiaries to maintain minimum levels of regulatory capital, liquid assets, and exposure limits. In addition, Great Eastern Holdings Limited and other insurance subsidiaries are subject to their respective local insurance laws and regulations, while the Group's banking subsidiaries are subject to prudential regulatory requirements imposed by local regulators.

33. Subsidiaries (continued)

33.2 Non-Controlling Interests in Subsidiaries

The following table summarises the financial information, before intercompany eliminations, relating to principal subsidiaries with material NCI.

	PT Bank OCBC NISP Tbk		Great Eastern Holdings Limited	
$ million	2022	2021	2022	2021
Net assets attributable to NCI	**418**	440	**1,237**	1,215
Total comprehensive income attributable to NCI	**(14)**	38	**59**	115
Dividends paid to NCI during the year	**7**	–	**37**	34
Summarised financial information				
Total assets	**20,097**	19,883	**107,918**	110,390
Total liabilities	**(17,294)**	(16,935)	**(98,387)**	(100,254)
Total net assets	**2,803**	2,948	**9,531**	10,136
Revenue	**978**	909	**12,595**	19,964
Profit	**259**	253	**787**	1,133
Other comprehensive income	**(84)**	(12)	**(1,076)**	(160)
Total comprehensive income	**175**	241	**(289)**	973
Cash flows (used in)/provided by operating activities	**(1,001)**	2,347	**3,709**	4,274
Cash flows (used in)/provided by investing activities	**1,239**	(2,043)	**(2,888)**	(4,081)
Cash flows (used in)/provided by financing activities	**(44)**	(83)	**(331)**	(725)
Effect of currency translation reserve adjustment	**28**	7	**–**	–
Net changes in cash and cash equivalents	**222**	228	**490**	(532)

33.3 Consolidated Structured Entities

The Bank has established a USD10 billion Global Covered Bond Programme (the Programme). Under the Programme, the Bank may from time to time issue covered bonds (the Covered Bonds). The payments of interest and principal under the Covered Bonds are guaranteed by the Covered Bond Guarantor, Red Sail Pte. Ltd. (the CBG). The Covered Bonds issued under the Programme will predominantly be backed by a portfolio of Singapore housing loans transferred from the Bank to the CBG. Integral to the Programme structure, the Bank provides funding and hedging facilities to the CBG.

34. Property, Plant and Equipment

GROUP ($ million)	2022 Property-related	2022 Computer-related [1]	2022 Others	2022 Total	2021 Property-related	2021 Computer-related [1]	2021 Others	2021 Total
Cost								
At 1 January	**3,739**	**3,039**	**670**	**7,448**	3,764	2,739	656	7,159
Currency translation	**(53)**	**(48)**	**(10)**	**(111)**	32	(1)	1	32
Additions/modifications	**100**	**399**	**52**	**551**	89	335	52	476
Disposals/terminations and other transfers	**(87)**	**(97)**	**(24)**	**(208)**	(115)	(34)	(39)	(188)
Net transfer from/(to):								
Assets held for sale	**–**	**–**	**(#)**	**(#)**	(10)	–	(#)	(10)
Investment property (Note 35)	**16**	**–**	**(1)**	**15**	(21)	–	(#)	(21)
At 31 December	**3,715**	**3,293**	**687**	**7,695**	3,739	3,039	670	7,448
Accumulated depreciation								
At 1 January	**(1,155)**	**(2,211)**	**(513)**	**(3,879)**	(1,031)	(1,993)	(505)	(3,529)
Currency translation	**22**	**43**	**8**	**73**	(11)	2	(#)	(9)
Disposals/terminations and other transfers	**72**	**92**	**32**	**196**	45	32	36	113
Depreciation charge	**(141)**	**(229)**	**(36)**	**(406)**	(141)	(213)	(36)	(390)
Depreciation charge to profit from life insurance (Note 4)	**(24)**	**(45)**	**(9)**	**(78)**	(24)	(39)	(8)	(71)
Net transfer (from)/to:								
Assets held for sale	**–**	**–**	**#**	**#**	2	–	#	2
Investment property (Note 35)	**(8)**	**–**	**–**	**(8)**	5	–	–	5
At 31 December	**(1,234)**	**(2,350)**	**(518)**	**(4,102)**	(1,155)	(2,211)	(513)	(3,879)
Accumulated impairment losses								
At 1 January	**(62)**	**(#)**	**(1)**	**(63)**	(62)	(#)	(1)	(63)
Currency translation	**2**	**–**	**#**	**2**	#	–	#	#
Impairment charge to income statement	**(49)**	**–**	**–**	**(49)**	–	–	–	–
At 31 December	**(109)**	**(#)**	**(1)**	**(110)**	(62)	(#)	(1)	(63)
Net carrying amount, at 31 December [2]	**2,372**	**943**	**168**	**3,483**	2,522	828	156	3,506

	2022	2021
Freehold property	**350**	409
Leasehold property	**1,820**	1,885
Net carrying amount	**2,170**	2,294

(1) Includes computer software of $703 million (2021: $618 million). The cost and accumulated depreciation are $2,312 million (2021: $2,079 million) and $1,609 million (2021: $1,461 million) respectively.

(2) Includes ROU assets comprising property-related of $202 million (2021: $228 million), computer-related of $13 million (2021: $1 million) and others of $2 million (2021: $2 million).

34. Property, Plant and Equipment (continued)

BANK ($ million)	2022 Property-related	2022 Computer-related [(1)]	2022 Others	2022 Total	2021 Property-related	2021 Computer-related [(1)]	2021 Others	2021 Total
Cost								
At 1 January	**422**	**1,607**	**197**	**2,226**	425	1,447	188	2,060
Currency translation	**(2)**	**(#)**	**(1)**	**(3)**	#	(#)	(#)	(#)
Additions	**44**	**220**	**29**	**293**	21	174	30	225
Disposals/terminations and other transfers	**(35)**	**(10)**	**(11)**	**(56)**	(19)	(14)	(21)	(54)
Net transfer to investment property (Note 35)	**(22)**	**–**	**–**	**(22)**	(5)	–	–	(5)
At 31 December	**407**	**1,817**	**214**	**2,438**	422	1,607	197	2,226
Accumulated depreciation								
At 1 January	**(165)**	**(1,183)**	**(142)**	**(1,490)**	(148)	(1,062)	(151)	(1,361)
Currency translation	**1**	**#**	**1**	**2**	#	#	#	#
Disposals/terminations and other transfers	**35**	**10**	**10**	**55**	18	12	21	51
Depreciation charge	**(37)**	**(143)**	**(13)**	**(193)**	(37)	(133)	(12)	(182)
Net transfer to investment property (Note 35)	**6**	**–**	**–**	**6**	2	–	–	2
At 31 December	**(160)**	**(1,316)**	**(144)**	**(1,620)**	(165)	(1,183)	(142)	(1,490)
Accumulated impairment losses								
At 1 January	**(1)**	**–**	**–**	**(1)**	(1)	–	–	(1)
Write-back to income statement	**1**	**–**	**–**	**1**	–	–	–	–
At 31 December	**–**	**–**	**–**	**–**	(1)	–	–	(1)
Net carrying amount, at 31 December [(2)]	**247**	**501**	**70**	**818**	256	424	55	735
Freehold property	**31**				42			
Leasehold property	**155**				167			
Net carrying amount	**186**				209			

(1) Includes computer software of $429 million (2021: $368 million). The cost and accumulated depreciation are $1,437 million (2021: $1,261 million) and $1,008 million (2021: $893 million) respectively.

(2) Includes ROU assets comprising property-related of $60 million (2021: $47 million), computer-related of $10 million (2021: $1 million) and others of $1 million (2021: $# million).

35. Investment Property

	GROUP		BANK	
$ million	2022	2021	2022	2021
Cost				
At 1 January	**1,053**	1,049	**602**	602
Currency translation	**(7)**	4	**–**	–
Additions	**1**	7	**–**	7
Disposals and other transfers	**(13)**	(23)	**(2)**	(9)
Net transfer (to)/from:				
Property, plant and equipment (Note 34)	**(15)**	21	**22**	5
Assets held for sale	**(1)**	(5)	**–**	(3)
At 31 December	**1,018**	1,053	**622**	602
Accumulated depreciation				
At 1 January	**(251)**	(235)	**(128)**	(123)
Currency translation	**2**	(1)	**–**	–
Disposals and other transfers	**5**	10	**(#)**	4
Depreciation charge	**(20)**	(22)	**(8)**	(8)
Net transfer to/(from):				
Property, plant and equipment (Note 34)	**8**	(5)	**(6)**	(2)
Assets held for sale	**1**	2	**–**	1
At 31 December	**(255)**	(251)	**(142)**	(128)
Accumulated impairment losses				
At 1 January	**(1)**	(1)	**(1)**	(1)
Write-back to income statement	**1**	#	**1**	#
At 31 December	**–**	(1)	**–**	(1)
Net carrying amount				
Freehold property	**540**	525	**167**	159
Leasehold property	**223**	276	**313**	314
At 31 December	**763**	801	**480**	473
Fair value hierarchy				
Level 2	**906**	875	**310**	242
Level 3	**1,862**	1,933	**1,099**	1,103
Market value	**2,768**	2,808	**1,409**	1,345

Market values for properties under Level 2 of the fair value hierarchy are determined based on the direct market comparison method. Such valuation is derived from price per square metre for comparable buildings market data with insignificant valuation adjustment, if necessary.

Market values for properties under Level 3 of the fair value hierarchy are determined using a combination of direct market comparison and investment methods. The key unobservable inputs used in these valuations are the capitalisation rates and rental yields.

36. Goodwill and Other Intangible Assets

	GROUP		BANK	
$ million	2022	2021	2022	2021
Goodwill				
At 1 January	**4,467**	4,431	**1,867**	1,867
Currency translation	**(27)**	36	**–**	–
At 31 December	**4,440**	4,467	**1,867**	1,867
Intangible assets				
At 1 January	**307**	406		
Amortisation charged to income statement:				
– Core deposit relationships [(1)]	**(42)**	(41)		
– Customer relationships [(2)]	**(15)**	(15)		
– Distribution platform	**(#)**	(#)		
– Life insurance business [(3)]	**(47)**	(47)		
Currency translation	**#**	4		
At 31 December	**203**	307		
Total goodwill and other intangible assets	**4,643**	4,774	**1,867**	1,867
Analysed as follows:				
Goodwill from acquisition of subsidiaries/business	**4,440**	4,467	**1,867**	1,867
Intangible assets, at cost	**1,568**	1,571	**–**	–
Accumulated amortisation for intangible assets	**(1,365)**	(1,264)	**–**	–
	4,643	4,774	**1,867**	1,867

(1) Core deposit relationships, arising from the acquisition of OCBC Wing Hang, are determined to have an estimated useful life of 10 years. At 31 December 2022, these have a remaining useful life of 1.5 years (2021: 2.5 years).
(2) Customer relationships, arising from the acquisition of Bank of Singapore Limited and Barclays WIM, are determined to have an estimated useful life of 10 years. At 31 December 2022, these have a remaining useful life of up to 4 years (2021: 5 years).
(3) The value of in-force insurance business of the Group is amortised over a useful life of 20 years. At 31 December 2022, the intangible asset has a remaining useful life of 2 years (2021: 3 years).

36. Goodwill and Other Intangible Assets (continued)

Impairment Tests for Goodwill

For impairment testing, goodwill is allocated to the Group's cash-generating units (CGU) identified mainly to business segments as follows:

$ million **Cash Generating Units**	Basis of determining recoverable value	Carrying amount 2022	 2021
Goodwill attributed to Banking CGU			
Global Consumer Financial Services		**844**	844
Global Wholesale Banking		**570**	570
Global Treasury		**524**	524
	Value-in-use	**1,938**	1,938
Great Eastern Holdings Limited	Appraisal value	**427**	427
Bank of Singapore Limited	Value-in-use	**809**	814
Lion Global Investors Limited	Value-in-use	**30**	30
OCBC Wing Hang Bank Limited	Value-in-use	**1,066**	1,073
PT Bank OCBC NISP Tbk	Value-in-use	**160**	175
Others	Value-in-use	**10**	10
		4,440	4,467

The value-in-use calculations apply a discounted cash flow model using cash flow projections based on financial budgets and forecasts approved by management covering a five-year period. The cash flow projections are discounted at a pre-tax discount rate that includes a reasonable risk premium at the date of assessment of the respective CGU. Cash flows beyond the fifth year are extrapolated using the estimated terminal growth rates (weighted average growth rate to extrapolate cash flows beyond the projected years). The terminal growth rate for each CGU used does not exceed management's expectation of the long-term average growth rate of the respective industry and country in which the CGU operates. The discount rates and terminal growth rates used are tabulated below for applicable CGUs.

	Banking CGU		Bank of Singapore Limited		OCBC Wing Hang Bank Limited		PT Bank OCBC NISP Tbk	
	2022	2021	2022	2021	2022	2021	2022	2021
Discount rate	**7.1%**	8.6%	**8.3%**	9.5%	**8.7%**	9.6%	**14.7%**	16.5%
Terminal growth rate	**2.0%**	2.0%	**2.0%**	2.0%	**2.6%**	2.6%	**4.0%**	4.0%

For the insurance CGU, the Group applies the appraisal value technique for its value-in-use calculation. This technique is commonly used to determine the economic value of an insurance business, which comprises two components: embedded value of in-force business and existing structural value (value of future sales). The embedded value of the life insurance business is the present value of projected distributable profits (cash flows) of the in-force business. The cash flows represent a deterministic approach based on assumptions as to future operating experience discounted at a risk adjusted rate of 6.00% (2021: 6.00%) and 7.75% (2021: 7.75%) for Singapore and Malaysia respectively. The assumptions take into account the recent experience of, and expected future outlook for the life insurance business of the CGU. Investment returns assumed are based on long term strategic asset mix and their expected future returns. The existing structural value is the value of projected distributable profits from new businesses, which is calculated based on new businesses sold for the nine months ended up to 30 September and applying a new business multiplier to the value of future sales.

A reasonably possible change in key assumptions will not cause the carrying amount to materially exceed the recoverable amount.

37. Segment Information

37.1 Business Segments

$ million	Global Consumer/ Private Banking	Global Wholesale Banking	Global Treasury and Markets	Insurance	Others	Group
Year ended 31 December 2022						
Net interest income	2,522	4,002	702	112	350	7,688
Non-interest income	1,588	823	288	1,176	112	3,987
Total income	4,110	4,825	990	1,288	462	11,675
Operating profit before allowances and amortisation	1,516	3,325	650	932	226	6,649
Amortisation of intangible assets	(15)	–	–	(47)	(42)	(104)
Allowances for loans and other assets	36	(323)	(1)	(4)	(292)	(584)
Operating profit after allowances and amortisation	1,537	3,002	649	881	(108)	5,961
Share of results of associates, net of tax	–	–	–	–	978	978
Profit before income tax	1,537	3,002	649	881	870	6,939
Other information:						
Capital expenditure	116	10	1	70	355	552
Depreciation	88	12	2	9	315	426
At 31 December 2022						
Segment assets	138,515	189,710	110,471	108,370	41,319	588,385
Unallocated assets						437
Elimination						(28,866)
Total assets						559,956
Segment liabilities	178,231	152,108	76,610	96,123	27,826	530,898
Unallocated liabilities						3,256
Elimination						(28,866)
Total liabilities						505,288
Other information:						
Gross non-bank loans	106,769	185,629	1,728	3	851	294,980
NPAs	886	2,591	–	2	7	3,486

37. Segment Information (continued)

37.1 Business Segments (continued)

$ million	Global Consumer/ Private Banking	Global Wholesale Banking	Global Treasury and Markets	Insurance	Others	Group
Year ended 31 December 2021						
Net interest income	1,663	2,736	972	98	386	5,855
Non-interest income	2,055	907	237	1,496	46	4,741
Total income	3,718	3,643	1,209	1,594	432	10,596
Operating profit before allowances and amortisation	1,181	2,267	868	1,270	246	5,832
Amortisation of intangible assets	(15)	–	–	(47)	(41)	(103)
Allowances for loans and other assets	(56)	(579)	(4)	1	(235)	(873)
Operating profit after allowances and amortisation	1,110	1,688	864	1,224	(30)	4,856
Share of results of associates, net of tax	–	–	–	–	824	824
Profit before income tax	1,110	1,688	864	1,224	794	5,680
Other information:						
Capital expenditure	74	14	1	105	290	484
Depreciation	85	11	2	8	306	412
At 31 December 2021						
Segment assets	131,443	184,050	94,832	110,950	39,960	561,235
Unallocated assets						280
Elimination						(19,328)
Total assets						542,187
Segment liabilities	167,679	151,384	59,917	97,356	27,104	503,440
Unallocated liabilities						3,737
Elimination						(19,328)
Total liabilities						487,849
Other information:						
Gross non-bank loans	109,972	177,670	1,274	3	797	289,716
NPAs	1,184	3,143	–	4	7	4,338

OCBC Group's businesses are presented in the following customer segments and business activities: Global Consumer/Private Banking, Global Wholesale Banking, Global Treasury and Markets and Insurance.

Global Consumer/Private Banking

Global Consumer/Private Banking provides a full range of products and services to individual customers. At Global Consumer Banking, the products and services offered include deposit products (checking accounts, savings and fixed deposits), consumer loans (housing loans and other personal loans), credit cards, wealth management products (unit trusts, bancassurance products and structured deposits) and brokerage services. Private Banking caters to the specialised banking needs of high net worth individuals, offering wealth management expertise, including investment advice and portfolio management services, estate and trust planning, and wealth structuring.

Global Wholesale Banking

Global Wholesale Banking serves institutional customers ranging from large corporates and the public sector to small and medium enterprises. The business provides a full range of financing solutions including long-term project financing, short-term credit, working capital and trade financing, as well as customised and structured equity-linked financing. It also provides customers with a broad range of products and services such as cash management and custodian services, capital market solutions, corporate finance services and advisory banking, and treasury products.

37. Segment Information (continued)

37.1 Business Segments (continued)

Global Treasury and Markets

Global Treasury and Markets is responsible for the management of the Group's asset and liability interest rate positions, engages in foreign exchange activities, money market operations, fixed income and derivatives trading, and offers structured treasury products and financial solutions to meet customers' investment and hedging needs. Income from treasury products and services offered to customers in Global Consumer/Private Banking and Global Wholesale Banking, is reflected in the respective business segments.

Insurance

The Group's insurance business, including its fund management activities, is undertaken by the Bank's subsidiary Great Eastern Holdings Limited and its subsidiaries, which provide both life and general insurance products to its customers mainly in Singapore and Malaysia.

Others

Others comprise mainly property holding, investment holding and items not attributable to the business segments described above.

The business segment information is prepared based on internal management reports, which are used by senior management for decision-making and performance management. The following management reporting methodologies are adopted:

(a) income and expenses are attributable to each segment based on the internal management reporting policies;
(b) in determining the segment results, balance sheet items are internally transfer priced; and
(c) transactions between business segments are recorded within the segment as if they are third party transactions and are eliminated on consolidation.

Where there are material changes in the organisational structure and management reporting methodologies, segment information for prior periods is reclassified to allow comparability. There are no material items of income or expense between the business segments.

37.2 Geographical Segments

$ million	Total income	Profit before income tax	Income tax expenses	Capital expenditure	Total assets	Total liabilities
2022						
Singapore	**6,738**	**3,568**	**431**	**381**	**323,392**	**328,187**
Malaysia	**1,668**	**1,239**	**355**	**49**	**65,280**	**53,189**
Indonesia	**1,016**	**325**	**67**	**76**	**21,047**	**18,136**
Greater China	**1,558**	**1,353**	**73**	**39**	**93,291**	**62,711**
Other Asia Pacific	**251**	**239**	**75**	**4**	**20,321**	**10,473**
Rest of the World	**444**	**215**	**56**	**3**	**36,625**	**32,592**
	11,675	**6,939**	**1,057**	**552**	**559,956**	**505,288**
2021						
Singapore	5,955	3,039	271	332	317,491	311,738
Malaysia	1,619	860	173	73	66,997	55,450
Indonesia	940	325	72	43	20,954	17,650
Greater China	1,453	1,243	75	29	88,031	60,128
Other Asia Pacific	262	102	29	5	18,631	10,644
Rest of the World	367	111	28	2	30,083	32,239
	10,596	5,680	648	484	542,187	487,849

The Group's operations are in six main geographical areas. The geographical information is prepared based on the country in which the transactions are booked. It would not be materially different if it is based on the country in which the counterparty or assets are located. The geographical information is stated after elimination of intra-group transactions and balances.

38. Risk Management

38.1 Overview

The Group's risk management framework comprises strong governance, sound policies and methodologies, and professionals, supported by fit-for-purpose technology, infrastructure and data. The framework is underpinned by a strong corporate culture that emphasises accountability, ownership, integrity and high ethical standards. The Group engages in business that are consistent with the corporate strategy and risk appetite, are well understood and are appropriately priced to provide the Group with an adequate return.

The Board of Directors (Board) has ultimate responsibility for the effective management of risk. It establishes the corporate strategy and approves the risk appetite within which senior management executes the strategy.

The Board Risk Management Committee (BRMC) is the designated board committee overseeing risk management matters. It ensures that the Group's overall risk management philosophy and principles are aligned with the corporate strategy and within the approved risk appetite. The Committee has oversight of credit, market, liquidity, information security and digital, operational, conduct, money laundering and terrorism financing, legal, regulatory, strategic, ESG and fiduciary risks, as well as any other category of risk that may be delegated by the Board or deemed necessary by the Committee. It also ensures that the necessary overall risk management organisation is in place and effective. Based on the approved risk appetite, the BRMC provides quantitative and qualitative guidance to major business units and risk functions to guide risk-taking. Senior management, functional risk committees covering principal risk types and the BRMC regularly review the Group's risk drivers, risk profiles across major lines of business and risk types, risk management frameworks and major risk policies, as well as compliance matters.

The Group's independent risk management function, the Group Risk Management Division (GRM), is headed by the Group Chief Risk Officer (CRO) who is also the Group Chief Information Security Officer (CISO). The Group CRO is a member of the Group Management Executive Committee and also the functional risk committees. GRM's day-to-day functional responsibility involves providing independent risk control and managing credit, market, liquidity, information security and digital, operational and ESG risks. It provides regular risk reports and updates on developments in material risk drivers, potential vulnerabilities, as well as recommended mitigating actions, to the senior management, risk committees, the BRMC and Board. Risk management staff work closely with the business and other support units to ensure that risks are well understood and appropriately managed.

GRM oversees the New Product Approval Process to ensure that risks are properly and comprehensively identified, and adequately addressed before implementation. GRM also oversees the data management framework so that comprehensive, accurate and timely information can support management decisions. With the increasing use of Artificial Intelligence and Data Analytics (AIDA) across the Group, GRM is taking the lead in embedding the principles of Fairness, Ethics, Accountability and Transparency (FEAT) into our data and model governance as the Group upgrades its digital capabilities in keeping with evolving industry practices.

The table below shows the value-at-risk (VaR) by risk type for the Group's trading portfolio.

	2022				2021			
$ million	End of the period	Average	Minimum	Maximum	End of the period	Average	Minimum	Maximum
Interest rate VaR	**4.89**	**5.25**	**1.43**	**7.96**	4.11	4.38	2.15	12.30
Foreign exchange VaR	**3.62**	**1.71**	**0.40**	**6.76**	0.63	1.74	0.59	5.75
Equity VaR	**0.97**	**1.99**	**0.61**	**4.91**	1.21	2.05	0.55	6.36
Credit spread VaR	**5.76**	**3.62**	**1.91**	**6.78**	2.01	2.67	1.42	7.02
Diversification effect (1)	**(6.92)**	**(5.82)**	**NM** (2)	**NM** (2)	(4.93)	(5.53)	NM (2)	NM (2)
Aggregate VaR	**8.32**	**6.76**	**2.84**	**11.07**	3.03	5.32	2.49	18.14

(1) Diversification effect is computed as the difference between Aggregate VaR and the sum of asset class VaRs.
(2) Not meaningful as the minimum and maximum VaRs may have occurred on different days for different asset classes.

38. Risk Management (continued)

38.2 Credit Risk

Credit risk is the risk of losing principal and/or income due to the failure of an obligor or counterparty to meet its financial or contractual obligations or an adverse change in the credit profile of an obligor or counterparty. Credit risk arises from the Group's lending activities to retail, corporate and institutional customers. It also includes counterparty and issuer credit risks arising from the Group's underwriting, trading and investment banking activities.

Maximum Exposure to Credit Risk

The following table presents the Group's maximum exposure to credit risk of on-balance sheet and off-balance sheet financial instruments, without taking into account of any collateral held or other credit enhancements. For on-balance sheet assets, the exposure to credit risk equals their carrying amount. For contingent liabilities, the maximum exposure to credit risk is the maximum amount that the Group would have to pay if the obligations of the instruments issued are called upon. For credit commitments, the maximum exposure to credit risk is the full amount of the undrawn credit facilities granted to customers.

	Carrying amount		Average	
$ million	2022	2021	2022	2021
Credit risk exposure of on-balance sheet assets:				
Loans to customers	**291,467**	286,281	**289,708**	272,302
Placements with and loans to banks	**30,244**	25,462	**24,611**	26,742
Government treasury bills and securities	**39,367**	37,271	**36,893**	34,669
Debt securities	**22,956**	28,045	**25,207**	28,290
Amounts due from associates	**7**	40	**5**	38
Derivative receivables	**15,605**	9,267	**21,048**	15,269
Other assets, comprising interest receivables and sundry debtors	**2,514**	1,811	**2,936**	2,881
	402,160	388,177	**400,408**	380,191
Credit risk exposure of off-balance sheet items:				
Contingent liabilities	**16,749**	16,651	**17,090**	14,937
Credit commitments	**183,704**	171,062	**177,664**	164,594
	200,453	187,713	**194,754**	179,531
Total maximum credit risk exposure	**602,613**	575,890	**595,162**	559,722

Collateral

The main types of collateral obtained by the Group are as follows:

- Residential property loans – Mortgages over residential properties
- Commercial property loans – Mortgages over commercial properties
- Derivatives – Cash and securities
- Car loans – Charges over the vehicles financed
- Share margin financing – Charges over listed securities including those of Singapore, Malaysia and Hong Kong
- Other loans – Securities and charges over business assets such as premises, inventories, trade receivables, deposits, single premium insurance policies or marketable securities

38. Risk Management (continued)

38.2 Credit Risk (continued)

Analysed by Geography

$ million	Derivative receivables (Note 18)	Government treasury bills and securities (Note 24)	Balances with banks (Note 25)	Loans to customers (Note 26)	Non-performing assets (Note 27)	Allowances for impaired assets (Note 27)	Debt securities (Note 29)
GROUP							
2022							
Singapore	**1,421**	**17,096**	**753**	**119,925**	**437**	**131**	**2,263**
Malaysia	**370**	**4,550**	**5,841**	**25,077**	**981**	**292**	**1,676**
Indonesia	**82**	**3,994**	**565**	**18,600**	**778**	**389**	**1,113**
Greater China	**2,424**	**3,702**	**12,867**	**72,756**	**901**	**246**	**8,982**
Other Asia Pacific	**861**	**5,248**	**3,114**	**21,734**	**96**	**29**	**5,892**
Rest of the World	**10,447**	**4,777**	**4,973**	**36,888**	**293**	**223**	**3,030**
	15,605	**39,367**	**28,113**	**294,980**	**3,486**	**1,310**	**22,956**
2021							
Singapore	1,221	11,112	802	115,620	606	193	2,827
Malaysia	306	5,428	2,565	27,611	1,516	361	1,598
Indonesia	209	6,425	404	18,918	1,216	504	1,367
Greater China	1,614	4,373	14,027	74,120	586	270	14,461
Other Asia Pacific	599	5,393	1,813	19,293	186	44	4,909
Rest of the World	5,318	4,540	3,629	34,154	228	165	2,883
	9,267	37,271	23,240	289,716	4,338	1,537	28,045
BANK							
2022							
Singapore	**1,796**	**15,889**	**410**	**111,626**	**437**	**129**	**1,061**
Malaysia	**69**	**147**	**2,791**	**3,574**	**24**	**18**	**157**
Indonesia	**14**	**243**	**189**	**5,611**	**74**	**61**	**711**
Greater China	**989**	**1,362**	**9,355**	**33,784**	**419**	**202**	**4,337**
Other Asia Pacific	**726**	**5,122**	**2,987**	**18,879**	**86**	**27**	**5,140**
Rest of the World	**10,148**	**1,291**	**2,952**	**29,618**	**192**	**146**	**2,229**
	13,742	**24,054**	**18,684**	**203,092**	**1,232**	**583**	**13,635**
2021							
Singapore	1,368	10,106	304	105,801	604	191	1,380
Malaysia	98	79	1,961	4,062	25	18	90
Indonesia	164	274	102	6,155	105	82	880
Greater China	681	2,285	11,964	33,108	469	234	7,901
Other Asia Pacific	470	5,381	1,685	16,005	173	43	4,194
Rest of the World	5,031	1,691	1,505	26,239	195	154	2,318
	7,812	19,816	17,521	191,370	1,571	722	16,763

The analysis by geography is determined based on where the credit risk resides.

38. Risk Management (continued)

38.2 Credit Risk (continued)

Total Loans and Advances – Credit Quality

In addition to the credit grading of facilities under MAS Notice 612 (2021: MAS Notices 612 and 612A), loans and advances are categorised into "neither past due nor impaired", "past due but not impaired" and "impaired".

	Bank loans		Non-bank loans	
$ million	2022	2021	2022	2021
Neither past due nor impaired	**28,113**	23,240	**291,059**	284,855
Non-impaired	**–**	–	**1,527**	1,690
Impaired	**–**	–	**1,505**	1,714
Past due loans	**–**	–	**3,032**	3,404
Impaired but not past due	**–**	–	**889**	1,457
Gross loans	**28,113**	23,240	**294,980**	289,716
Allowances				
Impaired loans	**–**	–	**(1,308)**	(1,535)
Non-impaired loans	**(5)**	(6)	**(2,205)**	(1,900)
Net loans	**28,108**	23,234	**291,467**	286,281

Past Due Loans

Analysis of past due loans by industry and geography are as follows:

	Bank loans		Non-bank loans	
$ million	2022	2021	2022	2021
By industry				
Agriculture, mining and quarrying	**–**	–	**96**	168
Manufacturing	**–**	–	**548**	767
Building and construction	**–**	–	**391**	330
General commerce	**–**	–	**401**	669
Transport, storage and communication	**–**	–	**246**	313
Financial institutions, investment and holding companies	**–**	–	**136**	56
Professionals and individuals (include housing loans)	**–**	–	**1,094**	963
Others	**–**	–	**120**	138
	–	–	**3,032**	3,404
By geography				
Singapore	**–**	–	**653**	625
Malaysia	**–**	–	**729**	576
Indonesia	**–**	–	**1,039**	1,829
Greater China	**–**	–	**472**	280
Rest of the World	**–**	–	**139**	94
	–	–	**3,032**	3,404

38. Risk Management (continued)

38.2 Credit Risk (continued)

Loans Past Due But Not Impaired

Certain loans and advances are past due but not impaired as the collateral values of these loans are in excess of the principal and interest outstanding. Allowances for these loans may have been set aside. The Group's non-bank loans which are past due but not impaired are as follows:

$ million	2022	2021
Past due		
Less than 30 days	**884**	1,188
30 to 90 days	**310**	224
Over 90 days	**333**	278
Past due but not impaired	**1,527**	1,690

Collateral and Other Credit Enhancements Obtained

Assets amounting to $853 million (2021: $116 million) were obtained by the Group during the year by taking possession of collateral held as security, or by calling upon other credit enhancements and held at the reporting date.

