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

(Incorporated in Hong Kong with limited liability) (Stock Code: 388)

(Financial figures in this announcement are expressed in Hong Kong dollar (HKD) unless otherwise stated)

# 2022 FINAL RESULTS, DIVIDEND AND CLOSURE OF REGISTER OF MEMBERS

# STRATEGIC AND FINANCIAL HIGHLIGHTS

### Nicolas Aguzin, Chief Executive Officer said:

"Throughout 2022, HKEX demonstrated focus and resilience, launching a range of important strategic initiatives and introducing a range of new products and market enhancements. These included the most significant developments to our mutual-market access Connect franchise since it was first established, the launch of Core Climate - Hong Kong's first carbon trading platform, and the introduction of a host of new Derivatives and ETF products. And despite the challenging global economic and geopolitical backdrop, HKEX remained one of the world's premier capital raising venues, with positive sentiment returning to the IPO market in the second half, culminating in a total of 90 new companies from a range of sectors and geographies successfully joining our markets in 2022. HKEX Derivatives Market also had another record year, with Hong Kong fast becoming the region's key risk management centre. The year finished very strongly for HKEX, with the Group reporting record fourth quarter financials, offsetting in part the softer volumes and numbers in the first half. Whilst the road ahead will not be without challenges, we are excited about the year ahead and we look forward to continuing to execute on our vision to build the Marketplace of the Future."

# **Strategic & Operational Highlights**

**Corporate** 

- 12 Jan New strategic cooperation agreement signed with Shenzhen Stock Exchange
- 29 Mar HKEX Corporate Day
- 21 Jun HKEX Connect Hall grand re-opening

#### Regulation

- 1 Jan Listing Rules amendments for overseas issuers came into effect
- 29 Apr Board Diversity & Inclusion in Focus Repository launched
- 19 Oct Consultation paper on Listing Regime for Specialist Technology Companies published

#### Products and Services

- 21 Feb First metaverse-themed ETF listed
- 24 Feb First pure-play Hong Kong equity ESG ETF listed
- 18 Mar First Special Purpose Acquisition Company listed
- 23 Mar First carbon futures ETF listed
- 29 Apr QME launched new soybean contracts
- 19 May First Hong Kong Government retail green bond listed
- 24 May LME launched a range of new sustainability certifications on LMEpassport
- 23 Jun First blockchain ETF listed
- 4 Jul Inclusion of ETFs in Stock Connect
- 4 Jul Swap Connect, a new mutual access programme between Hong Kong and Mainland China's interbank interest rate swap markets announced
- 7 Jul IR Connect launched
- 8 Aug MSCI China A 50 Connect Index Derivatives Warrants listed, Hong Kong's first A-share structured products
- 28 Oct Core Climate launched, Hong Kong's first carbon trading platform
- 31 Oct Fit-out of a new Hosting Services data hall completed
- 28 Nov Hang Seng TECH Index Futures Options launched
- 16 Dec First two crypto asset ETFs launched

#### Market Operations

- 25 Apr Electronic Communication Platform upgraded, enabling clients to exchange files with HKEX
- 3 May Volatility Control Mechanism expanded to cover Exchange Traded Products
- 9 May Derivatives Holiday Trading commenced
- 13 Jun New Value-at-Risk (VaR) Platform launched in the Cash Market
- 12 Aug Stock Connect trading calendar enhancements announced, facilitating trading on all days where both the Hong Kong and Mainland markets are open
- 17 Oct Volatility Control Mechanism and Dynamic Price Banding Mechanism expanded to cover Hang Seng TECH Index Futures
- 21 Nov T Session closing hour revised for selected futures and options contracts to support investors capturing underlying market movements in the same trading session
- 13 Dec New HKD-RMB Dual Counter Model plan announced, together with Dual Counter Market Making Programme in the Cash Market
- 19 Dec The SFC and the CSRC announced in-principle agreement on expansion of eligible stocks included in Stock Connect

### **Corporate Social Responsibility and ESG**

- 24 Mar MOU signed with Guangzhou-based China Emissions Exchange to explore Greater Bay Area and international carbon opportunities
- 31 Mar 2022 HKEX Impact Funding Scheme launched
- 16 May 2022 HKEX Charity Partnership Programme launched
- 22 Jun New HKEX Research Funding Scheme launched
- 5 Jul Hong Kong International Carbon Market Council launched
- 24 Oct LME confirmed 2040 net-zero commitments
- 2 Dec Inaugural HKEX Impact Summit

# **Financial Highlights**

- 2022 revenue and other income of \$18,456 million was 12 per cent lower than the record 2021
  - Core business revenue was down 9 per cent against 2021, reflecting reduced trading and clearing fees from lower Headline ADT and Stock Connect Northbound ADT, and lower depository fees and