Repossessed properties are made available for sale in an orderly fashion, with the proceeds used to reduce or repay the outstanding indebtedness. The Group generally does not occupy the premises repossessed for its business use.

Country Risk

The Group's country risk framework covers the assessment and rating of countries, as well as the maximum cross-border transfer risk limit granted to any one country based on its risk rating. The risk covers all cross-border transactions including onshore non-local currency transactions. Limits are allocated into maturity time-bands and vary according to the risk rating of the country and the political and economic outlook. The Group's main cross-border transfer risk exposures during the financial year were in Hong Kong SAR, People's Republic of China and Malaysia.

38.3 Market Risk and Asset Liability Management

Market risk is the risk of losing income and/or market value due to fluctuations in factors such as interest rates, foreign exchange rates, credit spreads, equity and commodity prices or changes in volatilities, or correlation of such factors. Market risks arise primarily from the Group's trading, client servicing and balance sheet management activities. It also includes interest rate risk in the banking book (IRRBB) which is the risk to income and/or capital arising from exposure to adverse changes in the interest rate environment.

The Group's market risk management framework covers the identification, assessment, measurement, monitoring and control of risks. Group-level market risk policies and procedures have been established to provide common guidelines and standards for managing market risks. The Group regularly reviews its market risk management strategy and limits – established within the Group's risk appetite and in line with the Group's business strategies – taking into account prevailing macroeconomic and market conditions.

Asset liability management is the strategic management of the Group's balance sheet structure and liquidity requirements. It covers liquidity sourcing and diversification as well as interest rate and structural foreign exchange management.

The Group's asset liability management framework focuses on managing the exposures arising from the balance sheet. The Group monitors its liquidity risk, IRRBB and structural foreign exchange risk profiles against approved risk limits under both business-as-usual and stressed scenarios. These are based on the standards established in the Group's framework, policies and procedures which are reviewed regularly to ensure that they remain relevant in the context of prevailing market practices and regulatory guidelines.

38. Risk Management (continued)

38.3 Market Risk and Asset Liability Management (continued)

Interest Rate Risk

The primary goal of the management of IRRBB is to ensure that interest rate risk exposures are consistent with the Group's risk appetite and maintained within the defined risk tolerances. The material sources of IRRBB are repricing risk, yield curve risk, basis risk and optionality risk.

A range of techniques are used to measure IRRBB from both the earnings and economic value perspectives. One measure involves the assessment of the impact of various interest rate scenarios on the Group's net interest income and the banking book's Economic Value of Equity (EVE). Other measures include interest rate sensitivity metrics such as PV01 and repricing gap profile analysis. The Group also use behavioural models to assess interest rate risks in relation to loan prepayment, time deposit early redemption and the profile of non-maturity deposits. These measurements facilitate the calibration of appropriate IRRBB management, hedging strategies, policies and positions.

The impact on net interest income of the banking book is simulated under various interest rate scenarios and assumptions. Based on a 100 bp parallel rise in yield curves on the Group's exposure to major currencies i.e. Singapore Dollar, US Dollar, Hong Kong Dollar and Malaysian Ringgit, net interest income is estimated to increase by $742 million (2021: $669 million), or approximately +9.6% (2021: +11.4%) of reported net interest income. The corresponding impact from a 100 bp decrease in interest rates is an estimated reduction of $742 million (2021: $669 million) in net interest income, or approximately -9.6% (2021: -11.4%) of reported net interest income.

The 1% rate shock impact on net interest income is based on the Group's interest rate risk profile as at reporting date. It does not take into account actions that would be taken by Global Treasury or the business units to mitigate the impact of this interest rate risk. The projections also assume a constant balance sheet size and position.

Currency Risk

The Group's major foreign exchange position for selected balance sheet items is shown below. "Others" include mainly Indonesian Rupiah, Chinese Renminbi, Australian Dollar, Euro, Japanese Yen and Sterling Pound.

$ million	SGD	USD	MYR	HKD	Others	Total
Selected balance sheet items						
2022						
Loans to customers	**106,119**	**70,231**	**17,926**	**36,120**	**61,071**	**291,467**
Deposits of non-bank customers	**130,205**	**119,527**	**21,278**	**26,210**	**52,861**	**350,081**
2021						
Loans to customers	101,047	72,414	19,537	34,595	58,688	286,281
Deposits of non-bank customers	133,157	109,842	22,603	23,381	53,412	342,395

38. Risk Management (continued)

38.3 Market Risk and Asset Liability Management (continued)

Structural Foreign Exchange Risk

Structural foreign exchange exposure arises primarily from the Group's non-SGD investment in overseas branches, subsidiaries and associates, strategic investments, as well as property assets. The Group manages structural foreign exchange risk through hedging instruments including the use of derivatives and matched funding for foreign currency investments. The table below shows the Group's structural foreign currency exposure at reporting date.

	2022			2021		
$ million	Structural currency exposure	Structural currency exposure – hedged	Net structural currency exposure	Structural currency exposure	Structural currency exposure – hedged	Net structural currency exposure
Hong Kong Dollar	**7,011**	**–**	**7,011**	7,234	–	7,234
Chinese Renminbi	**8,357**	**–**	**8,357**	8,182	–	8,182
US Dollar	**3,931**	**3,434**	**497**	4,024	3,185	839
Others	**7,746**	**–**	**7,746**	7,968	117	7,851
Total	**27,045**	**3,434**	**23,611**	27,408	3,302	24,106

Net Investment Hedges

The amounts relating to items designated as hedging instruments were as follows.

		Carrying amount	
$ million	Nominal amount	Assets	Liabilities
2022			
Foreign exchange derivatives	**1,430**	**–**	**238**
Subordinated debt	**1,775**	**–**	**1,658**
2021			
Foreign exchange derivatives	3,642	49	180

The total change in fair value of the hedging instruments during the year was a gain of $30 million (2021: loss of $67 million) and the change in value of the hedging instruments recognised in OCI was a gain of $30 million (2021: loss of $67 million). There was no gain or loss recognised in other income arising from hedge ineffectiveness in 2022 (2021: nil).

38. Risk Management (continued)

38.3 Market Risk and Asset Liability Management (continued)

Liquidity Risk

Liquidity risk is the risk arising from the inability to meet financial and cash outflow obligations as they fall due without incurring unacceptable costs or losses.

The objective of liquidity risk management is to ensure that the Group has sufficient funds to meet the required contractual and regulatory financial obligations and to undertake new transactions.

Liquidity monitoring is performed on daily basis within a framework for projecting cash flows on contractual and behavioural bases. Indicators such as liquidity and deposit concentration ratios are used to establish the optimal funding mix and asset composition. Funding strategies are established to provide effective diversification and stability in funding sources across tenors, products and geographies. Simulations of liquidity exposures under stressed market scenarios are performed and the results are used to adjust liquidity risk management strategies, policies and positions, as well as to develop contingency funding plans.

The table below analyses the carrying amount of assets and liabilities of the Group into maturity time bands based on the remaining term to contractual maturity as at the reporting date.

$ million	Within 1 week	1 week to 1 month	1 to 3 months	3 to 12 months	1 to 3 years	Over 3 years	No specific maturity	Total
2022								
Cash and placements with central banks	**16,187**	**5,208**	**8,585**	**3**	**–**	**–**	**4,983**	**34,966**
Placements with and loans to banks	**5,257**	**3,959**	**8,928**	**8,833**	**546**	**585**	**–**	**28,108**
Loans to customers	**21,925**	**36,231**	**21,047**	**33,916**	**54,199**	**124,149**	**–**	**291,467**
Securities [1]	**505**	**4,535**	**7,277**	**15,350**	**20,731**	**13,925**	**5,054**	**67,377**
Derivative receivables	**15,199**	**6**	**52**	**35**	**162**	**151**	**–**	**15,605**
Other assets [2]	**2,718**	**2,012**	**511**	**470**	**72**	**110**	**1,179**	**7,072**
Associates	**#**	**–**	**6**	**–**	**–**	**1**	**6,333**	**6,340**
Property, plant and equipment and investment property [3]	**–**	**1**	**–**	**–**	**–**	**–**	**3,592**	**3,593**
Goodwill and other intangible assets	**–**	**–**	**–**	**–**	**–**	**–**	**4,643**	**4,643**
Total	**61,791**	**51,952**	**46,406**	**58,607**	**75,710**	**138,921**	**25,784**	**459,171**
Total life insurance fund assets								**100,785**
Total assets								**559,956**
Deposits of non-bank customers	**201,584**	**38,932**	**46,777**	**56,773**	**4,242**	**1,773**	**–**	**350,081**
Deposits and balances of banks	**6,089**	**2,050**	**1,755**	**123**	**–**	**29**	**–**	**10,046**
Trading portfolio liabilities	**–**	**–**	**201**	**–**	**–**	**–**	**11**	**212**
Derivative payables	**15,248**	**3**	**116**	**85**	**442**	**154**	**–**	**16,048**
Other liabilities [4]	**2,687**	**2,075**	**981**	**2,598**	**233**	**122**	**1,217**	**9,913**
Debt issued	**739**	**1,148**	**7,567**	**4,709**	**6,400**	**1,375**	**–**	**21,938**
Total	**226,347**	**44,208**	**57,397**	**64,288**	**11,317**	**3,453**	**1,228**	**408,238**
Total life insurance fund liabilities								**97,050**
Total liabilities								**505,288**
Net liquidity gap	**(164,556)**	**7,744**	**(10,991)**	**(5,681)**	**64,393**	**135,468**		

(1) Securities comprise government, debt and equity securities. Securities at FVTPL (Note 39) are expected to be recovered or settled within 12 months.
(2) Other assets include deferred tax assets.
(3) Property, plant and equipment and investment property include assets held for sale.
(4) Other liabilities include amounts due to associates, current tax and deferred tax liabilities.

38. Risk Management (continued)

38.3 Market Risk and Asset Liability Management (continued)

Liquidity Risk (continued)

$ million	Within 1 week	1 week to 1 month	1 to 3 months	3 to 12 months	1 to 3 years	Over 3 years	No specific maturity	Total
2021								
Cash and placements with central banks	13,629	2,436	6,643	–	–	–	5,211	27,919
Placements with and loans to banks	5,773	2,918	4,102	10,381	60	#	–	23,234
Loans to customers	24,494	37,225	21,463	32,106	57,751	113,242	–	286,281
Securities [1]	64	2,303	4,421	14,242	22,993	21,293	5,970	71,286
Derivative receivables	8,922	6	99	30	120	90	–	9,267
Other assets [2]	3,336	972	721	542	64	102	877	6,614
Associates	1	–	4	35	–	#	6,130	6,170
Property, plant and equipment and investment property [3]	1	8	1	1	–	–	3,627	3,638
Goodwill and other intangible assets	–	–	–	–	–	–	4,773	4,773
Total	56,220	45,868	37,454	57,337	80,988	134,727	26,588	439,182
Total life insurance fund assets								103,005
Total assets								542,187
Deposits of non-bank customers	229,550	30,704	41,873	37,392	1,907	969	–	342,395
Deposits and balances of banks	5,362	1,593	1,075	154	–	55	–	8,239
Trading portfolio liabilities	–	–	392	–	–	–	1	393
Derivative payables	8,670	1	1	84	145	169	–	9,070
Other liabilities [4]	3,206	1,133	826	1,865	268	219	1,083	8,600
Debt issued	782	1,511	4,488	5,805	4,759	2,770	–	20,115
Total	247,570	34,942	48,655	45,300	7,079	4,182	1,084	388,812
Total life insurance fund liabilities								99,037
Total liabilities								487,849
Net liquidity gap	(191,350)	10,926	(11,201)	12,037	73,909	130,545		

(1) Securities comprise government, debt and equity securities. Securities at FVTPL (Note 39) are expected to be recovered or settled within 12 months.
(2) Other assets include deferred tax assets.
(3) Property, plant and equipment and investment property include assets held for sale.
(4) Other liabilities include amounts due to associates, current tax and deferred tax liabilities.

As contractual maturities may not necessarily reflect the timing of actual cash flows of assets and liabilities, cash flows for profiling liquidity risk are on contractual and behavioural bases. The cash flows of assets and liabilities may be different from their contractual terms.

Contractual Maturity for Financial Liabilities

The table below shows the undiscounted cash outflows of the Group's financial liabilities by remaining contractual maturities, except for trading portfolio liabilities which are profiled in accordance with the Group's trading strategies. Information on cash outflows of gross loan commitments is set out in Note 44. The behavioural cash flows of these liabilities could vary significantly from what is shown in the table. For example, demand deposits of non-bank customers, such as current and savings deposits (Note 17) may exhibit a longer behavioural maturity beyond the contractual profile. Similarly, loan commitments are not all expected to be drawn down immediately.

38. Risk Management (continued)

38.3 Market Risk and Asset Liability Management (continued)

Contractual Maturity for Financial Liabilities (continued)

$ million	Within 1 week	1 week to 1 month	1 to 3 months	3 to 12 months	1 to 3 years	Over 3 years	Total
2022							
Deposits of non-bank customers [1]	**201,639**	**39,190**	**47,267**	**58,418**	**4,532**	**1,841**	**352,887**
Deposits and balances of banks [1]	**6,094**	**2,063**	**1,772**	**125**	**–**	**29**	**10,083**
Trading portfolio liabilities	**–**	**–**	**212**	**–**	**–**	**–**	**212**
Other liabilities [2]	**2,650**	**1,854**	**674**	**1,253**	**167**	**113**	**6,711**
Debt issued	**740**	**1,158**	**7,598**	**4,924**	**7,203**	**1,491**	**23,114**
Derivatives							
Trading	**15,460**	**–**	**–**	**–**	**–**	**–**	**15,460**
Hedging – Net settled	**#**	**5**	**46**	**88**	**174**	**26**	**339**
Hedging – Gross settled							
Outflow	**39**	**35**	**873**	**778**	**2,116**	**–**	**3,841**
Inflow	**(38)**	**(32)**	**(760)**	**(792)**	**(1,981)**	**–**	**(3,603)**
	226,584	**44,273**	**57,682**	**64,794**	**12,211**	**3,500**	**409,044**
2021							
Deposits of non-bank customers [1]	229,563	30,765	41,946	37,567	2,022	1,020	342,883
Deposits and balances of banks [1]	5,364	1,594	1,076	154	–	55	8,243
Trading portfolio liabilities	–	–	393	–	–	–	393
Other liabilities [2]	3,177	1,048	749	1,039	226	171	6,410
Debt issued	783	1,512	4,508	5,910	4,910	2,966	20,589
Derivatives							
Trading	8,726	–	–	–	–	–	8,726
Hedging – Net settled	#	2	3	17	35	20	77
Hedging – Gross settled							
Outflow	5	85	912	1,909	1,747	916	5,574
Inflow	(1)	(84)	(960)	(1,829)	(1,610)	(837)	(5,321)
	247,617	34,922	48,627	44,767	7,330	4,311	387,574

(1) Interest cash flows of bank and non-bank deposits are included in the respective deposit lines based on interest payment dates.
(2) Other liabilities include amounts due to associates.

Information Security and Digital Risk

Information security risk is the risk of compromising confidentiality, integrity and/or availability of information (in physical or digital form).

Digital risk encompasses cyber and technology risks. Cyber risk is the risk arising from malicious acts perpetrated by threat actors. Technology risk is the risk of disruption, failure or irregularity in essential financial services arising from the use of information and communication technologies.

Operational Risk

Operational risk is the risk of loss resulting from inadequate or failed internal processes and systems, poor management, human error or external events. This is a broad risk category that encompasses fraud risk, money laundering, terrorism financing and sanctions risk, third-party risk, physical and people security risk, conduct risk, business continuity risk, unauthorised trading risk, regulatory risk, legal risk, fiduciary risk and reputational risk.

38. Risk Management (continued)

38.4 Insurance-Related Risk Management

This note sets out the risk management information of GEH Group.

Governance Framework

Managing risk is an integral part of GEH Group's core business. As stated in the Enterprise Risk Management (ERM) Framework, GEH Group shall operate within parameters and limits that are calibrated to the risk appetite approved by the GEH Board, and pursue appropriate risk-adjusted returns.

GEH Group Risk Management department spearheads the development and implementation of the ERM Framework for GEH Group.

GEH Board is responsible for overseeing GEH Group's risk management initiatives. GEH Board may delegate this responsibility to the Risk Management Committee (RMC) and Senior Management of GEH Group for the execution of these initiatives. At GEH Group level, detailed risk management and oversight activities are undertaken by the following Group Management committees, all of which are chaired by GEH Group Chief Executive Officer and comprise key Senior Management Executives, namely: Group Management Committee (GMC), Group Investment Committee (Group IC), Group Asset-Liability Committee (Group ALC), Group Technology Strategy Committee (Group TSC) and Group Product Management and Approval Committee (Group PMAC).

GMC is responsible for providing leadership, direction and functional oversight on all matters including sustainability performance of GEH Group. In addition to complying with regulatory requirements, the GMC is also responsible for ensuring compliance and alignment with Group Governance and Oversight Framework, i.e. Group standards and guidelines. The GMC is supported by the Group IC, Group ALC, Group PMAC, Group TSC, Local Senior Management Team (SMT), Local ALC, Local Product Development Committee (PDC) and Local TSC.

Group IC is responsible for overseeing all investment management activities of GEH Group and ensuring that the interests and rights of policyholders are not compromised.

Group ALC is responsible for balance sheet management. Specifically, Group ALC reviews and formulates frameworks, policies, processes and methodologies relating to balance sheet management. Group ALC is also responsible for ensuring compliance and alignment with Group Governance and Oversight Framework, i.e. Group standards and guidelines. Group ALC is supported by the local ALC.

Group TSC is responsible for assisting GMC in providing the overall strategic direction and approval of all IT related issues and initiatives, including the digitalisation and transformation programs to support GEH Group's strategic growth into the future. Group TSC is supported by local TSC.

Group PMAC is responsible for reviewing, approving and managing new and existing products, ensuring the business operates within the risk appetite in delivering the annual business targets. Local PDC is responsible for reviewing and endorsing new products at the local operating subsidiaries.

Regulatory Framework

Insurers are required to comply with the Insurance Act and Regulations, as applicable, including guidelines on investment limits. The responsibility for the formulation, establishment and approval of the policy for the investment of the funds rests with the respective Board of Directors (Board) of the insurance subsidiaries. GEH Board exercises oversight on investments to safeguard the interests of policyholders and shareholders.

Capital Management

The objectives of GEH's capital management policy are to create shareholder value, deliver sustainable returns to shareholders, maintain a strong capital position with sufficient buffer to meet policyholders' obligations and regulatory requirements and make strategic investments for business growth.

GEH Group had no significant changes in the policies and processes relating to its capital structure during the year.

38. Risk Management (continued)

38.4 Insurance-Related Risk Management (continued)

Regulatory Capital

GEH Group and its insurance subsidiaries are required to comply with the capital requirements prescribed by the insurance regulations of the jurisdictions in which the subsidiaries operate. The Capital Adequacy Ratios of GEH Group and its insurance subsidiaries in Singapore, Malaysia and Indonesia remained well above the regulatory minimum ratios under the Risk-based Capital Frameworks established by the Monetary Authority of Singapore (MAS), Bank Negara Malaysia (BNM) and Otoritas Jasa Keuangan, Indonesia respectively.

GEH Group's approach to capital management aims to maintain an adequate level of capital to meet regulatory requirements, including any additional amounts required by the regulators of GEH Group and its insurance subsidiaries. This involves managing asset, liability decisions and the associated risks in a coordinated way by assessing and monitoring the available and required capital (by each regulated entity) on a regular basis and, where appropriate, taking appropriate actions to adjust the asset liability position of GEH Group and/or its subsidiaries in light of changes in economic conditions and risk characteristics.

The primary sources of capital of GEH Group are shareholders' equity. GEH Group defines available capital as the amount of assets in excess of liabilities measured in accordance with the insurance regulations of the respective jurisdictions in which the insurance subsidiaries operate.

Dividend

GEH's dividend policy aims to provide shareholders with a predictable and sustainable dividend return, payable on a half-yearly basis.

38. Risk Management (continued)

38.4 Insurance-Related Risk Management (continued)

The following sections provide details of GEH Group's exposure to insurance and key financial risks, as well as the objectives, policies and processes for managing these risks.

There has been no change to GEH Group's exposure to these insurance and key financial risks or the manner in which it manages and measures the risks.

Insurance Risk

The principal activity of GEH Group is the provision of insurance products and related financial advisory services. The products cover risks such as mortality, morbidity (health, disability, critical illness, personal accident), property and casualty, investment saving protection and wealth accumulation guarantees.

GEH Group's underwriting strategy is designed to ensure that risks are well diversified across the types of risk and level of insured benefits. This is largely achieved through diversification across industry sectors and geography, the use of medical screening in order to ensure that pricing takes into account current health conditions and family medical history, regular review of actual claims experience, as well as detailed claims handling procedures. Underwriting limits are also established to enforce appropriate risk selection criteria. For example, GEH Group has the right to reject renewal of insurance policy, impose deductibles and reject payment of fraudulent claims.

Risks inherent in GEH Group’s activities include but are not limited to the following.

Insurance Risks of Life Insurance Contracts

Insurance risks arise when GEH Group underwrites insurance contracts. While insurance risks may not vary significantly across the geographical locations in which GEH Group currently operates, the types of risks insured, assumptions used in pricing the insurance products and subsequent setting aside of provisions may give rise to potential shortfalls in provision for future claims and expenses when actual claims experience are worse than projections. Assumptions that may cause insurance risks to be underestimated include assumptions on policy lapses, mortality, morbidity and expenses.

GEH Group utilises reinsurance to manage the mortality and morbidity risks. GEH Group’s reinsurance management strategy and policy are reviewed annually by RMC and GEH Group ALC. Reinsurance is structured according to the type of risk insured. Catastrophe reinsurance is procured to limit catastrophic losses.

In general, reinsurance business will only be given to reinsurers with a minimum credit rating of S&P A- or equivalent. GEH Group limits its risk to any one reinsurer by ceding different products to different reinsurers or to a panel of reinsurers.

GEH Group ALC reviews the actual experience of mortality, morbidity, lapses and surrenders, and expenses at least annually, and ensures that the policies, guidelines and limits established for managing the risks remain adequate and appropriate.

A substantial portion of GEH Group’s life insurance funds is participating in nature. In the event of volatile investment climate and/or unusual claims experience, the insurer has the option of revising the bonus payable to policyholders.

For non-participating funds, the risk is that the guaranteed policy benefits must be met even when investment portfolios perform below expectations, or claims experience is higher than expected.

For investment-linked funds, the risk exposure for GEH Group is limited only to the underwriting aspect as all investment risks are borne by the policyholders. Nevertheless, the fees earned by GEH Group for managing the investment-linked funds would fluctuate with the changes in underlying fund values.

Stress testing is performed at least once a year to assess the solvency of the life insurance fund under various stress scenarios. The stress scenarios include regulatory prescribed scenarios, as well as scenarios depicting drastic changes in key parameters such as new business volume, market volatilities, expense patterns, mortality/morbidity patterns and lapse rates.

38. Risk Management (continued)

38.4 Insurance-Related Risk Management (continued)

Insurance Risk (continued)

Insurance Risks of Life Insurance Contracts (continued)

The table below sets out the distribution of the various life insurance risk as at the reporting date.

	Gross			Reinsurance			
$ million	With DPF [1]	Without DPF	Total	With DPF	Without DPF	Total	Net total
(a) By class of business							
2022							
Whole life	**40,799**	**9,749**	**50,548**	**9**	**(23)**	**(14)**	**50,534**
Endowment	**18,003**	**13,125**	**31,128**	**#**	**(28)**	**(28)**	**31,100**
Term	**#**	**678**	**678**	**(#)**	**(162)**	**(162)**	**516**
Accident and health	**2**	**736**	**738**	**–**	**(293)**	**(293)**	**445**
Annuity	**23**	**366**	**389**	**–**	**–**	**–**	**389**
Others	**124**	**1,331**	**1,455**	**(1)**	**(82)**	**(83)**	**1,372**
Total	**58,951**	**25,985**	**84,936**	**8**	**(588)**	**(580)**	**84,356**
2021							
Whole life	41,215	11,084	52,299	11	(27)	(16)	52,283
Endowment	21,963	9,549	31,512	#	(125)	(125)	31,387
Term	#	732	732	(#)	(165)	(165)	567
Accident and health	2	548	550	–	(133)	(133)	417
Annuity	26	444	470	–	–	–	470
Others	128	1,268	1,396	(1)	(33)	(34)	1,362
Total	63,334	23,625	86,959	10	(483)	(473)	86,486
(b) By country							
2022							
Singapore	**44,104**	**18,416**	**62,520**	**15**	**(252)**	**(237)**	**62,283**
Malaysia	**14,514**	**6,768**	**21,282**	**(6)**	**(333)**	**(339)**	**20,943**
Others	**333**	**801**	**1,134**	**(1)**	**(3)**	**(4)**	**1,130**
Total	**58,951**	**25,985**	**84,936**	**8**	**(588)**	**(580)**	**84,356**
2021							
Singapore	47,300	16,581	63,881	17	(311)	(294)	63,587
Malaysia	15,676	6,366	22,042	(7)	(168)	(175)	21,867
Others	358	678	1,036	(#)	(4)	(4)	1,032
Total	63,334	23,625	86,959	10	(483)	(473)	86,486

(1) DPF is defined as contracts with Discretionary Participating Features.

The sensitivity analysis below shows the impact of changes in key parameters on the value of policy liabilities, and hence on the income statement and shareholders' equity.

Sensitivity analysis produced are based on parameters set out as follows:

	Change in assumptions
(a) Scenario 1 – Mortality and Major Illness	+ 25% for all future years
(b) Scenario 2 – Mortality and Major Illness	– 25% for all future years
(c) Scenario 3 – Health and Disability	+ 25% for all future years
(d) Scenario 4 – Health and Disability	– 25% for all future years
(e) Scenario 5 – Lapse and Surrender Rates	+ 25% for all future years
(f) Scenario 6 – Lapse and Surrender Rates	– 25% for all future years
(g) Scenario 7 – Expenses	+ 30% for all future years

38. Risk Management (continued)

38.4 Insurance-Related Risk Management (continued)

Insurance Risk (continued)

Insurance Risks of Life Insurance Contracts (continued)

Profit/(Loss) After Tax and Shareholders' Equity Sensitivity for the Singapore Segment

Impact on 1-Year's Profit/(Loss) After Tax and Shareholders' Equity

Life Insurance Contracts

	2022			2021		
$ million	Gross impact	Reinsurance ceded	Net impact	Gross impact	Reinsurance ceded	Net impact
Scenario 1	**(730)**	**354**	**(376)**	(754)	362	(392)
Scenario 2	**492**	**(228)**	**264**	526	(246)	280
Scenario 3	**(278)**	**145**	**(133)**	(257)	141	(116)
Scenario 4	**176**	**(62)**	**114**	150	(45)	105
Scenario 5	**99**	**(34)**	**65**	92	(17)	75
Scenario 6	**(143)**	**46**	**(97)**	(130)	30	(100)
Scenario 7	**(56)**	**5**	**(51)**	(48)	3	(45)

Profit/(Loss) After Tax and Shareholders' Equity Sensitivity for the Malaysia Segment

Impact on 1-Year's Profit/(Loss) After Tax and Shareholders' Equity

Life Insurance Contracts

	2022			2021		
$ million	Gross impact	Reinsurance ceded	Net impact	Gross impact	Reinsurance ceded	Net impact
Scenario 1	**(127)**	**–**	**(127)**	(133)	–	(133)
Scenario 2	**109**	**–**	**109**	120	–	120
Scenario 3	**(14)**	**–**	**(14)**	(23)	–	(23)
Scenario 4	**13**	**–**	**13**	20	–	20
Scenario 5	**(28)**	**–**	**(28)**	(24)	–	(24)
Scenario 6	**72**	**–**	**72**	58	–	58
Scenario 7	**(40)**	**–**	**(40)**	(35)	–	(35)

The tables above demonstrate the sensitivity of GEH Group's profit or loss after tax to possible changes in individual actuarial valuation assumptions, with all other variables held constant.

The method used, including the significant assumptions made, for performing the above sensitivity analysis did not change from the previous year.

38. Risk Management (continued)

38.4 Insurance-Related Risk Management (continued)

Insurance Risk (continued)

Insurance Risk of Non-Life Insurance Contracts

Risks under non-life insurance policies usually cover a twelve-month duration. The risk inherent in non-life insurance contracts is reflected in the insurance contract liabilities which include the premium and claims liabilities. The premium liabilities comprise reserve for unexpired risks, while the claims liabilities comprise the loss reserves which include both provision for outstanding claims notified and outstanding claims incurred but not reported.

The table below sets out the distribution of the various categories of the non-life insurance risk as at the reporting date.

	2022			2021		
Non-life insurance contracts $ million	Gross premium liabilities	Reinsured premium liabilities	Net premium liabilities	Gross premium liabilities	Reinsured premium liabilities	Net premium liabilities
(a) By class of business						
Fire	**42**	**(18)**	**24**	39	(16)	23
Motor	**42**	**(5)**	**37**	36	(2)	34
Marine and aviation	**6**	**(3)**	**3**	8	(4)	4
Workmen's compensation	**14**	**(4)**	**10**	18	(6)	12
Personal accident and health	**23**	**(1)**	**22**	23	(2)	21
Miscellaneous	**67**	**(47)**	**20**	65	(44)	21
Total	**194**	**(78)**	**116**	189	(74)	115
(b) By country						
Singapore	**101**	**(48)**	**53**	99	(47)	52
Malaysia	**73**	**(22)**	**51**	71	(19)	52
Indonesia	**20**	**(8)**	**12**	19	(8)	11
Total	**194**	**(78)**	**116**	189	(74)	115

	2022			2021		
Non-life insurance contracts $ million	Gross claims liabilities	Reinsured claims liabilities	Net claims liabilities	Gross claims liabilities	Reinsured claims liabilities	Net claims liabilities
(a) By class of business						
Fire	**123**	**(95)**	**28**	128	(105)	23
Motor	**63**	**(5)**	**58**	54	(6)	48
Marine and aviation	**25**	**(19)**	**6**	28	(21)	7
Workmen's compensation	**36**	**(13)**	**23**	34	(13)	21
Personal accident and health	**26**	**(4)**	**22**	25	(5)	20
Miscellaneous	**240**	**(209)**	**31**	222	(190)	32
Total	**513**	**(345)**	**168**	491	(340)	151
(b) By country						
Singapore	**194**	**(123)**	**71**	175	(113)	62
Malaysia	**267**	**(189)**	**78**	289	(216)	73
Indonesia	**52**	**(33)**	**19**	27	(11)	16
Total	**513**	**(345)**	**168**	491	(340)	151

38. Risk Management (continued)

38.4 Insurance-Related Risk Management (continued)

Insurance Risk (continued)

Insurance Risk of Non-Life Insurance Contracts (continued)

Cumulative Claims Estimates and Cumulative Payments To-Date

The tables below show the cumulative claims estimates, including both claims notified and IBNR for each successive accident year, at each reporting date, together with cumulative payments to date.

(i) Gross non-life insurance contract liabilities for 2022

$ million	2015	2016	2017	2018	2019	2020	2021	2022	Total
(a) Estimate of cumulative claims									
Accident Year	195	202	219	188	221	273	258	266	
One year later	195	213	213	163	227	239	226	–	
Two years later	167	209	191	154	227	271	–	–	
Three years later	171	203	195	244	231	–	–	–	
Four years later	170	201	196	245	–	–	–	–	
Five years later	170	201	193	–	–	–	–	–	
Six years later	166	196	–	–	–	–	–	–	
Seven years later	164	–	–	–	–	–	–	–	
Current estimate of cumulative claims	**164**	**196**	**193**	**245**	**231**	**271**	**226**	**266**	
(b) Cumulative payments	**160**	**193**	**175**	**138**	**191**	**204**	**143**	**82**	
(c) Non-life gross claim liabilities	**4**	**3**	**18**	**107**	**40**	**67**	**83**	**184**	**506**
Reserve for prior years									**7**
Non-life insurance contract liabilities, gross									**513**

38. Risk Management (continued)

38.4 Insurance-Related Risk Management (continued)

Insurance Risk (continued)

Insurance Risk of Non-Life Insurance Contracts (continued)

Cumulative Claims Estimates and Cumulative Payments To-Date (continued)

(ii) Non-life insurance contract liabilities, net of reinsurance of liabilities, for 2022

$ million	2015	2016	2017	2018	2019	2020	2021	2022	Total
(a) Estimate of cumulative claims									
Accident Year	102	109	125	121	123	109	109	140	
One year later	100	107	124	113	116	96	93	–	
Two years later	96	105	120	110	115	97	–	–	
Three years later	92	102	119	111	117	–	–	–	
Four years later	91	100	118	111	–	–	–	–	
Five years later	90	100	116	–	–	–	–	–	
Six years later	88	97	–	–	–	–	–	–	
Seven years later	87	–	–	–	–	–	–	–	
Current estimate of cumulative claims	**87**	**97**	**116**	**111**	**117**	**97**	**93**	**140**	
(b) Cumulative payments	**85**	**95**	**110**	**101**	**103**	**82**	**70**	**49**	
(c) Non-life net claim liabilities	**2**	**2**	**6**	**10**	**14**	**15**	**23**	**91**	**163**
Reserve for prior years									**5**
Non-life insurance contract liabilities, net									**168**

Key Assumptions

Non-life insurance contract liabilities are determined based on claims experience, knowledge of existing events, the terms and conditions of the relevant policies and interpretation of circumstances. Of particular relevance is past experience with similar cases, trends in historical claims, legislative changes, judicial decisions, economic conditions and claims handling procedures. The estimates of the non-life insurance contract liabilities are therefore sensitive to various factors. The actual future premium and claims liabilities will not develop exactly as projected and may vary from initial estimates.

Insurance risk of non-life insurance contracts is mitigated by achieving a large and well-diversified portfolio of insurance contracts across various industries and geographical areas. The risks are further mitigated by careful selection and implementation of underwriting strategies, which are designed to ensure that risks are diversified in terms of type of risk and level of insured benefits. Comprehensive assessment of new and on-going claims, regular detailed review of claims handling procedures and frequent investigation of possible fraudulent claims are established to further reduce the risk exposure of GEH Group. In addition, GEH Group enforces a policy of active management and prompt pursuit of claims, to reduce its exposure to unpredictable future developments that can negatively impact GEH Group.

GEH Group has also limited its exposure by imposing maximum claim amounts on certain contracts as well as the use of reinsurance arrangements in order to limit exposure to catastrophic events such as hurricanes, earthquakes and flood damages.

38. Risk Management (continued)

38.4 Insurance-Related Risk Management (continued)

Insurance Risk (continued)

Insurance Risk of Non-Life Insurance Contracts (continued)

The sensitivity analysis below shows the impact of changes in key assumptions on gross and net liabilities, profit before tax and equity.

		Impact on			
$ million	Change in assumptions	Gross liabilities	Net liabilities	Profit before tax	Equity
2022					
Provision for adverse deviation margin	**+20%**	**12**	**3**	**(3)**	**(3)**
Loss ratio (for latest year)	**+20%**	**75**	**41**	**(41)**	**(33)**
Claims handling expenses	**+20%**	**2**	**1**	**(1)**	**(1)**
2021					
Provision for adverse deviation margin	+20%	11	4	(4)	(3)
Loss ratio (for latest year)	+20%	67	37	(37)	(29)
Claims handling expenses	+20%	2	2	(2)	(1)

The method used and significant assumptions made for deriving sensitivity information above did not change from the previous year.

Market and Credit Risk

Market risk arises when market values of assets and liabilities are adversely affected by changes in financial markets. Changes in interest rates, foreign exchange rates, equity prices and prices of alternative investment assets can impact present and future earnings of the insurance operations, as well as shareholders' equity.

GEH Group is exposed to market risk through its investment portfolios, as well as in the mismatches between assets and liabilities of the Insurance Funds. In the case of the third-party funds managed by its asset management subsidiary, Lion Global Investors Limited, investment risks are borne by investors and GEH Group does not assume any liability in the event of occurrence of loss or write-down in market valuations.

GEH Group ALC, Group IC and local ALCs actively manage market risks through the setting of investment policies and asset allocations, approving portfolio construction, risk measurement methodologies, as well as hedging and alternative risk transfer strategies. Investment limits are monitored at various levels to ensure that all investment activities are conducted within GEH Group's risk appetite and in line with GEH Group's management principles and philosophies. Compliance with established limits forms an integral part of the risk governance and financial reporting framework. The approach adopted by GEH Group in managing the various types of risk, including interest rate risk, foreign exchange risk, equity price risk, credit risk, alternative investment risk and liquidity risk, is briefly described below.

(a) Interest Rate Risk (Including Asset Liability Mismatch)

GEH Group is exposed to interest rate risk through (i) investments in fixed income instruments and (ii) policy liabilities in the Insurance Funds. Since the Shareholders' Fund has exposure to investments in fixed income instruments but no exposure to insurance policy liabilities, it will incur economic losses when interest rates rise. Given the long duration of policy liabilities and the uncertainties in the cash flows of Insurance Funds, it is not possible to hold assets with duration that perfectly matches the duration of the policy liabilities. This results in interest rate risk and asset liability mismatch risk, and these risks are managed and monitored by GEH Group ALC and the local ALCs. The Insurance Funds will incur economic losses when interest rates drop as the duration of policy liabilities is generally longer than the duration of fixed income assets.

Under Singapore regulations governed by the MAS, the discount rate used for discounting liability cash flows may include a positive adjustment in the form of matching adjustment, or illiquidity premium, subject to certain conditions being met. As a result, the Singapore non-participating funds could have losses when the magnitude of the adjustment decreases leading to higher discounted liabilities.

38. Risk Management (continued)

38.4 Insurance-Related Risk Management (continued)

Market and Credit Risk (continued)

(a) Interest Rate Risk (Including Asset Liability Mismatch) (continued)

Under Malaysia regulations governed by the BNM, liability cash flows with durations less than 15 years are discounted using the spot yield of Malaysia Government Securities (MGS) with matching durations, while liability cash flows with durations of 15 years or more are discounted using the 15 year MGS spot yield. As a result, the Malaysia non-participating fund could have losses when the MGS spot yield decreases.

Managing Interest Rate Benchmark Reform

i) Overview

A fundamental reform of major interest rate benchmarks is being undertaken globally, including the replacement of some interbank offered rates (IBOR) with alternative nearly risk-free rates (referred to as IBOR reform). GEH Group has moderate exposure to IBORs on its financial instruments that will be reformed as part of this market-wide initiative. Most reforms affecting GEH Group had been completed by the end of 2021. However, the transition deadlines for USD LIBOR and SIBOR have been extended to end June 2023 and end December 2024 respectively, hence some instruments referencing these rates may not be transited until those dates.

GEH Group anticipates that IBOR reform will have moderate operational, risk management and accounting impacts across all of its business lines. The main risk to which GEH Group is exposed as a result of IBOR reform is operational. For example, the bilateral renegotiation with private debt issuers, updating of contractual terms, updating of systems that use IBOR curves and revision of operational controls related to the reform. Financial risk is predominantly limited to interest rate risk.

GEH Group has a cross-functional IBOR Working Group to manage its transition to alternative rates. The objectives of the IBOR Working Group include evaluating the extent to which fixed income holdings, derivatives and liabilities reference IBOR cash flows, whether such contracts need to be amended as a result of IBOR reform and how to manage communication about IBOR reform with counterparties.

ii) Non-Derivative Financial Assets

GEH Group's IBOR exposures on bonds/FRNs holdings include SGD Swap Offer Rate (SOR), SIBOR and USD LIBOR are primarily at The Great Eastern Life Assurance Company Limited. GEH Group also has corporate loans holdings indexed to SOR.

The alternative reference rate for SOR and SIBOR is the Singapore Overnight Rate Average (SORA); for USD LIBOR is the Secured Overnight Financing Rate (SOFR). The changes to the contractual terms of financial assets indexed to SOR, SIBOR and USD LIBOR to incorporate new benchmark rates are still in progress as at 31 December 2022.

GEH Group monitors the progress of transition from IBORs to new benchmark rates by reviewing the total amounts of contracts that have yet to transition to an alternative benchmark rate and the amounts of such contracts that include an appropriate fallback clause. GEH Group considers that a contract is not yet transitioned to an alternative benchmark rate when interest under the contract is indexed to a benchmark rate that is still subject to IBOR reform, even if it includes a fallback clause that deals with the cessation of the existing IBOR (referred to as an "unreformed contract").

The following table shows the total amounts of unreformed non-derivative financial assets as at 31 December 2022. The amounts of trading assets and investment securities are shown at their carrying amounts.

	Gross carrying amount		
$ million	SOR	USD LIBOR	Total
Debt securities	**692**	**970**	**1,662**
Corporate loan	**116**	**–**	**116**
Total	**808**	**970**	**1,778**

iii) Non-Derivative Financial Liabilities

GEH Group does not have any floating-rate liabilities which would be impacted by the IBOR reform.

38. Risk Management (continued)

38.4 Insurance-Related Risk Management (continued)

Market and Credit Risk (continued)

(a) Interest Rate Risk (Including Asset Liability Mismatch) (continued)

Managing Interest Rate Benchmark Reform (continued)

iv) Derivatives and Hedge Accounting

GEH Group holds derivatives for risk management and efficient portfolio management purposes, and are not designated in hedging relationships. The instruments used principally include interest rate, cross-currency, and total return swaps, which have floating legs that are indexed to various IBORs. Typically, derivative transactions that reference interest rate benchmarks incorporate standard terms such as the 2006 ISDA Definitions published by ISDA. ISDA has reviewed such definitions in light of IBOR reform and issued an IBOR fallback protocol on 23 October 2020 and a supplement to amend the 2006 ISDA Definitions effective 25 January 2021. This sets out how the amendments to new alternative benchmark rates (e.g. SORA, SOFR) in the 2006 ISDA Definitions will be accomplished. The effect of the supplement is to create fallback provisions in derivatives that describe what floating rates will apply on the permanent discontinuation of certain key IBORs or on ISDA declaring a non-representative determination of an IBOR. GEH Group has adhered to the protocol to implement the fallbacks to derivative contracts that were entered into before the effective date of the supplement, where the existing derivative counterparties have also adhered to the protocol. All new derivative contracts entered into on or after the effective date of the supplement that reference the 2006 ISDA Definitions will also include the fallback.

The following table shows the total amounts of unreformed derivative instruments as at 31 December 2022. For cross-currency swaps, GEH Group used the notional amount of the receive leg of the swap. GEH Group expects both legs of cross-currency swaps to be reformed simultaneously.

	Notional amount		
$ million	SOR	USD LIBOR	Total
Derivatives	**280**	**21**	**301**

(b) Foreign Exchange Risk

The foreign exchange risk inherent in foreign currency fixed income portfolio is typically hedged using currency forwards and swaps wherever practical and cost-effective. Foreign exchange instruments are also used for efficient portfolio management.

The SGD and MYR positions predominately arose from the entities within GEH Group with the same respective functional currencies. GEH Group has no significant concentration of foreign exchange risk.

Limits are set on the total amount of foreign currency (net of liabilities) to cap GEH Group's foreign exchange risk.

38. Risk Management (continued)

38.4 Insurance-Related Risk Management (continued)

Market and Credit Risk (continued)

(b) Foreign Exchange Risk (continued)

The tables below show the foreign exchange position of GEH Group's financial and insurance-related assets and liabilities by major currencies.

$ million	SGD	MYR	USD	Others	Total
2022					
Financial assets at FVOCI					
Equity securities	**232**	**250**	**203**	**977**	**1,662**
Debt securities	**3,558**	**1,242**	**3,285**	**408**	**8,493**
Financial assets at FVTPL					
Equity securities	**879**	**6,608**	**668**	**3,336**	**11,491**
Debt securities	**21,008**	**14,833**	**11,718**	**3,526**	**51,085**
Other investments	**6,500**	**204**	**5,989**	**1,534**	**14,227**
Financial assets at amortised cost					
Debt securities	**804**	**–**	**995**	**4**	**1,803**
Derivative financial assets	**671**	**#**	**56**	**35**	**762**
Loans	**222**	**145**	**–**	**114**	**481**
Reinsurers' share of insurance contract liabilities	**396**	**550**	**31**	**26**	**1,003**
Insurance receivables	**1,025**	**2,512**	**10**	**33**	**3,580**
Other debtors	**385**	**228**	**161**	**43**	**817**
Cash and cash equivalents	**6,820**	**1,509**	**886**	**393**	**9,608**
Financial and insurance-related assets	**42,500**	**28,081**	**24,002**	**10,429**	**105,012**
Other creditors	**1,385**	**491**	**89**	**32**	**1,997**
Insurance payables	**2,460**	**4,673**	**2**	**12**	**7,147**
Derivative financial liabilities	**84**	**5**	**97**	**106**	**292**
Provision for agents' retirement benefits	**1**	**295**	**–**	**–**	**296**
Insurance contract liabilities	**60,182**	**21,621**	**3,173**	**668**	**85,644**
Financial and insurance-related liabilities	**64,112**	**27,085**	**3,361**	**818**	**95,376**
2021					
Financial assets at FVOCI					
Equity securities	479	251	259	1,213	2,202
Debt securities	2,020	1,077	3,645	751	7,493
Financial assets at FVTPL					
Equity securities	1,118	7,123	1,015	4,420	13,676
Debt securities	18,220	15,034	13,894	5,016	52,164
Other investments	7,502	236	6,850	2,097	16,685
Financial assets at amortised cost					
Debt securities	–	–	242	–	242
Derivative financial assets	333	1	17	19	370
Loans	323	250	–	19	592
Reinsurers' share of insurance contract liabilities	343	410	120	14	887
Insurance receivables	1,030	2,267	3	36	3,336
Other debtors	364	231	208	43	846
Cash and cash equivalents	6,429	1,630	668	391	9,118
Financial and insurance-related assets	38,161	28,510	26,921	14,019	107,611
Other creditors	1,328	397	57	29	1,811
Insurance payables	2,172	4,433	2	14	6,621
Derivative financial liabilities	12	1	51	47	111
Provision for agents' retirement benefits	#	291	–	–	291
Insurance contract liabilities	61,296	22,402	3,267	674	87,639
Financial and insurance-related liabilities	64,808	27,524	3,377	764	96,473

38. Risk Management (continued)

38.4 Insurance-Related Risk Management (continued)

Market and Credit Risk (continued)

(c) Equity Price Risk

Exposure to equity price risk exists in investment assets through direct equity, equity derivatives and fund investments, where GEH Group, through investments, bears all or most of the equity volatility and investment risks. Equity price risk also exists in investment-linked products where the revenues of the insurance operations are linked to the performances of underlying equity funds since this has an impact on the level of fees earned. Limits are set for single security holdings as a percentage of total equity holdings.

(d) Credit Spread Risk

Exposure to credit spread risk exists in GEH Group's bond investments. Credit spread is the difference between the quoted yields of a credit and a government bond of the same maturity. Credit spreads widen when the default risk of credit bonds increases. Hence, widening credit spreads will result in mark-to-market losses in GEH Group's bond portfolio.

(e) Alternative Investment Risk

GEH Group is exposed to alternative investment risk through investments in real estate that it owns in Singapore and Malaysia, and through real estate funds, private equities, infrastructure and hedge funds. A monitoring process is established to manage foreign exchange, country and manager concentration risks. This process and the acquisition or divestment of alternative investments are reviewed and approved by RMC and GEH Group IC.

(f) Commodity Risk

GEH Group does not have any exposure to commodity risk.

(g) Liquidity Risk

Liquidity risk arises when GEH Group is unable to meet its cash flow demands, or if the assets backing the liabilities cannot be sold quickly enough without incurring significant losses. For an insurance company, the greatest liquidity needs typically arise from its insurance liabilities. Demands for funds can usually be met through ongoing normal operations via premiums received, sale of assets or borrowings. Unexpected demands for liquidity may be triggered by surrender of insurance policies due to negative publicity, deterioration of the economy, adverse news on other companies in the same or similar lines of business, unanticipated policy claims, or other unexpected cash demands from policyholders.

Expected liquidity demands are managed through a combination of treasury, investment and asset-liability management practices, which are monitored on an ongoing basis. Actual and projected cash inflows and outflows are regularly monitored, and a reasonable amount of liquid assets are maintained at all times. The projected cash flows from the in-force insurance policy contract liabilities consist of renewal premiums, commissions, claims, maturities and surrenders. Renewal premiums, commissions, claims and maturities are generally stable and predictable. Surrenders can be more uncertain although these have been quite stable over the past several years.

Unexpected liquidity demands are mitigated through product design, risk diversification, investment strategies and systematic monitoring. Surrender penalty in insurance contracts also protects GEH Group from losses due to unexpected surrender trends and reduces the sensitivity of surrenders to changes in interest rates.

The following tables show the expected recovery or settlement of financial and insurance-related assets and maturity profile of GEH Group's financial and insurance-related liabilities which are presented based on contractual undiscounted cash flows, except for insurance contract liabilities which are presented based on discounted cash outflows resulting from recognised liabilities.

38. Risk Management (continued)

38.4 Insurance-Related Risk Management (continued)

Market and Credit Risk (continued)

(g) Liquidity Risk (continued)

$ million	Less than 1 year	1 to 5 years	Over 5 years	No specific maturity	Total
2022					
Financial assets at FVOCI					
Equity securities	**–**	**–**	**–**	**1,662**	**1,662**
Debt securities	**814**	**4,401**	**7,102**	**–**	**12,317**
Financial assets at FVTPL					
Equity securities	**–**	**–**	**–**	**11,491**	**11,491**
Debt securities	**7,340**	**20,032**	**41,647**	**1,185**	**70,204**
Other investments	**3**	**–**	**–**	**14,227**	**14,230**
Financial assets at amortised cost					
Debt securities	**789**	**846**	**640**	**–**	**2,275**
Derivative financial assets	**641**	**80**	**41**	**–**	**762**
Loans	**114**	**395**	**14**	**–**	**523**
Reinsurers' share of insurance contract liabilities	**449**	**389**	**165**	**–**	**1,003**
Insurance receivables	**770**	**532**	**–**	**2,278**	**3,580**
Other debtors	**817**	**–**	**–**	**–**	**817**
Cash and cash equivalents	**9,608**	**–**	**–**	**–**	**9,608**
Financial and insurance-related assets	**21,345**	**26,675**	**49,609**	**30,843**	**128,472**
Other creditors	**1,903**	**58**	**#**	**36**	**1,997**
Insurance payables	**7,125**	**22**	**–**	**–**	**7,147**
Derivative financial liabilities	**221**	**12**	**59**	**–**	**292**
Provision for agents' retirement benefits	**140**	**57**	**99**	**–**	**296**
Insurance contract liabilities	**16,751**	**20,366**	**48,522**	**5**	**85,644**
Financial and insurance-related liabilities	**26,140**	**20,515**	**48,680**	**41**	**95,376**
2021					
Financial assets at FVOCI					
Equity securities	–	–	–	2,202	2,202
Debt securities	497	2,668	6,889	–	10,054
Financial assets at FVTPL					
Equity securities	–	–	–	13,676	13,676
Debt securities	3,937	17,427	44,443	2,882	68,689
Other investments	–	–	–	16,685	16,685
Financial assets at amortised cost					
Debt securities	12	47	441	–	500
Derivative financial assets	221	149	–	–	370
Loans	212	333	125	–	670
Reinsurers' share of insurance contract liabilities	548	258	81	–	887
Insurance receivables	611	348	1	2,376	3,336
Other debtors	845	1	–	#	846
Cash and cash equivalents	9,118	–	–	–	9,118
Financial and insurance-related assets	16,001	21,231	51,980	37,821	127,033
Other creditors	1,809	2	#	–	1,811
Insurance payables	6,614	7	–	–	6,621
Derivative financial liabilities	74	37	–	–	111
Provision for agents' retirement benefits	134	58	99	–	291
Insurance contract liabilities	16,024	20,018	51,590	7	87,639
Financial and insurance-related liabilities	24,655	20,122	51,689	7	96,473

38. Risk Management (continued)

38.4 Insurance-Related Risk Management (continued)

Market and Credit Risk (continued)

(g) Liquidity Risk (continued)

The following tables show the current/non-current classification of assets and liabilities:

$ million	Current*	Non-current	Unit-linked	Total
2022				
Cash and cash equivalents	**9,059**	**–**	**549**	**9,608**
Other debtors	**799**	**33**	**46**	**878**
Insurance receivables	**2,146**	**1,434**	**–**	**3,580**
Asset held for sale	**73**	**–**	**–**	**73**
Reinsurers' share of insurance contract liabilities	**441**	**549**	**13**	**1,003**
Loans	**104**	**377**	**–**	**481**
Derivative financial assets	**631**	**121**	**10**	**762**
Investments	**15,126**	**65,561**	**8,073**	**88,760**
Deferred tax assets	**–**	**58**	**–**	**58**
Associates	**–**	**122**	**–**	**122**
Intangible assets	**43**	**161**	**–**	**204**
Investment properties	**–**	**1,881**	**–**	**1,881**
Property, plant and equipment	**45**	**464**	**–**	**509**
Assets	**28,467**	**70,761**	**8,691**	**107,919**
Insurance payables	**7,124**	**23**	**–**	**7,147**
Other creditors	**1,909**	**150**	**51**	**2,110**
Derivative financial liabilities	**212**	**71**	**9**	**292**
Income tax payable	**239**	**–**	**–**	**239**
Provision for agents' retirement benefits	**20**	**276**	**–**	**296**
Deferred tax liabilities	**(29)**	**2,061**	**#**	**2,032**
Insurance contract liabilities	**8,249**	**69,334**	**8,690**	**86,273**
Liabilities	**17,724**	**71,915**	**8,750**	**98,389**
2021				
Cash and cash equivalents	8,606	–	512	9,118
Other debtors	815	39	50	904
Insurance receivables	1,822	1,498	16	3,336
Reinsurers' share of insurance contract liabilities	538	333	16	887
Loans	194	398	–	592
Derivative financial assets	212	149	9	370
Investments	11,616	71,825	9,021	92,462
Associates	–	95	–	95
Intangible assets	35	160	–	195
Investment properties	–	1,884	–	1,884
Property, plant and equipment	67	480	–	547
Assets	23,905	76,861	9,624	110,390
Insurance payables	6,594	7	20	6,621
Other creditors	1,780	76	69	1,925
Derivative financial liabilities	70	36	5	111
Income tax payable	329	–	–	329
Provision for agents' retirement benefits	22	264	5	291
Deferred tax liabilities	59	2,513	7	2,579
Insurance contract liabilities	6,512	72,193	9,693	88,398
Liabilities	15,366	75,089	9,799	100,254

(1) * represents expected recovery or settlement within 12 months from the reporting date.

38. Risk Management (continued)

38.4 Insurance-Related Risk Management (continued)

Market and Credit Risk (continued)

(h) Credit Risk

Credit risk is the risk of loss arising from an obligor failing to discharge an obligation. GEH Group is mainly exposed to credit risk through (i) investments in cash and bonds, (ii) corporate lending activities and (iii) exposure to counterparty's credit risk in derivative transactions and reinsurance contracts. For all three types of exposures, financial loss may materialise as a result of a downgrading of credit rating or default by the borrower or counterparty.

GEH group wide credit risk is managed by GEH Group ALC. GEH Group establishes internal limits by issuer and counterparty according to their investment credit rating which are actively monitored to manage the credit and concentration risk, and are reviewed on a regular basis. The creditworthiness of reinsurers is assessed on an annual basis by reviewing their financial strength through published credit ratings and other publicly available information. The task of evaluating and monitoring credit risk at the GEH subsidiary level is undertaken by Local ALCs.

Reinsurance is placed with counterparties that have a good credit rating and concentration of risk is mitigated through counterparty limits that are reviewed and approved on an annual basis.

Credit risk arising from customer balances incurred on non-payment of premiums or contributions will only persist during the grace period specified in the policy document or trust deed until expiry, when the policy is either paid up or terminated.

GEH Group issues unit-linked investment policies in which the policyholder bears the investment risk on the assets held in the unit-linked funds as the policy benefits are directly linked to the value of the assets in the fund. Therefore, GEH Group has no material credit risk or market risk on unit-linked financial assets.

The loans in GEH Group's portfolio are generally secured by collateral, with a maximum loan-to-value ratio of 70%. The amount and type of collateral required depend on an assessment of the credit risk of the counterparty. Guidelines on the collateral eligibility have been established, and all collateral are revalued on a regular basis. GEH management monitors the market values of the collateral, requests additional collateral when needed and performs an impairment valuation when applicable. The fair values of collateral, held by GEH Group as lender, for which it is entitled to sell or pledge in the event of default is as tabulated below:

		2022		2021	
$ million	Type of collateral	Carrying amount	Fair value	Carrying amount	Fair value
Policy loans	Cash value of policies	**2,278**	**5,280**	2,356	5,115
Secured loans	Properties	**292**	**545**	395	812
Secured loans	Others	**#**	**#**	#	1
Derivatives	Cash	**186**	**186**	98	98
		2,756	**6,011**	2,849	6,026

There were no securities lending arrangements as at 31 December 2022 (2021: nil).

As at the reporting date, no investments (2021: nil) were placed as collateral for currency hedging purposes.

38. Risk Management (continued)

38.4 Insurance-Related Risk Management (continued)

Market and Credit Risk (continued)

(h) Credit Risk (continued)

The following table sets out information about the credit quality of loans and debt securities measured at amortised cost and debt securities measured at FVOCI. The maximum exposure is shown on a gross basis, before the effect of mitigation through the use of master netting or collateral agreements and the use of credit derivatives.

$ million	12-month ECL	Lifetime ECL not credit-impaired	Lifetime ECL credit-impaired	Total
2022				
Loans at amortised cost				
Investment grade* (BBB to AAA)	**373**	**112**	**–**	**485**
Not rated	**2**	**–**	**36**	**38**
	375	**112**	**36**	**523**
Loss allowance	**(1)**	**(6)**	**(36)**	**(43)**
Carrying amount	**374**	**106**	**–**	**480**
Debt securities at amortised cost				
Investment grade* (BBB to AAA)	**1,802**	**–**	**–**	**1,802**
Loss allowance	**(1)**	**–**	**–**	**(1)**
Carrying amount	**1,801**	**–**	**–**	**1,801**
Debt securities at FVOCI				
Investment grade* (BBB to AAA)	**8,362**	**29**	**–**	**8,391**
Non investment grade* (C to BB)	**–**	**5**	**–**	**5**
Not rated	**97**	**–**	**–**	**97**
	8,459	**34**	**–**	**8,493**
2021				
Loans at amortised cost				
Investment grade* (BBB to AAA)	479	122	–	601
Not rated	2	–	2	4
	481	122	2	605
Loss allowance	(1)	(10)	(2)	(13)
Carrying amount	480	112	–	592
Debt securities at amortised cost				
Investment grade* (BBB to AAA)	244	–	–	244
Loss allowance	(2)	–	–	(2)
Carrying amount	242	–	–	242
Debt securities at FVOCI				
Investment grade* (BBB to AAA)	6,067	56	–	6,123
Non investment grade* (C to BB)	–	10	3	13
Not rated	1,357	–	–	1,357
	7,424	66	3	7,493

(1) * Based on internal ratings grades which are equivalent to grades of external rating agencies.

38. Risk Management (continued)

38.4 Insurance-Related Risk Management (continued)

Market and Credit Risk (continued)

(h) Credit Risk (continued)

The following table sets out the credit analysis for financial assets that are not subjected to ECL.

$ million	Investment grade* (BBB to AAA)	Non investment grade* (C to BB)	Not rated	Unit-linked	Not subject to credit risk	Total carrying amount
2022						
Financial assets at FVOCI						
Equity securities	**–**	**–**	**–**	**–**	**1,662**	**1,662**
Financial assets at FVTPL						
Equity securities	**–**	**–**	**–**	**3,366**	**8,125**	**11,491**
Debt securities	**43,047**	**2,118**	**4,294**	**1,626**	**–**	**51,085**
Other investments	**–**	**–**	**–**	**3,082**	**11,145**	**14,227**
Derivative financial assets	**717**	**–**	**36**	**9**	**–**	**762**
Reinsurers' share of insurance contract liabilities	**–**	**–**	**990**	**13**	**–**	**1,003**
Insurance receivables	**992**	**20**	**2,568**	**–**	**–**	**3,580**
Other debtors	**4**	**1**	**766**	**46**	**–**	**817**
Cash and cash equivalents	**8,799**	**–**	**260**	**549**	**–**	**9,608**
	53,559	**2,139**	**8,914**	**8,691**	**20,932**	**94,235**
2021						
Financial assets at FVOCI						
Equity securities	–	–	–	–	2,202	2,202
Financial assets at FVTPL						
Equity securities	–	–	–	3,664	10,012	13,676
Debt securities	43,171	2,276	5,141	1,576	–	52,164
Other investments	–	–	–	3,781	12,904	16,685
Derivative financial assets	350	–	11	9	–	370
Reinsurers' share of insurance contract liabilities	–	–	870	17	–	887
Insurance receivables	620	–	2,700	16	–	3,336
Other debtors	6	1	792	47	–	846
Cash and cash equivalents	8,491	–	116	511	–	9,118
	52,638	2,277	9,630	9,621	25,118	99,284

(1) * Based on internal ratings grades which are equivalent to grades of external rating agencies.

38. Risk Management (continued)

38.4 Insurance-Related Risk Management (continued)

Market and Credit Risk (continued)

(h) Credit Risk (continued)

Amounts Arising from ECL

ECL provisioning is the setting of allowance for credit-impaired and non-credit-impaired exposure in accordance to SFRS (I) 9 through forward-looking ECL models.

Measurement of ECL – Explanation of Inputs, Assumptions and Estimation Techniques

The key inputs into the measurement of ECL are the following variables:

- probability of default (PD);
- loss given default (LGD); and
- exposure at default (EAD).

These parameters are derived from statistical models internally developed by GEH Group.

PD represents the likelihood of a borrower defaulting on its financial obligation, either over the next 12 months (12M PD), or over the remaining lifetime (Lifetime PD) of the obligation. PD estimates are derived from PD models that incorporate both quantitative and qualitative inputs, which are in turn derived from internal and external compiled data.

LGD is the magnitude of the likely loss incurred during a default. LGD is expressed as a percentage of loss per unit of exposure at the time of default and represents an estimate of the economic loss in the event of the default of the counterparty. Factors in determining LGDs include claim seniority, availability and quality of collateral, legal enforceability processes in the jurisdiction and industry of borrower and prevailing market conditions. They are estimates at a certain date and are derived using statistical models. These statistical models are developed using internally compiled data and incorporate both quantitative and qualitative factors. The model outputs are adjusted to reflect forward-looking information whenever appropriate.

EAD represents the expected exposure in the event of a default. GEH Group derives the EAD based on the current exposure to the counterparty and potential future exposure.

The ECL is determined by the PD, LGD and EAD for each individual exposure. The ECLs are first determined by the product of these three components, which are then adjusted to take into account forward-looking information. The ECLs are finally discounted to the reporting date. The discount rate used in the ECL calculation is the original effective interest rate or an approximation thereof.

Significant Increase in Credit Risk

To assess whether there is a significant increase in credit risk, GEH Group compares the risk of a default occurring on the asset as at reporting date with the risk of default assessed at the date of initial recognition. GEH Group considers available reasonable and supportive forward-looking information, which includes the following indicators:

– Internal credit rating;
– External credit rating;
– Actual or expected significant adverse changes in business, financial or economic conditions that are expected to cause a significant change to the counterparty's ability to meet its obligations.

A movement of an obligor's credit rating along the rating scale represents a change in the credit risk as measured by the change in PD.

The criteria for assessing whether credit risk has increased significantly will be determined by changes in 12M PDs and other qualitative factors. The credit risk of an obligor is deemed to have increased significantly since initial recognition if, based on GEH Group's quantitative model, the 12M PD is determined to have more than doubled since origination, except when the obligor remains within the investment grade ratings.

Using expert credit judgement and, where possible, relevant historical experience, GEH Group may determine that an obligor has undergone a significant increase in credit risk based on qualitative factors that are indicative of such and whose effect may not otherwise be fully reflected in its quantitative analysis on a timely basis. GEH Group uses the watch-list as an additional trigger for the identification of significant increase in credit risk.

GEH Group considers an obligor to have relatively lower credit risk if it is of investment grade quality, taking into account both internal and external credit ratings.

38. Risk Management (continued)

38.4 Insurance-Related Risk Management (continued)

Market and Credit Risk (continued)

(h) Credit Risk (continued)

Credit Risk Grades

GEH Group assigns each obligor to a credit risk grade that reflects the PD of the obligor. Credit risk grades are established based on qualitative and quantitative factors that are indicative of default risk. These factors vary depending on the nature of the exposure and the type of counterparty.

Credit risk grades are defined and calibrated such that the default risk increases as credit risk deteriorates. Each exposure is assigned with a credit risk grade at initial recognition, based on available information on the borrower. Obligors are subject to ongoing monitoring and review, and may be assigned with new credit risk grades that better reflects their creditworthiness. The monitoring typically involves the use of information obtained during periodic review, including published financial statements, external rating (where available), as well as qualitative information on an obligor's industry, competitive positioning, management, financial policy and financial flexibility.

Definition of Default

GEH Group considers a financial asset to be in default by assessing the following criteria:

Quantitative Criteria

For insurance receivables, the obligor is said to be in default if it fails to make contractual payments within 6 months after it falls due (i.e. after expiration of the maximum granted credit terms). For bonds and loans, the obligor is said to be in default if it fails to meet its contractual obligation and there are non-payments on another debt obligation of the same issuer to GEH Group.

Qualitative Criteria

The counterparty is in bankruptcy or has indications of potentially significant financial difficulty such as lawsuits or similar actions that threaten the financial viability of the counterparty; distressed exchange, merger or amalgamation without assumption or breach of material loan covenants not rectified within a given timeframe, restructuring with expected principal haircut or a breach in material loan covenant that is not rectified within given timeframe.

The criteria above have been applied to all financial instruments held by GEH Group and are consistent with the definition of default used for credit risk management purposes. The default definition has been applied consistently to model the PD, EAD and LGD throughout GEH Group's expected loss calculations.

Incorporating of Forward-Looking Information

GEH Group incorporates forward-looking information into both its assessment of whether the credit risk of an instrument has increased significantly since its initial recognition and in its ECL measurement. GEH Group has performed historical analysis and identified key economic variables impacting credit risk and ECLs for each portfolio.

These economic variables and their associated impact on the PD, EAD and LGD vary by financial instrument. Expert judgement has also been applied in this process. Forecasts of these economic variables (the base economic scenario) are obtained from publicly available economic databases published on a quarterly basis and provide the best estimate view of the economy over the next four to five years, and based on such information to project the economic variables for the full remaining lifetime of each instrument, a mean reversion approach is used. The impact of these economic variables on PDs, EADs and LGDs has been determined via regression analyses.

In addition to the base economic scenario, GEH Group uses multiple scenarios to ensure non-linear risks are captured. The number of scenarios and the respective scenario attributes are reviewed at each reporting date. At 31 December 2022, GEH Group concluded that two particular scenarios are capable of capturing non-linear risks inherent in all portfolios. The scenario weightings are determined by expert credit judgement, taking into account the range of possible outcomes presented by the chosen scenarios. The assessment of significant increase in credit risk is performed using the 12M PD under each scenario multiplied by the associated scenario weights. This determines whether the financial instrument is in Stage 1, 2 or 3, and hence whether 12M or lifetime ECL should be applied. Following this assessment, GEH Group measures ECL as either a probability-weighted 12M ECL (Stage 1), or a probability-weighted lifetime ECL (Stages 2 and 3). These probability-weighted ECLs are determined by running each scenario through the relevant ECL model and multiplying it by the appropriate scenario weighting (as opposed to weighting the inputs).

As with any economic forecasts, the projections and likelihoods of occurrence are subject to a high degree of uncertainty and the actual outcomes may be significantly different from projected outcomes. GEH Group considers these forecasts being representative of the best estimates of the possible outcomes and has analysed the non-linear risks and asymmetries within the various portfolios of GEH Group to establish that the chosen scenarios are appropriately representative of the range of possible scenarios.

The sensitivity of the ECL to the economic variable assumptions affecting the calculation of ECL was not material to GEH Group for the year ended 31 December 2022.

38. Risk Management (continued)

38.4 Insurance-Related Risk Management (continued)

Market and Credit Risk (continued)

(h) Credit Risk (continued)

Loss Allowance

The following tables show reconciliations from the opening to the closing balance of the loss allowance by class of financial instrument.

$ million	12-month ECL	Lifetime ECL not credit-impaired	Lifetime ECL credit-impaired	Total
Loans and other receivables at amortised cost				
At 1 January 2021	1.4	3.5	42.3	47.2
Net remeasurement of loss allowance	0.3	0.8	(4.0)	(2.9)
New financial assets purchased	0.1	–	–	0.1
Financial assets that have been derecognised	(0.3)	–	–	(0.3)
Write-offs	–	–	(36.0)	(36.0)
Changes in models/risk parameters	(0.6)	5.2	–	4.6
At 31 December 2021/1 January 2022	**0.9**	**9.5**	**2.3**	**12.7**
Net remeasurement of loss allowance	**–**	**–**	**34.4**	**34.4**
New financial assets purchased	**0.6**	**3.7**	**–**	**4.3**
Financial assets that have been derecognised	**(0.7)**	**(4.2)**	**–**	**(4.9)**
Changes in models/risk parameters	**(0.2)**	**(2.5)**	**–**	**(2.7)**
Foreign exchange and other movements	**–**	**(0.6)**	**–**	**(0.6)**
At 31 December 2022	**0.6**	**5.9**	**36.7**	**43.2**
Debt securities at amortised cost				
At 1 January 2021	1.3	–	–	1.3
Net remeasurement of loss allowance	(0.4)	–	–	(0.4)
New financial assets purchased	0.3	–	–	0.3
Changes in models/risk parameters	0.5	–	–	0.5
At 31 December 2021/1 January 2022	**1.7**	**–**	**–**	**1.7**
Net remeasurement of loss allowance	**0.1**	**–**	**–**	**0.1**
New financial assets purchased	**0.6**	**–**	**–**	**0.6**
Financial assets that have been derecognised	**(1.2)**	**–**	**–**	**(1.2)**
Changes in models/risk parameters	**0.1**	**–**	**–**	**0.1**
Foreign exchange and other movements	**(0.2)**	**–**	**–**	**(0.2)**
At 31 December 2022	**1.1**	**–**	**–**	**1.1**
Debt securities at FVOCI				
At 1 January 2021	10.8	1.2	2.8	14.8
Transfer to 12-month ECL	(0.2)	0.2	–	–
Additional allowance due to transfer	–	1.0	–	1.0
Net remeasurement of loss allowance	(0.4)	–	–	(0.4)
New financial assets purchased	2.7	–	–	2.7
Financial assets that have been derecognised	(2.5)	(0.1)	–	(2.6)
Changes in models/risk parameters	(3.2)	2.1	–	(1.1)
At 31 December 2021/1 January 2022	**7.2**	**4.4**	**2.8**	**14.4**
Net remeasurement of loss allowance	**0.1**	**(0.1)**	**–**	**–**
New financial assets purchased	**4.0**	**2.4**	**–**	**6.4**
Financial assets that have been derecognised	**(3.3)**	**(3.1)**	**–**	**(6.4)**
Changes in models/risk parameters	**(0.7)**	**(0.9)**	**–**	**(1.6)**
Foreign exchange and other movements	**–**	**(0.2)**	**–**	**(0.2)**
At 31 December 2022	**7.3**	**2.5**	**2.8**	**12.6**
(Decrease)/increase in provision for impairment of financial assets for the year				
31 December 2022	**(0.6)**	**(4.7)**	**34.4**	**29.1**
31 December 2021	(3.7)	9.2	(4.0)	1.5

38. Risk Management (continued)

38.4 Insurance-Related Risk Management (continued)

Market and Credit Risk (continued)

(h) Credit Risk (continued)

Loss Allowance (continued)

The carrying amount of outstanding premiums as at 31 December 2022 is $983.9 million (2021: $663.3 million). The ECL relating to outstanding premiums as at 31 December 2022 was $9.1 million (2021: $8.0 million) for GEH Group. For the year ended 31 December 2022, the changes in credit loss recognised in the income statement was $1.1 million (2021: $0.5 million).

The changes in risk parameters may consist of management overlays, including but not limited to, the application of judgement to:

i) key economic variables including GDP growth projections;
ii) scenario weightings;
iii) obligor's credit rating to reflect a deterioration to credit risk;
iv) take into consideration government relief programmes; or
v) events arisen after post-model-run that require adjustment.

Loss allowances are reviewed quarterly, taking into consideration the effects of key variables.

(i) Concentration Risk

An important element of managing both market and credit risks is to actively manage concentration to specific issuers, counterparties, industry sectors, countries and currencies. Both internal and regulatory limits are put in place to manage concentration risk. These limits are reviewed on a regular basis by the respective management committees. GEH Group’s exposures are within the concentration limits set by the respective local regulators.

GEH Group actively manages its investment mix to ensure that there is no significant concentration in market and credit risk.

38. Risk Management (continued)

38.4 Insurance-Related Risk Management (continued)

Market and Credit Risk (continued)

(j) Sensitivity Analysis on Financial Risks

The sensitivity analysis below shows the impact on GEH Group's net profit after tax by applying possible shocks to each key variables, with all other variables constant. Co-movement of key variables can significantly affect the fair values and/or amortised cost of financial assets. To demonstrate the impact due to changes in each key variable, the variables are changed individually.

The impact on net profit after tax represents the effect caused by changes in fair value of financial assets whose fair values are recorded in the income statement, and changes in valuation of insurance contract liabilities. The equity sensitivity represents the impact on net profit after tax and the effect on changes in fair value of financial assets measured at FVOCI.

Market Risk Sensitivity Analysis

	Impact on profit after tax		Impact on equity	
$ million	2022	2021	2022	2021
Change in variables:				
(a) Interest rate [1]				
+100 basis points	**188.5**	81.4	**(197.8)**	(386.7)
–100 basis points	**(313.4)**	(312.4)	**121.3**	230.8
(b) Foreign currency				
5% increase in market value of MYR denominated assets	**0.1**	0.1	**0.1**	0.1
5% decrease in market value of MYR denominated assets	**(0.1)**	(0.1)	**(0.1)**	(0.1)
5% increase in market value of USD denominated assets	**12.1**	0.7	**12.1**	0.7
5% decrease in market value of USD denominated assets	**(12.1)**	(0.7)	**(12.1)**	(0.7)
(c) Equity				
20% increase in market indices				
STI	**31.2**	51.3	**68.8**	129.9
KLCI	**2.4**	–	**39.1**	34.6
20% decrease in market indices				
STI	**(31.2)**	(51.3)	**(68.8)**	(129.9)
KLCI	**(2.4)**	–	**(39.1)**	(34.6)
(d) Credit				
Spread +100 basis points	**(72.7)**	(165.2)	**(315.8)**	(487.3)
Spread –100 basis points	**79.0**	208.4	**352.5**	583.6
(e) Alternative investments [2]				
10% increase in market value of all alternative investments	**71.0**	72.1	**72.6**	73.9
10% decrease in market value of all alternative investments	**(71.0)**	(72.1)	**(72.6)**	(73.9)

(1) Comparatives have been reclassified to conform to current year's presentation.
(2) Alternative investments comprise investments in real estate, private equity, infrastructure and hedge funds.

The method for deriving sensitivity information and significant variables did not change from the previous year.

Operational and Compliance Risk

Operational risk is an event or action that may potentially impact partly or completely the achievement of the organisation's objectives resulting from inadequate or failed internal processes and systems, human factors, or external events.

Compliance risk is any event or action that may potentially impact partly or completely the achievement of the organisation's objectives, as a result of its failure to comply with the following applicable laws, regulations and standards:

- local laws, regulations and rules governing licensed activities undertaken by GEH Group;
- foreign laws, regulations and rules that have extraterritorial jurisdiction over GEH Group's licensed activities;
- codes of practice promoted by industry associations of which GEH Group are members of; and
- any other applicable regulations which do not specifically govern the licensed activities undertaken by GEH Group but can expose the organisation to legal, regulatory or reputational loss.

38. Risk Management (continued)

38.4 Insurance-Related Risk Management (continued)

Operational and Compliance Risk (continued)

The day-to-day management of operational and compliance risk is through the maintenance of comprehensive internal control frameworks, supported by an infrastructure of systems and procedures to monitor processes and transactions. GMC reviews operational and compliance issues on a GEH Group basis at its monthly meetings while local level issues are managed and monitored by the local SMTs. GEH Group Internal Audit team reviews the systems of internal controls to assess their ongoing relevance and effectiveness, and reports at least quarterly to GEH Group Audit Committee.

Technology, Information and Cyber Risks

Technology risk is defined as risk related to any potential adverse outcome, damage, loss, disruption, violation, system/hardware failure, capacity deficiency arising from the use of technologies such as electronic hardware/devices, software, online networks and telecommunications systems.

Information risk is defined as risk related to confidentiality, integrity and availability of information (in physical or digital form).

Cyber risk is defined as risk related to acts perpetrated by malicious threat actors including internal sabotage, espionage, malicious attacks, hacking incidents, fraudulent conduct using information and communication technologies.

GEH Group adopts a risk-based approach in managing technology risks relating to IT disruption, cyber threats, data loss and third parties. Key risk indicators related to technology, information and cyber risks are reported to GEH Group Board on a regular basis. Independent assessment is performed by GEH Group Internal Audit on the adequacy and effectiveness of the technology risk controls.

Sustainability Risk

Sustainability risk is defined as any environmental, social or governance (ESG) event or condition that, if it occurs, could cause an actual or a potential material negative impact on the value of the investment and enterprise value. GEH Group has integrated ESG considerations into the investment and underwriting activities.

At present, GEH Group manages social and governance-related risk through existing frameworks and policies. In order to build resilience as the world transits to a low-carbon economy, GEH Group has formalised the Group Environmental Risk Management Policy which sets forth guiding principles and minimum standards in managing environmental risk within GEH Group. Environmental risk arises from the potential adverse impact of changes in the environment on economic activities and human well-being. Environmental issues that are of concern include climate change, loss of biodiversity, pollution and changes in land use. Environmental risk can manifest in three dimensions of risk as follows:

- Physical risk – impact of weather events and long-term or widespread environmental changes. It arises from acute (event-driven) and chronic (long term shift) climate-related events that damage property, reduce productivity and disrupt trade.
- Transition risk – arises from the process of adjustment to an environmentally sustainable economy, including change in public policies, disruptive technological developments, and shifts in consumer and investor preferences.
- Liability risk – arises from legal risk and claims on damages and losses incurred from inaction or lack of action that results in the effects of physical and transition risks.

GEH Group's risk assessment considers the financial and non-financial impacts from physical and transition risks arising from climate change. With this, GEH Group organisation has put in place processes, methodology, and both qualitative and quantitative tools to identify and assess environmental risk for investment and underwriting portfolios.

For underwriting portfolio, risk transfer tool such as reinsurance is used to assist in managing environmental risk. For investment portfolio, the objective is to build resilient investment portfolios whilst striking a balance between ESG considerations, impact and financial returns.

GEH Group has made its first disclosures on climate-related risks aligned to the Task Force on Climate-related Financial Disclosures (TCFD) in May 2021 as part of GEH Sustainability Report 2021. The report provides some insights into the Group’s governance approach, strategy and risk management, as well as key metrics and targets for climate-related financial risks.

39. Financial Assets and Financial Liabilities Classification

$ million	Mandatorily measured at FVTPL	Designated as FVTPL	Amortised cost	FVOCI	Insurance contracts	Total
	GROUP					
2022						
Cash and placements with central banks	**–**	**–**	**34,966**	**–**	**–**	**34,966**
Singapore government treasury bills and securities	**2,193**	**–**	**537**	**14,366**	**–**	**17,096**
Other government treasury bills and securities	**1,194**	**10**	**419**	**20,648**	**–**	**22,271**
Placements with and loans to banks	**877**	**–**	**17,042**	**12,325**	**–**	**30,244**
Loans to customers	**23**	**–**	**291,444**	**–**	**–**	**291,467**
Debt securities	**2,697**	**24**	**307**	**19,928**	**–**	**22,956**
Equity securities and investment funds	**3,924**	**–**	**–**	**1,130**	**–**	**5,054**
Debt and equity securities	**6,621**	**24**	**307**	**21,058**	**–**	**28,010**
Derivative receivables	**15,605**	**–**	**–**	**–**	**–**	**15,605**
Other assets	**–**	**–**	**5,428**	**–**	**463**	**5,891**
Amounts due from associates	**–**	**–**	**7**	**–**	**–**	**7**
Financial assets	**26,513**	**34**	**350,150**	**68,397**	**463**	**445,557**
Non-financial assets						**16,404**
						461,961
Life insurance fund financial assets	**33,090**	**40,292**	**15,861**	**6,776**	**–**	**96,019**
Life insurance fund non-financial assets						**1,976**
Total assets						**559,956**
Deposits of non-bank customers	**–**	**–**	**350,081**	**–**	**–**	**350,081**
Deposits and balances of banks	**–**	**–**	**10,046**	**–**	**–**	**10,046**
Trading portfolio liabilities	**212**	**–**	**–**	**–**	**–**	**212**
Derivative payables	**16,048**	**–**	**–**	**–**	**–**	**16,048**
Other liabilities [(1)]	**–**	**–**	**7,076**	**–**	**823**	**7,899**
Debt issued	**–**	**1,040**	**20,898**	**–**	**–**	**21,938**
Financial liabilities	**16,260**	**1,040**	**388,101**	**–**	**823**	**406,224**
Non-financial liabilities						**4,118**
						410,342
Life insurance fund financial liabilities	**275**	**–**	**9,248**	**–**	**84,936**	**94,459**
Life insurance fund non-financial liabilities						**487**
Total liabilities						**505,288**

(1) Other liabilities include amounts due to associates.

39. Financial Assets and Financial Liabilities Classification (continued)

	GROUP					
$ million	Mandatorily measured at FVTPL	Designated as FVTPL	Amortised cost	FVOCI	Insurance contracts	Total
2021						
Cash and placements with central banks	–	–	27,919	–	–	27,919
Singapore government treasury bills and securities	1,230	–	–	9,882	–	11,112
Other government treasury bills and securities	2,692	10	347	23,110	–	26,159
Placements with and loans to banks	758	–	17,595	7,109	–	25,462
Loans to customers	47	–	286,232	2	–	286,281
Debt securities	4,084	22	331	23,608	–	28,045
Equity securities and investment funds	4,596	–	–	1,374	–	5,970
Debt and equity securities	8,680	22	331	24,982	–	34,015
Derivative receivables	9,267	–	–	–	–	9,267
Other assets	–	–	5,270	–	467	5,737
Amounts due from associates	–	–	40	–	–	40
Financial assets	22,674	32	337,734	65,085	467	425,992
Non-financial assets						16,099
						442,091
Life insurance fund financial assets	34,381	46,544	11,262	5,995	–	98,182
Life insurance fund non-financial assets						1,914
Total assets						542,187
Deposits of non-bank customers	–	–	342,395	–	–	342,395
Deposits and balances of banks	–	–	8,239	–	–	8,239
Trading portfolio liabilities	393	–	–	–	–	393
Derivative payables	9,070	–	–	–	–	9,070
Other liabilities [1]	–	–	6,089	–	788	6,877
Debt issued	–	1,092	19,023	–	–	20,115
Financial liabilities	9,463	1,092	375,746	–	788	387,089
Non-financial liabilities						4,454
						391,543
Life insurance fund financial liabilities	109	–	8,595	–	86,966	95,670
Life insurance fund non-financial liabilities						636
Total liabilities						487,849

(1) Other liabilities include amounts due to associates.

39. Financial Assets and Financial Liabilities Classification (continued)

	BANK				
$ million	Mandatorily measured at FVTPL	Designated as FVTPL	Amortised cost	FVOCI	Total
2022					
Cash and placements with central banks	–	–	27,812	–	27,812
Singapore government treasury bills and securities	1,836	–	537	13,516	15,889
Other government treasury bills and securities	816	–	419	6,930	8,165
Placements with and loans to banks	856	–	11,278	6,546	18,680
Loans to customers	23	–	201,087	–	201,110
Debt securities	1,894	–	307	11,434	13,635
Equity securities and investment funds	2,896	–	–	90	2,986
Debt and equity securities	4,790	–	307	11,524	16,621
Placements with and advances to subsidiaries	–	–	18,844	–	18,844
Derivative receivables	13,742	–	–	–	13,742
Other assets	–	–	2,177	–	2,177
Amounts due from associates	–	–	6	–	6
Financial assets	22,063	–	262,467	38,516	323,046
Non-financial assets					20,931
Total assets					343,977
Deposits of non-bank customers	–	–	223,310	–	223,310
Deposits and balances of banks	–	–	7,691	–	7,691
Deposits and balances of subsidiaries	–	–	36,522	–	36,522
Trading portfolio liabilities	212	–	–	–	212
Derivative payables	14,300	–	–	–	14,300
Other liabilities [1]	–	–	2,556	–	2,556
Debt issued	–	1,040	20,254	–	21,294
Financial liabilities	14,512	1,040	290,333	–	305,885
Non-financial liabilities					1,176
Total liabilities					307,061

(1) Other liabilities include amounts due to associates.

39. Financial Assets and Financial Liabilities Classification (continued)

	BANK				
$ million	Mandatorily measured at FVTPL	Designated as FVTPL	Amortised cost	FVOCI	Total
2021					
Cash and placements with central banks	–	–	22,863	–	22,863
Singapore government treasury bills and securities	1,130	–	–	8,976	10,106
Other government treasury bills and securities	1,671	–	347	7,692	9,710
Placements with and loans to banks	758	–	11,639	5,119	17,516
Loans to customers	47	–	189,354	–	189,401
Debt securities	3,369	–	331	13,063	16,763
Equity securities and investment funds	3,142	–	–	126	3,268
Debt and equity securities	6,511	–	331	13,189	20,031
Placements with and advances to subsidiaries	–	–	21,930	–	21,930
Derivative receivables	7,812	–	–	–	7,812
Other assets	–	–	2,059	–	2,059
Amounts due from associates	–	–	40	–	40
Financial assets	17,929	–	248,563	34,976	301,468
Non-financial assets					20,754
Total assets					322,222
Deposits of non-bank customers	–	–	221,213	–	221,213
Deposits and balances of banks	–	–	6,708	–	6,708
Deposits and balances of subsidiaries	–	–	28,250	–	28,250
Trading portfolio liabilities	393	–	–	–	393
Derivative payables	7,656	–	–	–	7,656
Other liabilities [(1)]	–	–	1,769	–	1,769
Debt issued	–	1,092	18,565	–	19,657
Financial liabilities	8,049	1,092	276,505	–	285,646
Non-financial liabilities					979
Total liabilities					286,625

(1) Other liabilities include amounts due to associates.

40. Interest Rate Benchmark Reform (IBOR Reform)

The London Interbank Offered Rate (LIBOR), a key benchmark used in international financial markets, is being phased out and replaced by Risk Free Rates (RFRs). On 5 March 2021, the UK Financial Conduct Authority (FCA) confirmed a two-phase discontinuation approach for LIBOR. Specifically, all British pound, Euro, Swiss franc and Japanese yen LIBORs, as well as the 1-week and 2-month US dollar LIBOR were discontinued after 31 December 2021. All remaining US dollar LIBORs will be discontinued after 30 June 2023.

The expected discontinuation of LIBOR directly impacts the viability of the Singapore Dollar Swap Offer Rate (SOR), which relies on US dollar LIBOR in its computation. In addition, like LIBOR, the Singapore Interbank Offered Rate (SIBOR), a key benchmark widely used in retail loans, is subject to expert judgement due to a lack of underlying transactions. The Singapore Overnight Rate Average (SORA) has been identified as the alternative benchmark to SOR and SIBOR. MAS has established an industry-led Steering Committee for SOR & SIBOR Transition to SORA (SC-STS), to oversee the coordination and implementation of the transition efforts.

To ensure a smooth transition from LIBOR to RFRs and SOR and SIBOR to SORA, the Group established an internal Steering Committee to coordinate efforts across various business, control and support functions. Clear timelines and deliverables have been established to keep pace with industry transition roadmaps and regulatory timelines.

The Group implemented the necessary system upgrades and modifications to ensure the readiness of our infrastructure and processes. The Group have also assessed the adequacy of provisions relating to the permanent discontinuation of benchmarks in loan documentation, derivatives contracts, debt issuances and other relevant contracts. With respect to the transition of SOR contracts, all retail loans referencing SOR have transitioned to SORA, fixed rates or other benchmarks, with the last transition completed on 18 Oct 2022 in line with the industry. As for corporate loans and derivatives referencing SOR, transition is in progress and expected to be completed by the first half of 2023 in line with industry guidelines. Appropriate adjustments will be made as recommended by the industry to reflect the differences between SOR and SORA. For SIBOR, the transition will be completed in 2024 in line with the roadmap established by the industry. No significant impact is expected from the transition of SOR and SIBOR to SORA.

Hedge Accounting

The Group uses interest rate swaps, futures and cross currency swaps to hedge its exposure to changes in fair value of fixed rate debt instruments and its foreign currency exposure in a fair value hedge. The Group also uses interest rate swaps to hedge the variability in the cash flows that is related to a variable rate asset or liability resulting from changes in interest rate. With respect to hedge accounting, the Group's primary exposure is to USD LIBOR due to the extent of fixed rate debt instruments and subordinated debt denominated in USD that are designated in fair value hedge relationships using interest rate swaps and cross currency swaps.

The Group has applied the following SFRS(I) 9 relief from hedge accounting requirements introduced as a result of IBOR reform:
- When considering the "highly probable" requirement, the Group assumed that the interest rate benchmark on which the hedged cash flows are based is not altered as a result of IBOR reform.
- In assessing the economic relationship between the hedged item and the hedging instrument, the Group assume that the interest rate benchmark on which the hedged item and hedging instruments are based is not altered as a result of IBOR reform.
- For fair value hedges of interest rate risk on fixed rate debt, the Group only assesses whether the designated benchmark is separately identifiable at hedge inception and not revisited on reporting date.

In applying the amendments, the Group assumes that the uncertainty arising from IBOR reform is no longer present when contracts are modified to reflect the new benchmark rates or are discontinued. The Group also assesses that when modifying contracts to reflect the new benchmark rates, no other changes to the terms of the contracts are made.

As at 31 December 2022, the notional amount of hedging instruments referencing USD LIBOR is $4.21 billion (2021: $9.43 billion).

40. Interest Rate Benchmark Reform (IBOR Reform) (continued)

Exposures Impacted by IBOR Reform

The following table shows the total amount of non-derivative financial assets, non-derivative financial liabilities and derivative financial instruments that have yet to transition to an alternative benchmark rate as at 31 December 2022 and 31 December 2021.

			GROUP		
$ million	SOR	USD LIBOR	SIBOR	Other LIBOR	Total
2022					
Gross carrying amount					
Loans to customers	**7,383**	**22,115**	**8,320**	**–**	**37,818**
Non-derivative financial assets	**7,383**	**22,115**	**8,320**	**–**	**37,818**
Gross carrying amount					
Deposits of non-bank customers	**–**	**1,462**	**–**	**–**	**1,462**
Deposits and balances of banks	**–**	**871**	**–**	**–**	**871**
Non-derivative financial liabilities	**–**	**2,333**	**–**	**–**	**2,333**
Notional amount					
Derivative financial instruments	**32,006**	**109,822**	**–**	**–**	**141,828**
Debt securities	**–**	**358**	**–**	**–**	**358**
2021					
Gross carrying amount					
Loans to customers	17,352	24,047	15,369	7,320	64,088
Non-derivative financial assets	17,352	24,047	15,369	7,320	64,088
Gross carrying amount					
Deposits of non-bank customers	–	2,621	–	–	2,621
Deposits and balances of banks	–	768	–	–	768
Non-derivative financial liabilities	–	3,389	–	–	3,389
Notional amount					
Derivative financial instruments	35,067	116,685	–	8,100	159,852
Debt securities	–	285	–	117	402

40. Interest Rate Benchmark Reform (IBOR Reform) (continued)

Exposures Impacted by IBOR Reform (continued)

	BANK				
$ million	SOR	USD LIBOR	SIBOR	Other LIBOR	Total
2022					
Gross carrying amount					
Loans to customers	**7,383**	**19,104**	**8,320**	**–**	**34,807**
Non-derivative financial assets	**7,383**	**19,104**	**8,320**	**–**	**34,807**
Gross carrying amount					
Deposits of non-bank customers	**–**	**1,462**	**–**	**–**	**1,462**
Deposits and balances of banks	**–**	**871**	**–**	**–**	**871**
Non-derivative financial liabilities	**–**	**2,333**	**–**	**–**	**2,333**
Notional amount					
Derivative financial instruments	**32,235**	**110,020**	**–**	**–**	**142,255**
Debt securities	**–**	**57**	**–**	**–**	**57**
2021					
Gross carrying amount					
Loans to customers	17,352	21,356	15,369	6,587	60,664
Non-derivative financial assets	17,352	21,356	15,369	6,587	60,664
Gross carrying amount					
Deposits of non-bank customers	–	2,621	–	–	2,621
Deposits and balances of banks	–	768	–	–	768
Non-derivative financial liabilities	–	3,389	–	–	3,389
Notional amount					
Derivative financial instruments	35,347	117,172	–	8,003	160,522
Debt securities	–	52	–	117	169

The “Other LIBOR” balances contain positions that had the last interest fixing in 2021 based on GBP LIBOR, EUR LIBOR or JPY LIBOR. These non-USD LIBOR positions were fixed using an alternative interest rate benchmark from the first interest fixing in 2022 onwards.

41. Fair Values of Financial Instruments

41.1 Valuation Governance Framework

The Group has an established governance framework with respect to the measurement of fair values, which includes formalised processes for the review and validation of fair values independent of the businesses entering into the transactions.

The Market Risk Management (MRM) function within the GRM is responsible for the model validation process. Financial models are used to price financial instruments and to calculate value-at-risk (VaR). MRM ensures that the models used are fit for their intended purposes through internal independent validation and periodic review. MRM sources market rates independently for risk measurement and valuation.

The Treasury Financial Control and Advisory – Valuation Control function within the Group Finance Division is responsible for the establishment of the overall valuation control framework. This includes, but is not limited to, reviewing and recommending appropriate valuation adjustment methodologies, independent price testing, and identifying valuation gaps.

Valuation policies are formulated and reviewed annually by the Valuation Control function, and approved by the Market Risk Management Committee, the CEO and BRMC. Valuation adjustments are applied to account for input parameter uncertainties, known model deficiencies and other factors that may affect valuation. The main valuation adjustments are described below.

Bid Offer Adjustments

When the position is marked at mid-price, bid offer adjustment is applied to account for close out cost.

Model Adjustments

Model adjustments are applied when there are inherent limitations in the valuation models used by the Bank.

Day 1 Profit or Loss Adjustments

Day 1 profit or loss adjustments are applied when the valuation technique involves the use of significant inputs which are not readily observable. The difference between the fair value at initial recognition and the transaction price is deferred as an adjustment.

The Day 1 profit or loss adjustments are released to the income statement when the significant inputs become observable, when the transaction is derecognised or amortised over the life of the transaction.

Credit Valuation Adjustments

Credit valuation adjustments are applied to account for the expected losses due to counterparty default on derivative positions.

Collateral Valuation Adjustments

Collateral valuation adjustments are applied when a derivative is denominated and discounted using a curve in the same currency but is collateralised in another currency.

Parameter Uncertainty Adjustments

These valuation adjustments mainly include adjustments for illiquid prices or internal methodologies used to derive model inputs.

The Group's internal audit provides independent assurance on the respective divisions' compliance with the policy.

41. Fair Values of Financial Instruments (continued)

41.2 Fair Values

Financial instruments comprise financial assets, financial liabilities and off-balance sheet financial instruments. The fair value of a financial instrument is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. For financial assets and liabilities not carried at fair value on the financial statements, the Group has determined that their fair values were not materially different from the carrying amounts at the reporting date. The carrying amounts and fair values of financial instruments of the Group are described below.

Financial Assets

Fair values of cash and balances with central banks, placements with banks, interest and other short term receivables are expected to approximate their carrying amounts due to their short tenor or frequent re-pricing.

Securities held by the Group, comprising government securities and debt and equity securities are substantially carried at fair value on the balance sheet.

Non-bank customer loans are mainly carried at amortised cost on the balance sheet, net of allowances for impaired and non-impaired loans. The Group deems that the carrying amounts of non-bank loans approximate their fair values as substantially all the loans are subject to frequent re-pricing.

Financial Liabilities

Fair value of certain financial liabilities, which include mainly customer deposits with no stated maturity, interbank borrowings and borrowings under repurchase agreements, are expected to approximate their carrying amounts due to their short tenor. For non-bank customer term deposits, contractual or derived cash flows are discounted at market rates as at reporting date to estimate the fair values, which approximate the carrying amounts.

The fair values of the Group's subordinated term notes and covered bonds are determined based on quoted market prices and independent broker offer prices. For other debts issued which are usually short term, the fair values approximate the carrying amounts.

41.3 Fair Value Hierarchy

The Group determines the fair values of its financial assets and liabilities using various measurements. The different levels of fair value measurements are as follows:

- Level 1 – quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2 – inputs other than quoted prices included within Level 1 that are observable market data either directly (i.e. as prices) or indirectly (i.e. derived from observable market data). The valuation techniques that use market parameters as inputs include, but are not limited to, yield curves, volatilities and foreign exchange rates; and
- Level 3 – inputs for the valuation that are not based on observable market data.

41. Fair Values of Financial Instruments (continued)

41.3 Fair Value Hierarchy (continued)

The following table summarises the Group's assets and liabilities measured at fair values subsequent to initial recognition by level of the fair value hierarchy:

	2022				2021			
$ million	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
GROUP								
Financial assets measured at fair value								
Placements with and loans to banks	**2,222**	**10,980**	**–**	**13,202**	2,194	5,673	–	7,867
Debt and equity securities	**18,453**	**5,869**	**3,381**	**27,703**	24,813	7,699	1,172	33,684
Loans to customers	**–**	**–**	**23**	**23**	–	2	47	49
Derivative receivables	**117**	**15,141**	**347**	**15,605**	42	8,413	812	9,267
Government treasury bills and securities	**34,096**	**4,315**	**–**	**38,411**	30,834	6,090	–	36,924
Life insurance fund investment securities and other assets	**51,460**	**25,442**	**3,256**	**80,158**	60,879	23,489	2,552	86,920
Total	**106,348**	**61,747**	**7,007**	**175,102**	118,762	51,366	4,583	174,711
Non-financial assets measured at fair value								
Life insurance fund investment properties and asset held for sale	**–**	**–**	**1,954**	**1,954**	–	–	1,884	1,884
Associates	**–**	**–**	**122**	**122**	–	–	95	95
Total	**–**	**–**	**2,076**	**2,076**	–	–	1,979	1,979
Financial liabilities measured at fair value								
Derivative payables	**103**	**15,662**	**283**	**16,048**	168	8,262	640	9,070
Trading portfolio liabilities	**212**	**–**	**–**	**212**	393	–	–	393
Debt issued	**–**	**1,040**	**–**	**1,040**	–	1,092	–	1,092
Life insurance fund financial liabilities	**22**	**253**	**–**	**275**	3	106	–	109
Total	**337**	**16,955**	**283**	**17,575**	564	9,460	640	10,664
BANK								
Financial assets measured at fair value								
Placements with and loans to banks	**1,532**	**5,870**	**–**	**7,402**	1,324	4,553	–	5,877
Debt and equity securities	**10,106**	**3,593**	**2,615**	**16,314**	13,828	5,376	496	19,700
Loans to customers	**–**	**–**	**23**	**23**	–	–	47	47
Derivative receivables	**22**	**13,388**	**332**	**13,742**	15	7,161	636	7,812
Government treasury bills and securities	**19,703**	**3,395**	**–**	**23,098**	14,693	4,776	–	19,469
Total	**31,363**	**26,246**	**2,970**	**60,579**	29,860	21,866	1,179	52,905
Financial liabilities measured at fair value								
Derivative payables	**32**	**13,992**	**276**	**14,300**	133	7,075	448	7,656
Trading portfolio liabilities	**212**	**–**	**–**	**212**	393	–	–	393
Debt issued	**–**	**1,040**	**–**	**1,040**	–	1,092	–	1,092
Total	**244**	**15,032**	**276**	**15,552**	526	8,167	448	9,141

During the financial year, the Group transferred financial assets from Level 2 to Level 1 as prices became observable arising from increased market activity. Financial assets were also transferred from Level 1 to Level 2 when quoted prices become unobservable arising from reduced market activity.

41. Fair Values of Financial Instruments (continued)

41.3 Fair Value Hierarchy (continued)

Valuation Techniques and Unobservable Inputs for Level 3 Instruments

GROUP $ million	Fair value at 31 December 2022	Classification	Valuation techniques	Unobservable inputs
Financial assets				
Debt securities	**222**	FVTPL/FVOCI	Discounted cash flows	Yield
Equity securities	**3,159**	FVTPL/FVOCI	Net asset value/ Multiples/Discounted cash flows	Value of net asset/ Earnings and multiples/ Cash flows and discount rate
Loans to customers	**23**	FVTPL	Discounted cash flows	Cash flows and discount rate
Derivative receivables	**347**	FVTPL	Option pricing model Derivatives pricing	Volatility/Correlation Long dated rate
Life insurance fund investment securities and other assets	**3,256**	FVTPL/FVOCI	Discounted cash flows/ Income approach/ Net asset value	Yield/Risk adjusted discount rate/ Value of net asset
Total	**7,007**			

Financial liabilities				
Derivative payables	**283**	FVTPL	Option pricing model Derivatives pricing	Volatility/Correlation Long dated rate
Total	**283**			

Movements in Level 3 Financial Assets and Liabilities

	2022				
GROUP $ million	Debt and equity securities	Loans to customers	Derivative receivables	Life insurance fund investment securities and other assets	Total
Financial assets measured at fair value					
At 1 January	**1,172**	**47**	**812**	**2,552**	**4,583**
Purchases	**519**	**46**	**43**	**600**	**1,208**
Settlements/disposals	**(14)**	**(27)**	**(41)**	**(335)**	**(417)**
Transfers in [1]	**1,729**	**–**	**51**	**549**	**2,329**
Gains/(losses) recognised in					
– profit or loss	**(24)**	**(43)**	**(520)**	**(106)**	**(693)**
– other comprehensive income	**(1)**	**#**	**2**	**(4)**	**(3)**
At 31 December	**3,381**	**23**	**347**	**3,256**	**7,007**
Unrealised (losses)/gains included in profit or loss for assets held at the end of the year	**(24)**	**(22)**	**152**	**(47)**	**59**

(1) Relates to transfers from Levels 1 and 2 to Level 3 due to use of inputs not based on market observable data.

41. Fair Values of Financial Instruments (continued)

41.3 Fair Value Hierarchy (continued)

Movements in Level 3 Financial Assets and Liabilities (continued)

GROUP $ million	2021 Debt and equity securities	Loans to customers	Derivative receivables	Life insurance fund investment securities and other assets	Total
Financial assets measured at fair value					
At 1 January	1,214	89	102	1,967	3,372
Purchases	11	–	42	541	594
Settlements/disposals	(14)	(26)	(8)	(243)	(291)
Transfer in [1]	20	–	226	–	246
Gains/(losses) recognised in					
– profit or loss	(68)	(16)	449	288	653
– other comprehensive income	9	(#)	1	(1)	9
At 31 December	1,172	47	812	2,552	4,583
Unrealised (losses)/gains included in profit or loss for assets held at the end of the year	(68)	(16)	738	274	928

Gains/(losses) included in profit or loss are presented in the income statement as follows:

	2022 Trading income	Other income	Total	2021 Trading income	Other income	Total
Total (losses)/gains included in profit or loss for the year ended	**(588)**	**(105)**	**(693)**	365	288	653
Unrealised gains/(losses) included in profit or loss for assets held at the end of the year	**106**	**(47)**	**59**	654	274	928

(1) Relates to transfers from Level 2 to Level 3 due to use of inputs not based on market observable data.

41. Fair Values of Financial Instruments (continued)

41.3 Fair Value Hierarchy (continued)

Movements in Level 3 Financial Assets and Liabilities (continued)

BANK $ million	2022 Debt and equity securities	Loans to customers	Derivative receivables	Total	2021 Debt and equity securities	Loans to customers	Derivative receivables	Total
Financial assets measured at fair value								
At 1 January	**496**	**47**	**636**	**1,179**	443	84	98	625
Purchases	**508**	**46**	**43**	**597**	4	–	42	46
Settlements/disposals	**(14)**	**(27)**	**(41)**	**(82)**	(9)	(21)	(7)	(37)
Transfers in [1]	**1,655**	**–**	**15**	**1,670**	11	–	–	11
Gains/(losses) recognised in								
– profit or loss	**(26)**	**(43)**	**(321)**	**(390)**	16	(16)	503	503
– other comprehensive income	**(4)**	**#**	**–**	**(4)**	31	#	–	31
At 31 December	**2,615**	**23**	**332**	**2,970**	496	47	636	1,179
Unrealised (losses)/gains included in profit or loss for assets held at the end of the year	**(25)**	**(22)**	**114**	**67**	16	(16)	557	557

Gains/(losses) included in profit or loss are presented in the income statement as follows:

	2022 Trading income	Total	2021 Trading income	Total
Total (losses)/gains included in profit or loss for the year ended	**(390)**	**(390)**	503	503
Unrealised gains included in profit or loss for assets held at the end of the year	**67**	**67**	557	557

(1) Relates to transfers from Levels 1 and 2 to Level 3 due to use of inputs not based on market observable data.

41. Fair Values of Financial Instruments (continued)

41.3 Fair Value Hierarchy (continued)

Movements in Level 3 Financial Assets and Liabilities (continued)

	GROUP				BANK			
	2022		2021		2022		2021	
$ million	Derivative payables	Total	Derivative payables	Total	Derivative payables	Total	Derivative payables	Total
Financial liabilities measured at fair value								
At 1 January	**640**	**640**	69	69	**448**	**448**	55	55
Issues	**59**	**59**	144	144	**59**	**59**	144	144
Settlements/disposals	**(143)**	**(143)**	(80)	(80)	**(142)**	**(142)**	(80)	(80)
Transfers in [1]	**39**	**39**	226	226	**3**	**3**	–	–
Losses/(gains) recognised in								
– profit or loss	**(314)**	**(314)**	281	281	**(92)**	**(92)**	329	329
– other comprehensive income	**2**	**2**	(#)	(#)	**–**	**–**	–	–
At 31 December	**283**	**283**	640	640	**276**	**276**	448	448
Unrealised losses included in profit or loss for liabilities held at the end of the year	**(351)**	**(351)**	(542)	(542)	**(359)**	**(359)**	(369)	(369)

(1) Relates to transfers from Level 2 to Level 3 due to use of inputs not based on market observable data.

Gains/(losses) included in profit or loss are presented in the income statements as follows:

	GROUP				BANK			
	2022		2021		2022		2021	
$ million	Trading income	Total	Trading income	Total	Trading income	Total	Trading income	Total
Total gains/(losses) included in profit or loss for the year ended	**314**	**314**	(281)	(281)	**92**	**92**	(329)	(329)
Unrealised losses included in profit or loss for liabilities held at the end of the year	**(351)**	**(351)**	(542)	(542)	**(359)**	**(359)**	(369)	(369)

Movements in Level 3 Non-Financial Assets

	GROUP					
	2022			2021		
$ million	Life insurance fund investment properties and asset held for sale [1]	Associates [2]	Total	Life insurance fund investment properties [1]	Associates [2]	Total
Non-financial assets measured at fair value						
At 1 January	**1,884**	**95**	**1,979**	1,767	–	1,767
Purchases/net transfer from property, plant and equipment	**1**	**–**	**1**	39	–	39
Transfers in [3]	**–**	**–**	**–**	–	97	97
Gains/(losses) recognised in						
– profit or loss	**91**	**24**	**115**	84	(2)	82
– other comprehensive income	**(22)**	**3**	**(19)**	(6)	–	(6)
At 31 December	**1,954**	**122**	**2,076**	1,884	95	1,979

(1) The fair value of investment properties and asset held for sale is determined based on a combination of income approach, comparison approach and capitalisation approach under Level 3 fair value measurements.
(2) The fair value of investment in associate is determined based on market approach under Level 3 fair value measurements.
(3) Relates to transfers from Level 2 to Level 3 due to use of inputs not based on market observable data.

42. Offsetting Financial Assets and Financial Liabilities

The Group enters into master netting arrangements with counterparties in its normal course of business. The credit risk associated with favourable contracts is reduced by the master netting arrangement to the extent that if an event of default occurs, all amounts with the counterparty are settled on a net basis. These arrangements do not qualify for net presentation on the balance sheet as the right to offset is enforceable only on the occurrence of future events such as default or other credit events.

The disclosures set out in the tables below pertain to financial assets and financial liabilities that are not presented net in the Group's balance sheet but are subject to enforceable master netting agreement or similar arrangement that covers similar financial instruments. The disclosures enable the evaluation on the potential effect of netting arrangements as well as provide additional information on how such credit risk is mitigated.

GROUP				Related amounts not offset on balance sheet		
Types of financial assets/liabilities $ million	Carrying amounts on balance sheet (A)	Amounts not subject to netting agreement (B)	Amounts subject to netting agreement (A – B = C + D + E)	Financial instruments (C)	Collateral (D)	Net amounts in scope (E)
2022						
Financial assets						
Derivative receivables	**15,605**	**2,410**	**13,195**	**8,126**	**677**	**4,392**
Reverse repurchase agreements	**7,057** (1)	**3,853**	**3,204**	**3,198**	**–**	**6**
Securities borrowings	**10** (2)	**9**	**1**	**1**	**–**	**–**
Total	**22,672**	**6,272**	**16,400**	**11,325**	**677**	**4,398**
Financial liabilities						
Derivative payables	**16,048**	**2,259**	**13,789**	**8,126**	**1,365**	**4,298**
Repurchase agreements	**3,144** (3)	**1,369**	**1,775**	**1,745**	**–**	**30**
Securities lendings	**2** (4)	**–**	**2**	**1**	**–**	**1**
Total	**19,194**	**3,628**	**15,566**	**9,872**	**1,365**	**4,329**
2021						
Financial assets						
Derivative receivables	9,267	3,163	6,104	4,625	236	1,243
Reverse repurchase agreements	3,037 (1)	1,800	1,237	1,224	–	13
Securities borrowings	7 (2)	6	1	1	–	–
Total	12,311	4,969	7,342	5,850	236	1,256
Financial liabilities						
Derivative payables	9,070	1,731	7,339	4,625	1,283	1,431
Repurchase agreements	2,056 (3)	997	1,059	995	–	64
Securities lendings	5 (4)	–	5	5	–	–
Total	11,131	2,728	8,403	5,625	1,283	1,495

(1) Reverse repurchase agreements shown above are the aggregate of transactions recorded in separate line items on the balance sheet, namely placements with central banks, loans to banks and non-bank customers and other assets. These transactions are measured either at fair value or amortised cost.

(2) Cash collateral placed under securities borrowings are presented under placements with and loans to banks and other assets on the balance sheet, and are measured at amortised cost.

(3) Repurchase agreements shown above are the aggregate of transactions recorded in separate line items on the balance sheet, namely deposits of banks and non-bank customers and other liabilities, and are measured at amortised cost.

(4) Cash collateral placed under securities lendings are presented under other liabilities, and are measured at amortised cost.

42. Offsetting Financial Assets and Financial Liabilities (continued)

BANK

Types of financial assets/liabilities $ million	Carrying amounts on balance sheet (A)	Amounts not subject to netting agreement (B)	Amounts subject to netting agreement (A – B = C + D + E)	Related amounts not offset on balance sheet Financial instruments (C)	Related amounts not offset on balance sheet Collateral (D)	Net amounts in scope (E)
2022						
Financial assets						
Derivative receivables	**13,742**	**1,762**	**11,980**	**7,959**	**874**	**3,147**
Reverse repurchase agreements	**4,375** [(1)]	**1,171**	**3,204**	**3,198**	**–**	**6**
Securities borrowings	**9** [(2)]	**9**	**–**	**–**	**–**	**–**
Total	**18,126**	**2,942**	**15,184**	**11,157**	**874**	**3,153**
Financial liabilities						
Derivative payables	**14,300**	**1,992**	**12,308**	**7,959**	**974**	**3,375**
Repurchase agreements	**1,775** [(3)]	**–**	**1,775**	**1,745**	**–**	**30**
Total	**16,075**	**1,992**	**14,083**	**9,704**	**974**	**3,405**
2021						
Financial assets						
Derivative receivables	7,812	1,689	6,123	4,458	359	1,306
Reverse repurchase agreements	2,169 [(1)]	932	1,237	1,224	–	13
Securities borrowings	6 [(2)]	6	–	–	–	–
Total	9,987	2,627	7,360	5,682	359	1,319
Financial liabilities						
Derivative payables	7,656	728	6,928	4,458	790	1,680
Repurchase agreements	1,059 [(3)]	–	1,059	995	–	64
Total	8,715	728	7,987	5,453	790	1,744

(1) Reverse repurchase agreements shown above are the aggregate of transactions recorded in separate line items on the balance sheet, namely placements with central banks, loans to banks and non-bank customers and other assets. These transactions are measured either at fair value or amortised cost.
(2) Cash collateral placed under securities borrowings are presented under placements with and loans to banks on the balance sheet, and are measured at amortised cost.
(3) Repurchase agreements shown above are the aggregate of transactions recorded in separate line items on the balance sheet, namely deposits of banks and non-bank customers and other liabilities, and are measured at amortised cost.

43. Contingent Liabilities

The Group conducts businesses involving acceptances, guarantees, documentary credits and other similar transactions. Acceptances are undertakings by the Group to pay on receipt of bills of exchange drawn. The Group issues guarantees on the performance of customers to third parties. Documentary credits commit the Group to make payments to third parties on presentation of stipulated documents. As the Group will only be required to meet these obligations in the event of customer's default, the cash requirements of these instruments are expected to be considerably below their nominal contractual amounts.

	GROUP		BANK	
	2022 $ million	2021 $ million	2022 $ million	2021 $ million
Guarantees and standby letters of credit:				
Term to maturity of one year or less	**6,352**	6,770	**4,756**	5,592
Term to maturity of more than one year	**2,984**	2,472	**2,220**	1,544
	9,336	9,242	**6,976**	7,136
Acceptances and endorsements	**950**	1,016	**564**	442
Documentary credits and other short term trade-related transactions	**6,463**	6,393	**4,707**	4,721
	16,749	16,651	**12,247**	12,299

43.1 Analysed by Industry

Agriculture, mining and quarrying	**153**	198	**58**	22
Manufacturing	**1,480**	1,412	**472**	353
Building and construction	**2,247**	2,137	**1,388**	1,066
General commerce	**9,238**	10,287	**7,554**	8,757
Transport, storage and communication	**561**	359	**408**	254
Financial institutions, investment and holding companies	**1,614**	1,116	**1,169**	880
Professionals and individuals	**158**	113	**37**	40
Others	**1,298**	1,029	**1,161**	927
	16,749	16,651	**12,247**	12,299

43.2 Analysed by Geography

Singapore	**10,905**	11,347	**10,719**	11,276
Malaysia	**1,226**	1,125	**7**	6
Indonesia	**1,094**	1,169	**–**	–
Greater China	**2,683**	2,520	**667**	520
Other Asia Pacific	**339**	128	**352**	135
Rest of the World	**502**	362	**502**	362
	16,749	16,651	**12,247**	12,299

Contingent liabilities analysed by geography is based on the country where the transactions are recorded.

44. Commitments

Commitments comprise mainly agreements to provide credit facilities to customers. Such credit facilities (cancellable and non-cancellable) can either be made for a fixed period, or have no specific maturity.

	GROUP		BANK	
	2022 $ million	2021 $ million	2022 $ million	2021 $ million
44.1 Credit Commitments				
Undrawn credit facilities:				
Term to maturity of one year or less	**150,236**	141,648	**67,418**	70,699
Term to maturity of more than one year	**33,468**	29,414	**41,039**	25,640
	183,704	171,062	**108,457**	96,339
44.2 Other Commitments				
Capital commitment authorised and contracted	**226**	220	**232**	234
Forward deposits and assets purchase	**83**	359	**716**	1,990
	309	579	**948**	2,224
44.3 Total Commitments	**184,013**	171,641	**109,405**	98,563
44.4 Credit Commitments Analysed by Industry				
Agriculture, mining and quarrying	**1,977**	1,408	**1,272**	657
Manufacturing	**11,297**	8,025	**5,220**	2,637
Building and construction	**26,766**	17,338	**22,607**	13,540
General commerce	**29,892**	24,809	**24,213**	19,692
Transport, storage and communication	**6,362**	4,768	**5,435**	4,080
Financial institutions, investment and holding companies	**41,278**	53,570	**24,912**	33,967
Professionals and individuals	**57,689**	54,552	**17,394**	16,409
Others	**8,443**	6,592	**7,404**	5,357
	183,704	171,062	**108,457**	96,339
44.5 Credit Commitments Analysed by Geography				
Singapore	**138,861**	136,454	**92,698**	83,515
Malaysia	**9,190**	8,736	**936**	469
Indonesia	**6,103**	5,379	**–**	–
Greater China	**20,432**	13,709	**5,679**	5,548
Other Asia Pacific	**3,424**	3,071	**3,447**	3,091
Rest of the World	**5,694**	3,713	**5,697**	3,716
	183,704	171,062	**108,457**	96,339

Credit commitments analysed by geography is based on the country where the transactions are recorded.

45. Unconsolidated Structured Entities

Unconsolidated structured entities refer to structured entities that are not controlled by the Group. The Group's transactions in these structured entities are for investment opportunities as well as to facilitate client transactions. The Group's maximum exposure to loss is primarily limited to the carrying amount on its balance sheet and loan and capital commitments to these structured entities.

The following table summarises the carrying amount of the assets and liabilities recognised in the Group's financial statements relating to the interests in unconsolidated structured entities undertaken by business segments.

GROUP ($ million)	Global investment banking	Insurance	Others	Total
2022				
FVOCI investments	**73**	**–**	**#**	**73**
FVTPL investments	**2**	**95**	**2**	**99**
Other assets	**–**	**9**	**–**	**9**
Total assets	**75**	**104**	**2**	**181**
Other liabilities	**–**	**–**	**–**	**–**
Total liabilities	**–**	**–**	**–**	**–**
Other commitments				
Loan and capital commitments authorised and contracted [1]	**37**	**–**	**–**	**37**
Income earned from sponsored structured entities [2]	**#**	**51**	**32**	**83**
Assets of structured entities	**652**	**6,728**	**403**	**7,783**
2021				
FVOCI investments	83	–	#	83
FVTPL investments	1	125	#	126
Other assets	–	6	–	6
Total assets	84	131	#	215
Other liabilities	–	–	–	–
Total liabilities	–	–	–	–
Other commitments				
Loan and capital commitments authorised and contracted [1]	34	–	–	34
Income earned from sponsored structured entities [2]	#	55	34	89
Assets of structured entities	669	7,186	3,019	10,874

(1) These were also included in the Group's capital commitments authorised and contracted in Note 44.
(2) The income earned relates primarily to management fee, interest income or fair value gains or losses recognised by the Group arising from the interests held by the Group in the unconsolidated investment funds.

The amount of assets transferred to sponsored entities during 2022 and 2021 were not significant.

46. Financial Assets Transferred

46.1 Assets Pledged

	GROUP		BANK	
	2022 $ million	2021 $ million	2022 $ million	2021 $ million
Government treasury bills and securities				
– Singapore	**584**	183	**909**	183
– Others	**650**	857	**634**	676
Placements with and loans to banks	**16**	–	**–**	–
Loans to customers	**1,537**	3,132	**1,422**	2,990
Debt securities	**1,811**	1,465	**1,358**	533
	4,598	5,637	**4,323**	4,382
Obligations to repurchase assets pledged	**2,083**	2,056	**1,657**	1,059

(a) The amounts received from repurchase transactions are recognised as collaterised borrowings, "obligations to repurchase assets pledged", measured at amortised cost and included in deposits of banks and non-bank customers and other liabilities on the balance sheet. The above assets pledged as collateral for repurchase transactions are not derecognised but are presented separately on the balance sheet.

(b) The amounts paid in reverse repurchase transactions are recognised as collaterised lendings, measured at amortised cost and included in loans to banks and non-bank customers as appropriate. The financial assets accepted as collateral for reverse repurchase transactions are not recognised as assets on the balance sheet. The fair value of financial assets accepted as collateral, which the Group is permitted to sell or re-pledge in the absence of default is $6.77 billion (2021: $3.05 billion), of which $0.05 billion (2021: $0.06 billion) have been sold or re-pledged. The Group is obliged to return equivalent assets.

(c) Transactions are conducted under terms and conditions that are usual and customary to standard securities lending (equivalent to repurchase transactions) and securities borrowing (equivalent to reverse repurchase transactions).

46.2 Assets Assigned as Security for Covered Bonds Issued (Note 21.5)

Pursuant to the Bank's Global Covered Bond Programme, selected pools of Singapore housing loans originated by the Bank have been assigned to a bankruptcy-remote structured entity, Red Sail Pte. Ltd. (Note 33.3). These housing loans continue to be recognised on the Bank's balance sheet as the Bank remains exposed to the risks and rewards associated with them.

As at 31 December 2022, the carrying amounts of the covered bonds in issue was $1.78 billion (2021: $3.52 billion), while the carrying amounts of assets assigned was $9.23 billion (2021: $12.08 billion). The difference in values is attributable to an intended over-collateralisation required to maintain the credit ratings of the covered bonds in issue, and additional assets assigned to facilitate future issuances.

47. Related Party Transactions

Loans and deposits transactions with related parties arise from the ordinary course of business and are not treated any differently from loans and deposits transactions with other customers of the Group. Credit facilities granted are subject to the same credit evaluation, approval, monitoring and reporting processes. All transactions with related parties are conducted on commercial terms.

47.1 Material Related Party Transactions

Material related party balances at the reporting date and transactions during the financial year were as follows:

	GROUP		BANK		
$ million	Associates	Life insurance fund	Subsidiaries	Associates	Life insurance fund
(a) Loans, placements and other receivables					
At 1 January 2022	41	600	21,929	40	9
Net change	(34)	18	(3,085)	(34)	58
At 31 December 2022	**7**	**618**	**18,844**	**6**	**67**
(b) Deposits, borrowings and other payables					
At 1 January 2022	431	1,197	28,250	230	541
Net change	(196)	(247)	8,272	(33)	34
At 31 December 2022	**235**	**950**	**36,522**	**197**	**575**
(c) Off-balance sheet credit facilities [(1)]					
At 1 January 2022	–	4	12,374	–	4
Net change	–	–	1,920	–	–
At 31 December 2022	**–**	**4**	**14,294**	**–**	**4**
(d) Income statement transactions					
Year ended 31 December 2022					
Interest income	**#**	**9**	**286**	**#**	**#**
Interest expense	**2**	**8**	**566**	**2**	**2**
Rental income	**–**	**2**	**30**	**–**	**#**
Fee and commission and other income	**–**	**305**	**94**	**–**	**244**
Rental and other expenses	**20**	**33**	**574**	**20**	**#**
Year ended 31 December 2021					
Interest income	#	13	90	#	#
Interest expense	1	6	103	1	#
Rental income	–	2	19	–	#
Fee and commission and other income	–	327	67	–	252
Rental and other expenses	19	21	452	18	#

(1) Off-balance sheet credit facilities refer to transaction-related and trade-related contingencies and commitments.

During the financial year, the Group had banking transactions with director-related and key management-related entities and personnel of the Group. These transactions were not material.

47. Related Party Transactions (continued)

47.2 Key Management Personnel Compensation

	BANK 2022 $ million	BANK 2021 $ million
Key management personnel compensation is as follows:		
Short-term employee benefits	**38**	42
Share-based benefits	**13**	13
	51	55

Certain performance-related payments to key management personnel of the Bank in relation to the performance year 2022 included in the above table are subject to the approval of the Remuneration Committee.

Comparatives have been updated following the approval of the performance-related payments to key management personnel of the Bank in relation to the performance year 2021 by the Remuneration Committee.

48. Capital Management

The key objective of the Group's capital management policy is to maintain a strong capital position to support business growth and strategic investments, and to sustain investor, depositor, customer and market confidence. In line with this, the Group targets a minimum credit rating of "A" and ensures that its capital ratios are comfortably above the regulatory minima, while balancing shareholders' desire for sustainable returns and high standards of prudence. The Group actively manages its capital composition with an optimal mix of capital instruments in order to keep its overall cost of capital low.

A description of the key terms and conditions of the regulatory capital instruments can be found in Notes 13, 14 and 21 of the financial statements, and the approaches adopted by the Group for the computation of risk-weighted assets can be found in the "Pillar 3 Disclosures" chapter.

The Group has complied with all externally imposed regulatory capital requirements. The table below shows the composition of the Group's regulatory capital and its capital adequacy ratios as of 31 December 2022 and 31 December 2021.

$ million	2022	2021
Ordinary shares	**18,048**	18,040
Disclosed reserves/others	**26,254**	25,782
Regulatory adjustments	**(9,123)**	(8,977)
Common Equity Tier 1 Capital	**35,179**	34,845
Additional Tier 1 capital	**1,730**	1,231
Regulatory adjustments	**–**	–
Tier 1 Capital	**36,909**	36,076
Tier 2 capital	**4,028**	3,497
Regulatory adjustments	**–**	–
Total Eligible Capital	**40,937**	39,573
Credit	**202,713**	197,164
Market	**8,587**	11,681
Operational	**20,348**	16,021
Risk Weighted Assets	**231,648**	224,866
Capital Adequacy Ratios		
Common Equity Tier 1	**15.2%**	15.5%
Tier 1	**15.9%**	16.0%
Total	**17.7%**	17.6%

49. New Accounting Standards and Interpretations

As of the reporting date, certain new standards, amendments and interpretations to existing accounting standards have been published. The Group has not adopted the following relevant new/revised financial reporting standards and interpretations that have been issued but not yet effective.

SFRS(I)	Title	Effective for financial year beginning on or after
SFRS(I) 17	*Insurance Contracts*	1 January 2023
Various	*Amendments to SFRS(I) 17*	1 January 2023
Various	*Amendments to SFRS(I) 1-1 and SFRS(I) Practice Statement 2: Disclosure of Accounting Policies*	1 January 2023
SFRS(I) 1-8 (Amendments)	*Definition of Accounting Estimates*	1 January 2023
SFRS(I) 1-12 (Amendments), SFRS(I) 1 (Amendments)	*Deferred Tax related to Assets and Liabilities arising from a Single Transaction*	1 January 2023
SFRS(I) 1-1 (Amendments)	*Classification of Liabilities as Current or Non-current*	1 January 2024
SFRS(I) 16 (Amendments)	*Lease Liability in a Sale and Leaseback*	1 January 2024
Various	*Amendments to SFRS(I) 1-1 Non-current Liabilities with Covenants*	1 January 2024
SFRS(I) 1-10 (Amendments), SFRS(I) 1-28 (Amendments)	*Sale or Contribution of Assets between an Investor and its Associate or Joint Venture*	To be determined

Based on the Group's preliminary analysis, the initial application of the above standards (including their consequential amendments) and interpretations are not expected to have a significant impact on the Group's financial statements, except as described below.

SFRS(I) 17 *Insurance Contracts*

GEH Group will apply SFRS(I) 17 for the first time on 1 January 2023. It is a comprehensive new accounting standard for insurance and reinsurance contracts covering recognition, measurement, presentation and disclosure, and is expected to have a material impact on GEH Group's consolidated financial statements in the period of initial application.

A. SFRS(I) 17 *Insurance Contracts*

SFRS(I) 17 replaces SFRS(I) 4 *Insurance Contracts* and is effective for annual periods beginning on or after 1 January 2023. The nature and effects of the changes in the GEH Group accounting policies are summarised below.

i. Identifying Contracts in the Scope of SFRS(I) 17

SFRS(I) 17 establishes specific principles for the recognition, measurement, presentation and disclosure of insurance contracts issued and reinsurance contracts held by GEH Group.

Under the key principles of SFRS(I) 17, GEH Group is required to:

- Identify insurance contracts as those under which GEH Group accepts significant risk from another party (the policyholder) by agreeing to compensate the policyholder if a specified uncertain future event (the insured event) adversely affects the policyholder;
- Separate specified embedded derivatives, distinct investment components and distinct non-insurance goods or services from insurance contracts and accounts for them in accordance with other standards; and
- Divide the insurance and reinsurance contracts into groups they will recognise and measure.

ii. Level of Aggregation

Under SFRS(I) 17, insurance contracts are aggregated into groups for measurement purposes. Groups of insurance contracts are determined by identifying portfolios of insurance contracts, each comprising contracts subject to similar risks and managed together, and dividing each portfolio into quarterly cohorts (by quarter of issuance) for life insurance or annual cohorts (by year of issuance) for non-life insurance, into three groups based on the expected profitability of the contracts:

(i) any contracts that are onerous at initial recognition;
(ii) any contracts that at initial recognition have no significant possibility of becoming onerous subsequently; and
(iii) any remaining contracts in the portfolio.

49. New Accounting Standards and Interpretations (continued)

SFRS(I) 17 *Insurance Contracts* (continued)

A. SFRS(I) 17 *Insurance Contracts* (continued)

ii. Level of Aggregation (continued)

These groups represent the level of aggregation at which insurance contracts are initially recognised and measured. The profitability groupings are not reassessed under subsequent measurement.

Portfolios of reinsurance contracts held are assessed for aggregation separately from portfolios of insurance contracts issued. Applying the grouping requirements to reinsurance contracts held, GEH Group aggregates reinsurance contracts into quarterly cohorts (by quarter of issuance) for life reinsurance contracts or annual cohorts (by year of issuance) for non-life reinsurance contracts into groups of:

(i) contracts for which there is a net gain at initial recognition, if any;
(ii) contracts for which, at initial recognition, there is no significant possibility of a net gain arising subsequently; and
(iii) remaining contracts in the portfolio, if any.

Reinsurance contracts held are assessed for aggregation requirements on an individual reinsurance contract basis.

The level of aggregation requirements of SFRS(I) 17 limits the offsetting of gains on groups of profitable contracts, which are generally deferred as a Contractual Service Margin (CSM), against losses on groups of onerous contracts, which are recognised immediately.

iii. Contract Boundary

Under SFRS(I) 17, the measurement of a group of insurance contracts includes all the future cash flows within the boundary of each contract in the group. Cash flows are within the boundary of an insurance contract if they arise from substantive rights and obligations that exist during the reporting period in which GEH Group can compel the policyholder to pay the premiums, or in which GEH Group has a substantive obligation to provide the policyholder with insurance contract services. A substantive obligation to provide insurance contract services ends when:

- GEH Group has the practical ability to reassess the risks of the particular policyholder and, as a result, can set a price or level of benefits that fully reflects those risks, or
- Both of the following criteria are satisfied:
  - GEH Group has the practical ability to reassess the risks of the portfolio of insurance contracts that contain the contract and, as a result, can set a price or level of benefits that fully reflects the risk of that portfolio; and
  - The pricing of the premiums up to the date when the risks are reassessed does not take into account the risks that relate to periods after the reassessment date.

Fulfilment cash flows relating to expected premiums or claims outside the boundary of the insurance contract are not recognised. Such amounts relate to future insurance contracts.

For life insurance contracts with renewal periods, GEH Group assesses whether premiums and related cash flows that arise from the renewed contract are within the contract boundary. The pricing of the renewals is established by GEH Group by considering all the risks covered for the policyholder by GEH Group, that GEH Group would consider when underwriting equivalent contracts on the renewal dates for the remaining service. Therefore, the cash flows related to renewals of insurance contracts will not be included in the contract boundary.

For groups of reinsurance contracts held, cash flows are within the contract boundary if they arise from substantive rights and obligations of GEH Group that exist during the reporting period in which GEH Group is compelled to pay amounts to the reinsurer or in which GEH Group has a substantive right to receive insurance contract services from the reinsurer. A substantive right to receive services from the reinsurer ends either when the reinsurer can reprice the contract to fully reflect the reinsured risk, or when the reinsurer has a substantive right to terminate coverage.

GEH Group reassesses contract boundaries of each group at the end of each reporting period.

Cash flows that are not directly attributable to a portfolio of insurance contracts, are recognised in other operating expenses as incurred.

49. New Accounting Standards and Interpretations (continued)

SFRS(I) 17 *Insurance Contracts* (continued)

A. SFRS(I) 17 *Insurance Contracts* (continued)

iv. Measurement – Overview

SFRS(I) 17 introduces a measurement model based on the estimates of the present value of future cash flows that are expected to arise as GEH Group fulfils the contracts, an explicit risk adjustment for non-financial risk and a CSM.

Contracts are subject to different requirements depending on whether they are classified as direct participating contracts or contracts without direct participation features. Insurance contracts with direct participation features are insurance contracts that are substantially investment-related service contracts under which GEH Group promises an investment return based on underlying items; they are contracts for which, at inception:

- the contractual terms specify that the policyholder participates in a share of a clearly identified pool of underlying items;
- GEH Group expects to pay to the policyholder an amount equal to a substantial share of the fair value returns on the underlying items; and
- GEH 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.

All other insurance and all reinsurance contracts are expected to be classified as contracts without direct participation features.

Some of these contracts are measured under the Premium Allocation Approach (PAA). The PAA is an optional simplified measurement model in SFRS(I) 17 that is available for insurance and reinsurance contracts that meet the eligibility criteria. This approach will be used for non-life insurance yearly renewable contracts, because each of these contracts have a coverage period of one year or less or meets the eligibility criteria.

v. Measurement – Contracts Not Measured Under the PAA

On initial recognition, GEH Group measures a group of insurance contracts as the total of (a) the fulfilment cash flows, and (b) the CSM. The fulfilment cash flows of a group of insurance contracts do not reflect GEH Group's non-performance risk.

The risk adjustment for non-financial risk is applied to the present value of the estimated future cash flows, and it reflects the compensation that GEH Group requires for bearing the uncertainty about the amount and timing of the cash flows from non-financial risk as GEH Group fulfils insurance contracts.

On initial recognition of a group of insurance contracts, if the total of (a) the fulfilment cash flows, (b) any cash flows arising at that date and (c) any amount arising from the derecognition of any assets or liabilities previously recognised for cash flows related to GEH Group is a net inflow, then it is not onerous to GEH Group. In this case, the CSM is measured as the equal and opposite amount of the net inflow, which results in no income or expenses arising on initial recognition.

If the total is a net outflow, then it is onerous to GEH Group. A loss from onerous insurance contracts is recognised in profit or loss immediately, with no CSM recognised on the balance sheet on initial recognition, and a loss component is established in the amount of loss recognised.

Fulfilment Cash Flows (FCF)

The FCF are the current estimates of the future cash flows within the contract boundary of a group of contracts that the group expects to collect from premiums and pay out for claims, benefits and expenses, adjusted to reflect the timing and the uncertainty of those amounts.

The estimates of future cash flows:

(a) are based on a probability-weighted mean of the full range of possible outcomes;
(b) are determined from the perspective of the group provided that the estimates are consistent with observable market prices for market variables; and
(c) reflect conditions existing at the measurement date.

The estimates of future cash flows are adjusted using the current discount rates to reflect the time value of money and the financial risks related to those cash flows, to the extent not included in the estimates of cash flows. The discount rates reflect the characteristics of the cash flows arising from the groups of insurance contracts, including timing, currency and liquidity of cash flows.

49. New Accounting Standards and Interpretations (continued)

SFRS(I) 17 *Insurance Contracts* (continued)

A. SFRS(I) 17 *Insurance Contracts* (continued)

v. Measurement – Contracts Not Measured Under the PAA (continued)

Contractual Service Margin (CSM)

The CSM is a component of the carrying amount of the asset or liability for a group of insurance contracts issued representing the unearned profit that GEH Group will recognise as it provides insurance contract services in the future.

At initial recognition, the CSM is an amount that results in no income or expenses (unless a group of contracts is onerous or insurance revenue and insurance service expenses are recognised as in (d) below) arising from:

(a) the initial recognition of the FCF;
(b) cash flows arising from the contracts in the group at that date;
(c) the derecognition of any insurance acquisition cash flows asset; and
(d) the derecognition of any other pre-recognition cash flows. Insurance revenue and insurance service expenses are recognised immediately for any such assets derecognised.

Subsequent Measurement

Subsequently, the carrying amount of a group of insurance contracts at each reporting date is the sum of the liability for remaining coverage and the liability for incurred claims. The liability for remaining coverage (LRC) comprises (a) the fulfilment cash flows that relate to services that will be provided under the contracts in future periods and (b) any remaining CSM at that date. The liability for incurred claims (LIC) includes the fulfilment cash flows for incurred claims and expenses that have not yet been paid, including claims that have been incurred but not yet reported.

- The fulfilment cash flows of groups of contracts are measured at the reporting date using current estimates of future cash flows, current discount rates and current estimates of the risk adjustment for non-financial risk. Changes in fulfilment cash flows are recognised as follows:

Changes relating to future service	Adjusted against CSM (or recognised in the insurance service result in profit or loss if it is onerous to the group)
Changes relating to current or past services	Recognised in the insurance service result in profit or loss
Effects of the time value of money, financial risk and changes therein on estimated cash flows	Recognised as insurance finance income or expenses in profit or loss, except for certain portfolios measured using the General Measurement Model (GMM) where the OCI option is applied

- The CSM is adjusted subsequently only for changes in fulfilment cash flows that relate to future services and other specified amounts and is recognised in profit or loss as services are provided. The CSM at each reporting date represents the profit in the group of contracts that has not yet been recognised in profit or loss because it relates to future services.

Reinsurance Contracts

GEH Group will apply the same accounting policies to measure a group of reinsurance contracts, with the following modifications.

The carrying amount of a group of reinsurance contracts at each reporting date is the sum of the asset for remaining coverage and the asset for incurred claims. The asset for remaining coverage comprises (a) the fulfilment cash flows that relate to services that will be received under the contracts in future periods and (b) any remaining CSM at that date.

GEH Group will measure the estimates of the present value of future cash flows using assumptions that are consistent with those used to measure the estimates of the present value of future cash flows for the underlying insurance contracts, with an adjustment for any risk of non-performance by the reinsurer. The effect of the non-performance risk of the reinsurer is assessed at each reporting date and the effect of changes in the non-performance risk is recognised in profit or loss.

The risk adjustment for non-financial risk represents the amount of risk being transferred by GEH Group to the reinsurer.

49. New Accounting Standards and Interpretations (continued)

SFRS(I) 17 *Insurance Contracts* (continued)

A. SFRS(I) 17 *Insurance Contracts* (continued)

v. Measurement – Contracts Not Measured Under the PAA (continued)

Reinsurance Contracts (continued)

For groups of reinsurance contracts held, any net gain or loss at initial recognition is recognised as the CSM unless the net cost of purchasing reinsurance relates to past events, in which case GEH Group recognises the net cost immediately in profit or loss. For reinsurance contracts held, the CSM represents a deferred gain or loss that GEH Group will recognise as a reinsurance income or expense as it receives insurance contract services from the reinsurer in the future.

A loss-recovery component is established or adjusted within the remaining coverage for reinsurance contracts held for the amount of income recognised above. This amount is calculated by multiplying the loss recognised on underlying insurance contracts by the percentage of claims on underlying insurance contracts that GEH Group expects to recover from the reinsurance contracts held that are entered into before or at the same time as the loss is recognised on the underlying insurance contracts.

Insurance Acquisition Cash Flows

Insurance acquisition cash flows arise from the costs of selling, underwriting and starting a group of insurance contracts that are directly attributable to the portfolio of insurance contracts to which the group belongs. If insurance acquisition cash flows are directly attributable to a group of contracts, then they are allocated to that group.

Insurance acquisition cash flows are allocated to groups of insurance contracts on a systematic and rational basis. Insurance acquisition cash flows that are directly attributable to a group of insurance contracts are allocated to that group; and to groups that will include insurance contracts that are expected to arise from renewals of the insurance contracts in that group.

Insurance acquisition cash flows not directly attributable to a group of contracts but directly attributable to a portfolio of contracts are allocated to groups of contracts in the portfolio or expected to be in the portfolio.

Under SFRS(I) 17, only insurance acquisition cash flows that arise before the recognition of the related insurance contracts are recognised as separate assets and tested for recoverability, whereas other insurance acquisition cash flows are included in the estimates of the present value of future cash flows as part of the measurement of the related insurance contracts.

SFRS(I) 17 will require GEH Group to assess at each reporting date whether facts and circumstances indicate that an asset for insurance acquisition cash flows may be impaired.

Impact Assessment

Under SFRS(I) 17, all profits will be recognised in profit or loss over the life of the contracts, and this will primarily be driven by the timing of the recognition in profit or loss of the CSM as services are provided and the risk adjustment for non-financial risk as the related risk expires. GEH Group expects that, even though the total profit recognised over the lifetime of the contracts will not change, the pattern of recognition across different financial periods will be different under SFRS(I) 17.

The increase in liabilities for Life contracts on transition to SFRS(I) 17 can mainly be attributed to the following.

Key changes from SFRS(I) 4	Impact on equity on transition to SFRS(I) 17 at 1 January 2022
The estimates of the present value of future cash flows will increase as a result of a reduction in the discount rates because of the SFRS(I) 17 requirements to measure future cash flows using current discount rates.	Decrease
The risk adjustment for non-financial risk under SFRS(I) 17 will be lower than the risk margin under SFRS(I) 4 as a result of (a) recalibration of the measurement techniques to conform with the SFRS(I) 17 requirements, and (b) exclusion of financial risk from the SFRS(I) 17 risk adjustment for non-financial risk for certain entities with GEH Group.	Increase
A CSM will be recognised for the unearned profit for these contracts.	Decrease

49. New Accounting Standards and Interpretations (continued)

SFRS(I) 17 *Insurance Contracts* (continued)

A. SFRS(I) 17 *Insurance Contracts* (continued)

vi. Measurement – Contracts Measured Under the PAA

For insurance contracts issued, on initial recognition, GEH Group measures the liability for remaining coverage at the amount of premiums received, less any acquisition cash flows paid and any amounts arising from the derecognition of the insurance acquisition cash flows asset and the derecognition of any other relevant pre-recognition cash flows.

For reinsurance contracts held, on initial recognition, GEH Group measures the remaining coverage at the amount of ceding premiums paid net of commission, plus broker fees paid to a party other than the reinsurer.

The carrying amount of a group of insurance contracts issued at the end of each reporting period is the sum of the LRC and the liability for incurred claims (LIC), comprising the FCF related to past service allocated to the group at the reporting date.

The carrying amount of a group of reinsurance contracts held at the end of each reporting period is the sum of the asset for remaining coverage and the asset for incurred claims, comprising the FCF related to past service allocated to the group at the reporting date.

For insurance contracts issued, at each of the subsequent reporting dates, the LRC is:
(a) increased for premiums received in the period, excluding amounts that relate to premium receivables included in the LIC;
(b) decreased for insurance acquisition cash flows paid in the period;
(c) decreased for the amounts of expected premium receipts recognised as insurance revenue for the services provided in the period;
(d) increased for the amortisation of insurance acquisition cash flows in the period recognised as insurance service expenses; and
(e) increased for net insurance finance expenses recognised during the period.

For reinsurance contracts held, at each of the subsequent reporting dates, the remaining coverage is:
(a) increased for ceding premiums, net of commission, paid in the period;
(b) increased for broker fees paid in the period;
(c) decreased for the expected amounts of ceding premiums and broker fees recognised as reinsurance expenses for the services received in the period; and
(d) increased for net reinsurance finance income recognised during the period.

For contracts measured under the PAA, the LIC is measured similarly to the LIC's measurement under the GMM. Future cash flows are adjusted for the time value of money and the effect of financial risk.

<u>Impact Assessment</u>

Although the PAA is similar to GEH Group's current accounting treatment when measuring liabilities for remaining coverage, the following changes are expected in the accounting for contracts under PAA.

Changes from SFRS(I) 4	Impact on equity on transition to SFRS(I) 17 on 1 January 2022
Under SFRS(I) 17, GEH Group will discount the future cash flows when measuring liabilities for incurred claims, unless they are expected to occur in one year or less from the date of which the claims are incurred. GEH Group generally does not currently discount such future cash flows for non-life contracts.	Increase
GEH Group's accounting policy under SFRS(I) 17 to recognise separately eligible insurance acquisition cash flows when they are incurred as deferred acquisition costs differs from current practice.	Increase

49. New Accounting Standards and Interpretations (continued)

SFRS(I) 17 *Insurance Contracts* (continued)

A. SFRS(I) 17 *Insurance Contracts* (continued)

vii. Measurement – Significant Judgements and Estimates

GEH Group makes estimates, assumptions and judgements in its estimates of future cash flows, discount rates used, risk adjustments for non-financial risk, and CSM. At the date of these financial statements, GEH Group is still in the midst of finalising the judgements and estimation techniques employed, which are subject to change until GEH Group reports SFRS(I) 17 for the first time in calendar year 2023.

Discount Rates

Insurance contract liabilities are calculated by discounting expected future cash flows at a risk-free rate, plus an illiquidity premium where applicable. Risk free rates are determined by reference to the observable market yields of Government Securities in the currency of the insurance contract liabilities. The illiquidity premium is determined by reference to observable market rates.

Risk Adjustment for Non-Financial Risk

The risk adjustment for non-financial risk is the compensation that is required for bearing the uncertainty about the amount and timing of cash flows that arises from non-financial risk as the insurance contract is fulfilled. Because the risk adjustment represents compensation for uncertainty, estimates are made on the degree of diversification benefits and expected favourable and unfavourable outcomes in a way that reflects GEH Group's degree of risk aversion. GEH Group estimates an adjustment for non-financial risk separately from all other estimates. GEH Group does not consider the effect of reinsurance in the risk adjustment for non-financial risk of the underlying insurance contracts.

The confidence level technique was used to derive the overall risk adjustment for non-financial risk. Applying a confidence level technique, GEH Group will estimate the probability distribution of the expected present value of the future cash flows from the contracts at each reporting date and calculate the risk adjustment for non-financial risk as the excess of the value at risk at the target confidence level over the expected present value of the future cash flows allowing for the associate risks over all future years. The target confidence level will be at 85^{th} percentile.

Estimates of Future Cash Flows

In estimating future cash flows, GEH Group will incorporate, in an unbiased way, all reasonable and supportable information that is available without undue cost or effort at the reporting date. This information includes both internal and external historical data about claims and other experience updated to reflect current expectations of future events.

The estimates of future cash flows will reflect GEH Group's view of current conditions at the reporting date, as long as the estimates of any relevant market variables are consistent with observable market prices.

When estimating future cash flows, GEH Group will take into account current expectations of future events that might affect cash flows. Cash flows within the boundary of a contract are those that relate directly to the fulfilment of the contract, including those for which GEH Group has discretion over the amount or timing. These include payments to (or on behalf of) policyholders, insurance acquisition cash flows and other costs that are incurred in fulfilling contracts. Insurance acquisition cash flows and other costs that are incurred in fulfilling contracts comprise both direct costs and an allocation of fixed and variable overheads.

Cash flows will be attributed to acquisition activities, other fulfilment activities and other activities at local entity level using activity-based costing techniques. Cash flows attributable to acquisition and other fulfilment activities will be allocated to groups of contracts using methods that are systematic and rational and will be consistently applied to all costs that have similar characteristics.

49. New Accounting Standards and Interpretations (continued)

SFRS(I) 17 *Insurance Contracts* (continued)

A. SFRS(I) 17 *Insurance Contracts* (continued)

viii. Presentation and Disclosure

Under SFRS(I) 17, for presentation in the balance sheet, GEH Group will aggregate portfolios of insurance and reinsurance contracts held and present separately:

- Portfolios of insurance contracts that are assets;
- Portfolios of reinsurance contracts held that are assets;
- Portfolios of insurance contracts that are liabilities; and
- Portfolios of reinsurance contracts held that are liabilities.

The portfolios referred to above are those established at initial recognition in accordance with the SFRS(I) 17 requirements.

The descriptions of the line items in GEH Group's Consolidated Profit or Loss Statement will change significantly compared with GEH Group's current practice. Under SFRS(I) 4, GEH Group reports the following line items: premiums, claims, maturities, surrenders and annuities and change in insurance contract liabilities. SFRS(I) 17 requires separate presentation of:

- Insurance revenue;
- Insurance service expense;
- Insurance finance income or expense; and
- Income or expenses from reinsurance contracts held.

GEH Group will provide disaggregated qualitative and quantitative information in the notes to the financial statements about:

- The amounts recognised in its financial statements from insurance contracts and reinsurance contracts; and
- Significant judgements, and changes in those judgements made when applying the standard.

Insurance service result comprises insurance revenue and insurance service expenses.

Insurance Revenue

As GEH Group provides insurance contract services under the insurance contracts, it reduces the LRC and recognises insurance revenue. The amount of insurance revenue recognised in the reporting period depicts the transfer of promised services at an amount that reflects the portion of consideration that GEH Group expects to be entitled to in exchange for those services.

The requirements of SFRS(I) 17 to recognise insurance revenue over the coverage period will result in slower revenue recognition compared with GEH Group's current practice of recognising revenue when the related premiums are written. Many insurance premiums include an investment (that is, deposit) component – an amount that will be paid to policyholders or their beneficiaries in all circumstances, regardless of whether an insured event occurs. The receipt and repayment of these non-distinct investment components do not relate to the provision of insurance services; therefore, such amounts are not presented as part of GEH Group's revenue or insurance service expenses.

Insurance Service Expense

For contracts not measured under the PAA, amortisation of insurance acquisition cash flows is reflected in insurance service expenses in the same amount as insurance acquisition cash flows recovery reflected within insurance revenue, as described above.

For contracts measured under the PAA, amortisation of insurance acquisition cash flows is based on the passage of time.

Other expenses that relate directly to the fulfilment of insurance contracts will be recognised in profit or loss as insurance service expenses, generally when they are incurred. Expenses that do not relate directly to the fulfilment contracts are included in other operating expenses in the consolidated statement of profit or loss.

49. New Accounting Standards and Interpretations (continued)

SFRS(I) 17 *Insurance Contracts* (continued)

A. SFRS(I) 17 *Insurance Contracts* (continued)

viii. Presentation and Disclosure (continued)

Insurance Finance Income or Expenses

Insurance finance income or expenses comprise the change in the carrying amount of the group of insurance contracts arising from:

(a) the effect of the time value of money and changes in the time value of money; and
(b) the effect of financial risk and changes in financial risk.

GEH Group disaggregates changes in the risk adjustment for non-financial risk between insurance service results and insurance finance income or expenses for life insurance. For non-life insurance, the entire change in the risk adjustment for non-financial risk is included in insurance service results.

For conventional life and non-life insurance contracts, GEH Group includes all insurance finance income or expenses for the period in profit or loss, except for certain portfolios measured using the GMM where the OCI option is applied. This is expected to reduce accounting mismatches in profit or loss, considering that many of the supporting financial assets will be debt investments measured at FVOCI.

GEH Group systematically allocates expected total insurance finance income or expenses over the duration of the group of contracts to profit or loss using discount rates determined on initial recognition of the group of contracts.

In the event of transfer of a group of insurance contracts or derecognition of an insurance contract, GEH Group reclassifies the insurance finance income or expenses to profit or loss as a reclassification adjustment to any remaining amounts for the group (or contract) that were previously recognised in other comprehensive income.

Disclosure

SFRS(I) 17 requires extensive new disclosures about amounts recognised in the financial statements, including detailed reconciliations of contracts, effects of newly recognised contracts and information on the expected CSM emergence pattern, as well as disclosures about significant judgements made when applying SFRS(I) 17. There will also be expanded disclosures about the nature and extent of risks from insurance contracts and reinsurance contracts. Disclosures will generally be made at a more granular level than under SFRS(I) 4, providing more transparent information for assessing the effects of insurance contracts on the financial statements.

B. Transition

GEH Group will restate the comparative information based on the transition approaches taken on adoption of SFRS(I) 17 with effect from 1 January 2023.

Changes in accounting policies resulting from the adoption of SFRS(I) 17 will be applied using the full retrospective approach to the extent practicable. The full retrospective approach will be applied to insurance contracts that were originated less than one year prior to the effective date. The modified retrospective approach will be applied to certain groups of insurance contracts that were originated less than 10 years prior to the transition date. The fair value approach will be applied to the remaining insurance contracts in force at transition date.

Shareholding Statistics

As at 3 March 2023

Class of Shares

Ordinary Shares

Voting Rights

One vote per share (other than treasury shares and subsidiary holdings, which are treated as having no voting rights)

Distribution of Shareholders

Size of Holdings	Number of Shareholders	%	Number of Shares Held	%
1 – 99	12,448	9.90	449,485	0.01
100 – 1,000	33,851	26.94	18,651,113	0.41
1,001 – 10,000	61,578	49.00	216,048,318	4.78
10,001 – 1,000,000	17,673	14.06	781,324,769	17.31
1,000,001 and above	120	0.10	3,498,348,229	77.49
Total	**125,670**	**100.00**	**4,514,821,914**	**100.00**

Number of issued shares (including treasury shares): 4,514,821,914
Number of treasury shares held: 20,138,382
Number of subsidiary holdings held: Nil
Percentage of the aggregate number of treasury shares and subsidiary holdings held against the total number of issued shares: 0.45%

Note:
"Subsidiary holdings" is defined in the Listing Manual of the Singapore Exchange Securities Trading Limited (**SGX-ST**) to mean shares referred to in Sections 21(4), 21(4B), 21(6A) and 21(6C) of the Companies Act 1967.

Twenty Largest Shareholders

Shareholders	Number of Shares Held	%*
1. Citibank Nominees Singapore Pte Ltd	723,206,401	16.09
2. Selat (Pte) Limited	467,604,264	10.40
3. Raffles Nominees (Pte.) Limited	317,728,639	7.07
4. HSBC (Singapore) Nominees Pte Ltd	298,797,042	6.65
5. DBSN Services Pte. Ltd.	295,555,267	6.58
6. Lee Foundation	200,851,953	4.47
7. Herald Investment Pte Ltd	181,721,294	4.04
8. DBS Nominees (Private) Limited	165,679,378	3.69
9. Singapore Investments Pte Ltd	157,007,526	3.49
10. Lee Rubber Company Pte Ltd	141,656,364	3.15
11. United Overseas Bank Nominees (Private) Limited	49,173,937	1.09
12. Kallang Development (Pte) Limited	44,007,742	0.98
13. BPSS Nominees Singapore (Pte.) Ltd.	33,420,269	0.74
14. DB Nominees (Singapore) Pte Ltd	31,083,719	0.69
15. Lee Pineapple Company (Pte) Limited	30,595,980	0.68
16. Kew Estate Limited	28,430,489	0.63
17. Phillip Securities Pte Ltd	22,319,978	0.50
18. OCBC Nominees Singapore Private Limited	20,336,287	0.45
19. OCBC Securities Private Limited	17,873,036	0.40
20. UOB Kay Hian Private Limited	12,813,311	0.29
Total	**3,239,862,876**	**72.08**

* Percentage is calculated based on the total number of issued shares (excluding treasury shares) as at 3 March 2023.

Approximately 72.2% of the issued shares (excluding treasury shares) are held in the hands of the public. Rule 723 of the Listing Manual of the SGX-ST has accordingly been complied with.

Substantial Shareholders

(As shown in the Register of Substantial Shareholders)

Substantial shareholders	Direct interest No. of Shares	Deemed interest No. of Shares	Total No. of Shares	%*
Lee Foundation	189,310,098 [(1)]	31,835,411 [(2)]	221,145,509	5.13
Selat (Pte) Limited	467,604,264	181,721,294 [(3)]	649,325,558	14.44

* Percentage is calculated based on the total number of issued shares (excluding treasury shares) as at the date of the latest notification given by the relevant substantial shareholder under the Securities and Futures Act 2001 (**SFA**).

(1) Does not include shares acquired pursuant to OCBC's Scrip Dividend Scheme in October 2019, October 2020 and June 2021. As the acquisitions did not result in any overall percentage level changes in Lee Foundation's total interest in OCBC, no notification of the changes was required to be given under the SFA.

(2) Represents Lee Foundation's deemed interest in (a) the 29,222,140 shares held by Lee Pineapple Company (Pte) Limited, and (b) the 2,613,271 shares held by Peninsula Plantations Sendirian Berhad (**Peninsula Plantations**). Lee Foundation has, however, informed the Bank in writing that it has ceased to have a deemed interest in the shares held by Peninsula Plantations following a corporate restructuring exercise but that, as the cessation did not result in an overall percentage level change in Lee Foundation's total interest in OCBC, no notification of the change was required to be given under the SFA.

(3) Represents Selat (Pte) Limited's deemed interest in the 181,721,294 shares held by Herald Investment Pte Ltd.

Five-Year Ordinary Share Capital History

(OCBC Group – As at 31 December 2022)

		Number of ordinary shares (million)		
Year	Particulars	Issued	Held in treasury	In circulation
2018	Shares issued to non-executive directors	#		
	Shares issued in lieu of dividend	63		
	Share buyback		(17)	
	Issue of shares pursuant to Share Option Scheme		4	
	Issue of shares pursuant to Employee Share Purchase Plan		8	
	Issue of shares pursuant to Deferred Share Plan		5	
	Shares sold for cash		#	
	Year end balance	4,257	(7)	4,250
2019	Shares issued to non-executive directors	#		
	Shares issued in lieu of dividend	152		
	Share buyback		(17)	
	Issue of shares pursuant to Share Option Scheme		3	
	Issue of shares pursuant to Employee Share Purchase Plan		6	
	Issue of shares pursuant to Deferred Share Plan		7	
	Year end balance	4,409	(8)	4,401
2020	Shares issued to non-executive directors	#		
	Shares issued in lieu of dividend	67		
	Share buyback		(7)	
	Issue of shares pursuant to Share Option Scheme		2	
	Issue of shares pursuant to Employee Share Purchase Plan		#	
	Issue of shares pursuant to Deferred Share Plan		11	
	Year end balance	4,476	(2)	4,474
2021	Shares issued to non-executive directors	#		
	Shares issued in lieu of dividend	32		
	Issue of shares pursuant to Deferred Share Plan	7		
	Issue of shares pursuant to Share Option Scheme	#	7	
	Share buyback		(34)	
	Issue of shares pursuant to Employee Share Purchase Plan		6	
	Year end balance	4,515	(23)	4,492
2022	Shares issued to non-executive directors	#		
	Share buyback		(21)	
	Issue of shares pursuant to Share Option Scheme		6	
	Issue of shares pursuant to Employee Share Purchase Plan		10	
	Issue of shares pursuant to Deferred Share Plan		8	
	Year end balance	4,515	(20)	4,495

(1) # represents less than 500,000 shares.

Further Information on Board of Directors

Mr Andrew Lee (70)

Chairman, Non-Executive and Independent Director

Appointed as Director: 18 February 2022
Last Re-elected as a Director: 22 April 2022
Appointed as Chairman: 1 February 2023

Mr Lee is a veteran banker with more than 30 years of financial services experience in Standard Chartered Bank, OCBC Bank, Great Eastern Life Assurance and BCS Information System as its Executive Chairman.

Other Directorships and Principal Commitments/Appointments

- Nordic Group Ltd*, Board Director
- OCBC Al-Amin Bank Berhad, Board Director
- OCBC Management Services Pte Ltd, Board Director

** Listed company*

Directorships and Principal Commitments/ Appointments for the past 5 years

- Lakeworks Ltd, Board Director

Academic and Professional Qualifications

- Bachelor of Arts, University of Singapore
- Bachelor of Social Science (Honours in Economic), University of Singapore

OCBC Board Committees Served On

Chairman, Risk Management Committee
Member, Board Sustainability Committee
Member, Ethics and Conduct Committee
Member, Executive Committee
Member, Nominating Committee
Member, Remuneration Committee

Length of Service as a Director

1 year 2 months

Country of Principal Residence

Singapore

Ms Chong Chuan Neo (60)

Non-Executive and Independent Director

Appointed as Director: 18 February 2022
Last Re-elected as a Director: 22 April 2022

Ms Chong spent over 29 years at Accenture where she held senior leadership roles covering various industries and countries in Asia Pacific. She was the Chairman and CEO of Accenture Greater China from 2015 to 2018 and a member of the Global leadership council. In the past three years, she has been actively involved in sustainability and innovation initiatives at a private equity portfolio company in China.

Other Directorships and Principal Commitments/Appointments

- Boost Holdings Sdn Bhd, Board Director
- iShine Cloud Ltd, Board Director
- Lion Global Investors Ltd, Board Director
- MODA Solutions (BCR Shanghai), Board Director
- Raffles Medical Group Ltd*, Board Director
- SIA Engineering Company Ltd*, Board Director
- Partners Group, Operating Director

** Listed company*

Directorships and Principal Commitments/ Appointments for the past 5 years

- Aimazing Pte Ltd, Board Director
- Accenture Pte Ltd, Board Director
- Graduate Investment Pte Ltd, Board Director
- Newspage Pte Ltd, Board Director
- vKirirom Pte Ltd, Board Director
- National Volunteer and Philanthropy Center, Adviser of Digital Task Force
- NUS Innovation & Enterprise, Executive Council Member

Academic and Professional Qualifications

- Bachelor of Science (Computer Science and Mathematics), National University of Singapore
- Management and Executive Programs in Business and Leadership, IMD Lausanne, Switzerland

OCBC Board Committees Served On

Chairman, Board Sustainability Committee
Member, Audit Committee
Member, Ethics and Conduct Committee

Length of Service as a Director

1 year 2 months

Country of Principal Residence

Singapore

Mr Chua Kim Chiu (68)

Non-Executive and Independent Director

Appointed as Director: 20 September 2017
Last Re-elected as a Director: 29 April 2021

Mr Chua is Professor (Practice) in Accounting, NUS Business School, National University of Singapore since 2016, after retiring as a partner from PricewaterhouseCoopers where he had a long and distinguished career of over 35 years.

Other Directorships and Principal Commitments/Appointments

- Department of Accounting, NUS Business School, National University of Singapore, Professor (Practice)
- MPACT Management Ltd#, Board Director
- Institute of Valuers and Appraisers, Singapore – Singapore Intellectual Property Strategy 2030 (SIPS 2030) Task Force, Member
- National University Health System Pte Ltd, Audit and Risk Committee, Member

 # Manager of Mapletree Pan Asia Commercial Trust – listed on SGX Mainboard

Directorships and Principal Commitments/ Appointments for the past 5 years

- Greenland (Singapore) Trust Management Pte. Ltd., Board Director
- Mapletree North Asia Commercial Trust Management Ltd, Board Director
- ACRA Financial Reporting Technical Advisory Panel, Member
- NUS Business School, Executive Education Advisory Board, Member

Academic and Professional Qualifications

- Bachelor of Commerce and Administration (Honours), Victoria University of Wellington, New Zealand
- Bachelor of Commerce, Nanyang Technological University (formerly Nanyang University), Singapore
- Fellow Chartered Accountant of Singapore
- Fellow of Chartered Accountants Australia and New Zealand
- Fellow Chartered Certified Accountant, United Kingdom

OCBC Board Committees Served On

Chairman, Audit Committee
Member, Risk Management Committee

Length of Service as a Director

5 years 7 months

Country of Principal Residence

Singapore

Dr Andrew Khoo (60)
Non-Executive and Independent Director

Appointed as Director: 8 March 2021
Last Re-elected as a Director: 29 April 2021

Dr Khoo spent 22 years in the Monetary Authority of Singapore holding several key positions. He retired as its Deputy Managing Director (Corporate Development).

Other Directorships and Principal Commitments/Appointments
- OCBC Wing Hang Bank Ltd, Board Chairman
- National Environment Agency, Board Member
- Stroke Support Station, Director

Directorships and Principal Commitments/ Appointments for the past 5 years
- Competition and Consumer Commission of Singapore, Commissioner

Academic and Professional Qualifications
- Doctor of Philosophy, University of Melbourne
- Bachelor of Economics (Honours), Monash University
- Member, CPA Australia

OCBC Board Committees Served On
Chairman, Nominating Committee
Member, Executive Committee
Member, Remuneration Committee

Length of Service as a Director
2 years 1 month

Country of Principal Residence
Singapore

Dr Lee Tih Shih (59)
Non-Executive and Non-Independent Director

Appointed as Director: 4 April 2003
Last Re-elected as a Director: 18 May 2020

Dr Lee, an Associate Professor at the Duke-NUS Medical School Singapore, has held senior roles in OCBC Bank and the Monetary Authority of Singapore.

Other Directorships and Principal Commitments/Appointments
- Duke-NUS Medical School (Singapore), Associate Professor
- Lee Foundation, Singapore, Board Director
- Selat (Pte) Ltd, Board Director
- Singapore Investments (Pte) Ltd, Board Director

Directorships and Principal Commitments/ Appointments for the past 5 years
- Neuropsychiatry Associates Pte. Ltd., Board Director

Academic and Professional Qualifications
- MBA with Distinction, Imperial College, London
- MD and PhD, Yale University, New Haven
- Fellow, Royal College of Physicians of Edinburgh

OCBC Board Committee Served On
Chairman, Executive Committee

Length of Service as a Director
20 years

Country of Principal Residence
Singapore

Ms Christina Ong (71)
Non-Executive and Independent Director

Appointed as Director: 15 February 2016
Last Re-elected as a Director: 22 April 2022

Ms Ong, a lawyer specialising in corporate and financial services, is the Chairman and Senior Partner of Allen & Gledhill LLP as well as the Co-Head of its Financial Services Department.

Other Directorships and Principal Commitments/Appointments
- Allen & Gledhill LLP, Chairman and Senior Partner
- Allen & Gledhill Regulatory & Compliance Pte Ltd, Board Director
- Eastern Development Holdings Pte Ltd, Board Director
- Eastern Development Pte Ltd, Board Director
- Epimetheus Ltd, Board Director
- Hongkong Land Holdings Ltd*, Board Director
- OCBC Management Services Pte Ltd, Board Director
- Singapore Telecommunications Ltd*, Board Director
- ABF Singapore Bond Index Fund, Supervisory Committee, Member
- Civil Aviation Authority of Singapore, Member
- MAS Corporate Governance Advisory Committee, Member
- SGX Catalist Advisory Panel, Member
- The Stephen A Schwarzman Scholars Trust, Trustee

** Listed company*

Directorships and Principal Commitments/ Appointments for the past 5 years
- SIA Engineering Company Ltd, Board Director
- Trailblazer Foundation Ltd, Board Director
- Singapore Tourism Board, Board Member

Academic and Professional Qualifications
- Bachelor of Laws (Second Upper Class Honours), University of Singapore
- Member, Law Society of Singapore
- Member, International Bar Association

OCBC Board Committees Served On
Chairman, Ethics and Conduct Committee
Chairman, Remuneration Committee
Member, Nominating Committee

Length of Service as a Director
7 years 2 months

Country of Principal Residence
Singapore

Mr Pramukti Surjaudaja (60)
Non-Executive and Non-Independent Director

Appointed as Director: 1 June 2005
Last Re-elected as a Director: 29 April 2021

Mr Pramukti has held key positions at Bank OCBC NISP, for 35 years, including President Director, and is presently its Board President Commissioner.

Other Directorships and Principal Commitments/Appointments
- PT Bank OCBC NISP Tbk*, Board President Commissioner
- PT Biolaborindo Makmur Sejahtera, Commissioner
- IOA Association, Board of Supervisors, Deputy Chairman
- Karya Salemba Empat Foundation, Board of Trustees, Member
- Parahyangan Catholic University, Board of Advisors, Member
- San Francisco State University, Lam Family College of Business, Dean's Development Council, Member

** Listed company*

Directorships and Principal Commitments/ Appointments for the past 5 years
- INSEAD, Southeast Asia Council, Member

Academic and Professional Qualifications
- Bachelor of Science (Finance & Banking), San Francisco State University
- Master of Business Administration (Banking), Golden Gate University, San Francisco
- Participant in Special Programs in International Relations, International University of Japan

OCBC Board Committees Served On
Member, Nominating Committee
Member, Remuneration Committee

Length of Service as a Director
17 years 10 months

Country of Principal Residence
Indonesia

Ms Tan Yen Yen (57)
Non-Executive and Independent Director

Appointed as Director: 1 January 2020
Last Re-elected as a Director: 18 May 2020

Ms Tan is a highly regarded IT practitioner for many years with vast experiences from SAS Institute, Oracle Corporation, Hewlett-Packard Singapore and Vodafone Enterprise Singapore. She now focuses on non-executive roles on boards and corporate advisory roles.

Other Directorships and Principal Commitments/Appointments
- ams OSRAM AG*, Board Director
- Barry Callebaut AG*, Board Director
- EdgeConnex Inc, Board Director
- In.Corp Global Pte Ltd, Board Director
- Jardine Cycle & Carriage Ltd*, Board Director
- The Y Journey Pte Ltd, Board Director
- Ministry of Culture, Community and Youth (High Performance Sports), SpexBusiness Network Advisory Board, Chairman
- Singapore Science Centre, Chairman

** Listed company*

Directorships and Principal Commitments/ Appointments for the past 5 years
- Cap Vista Pte Ltd, Board Director
- Galboss Asia Pte Ltd, Board Director
- Singapore Press Holdings Ltd, Board Director
- Gemalto NV, Board Director
- XY Maxwell Pte Ltd, Board Director
- Vodafone group of companies in Asia Pacific, Board Director
- Vodafone Enterprise Singapore Pte Ltd, President
- National University of Singapore (School of Computing), Board of Advisors, Member
- Singapore Institute of Directors, Board of Advisors, Member
- TNF Ventures Pte Ltd, Advisor Mentor

Academic and Professional Qualifications
- Executive MBA, Helsinki School of Economics Executive Education
- Bachelor of Science (Computer Science), National University of Singapore

OCBC Board Committees Served On
Member, Audit Committee
Member, Nominating Committee
Member, Risk Management Committee

Length of Service as a Director
3 years 3 months

Country of Principal Residence
Singapore

Ms Helen Wong (61)
Group Chief Executive Officer, Executive and Non-Independent Director

Appointed as Director: 7 February 2023
Appointed as Group Chief Executive Officer: 15 April 2021

Ms Wong has 40 years of banking experience with deep knowledge of Greater China. She spent 27 years at HSBC where her last held role was the Chief Executive for Greater China.

Other Directorships and Principal Commitments/Appointments
- OCBC Wing Hang Bank (China) Ltd, Board Chairman
- Bank of Singapore Ltd, Board Director
- Dr Goh Keng Swee Scholarship Fund, Board Director
- Enterprise Singapore, Board Director
- Great Eastern Holdings Ltd*, Board Director
- OCBC Bank (Malaysia) Berhad, Board Director
- OCBC Overseas Investments Pte Ltd, Board Director
- OCBC Wing Hang Bank Ltd, Board Director
- PT Bank OCBC NISP Tbk*, Board Commissioner
- Institute of Banking and Finance Singapore, Council Member
- The Association of Banks in Singapore, Council Member
- The Institute of International Finance, Board Member
- Advisory Board of the Asian Financial Leaders Programme, Member
- CNBC ESG Council, Member
- MAS Payments Council, Member
- MAS Financial Centre Advisory Panel, Member
- MAS Financial Sector Tripartite Committee, Member

** Listed company*

Directorships and Principal Commitments/ Appointments for the past 5 years
- HSBC Bank (Taiwan) Ltd, Chairman
- HSBC Global Asset Management (Hong Kong) Ltd, Chairman
- HSBC Bank (China) Company Ltd, Deputy Chairman
- HSBC Qianhai Securities Ltd, Vice Chairman
- Bank of Communications Company Ltd, Non-executive Director
- HSBC Bank Canada, Director
- The Shanghai Committee of the Chinese People's Political Consultative Conference, Member

Academic and Professional Qualifications
- Bachelor of Social Sciences – University of Hong Kong

OCBC Board Committee Served On
Member, Board Sustainability Committee
Member, Risk Management Committee

Length of Service as a Director
2 months

Country of Principal Residence
Singapore

Further Information on Management Committee

Ms Helen Wong
Group Chief Executive Officer

Ms Helen Wong was appointed Group Chief Executive Officer of OCBC Bank on 15 April 2021 and Executive Director on 7 February 2023. She is also Chairman of OCBC Wing Hang Bank (China), a Board Commissioner of Bank OCBC NISP and a Director of Bank of Singapore, Great Eastern Holdings, OCBC Bank (Malaysia), OCBC Wing Hang Bank and the Dr Goh Keng Swee Scholarship Fund. Ms Wong is currently a council member of the Association of Banks in Singapore (ABS) and the Institute of Banking & Finance (IBF) Singapore. She also serves as a Board member at Enterprise Singapore (ESG), and as a member of the Monetary Authority of Singapore (MAS) Financial Centre Advisory Panel, MAS Payments Council and MAS Financial Sector Tripartite Committee.

Ms Wong joined OCBC Bank in February 2020 as Deputy President and Head of Global Wholesale Banking. She has 40 years of banking experience, having started out as a Management Trainee in OCBC Bank and was its first China Desk Manager, based at the Hong Kong Branch. She has vast experience in Greater China, covering a wide range of roles in capital markets, syndicated finance and corporate banking. Before returning to OCBC Bank, Ms Wong spent 27 years at HSBC, where her last role was as its Chief Executive for Greater China, which she was appointed to in 2015. She became the President and CEO of HSBC China based in Shanghai in 2010, and was promoted to be Group General Manager in 2011 to recognise her responsibility for the business operations and strategic expansion in China. She also held non-executive directorships at Baoshan Iron & Steel from 2012 to 2015, and at Bank of Communications from 2016 to 2019. Ms Wong holds a Bachelor of Social Sciences from the University of Hong Kong.

Ms Goh Chin Yee
Group Chief Financial Officer

Ms Goh Chin Yee was appointed Group Chief Financial Officer in November 2022, with global responsibility over financial, regulatory and management accounting, treasury financial control and advisory, corporate planning and development, corporate treasury, capital management and investor relations.

Prior to this appointment, Ms Goh was the Head of Group Audit since March 2013, overseeing the full spectrum of internal audit activities in OCBC Group. She has also worked in diverse functions in the Group, covering strategic management, investment research, fund management, finance, risk management and treasury business management.

Ms Goh graduated with First Class Honours in Bachelor of Engineering from the National University of Singapore and holds the professional qualifications of Chartered Financial Analyst, Certification in Risk Management Assurance and Certified Internal Auditor. She also serves as a Governor and Vice President of The Institute of Internal Auditors Singapore.

Mr Noel Gerald DCruz
Group Chief Risk Officer

Mr Noel Gerald DCruz was appointed Group Chief Risk Officer (GCRO) on 1 January 2023. As GCRO, he has overall responsibility for the management of risk, including Credit, Market, Liquidity, Operational, and Environmental Social Governance (ESG) for OCBC's businesses in Singapore, Malaysia and other overseas markets. In addition, he was concurrently appointed as Group Chief Information Security Officer responsible for Cyber & Information Security. He reports jointly to both Group CEO and the Board Risk Committee of OCBC Bank.

Mr DCruz joined the Bank in 1989 after a stint in the Monetary Authority of Singapore and rose through the ranks to head both the Group Risk Portfolio Management department as well as the Group Data Management Office. He has been closely involved in the re-organisation and reinforcement of the Bank's credit risk management function with dedicated policy, underwriting, analytics, remediation and data units, and the establishment of the Credit Risk Management Committee. Mr DCruz led the OCBC Group Basel programme to develop internal ratings-based approaches for credit management and capital adequacy assessments and later the modelling approaches for Expected Credit Loss portfolio allowances. In 2017, he also established the Group Data Management Office to drive implementation of a Group-wide data governance and management framework.

Mr DCruz holds a degree in Economics from the London School of Economics and Political Science.

Mr Lim Khiang Tong
Group Chief Operating Officer

Mr Lim Khiang Tong was appointed Group Chief Operating Officer (GCOO) in June 2021. As GCOO, he develops and drives transformation efforts in modernising the Bank's technology architecture, streamlining processes and instituting a data-driven and customer-centric culture across the Group. He has oversight over operations and technology, technology architecture, operational excellence, customer experience, data and analytics, transformation and property management functions. Mr Lim joined the Bank's IT Management team in 2000 and was appointed Head of IT Management in January 2002. He was promoted to Executive Vice President and Head of Group Information Technology in December 2007. In May 2010, he assumed the role of Head of Group Operations and Technology. Mr Lim has over 30 years of management experience in strategic technology development, information technology, process-reengineering, project management and banking operations.

In 2020, Mr Lim was named Digital Transformation Leader in Singapore by the International Data Corporation, a global market intelligence firm in information technology, in recognition of his role in accelerating the Bank's digital transformation efforts. Currently, Mr Lim is a member of IBM Services Client Advisory Board (Asia Pacific), Huawei Financial Industry Advisory Board and Ministry of Finance – The Info-comm Technology Projects Advisory Panel. He holds a Bachelor of Science in Computer Science and Economics from the National University of Singapore and is an IBF Distinguished Fellow (Technology).

Mr Kenneth Lai

Global Treasury

Mr Kenneth Lai was appointed Head of Global Treasury in October 2020. He has global responsibility for OCBC Bank's financial market businesses and asset liability management in Singapore, Malaysia, Indonesia, Hong Kong, China and seven other overseas centres.

Mr Lai joined OCBC Bank in February 2012 as Head of Global Treasury International. Since 2015, he has also been responsible for the Bank's Asset and Liability Management (ALM) globally. He was appointed Executive Vice President in May 2019. Mr Lai has over 33 years of experience in different functions across trading, sales and asset liability management and across different countries in Asia. Currently, he serves on the boards of Bank of Singapore, OCBC Securities, and Clearing and Payment Services Pte Ltd (CAPS). Mr Lai also serves on Great Eastern Group's Asset/Liability Committee and Investment Committee. He is a member of the Singapore Foreign Exchange Market Committee, and member of the Institute of Banking and Finance Singapore (IBF), Standards Committee and Chairman of the Capital and Financial Markets Workgroup. Mr Lai also serves as a member on the ABS Standing Committee on Financial Market and Benchmark Co Oversight Committee.

Before joining OCBC Bank, he was the Head of Financial Markets at Ta Chong Bank in Taiwan and has held several key appointments with ABN AMRO Bank. He started his career at Bankers Trust Company. Mr Lai holds a Bachelor of Science in Finance from Virginia Polytechnic Institute and State University and is an IBF Fellow.

Mr Tan Teck Long

Global Wholesale Banking

Mr Tan Teck Long was appointed Executive Vice President and Head of Global Wholesale Banking on 15 March 2022. As the Head of Global Wholesale Banking, he has global responsibility for all banking relationships with small and medium-sized enterprises, large corporates and financial institutions, global transaction banking as well as the investment banking business.

Mr Tan has more than 29 years of banking experience overseeing Corporate Banking, Investment Banking and Risk Management. He joined OCBC Bank from DBS Bank, where his last appointment was Chief Risk Officer. During his tenure at DBS Bank, he had served in a number of senior roles including Group Head of DBS' corporate banking business, Head of Institutional Banking Group (China), Group Head of Special Assets Management and Group Head of Corporate Real Estate Strategy and Administration. Mr Tan is a Chartered Financial Analyst charter holder and a Fellow Chartered Accountant of Singapore. He holds a Master of Business Administration from the University of Manchester and a Bachelor of Accountancy with First Class Honours from the National University of Singapore.

Mr Sunny Quek

Global Consumer Financial Services

Mr Sunny Quek was appointed Head of Global Consumer Financial Services in October 2022 and has been the Head of Consumer Financial Services Singapore since November 2019. He joined OCBC Bank in December 2012 as Head of Branch and Premier Banking. In the six years, Mr Quek was responsible for formulating and executing the sales and distribution strategy for the consumer banking branch network in Singapore, and supporting the OCBC Premier Banking network in the region.

He made significant contributions to the transformation and growth of the retail banking business and led the OCBC Premier Banking business to become a leader in the affluent segment space. In 2018, he spearheaded the transformation of the OCBC Premier Private Client segment to launch an Accredited Investor (AI) platform that offers bespoke wealth solutions to high net worth individuals in Singapore and the region. Mr Quek started his banking career at Tokai Bank in 1997 before joining Citibank Singapore in 2000. He has more than 25 years of experience spanning branch management, treasury sales and trading. Mr Quek currently serves as a board member of OCBC Securities Private Limited and Network for Electronic Transfers (Singapore). He graduated with a Bachelor of Science in Economics from the National University of Singapore.

Mr Tan Wing Ming

Greater China

Mr Tan Wing Ming was appointed acting Head of Greater China on 1 October 2021, overseeing OCBC Group's Greater China business, including the formulation and implementation of the Group's Greater China strategy. Mr Tan was previously Regional General Manager of North East Asia and the Chief Executive of OCBC Bank Hong Kong Branch since September 2009. In this role, he assumed oversight of the Bank's branches in Hong Kong, Japan, Korea and Taiwan. In November 2016, he was promoted to Executive Vice President.

Mr Tan joined OCBC Bank in January 2005 as Senior Vice President and Country Head of OCBC Bank's operations in China. Following the local incorporation of OCBC Bank in China in July 2007, he was appointed Director and President of OCBC Bank (China) until his assignment to Hong Kong in 2009. Mr Tan had worked for major American and European investment and commercial banks in Singapore for 10 years. He then started and managed his own private business in China for 11 years before joining OCBC Bank. Mr Tan holds a Bachelor of Arts (Economics) with Honours from Georgetown University and a Master of Business Administration (Finance) from the University of Chicago.

Mr Tan Chor Sen

CEO, OCBC Bank Malaysia

Mr Tan Chor Sen was appointed Chief Executive Officer on 1 January 2023.

His over 35 years of banking experience began in commercial banking with postings in consumer banking and later several positions in corporate and offshore banking.

Mr Tan joined OCBC Bank in Singapore in 2005 as Head of Emerging Business and led the formation of the unit. During this time, he redefined the Bank's coverage of small businesses, positioning OCBC Bank as a leading SME bank in Singapore serving one in every two SMEs. He was instrumental in expanding the SME business regionally in Malaysia, Indonesia and Hong Kong, introducing new business models, digital solutions and service innovations tailored for SMEs. For Malaysia, he oversaw the launch of the SME cash business and digital account opening for businesses.

In 2012, Mr Tan was appointed Head of International, Global Commercial Banking. In addition to overseeing the growth of the emerging business segment in OCBC Bank's core markets, he became responsible for developing cross-border capabilities and business within the region, leveraging the OCBC network and partner banks in key markets. In the decade under his leadership, he progressively led the Bank's strategic thrust in capturing the cross-border trade and investment flows within ASEAN and with Greater China.

He holds a Bachelor of Business Administration from the National University of Singapore and is an IBF Fellow (Corporate Banking).

Ms Parwati Surjaudaja

President Director and CEO, Bank OCBC NISP

Ms Parwati Surjaudaja was appointed as President Director and CEO of Bank OCBC NISP in December 2008 and was last re-elected as President Director in 2020. Prior to this appointment, she joined Bank OCBC NISP as a Director in 1990 and served as a Deputy President Director from 1997. Ms Surjaudaja, who has more than 30 years of experience in the banking industry, has led the Bank to be among the 10 biggest banks in Indonesia with the highest credit rating.

She is a pioneer in ESG initiatives in the region through the deployment of green and gender financing. For her strong commitment, she is elected as one of G20 EMPOWER Advocates for gender equality as well as spoke in various international forums such as the World Bank Annual Meeting on Gender Equality, Washington DC and Bloomberg Sustainability Business Summit, London. She was named Fortune Indonesia's Businessperson of the Year in 2021.

Under her leadership, the Bank has received prestigious awards including the Bank of the Year Country Award for five consecutive years since 2018 from The Banker, London, Honourable Mention by the UN Women-WEPs Awards 2020 on the Gender Inclusive Workplace and Gender-Responsive Marketplace in 2021, and Top 5 Workplace – Linkedin Top Companies Indonesia in 2022.

Ms Surjaudaja had previous corporate experience with SGV Utomo-Arthur Andersen and holds a Master of Business Administration (Accounting) and a Bachelor of Science Cum Laude (Accounting and Finance) from San Francisco State University.

Ms Ivy Au-Yeung

CEO, OCBC Wing Hang Bank

Ms Ivy Au-Yeung was appointed Chief Executive Officer of OCBC Wing Hang Bank on 20 May 2021. She joined OCBC Wing Hang Bank as Deputy Chief Executive in December 2019, overseeing the Retail Banking Group of the Bank in Hong Kong, Banco OCBC Weng Hang, S.A in Macau and OCBC Wing Hang Credit.

Ms Au-Yeung has had more than 30 years of experience across global banks in corporate and commercial banking covering relationship management, product management as well as credit and sales. Prior to joining OCBC Wing Hang, she was the Chief Executive Officer of the Hong Kong Branch of an Australian bank. Ms Au-Yeung holds a Master of Business Administration degree from University of Sydney, Australia, a Bachelor of Social Science degree from the University of Hong Kong, and is a Fellow of CPA Australia (FCPA).

Mr Wang Ke

CEO, OCBC Wing Hang Bank (China)

Mr Wang Ke was appointed Chief Executive Officer of OCBC Wing Hang Bank (China) on 9 December 2019 and was approved to expand his role as the Director of OCBC Wing Hang Bank (China) in February 2020. He joined OCBC Wing Hang Bank (China) (previously OCBC Bank (China)) as Chief Information Officer and Head of IT Department in 2012, and assumed the expanded role as Head of Operations and Technology afterwards.

Prior to his current role, Mr Wang was the Regional General Manager of the Pearl River Delta region and was appointed as the Deputy President of OCBC Wing Hang Bank (China) in March 2015. Mr Wang is conversant with foreign companies' business models in China and has intimate knowledge of the local market and regulations. As an indispensable member of the Bank's top management, he participated in strategy formulation, led the implementation of many strategic projects and achieved fruitful results. He has over 20 years of international banking working experience spanning a wide spectrum of fields in China, United States and Singapore.

Before joining OCBC Wing Hang Bank (China), Mr Wang held several senior positions in JPMorgan Chase & Co., McKinsey & Company and United Overseas Bank (China) Limited, where he oversaw the operations, technology and Risk Management and accumulated rich and comprehensive experience in the international financial business management and people engagement. Mr Wang holds a Master of Business Administration degree from Kellogg School of Management at Northwestern University and a bachelor's degree in Computer Science from Peking University.

Mr Linus Goh
Global Commercial Banking

Mr Linus Goh was appointed Head of Global Commercial Banking in April 2012. He presently has global responsibility for OCBC Bank's commercial and institutional banking businesses, serving start-ups, SMEs, mid-cap corporates and financial institutions globally. He joined OCBC Bank in April 2004 as Executive Vice President and Head of International, and in August 2008, assumed responsibility for Global Enterprise Banking and Financial Institutions. Mr Goh has over 30 years of banking experience, including 17 years at Citibank, N.A. Singapore, where he held several senior management positions overseeing corporate banking, financial institutions, e-business and transaction banking.

Mr Goh is a member of the Pro-Enterprise Panel under the Ministry of Trade and Industry, and actively supports the development of start-ups and SMEs in Singapore having served in Seeds Capital Private Limited and the SME Committee of the Singapore Business Federation. Mr Goh holds a Bachelor of Arts (Philosophy) with Honours from the National University of Singapore and is an IBF Distinguished Fellow.

Ms Elaine Lam
Global Corporate Banking

Ms Elaine Lam was appointed Head of Global Corporate Banking in April 2016. She has global responsibility for OCBC Bank's global corporate banking business which spans industry groups including real estate, infrastructure, energy, utilities, transportation, technology, conglomerates, industrials, the public sector, regional coverage groups and Greater China Business Office as well as OCBC Bank's corporate banking business in the overseas branches and subsidiaries. She is also responsible for driving the Structured Finance and Partnership & Innovation groups within Global Corporate Banking.

With more than 26 years of experience in corporate banking, Ms Lam is currently a steering committee member of the Monetary Authority of Singapore's Finance Centre Advisory Panel Green Finance Workgroup, and a member of the Institute of Banking and Finance (IBF) Sustainable Finance Workgroup. She presently serves as Singapore's APEC Business Advisory Council (ABAC) member in championing Singapore's business interests at the ABAC.

She also served in the IBF Corporate Banking Workgroup and the Financial Industry Competency Standards' Corporate Banking Working Group. Ms Lam holds a Bachelor of Accountancy (Honours) from the Nanyang Technological University and is an IBF Fellow (Corporate Banking).

Mr Jason Moo
CEO, Bank of Singapore

Mr Jason Moo was appointed Chief Executive Officer of Bank of Singapore in March 2023. He joined Bank of Singapore from Julius Baer, where he was Head Private Banking Southeast Asia and Branch Manager Singapore.

Prior to joining Julius Baer in 2020, Jason worked at Goldman Sachs for more than two decades and has held several senior roles, including CEO of Goldman Sachs Singapore and Head of Southeast Asia and Australia for Private Wealth Management (PWM). Before relocating back to Singapore, he was based in Hong Kong as Head of Market Solutions Group and Head of Alternative Capital Markets Asia Pacific. Prior to that, he worked in the Equities Merchandising Group in New York. He joined Goldman Sachs as a financial analyst in PWM in Singapore upon graduation.

Mr Moo earned a BA in Economics and East Asia Studies, with a focus on Japan, from Brown University, USA. He serves on the Board of Governors of Raffles Institution.

Mr Gan Kok Kim
Global Investment Banking

Mr Gan Kok Kim was appointed Executive Vice President and Head of Global Investment Banking in February 2012. As the Head of Global Investment Banking, he oversees OCBC Bank's loans syndication, debt capital markets, corporate finance, merger and acquisition and mezzanine/private equity investment businesses. Mr Gan joined OCBC Bank in 2004 as the Head of Treasury at OCBC Bank (Malaysia). In February 2011, he was also appointed Head of International Treasury.

In August 2011, he was given the additional role of Head of Asset Liability Management in Singapore and gave up his Malaysian role. Mr Gan has more than 33 years of treasury and markets, investment banking, and management experience and has held various positions in a global bank. He holds a Bachelor of Science in Economics from the Massachusetts Institute of Technology.

Mr Melvyn Low
Global Transaction Banking

Mr Melvyn Low has responsibility for OCBC Bank's transaction banking business serving SMEs, large corporations, financial institutions and government entities across the Bank's core markets of Singapore, Malaysia, China, Hong Kong and Indonesia.

He is an industry veteran with more than 30 years of experience and has held senior positions in cash management, trade, and securities services in regional and global banks. Mr Low also served as Director of the Singapore Clearing House Association from 2010 to 2013, where he was a key contributor to the launch of Fast and Secure Transfers, or FAST, platform.

As the Chair of the PayNow Steering Committee of the Association of Banks in Singapore (ABS) from 2019 to 2021, he co-led Singapore banks in the launch of PromptPay-PayNow, the world's first cross-border faster payment system. Mr Low is currently the Payment Co-Chair of the Digital Standing Commitee for ABS and the Corporate Banking Workgroup Chair for IBF. He also serves as a board member of Network for Electronic Transfers (Singapore) and the Singapore Trade Data Exchange (SGTraDex). Mr Low is an IBF Distinguished Fellow and holds a Master of Business Administration from the University of British Columbia, Canada.

Ms Lee Hwee Boon
Group Human Resources

Ms Lee Hwee Boon was appointed Head of Group Human Resources in June 2022. Being Head of Group Human Resources, she is responsible for the management, training and development of our human capital.

Prior to this appointment, Ms Lee has worked in diverse functions in OCBC Group, covering strategy, risk management as well as corporate and commercial banking. She holds a Bachelor of Business with Honours from Nanyang Technological University and is an IBF Fellow.

Mr Praveen Raina
Group Operations and Technology

Mr Praveen Raina was appointed Head of Group Operations and Technology in June 2021. He has more than 20 years of experience and was instrumental in leading the Bank's innovation and transformation efforts in the technology sphere.

Mr Raina joined OCBC Bank in August 2008 and has held various senior management positions in Group Operations and Technology. He was appointed Executive Vice President in May 2019 and assumed the role of Global Head of Operations and Technology at OCBC Bank's private banking subsidiary, Bank of Singapore, in December the same year. Mr Raina has a Master of Business Administration from the University of Windsor and a Bachelor of Applied Science in Computer Science from the Memorial University of Newfoundland.

Ms Loretta Yuen
Group Legal and Compliance

Ms Loretta Yuen was appointed General Counsel and Head of Group Legal and Compliance in September 2010 and Executive Vice President in June 2015. She oversees the full spectrum of legal and regulatory risks, including anti-money laundering, across OCBC Bank and its subsidiaries, and provides advice on regulatory risks and legal issues involved in decisions to management, so that management can make informed strategic choices within an acceptable legal and regulatory risk profile.

Ms Yuen has over 20 years of legal and regulatory experience in banking and finance. She graduated with Second Class Honours in Law from the National University of Singapore and is an IBF Distinguished Fellow. In 2017, Ms Yuen was conferred the Outstanding Singapore Chief Legal Officer Award by the Singapore Corporate Counsel Association.

Ms Koh Ching Ching
Group Brand and Communications

As the Head of Group Brand and Communications, Ms Koh Ching Ching oversees OCBC Bank's branding and communications initiatives with the media, employees, customers, shareholders and the general public across its core markets. She has been heading the division since November 2004 and was appointed Executive Vice President in March 2012.

Prior to her current role, she led OCBC Bank's franchise expansion efforts in trade finance in Malaysia. Ms Koh has 16 years of corporate and retail banking experience, having held various senior customer and product positions in local and foreign financial institutions. She graduated with First Class Honours in Business Administration from the National University of Singapore.

Mr Harry Lim
Group Audit

Mr Harry Lim was appointed Acting Head of Group Audit in November 2022. He oversees the full spectrum of internal audit activities for OCBC Bank and its subsidiaries. He reports directly to the Audit Committee and administratively to the Group CEO.

Mr Lim joined OCBC Bank in May 2012 as Head of Internal Audit of the former OCBC Bank (China) (based in Shanghai), where he oversaw the smooth integration of the audit teams in the former OCBC Bank (China) and OCBC Wing Hang Bank (China). He was then appointed as Head of Greater China Audit in 2017 (based in Hong Kong), where he managed the Mainland China, Hong Kong and Macau audit teams, and expedited the full adoption of Group Audit's methodology and standards by the Hong Kong and Macau audit teams.

Prior to joining OCBC Bank, Mr Lim spent seven years in the Singapore and Hong Kong offices of JP Morgan Chase covering internal audit for various trading business units including commodities, equities and emerging markets. He also spent five years in Credit Suisse First Boston in a regional oversight and governance role and in market risk reporting and analysis. He graduated with a Bachelor of Business Administration in Finance from the National University of Singapore and holds the professional qualifications of Chartered Financial Analyst and Certification in Risk Management Assurance.

Ms Sylvia Ng
Strategic Planning Office

Ms Sylvia Ng joined OCBC Bank in June 2021 as Head of Strategic Planning. In this role, she supports the Group CEO in the formulation and planning of the Group's strategy and monitoring of strategic and thematic business opportunities.

Ms Ng began her banking career with HSBC in 2002 as a graduate talent in investment banking, and has held various corporate planning and business development roles in HSBC's Hong Kong, China and United Kingdom offices. She has an established track record in leading strategic development and implementation, with her last held position at HSBC Hong Kong being its Head of Business Development for Greater China.

Prior to joining OCBC Bank, she was the General Manager of Corporate Strategy for the MTR Corporation in Hong Kong. Ms Ng graduated with First Class Honours in Investment and Financial Risk Management from City University Business School, London, United Kingdom. She also holds an MBA from the Kellogg-HKUST Executive MBA Programme.

International Network

Southeast Asia

Singapore

OCBC Bank Limited
Head Office
63 Chulia Street
#10-00 OCBC Centre East
Singapore 049514
Tel: (65) 6363 3333
Fax: (65) 6534 3986
www.ocbc.com

OCBC Bank has 34 branches in Singapore.

Bank of Singapore Limited
Head Office
63 Market Street #22-00
Bank of Singapore Centre
Singapore 048942
Tel: (65) 6559 8000
www.bankofsingapore.com

Great Eastern Holdings Limited

The Great Eastern Life Assurance Company Limited

Great Eastern General Insurance Limited
Head Office
1 Pickering Street
#01-01 Great Eastern Centre
Singapore 048659
Tel: (65) 6248 2888
www.greateasternlife.com
www.greateasterngeneral.com

Great Eastern Financial Advisers Private Limited
1 Pickering Street
#01-01 Great Eastern Centre
Singapore 048659
Tel: (65) 6248 2121
Fax: (65) 6327 3073
www.greateasternfa.com.sg

Lion Global Investors Limited
65 Chulia Street
#18-01 OCBC Centre
Singapore 049513
Tel: (65) 6417 6800
www.lionglobalinvestors.com

OCBC Securities Private Limited
18 Church Street
#01-00 OCBC Centre South
Singapore 049479
Tel: (65) 6338 8688
Fax: (65) 6538 9115
www.iocbc.com

BOS Trustee Limited
63 Market Street #14-00
Bank of Singapore Centre
Singapore 048942
Tel: (65) 6818 6478
Fax: (65) 6818 6487

OCBC Property Services Private Limited
63 Chulia Street
#08-03/04
OCBC Centre East
Singapore 049514
www.ocbcproperty.com.sg

Brunei

The Great Eastern Life Assurance Company Limited
Units 17/18, Block B
Bangunan Habza
Spg 150, Kpg. Kiarong Bandar
Seri Begawan BE1318
Negara Brunei Darussalam
Tel: (673) 223 3118
Fax: (673) 223 8118
www.greateasternlife.com/bn

Lion Global Investors Limited
Brunei Branch
Unit 3A, Level 5
Retail Arcade
The Empire Hotel &
Country Club
Jerudong BG3122
Negara Brunei Darussalam
Tel: (673) 261 0925/261 0926
www.lionglobalinvestors.com

Indonesia

PT Bank OCBC NISP Tbk
Head Office
OCBC NISP Tower
Jl. Prof. Dr. Satrio Kav. 25
Jakarta 12940
Indonesia
Tel: (62) 21 2553 3888
Fax: (62) 21 5794 4000
www.ocbcnisp.com

PT Bank OCBC NISP Tbk has 200 branches and offices in Indonesia.

PT Great Eastern Life Indonesia
Head Office
Menara Karya, 5th Floor
Jl. H.R. Rasuna Said
Blok X-5 Kav. 1-2
Jakarta Selatan 12950
Indonesia
Tel: (62) 21 2554 3888
www.greateasternlife.com/id

PT Great Eastern General Insurance Indonesia
MidPlaza 2, 23rd Floor
Jalan Jenderal Sudirman
Kav. 10-11
Jakarta 10220
Indonesia
Tel: (62) 21 5723737
www.greateasterngeneral.com/id

PT Great Eastern General Insurance Indonesia has 12 branches and/or servicing offices in Indonesia.

PT OCBC Sekuritas Indonesia
Head Office
Indonesia Stock Exchange
Building Tower 2
29th Floor
Suite 2901
Jl. Jend. Sudirman Kav. 52-53
Jakarta 12190
Indonesia
Tel: (62) 21 2970 9300
Fax: (62) 21 2970 9393
www.ocbcsekuritas.com

Malaysia

OCBC Bank (Malaysia) Berhad
Head Office
Menara OCBC
18 Jalan Tun Perak
50050 Kuala Lumpur
Malaysia
www.ocbc.com.my

OCBC Contact Centre:
Tel: (603) 8317 5000 (Personal)
Tel: (603) 8317 5200 (Corporate)

OCBC Bank (Malaysia) Berhad has 31 branches in Malaysia.

OCBC Al-Amin Bank Berhad
Head Office
25th floor
Wisma Lee Rubber
1 Jalan Melaka
50100 Kuala Lumpur
Malaysia

General Enquiries:
Within Malaysia
Tel: (603) 8314 9310 (Personal)
Tel: 1300 88 0255 (Corporate)

Outside Malaysia
Tel: (603) 8314 9310 (Personal)
Tel: (603) 8314 9090 (Corporate)

OCBC Al-Amin Bank Berhad has 7 branches in Malaysia.

OCBC Bank Limited
Labuan Branch
Licensed Labuan Bank
(940026C) Level 8 (C)
Main Office Tower
Financial Park Labuan
Jalan Merdeka
87000 Labuan
Federal Territory
Malaysia
Tel: (60-87) 423 381/82
Fax: (60-87) 423 390

BOS Wealth Management Malaysia Berhad
09-02 Level 9, Imazium
No. 8 Jalan SS 21/37
Damansara Uptown
47400 Petaling Jaya
Selangor, Malaysia
Tel: (603) 7712 3000

Great Eastern Life Assurance (Malaysia) Berhad
Head Office
Menara Great Eastern
303 Jalan Ampang
50450 Kuala Lumpur
Malaysia
Tel: (603) 4259 8888
Fax: (603) 4259 8000
www.greateasternlife.com/my

Great Eastern Life Assurance (Malaysia) Berhad has 21 branch offices in Malaysia.

Great Eastern General Insurance (Malaysia) Berhad
Head Office
Level 18
Menara Great Eastern
303 Jalan Ampang
50450 Kuala Lumpur
Malaysia
Tel: (603) 4259 8888
Fax: (603) 4813 0055
www.greateasterngeneral.com/my

Great Eastern General Insurance (Malaysia) Berhad has 13 branches and 5 servicing offices in Malaysia.

Great Eastern Takaful Berhad
201001032332 (916257-H)
Level 3
Menara Great Eastern
303 Jalan Ampang
50450 Kuala Lumpur
Malaysia
Tel: (603) 4259 8338
Fax: (603) 4259 8808
www.greateasterntakaful.com

Great Eastern Takaful Berhad has 2 agency offices.

OCBC Advisers (Malaysia) Sdn Bhd
13th Floor Menara OCBC
18 Jalan Tun Perak
50050 Kuala Lumpur
Malaysia
Tel: (603) 2034 5696
Fax: (603) 2691 6616

Pac Lease Berhad
Level 12 & 13
Menara Haw Par
Jalan Sultan Ismail
50250 Kuala Lumpur
Malaysia
Tel: (603) 2035 1000
Fax: (603) 2032 3300

OCBC Properties (Malaysia) Sdn Bhd
27th Floor
Wisma Lee Rubber
1 Jalan Melaka
50100 Kuala Lumpur
Malaysia
Tel: (603) 2054 3844
Fax: (603) 2031 7378

Myanmar

OCBC Bank Limited
Yangon Branch
Suite Nos. #21-01 to 05
Junction City Tower, No. 3/A
Corner of Bogyoke Aung San
Road and 27th Street
Pabedan Township, Yangon
Myanmar
Tel: (951) 925 3488
Fax: (951) 925 3366

The Great Eastern Life Assurance Company Limited

Great Eastern General Insurance Limited (Myanmar Representative Office)
Suite No. #06-05A, Level 6
Junction City Tower, No. 3/A
Corner of Bogyoke Aung San
Road and 27th Street
Pabedan Township, Yangon
Myanmar
Tel: (95) 9254 054 093

Philippines

Bank of Singapore Limited (Philippines Representative Office)
34/F Ayala Triangle Gardens
Tower 2
Paseo de Roxas Makati City
1226
Philippines
Tel: (63) 2 8479 8988

Thailand

OCBC Bank Limited
Bangkok Branch
Unit 2501-2, 25th Floor
Q House Lumpini
1 South Sathorn Road
Tungmahamek Sathorn
Bangkok 10120
Thailand
Tel: (66) 2 287 9888
Fax: (66) 2 287 9898

Vietnam

OCBC Bank Limited
Ho Chi Minh Branch
Unit 708-709, Level 7
Saigon Tower
29 Le Duan Street
District 1
Ho Chi Minh City
Vietnam
Tel: (84) 8 3823 2627
Fax: (84) 8 3823 2611

East Asia

Japan

OCBC Bank Limited
Tokyo Branch
Sanno Park Tower
5th Floor 11-1
Nagata-cho 2 chome
Chiyoda-ku
Tokyo 100-6105
Japan
Tel: (81) 3 5510 7660
Fax: (81) 3 5510 7661

South Korea

OCBC Bank Limited
Seoul Branch
25th Floor
Seoul Finance Center
(Taepyung-ro 1-ka)
136 Sejong-daero
Jung-gu
Seoul 04520
Republic of Korea
Tel: (82) 2 2021 3900
Fax: (82) 2 2021 3908

Greater China

China

OCBC Wing Hang Bank (China) Limited
Head Office
OCBC Bank Tower
No. 1155 Yuanshen Road
Pudong New District
Shanghai 200135
People's Republic of China
Tel: (86) 21 5820 0200
Fax: (86) 21 5830 1925
www.ocbc.com.cn

As at end December 2022, including its head office, OCBC Wing Hang China has 19 branches and sub-branches in 14 cities, namely Beijing, Shanghai, Xiamen, Tianjin, Chengdu, Guangzhou, Shenzhen, Chongqing, Qingdao, Wuhan, Shaoxing, Suzhou, Zhuhai and Foshan.

The Great Eastern Life Assurance Company Limited (Beijing Representative Office)
Room 901
China Garments Mansion
No. 99 Jianguo Rd
Beijing 100020
People's Republic of China
Tel: (86) 10 6581 5501
Fax: (86) 10 6583 8727

Bank of Ningbo Co., Ltd
Head Office
No. 345, Ning Dong Road
Ningbo Zhejiang 315042
People's Republic of China
Tel: (86) 574 8705 0028
Fax: (86) 574 8705 0027
www.nbcb.com.cn

Bank of Ningbo is OCBC Bank's strategic partner in China.

As at end December 2022, it has 479 branches, sub-branches and offices, covering the cities of Ningbo, Shanghai, Hangzhou, Nanjing, Shenzhen, Suzhou, Wenzhou, Beijing, Wuxi, Jinhua, Shaoxing, Taizhou, Jiaxing, Lishui, Huzhou, Quzhou and Zhoushan.

Hong Kong SAR

Bank of Singapore Limited
Hong Kong Branch
1 Harbour View Street
34th Floor
One International Finance Centre
Central
Hong Kong SAR
Tel: (852) 2846 3980

OCBC Wing Hang Bank Limited
Head Office
161 Queen's Road Central
Hong Kong SAR
Tel: (852) 2852 5111
Fax: (852) 2851 7127
www.ocbcwhhk.com

OCBC Wing Hang Bank Limited has a total of 29 branches in Hong Kong.

OCBC Wing Hang Credit Limited
Head Office
14/F Tai Yau Building
181 Johnston Road
Wanchai
Hong Kong SAR
Tel: (852) 2201 7712
Fax: (852) 2191 5144
www.ocbcwhcr.com

OCBC Wing Hang Credit Limited has a total of 9 offices in Hong Kong.

Macau SAR

OCBC Wing Hang Bank Limited
Head Office
241 Avenida de Almeida Ribeiro
Macau
Tel: (853) 2833 5678
Fax: (853) 2857 6527
www.ocbcwhmac.com

OCBC Wing Hang Bank Limited has a total of 11 branches in Macau.

Taiwan

OCBC Bank Limited
Taipei Branch
41 Floor, No. 68, Sec. 5
Zhongxiao East Road
Xinyi District
Taipei City 11065
Taiwan (R.O.C)
Tel: (886) 2 8726 8100
Fax: (886) 2 2722 8908

North America

United States of America

OCBC Bank Limited
Los Angeles Agency
801 South Figueroa Street
Suite 970
Los Angeles California 90017
United States of America
Tel: (1) 213 624 1189
Fax: (1) 213 624 1386

OCBC Bank Limited
New York Agency
1700 Broadway 18/F New York
NY 10019
United States of America
Tel: (1) 212 586 6222
Fax: (1) 212 586 0636

Oceania

Australia

OCBC Bank Limited
Sydney Branch
Level 2
75 Castlereagh Street
Sydney NSW 2000
Australia
Tel: (61) 2 9235 2022
Fax: (61) 2 9223 5703

Europe

United Kingdom

OCBC Bank Limited
London Branch
The Rex Building, 3rd Floor
62 Queen Street
London EC4R 1EB
United Kingdom
Tel: (44) 20 7653 0900
Fax: (44) 20 7489 1132

Bank of Singapore is the trading name of Oversea-Chinese Banking Corporation Limited's private banking business in London.

BOS Wealth Management Europe S.A., UK Branch
The Rex Building, 3rd Floor
62 Queen Street
London EC4R 1EB
United Kingdom
Tel: (44) (0) 207 029 5850

Luxembourg

BOS Wealth Management Europe S.A.
33, Rue Ste Zithe
L-2763 Luxembourg
Tel: (352) 28 57 32 2000

BOS Wealth Management Europe is a wholly owned subsidiary of Bank of Singapore, dedicated to providing wealth management services to European clients.

Middle East

United Arab Emirates

Bank of Singapore Limited
Dubai International Financial Centre Branch
Office 30-34, Level 28
Central Park Tower
Dubai International Financial Centre
P.O. Box 4296
Dubai U.A.E
Tel: (971) 4427 7100

Regulated by the Dubai Financial Services Authority.

Financial Calendar

February

24 February 2023	Announcement of full year results for 2022

April

25 April 2023	Annual General Meeting

May

May 2023	Announcement of first quarter results for 2023
On or about 19 May 2023*	Payment of 2022 final dividend on ordinary shares (subject to shareholders' approval at Annual General Meeting)

August

August 2023	Announcement of first half results for 2023
August 2023*	Payment of 2023 interim dividend on ordinary shares (subject to approval by the Board)

November

November 2023	Announcement of third quarter results for 2023

** The dividend payment dates are indicative and subject to change. Please refer to OCBC website, www.ocbc.com for latest updates.*

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Corporate Profile

OCBC Bank is the longest established Singapore bank, formed in 1932 from the merger of three local banks, the oldest of which was founded in 1912. It is now the second largest financial services group in Southeast Asia by assets and one of the world's most highly-rated banks, with Aa1 by Moody's and AA- by both Fitch and S&P. Recognised for its financial strength and stability, OCBC Bank is consistently ranked among the World's Top 50 Safest Banks by Global Finance and has been named Best Managed Bank in Singapore by The Asian Banker.

OCBC Bank and its subsidiaries offer a broad array of commercial banking, specialist financial and wealth management services, ranging from consumer, corporate, investment, private and transaction banking to treasury, insurance, asset management and stockbroking services.

OCBC Bank's key markets are Singapore, Malaysia, Indonesia and Greater China. It has more than 420 branches and representative offices in 19 countries and regions. These include over 190 branches and offices in Indonesia under subsidiary Bank OCBC NISP, and over 60 branches and offices in Mainland China, Hong Kong SAR and Macau SAR under OCBC Wing Hang.

OCBC Bank's private banking services are provided by its wholly-owned subsidiary, Bank of Singapore.

OCBC Bank's insurance subsidiary, Great Eastern Holdings, is the oldest and most established life insurance group in Singapore and Malaysia. Its asset management subsidiary, Lion Global Investors, is one of the largest private sector asset management companies in Southeast Asia.

For more information, please visit www.ocbc.com

Corporate Information

Board of Directors
Mr Andrew Lee
Chairman

Ms Chong Chuan Neo
Mr Chua Kim Chiu
Dr Andrew Khoo
Dr Lee Tih Shih
Ms Christina Ong
Mr Pramukti Surjaudaja
Ms Tan Yen Yen
Ms Helen Wong

Secretaries
Mr Peter Yeoh
Ms Sherri Liew

Registered Office
63 Chulia Street
#10-00 OCBC Centre East
Singapore 049514
Tel: (65) 6363 3333
(Personal Banking)
(65) 6538 1111
(Business Banking)
Website: www.ocbc.com

Share Registration Office
Boardroom Corporate &
Advisory Services Pte. Ltd.
1 Harbourfront Avenue
#14-07 Keppel Bay Tower
Singapore 098632
Tel: (65) 6536 5355

Auditor
PricewaterhouseCoopers LLP
7 Straits View
Marina One East Tower Level 12
Singapore 018936
Tel: (65) 6236 3388

Partner in charge of the Audit
Mr Lian Wee Cheow, PBM
(Year of Appointment: 2020)

Investor Relations
Email: Investor-Relations@ocbc.com

OCBC Bank

Oversea-Chinese Banking Corporation Limited
(Incorporated in Singapore)

Company Registration Number: 193200032W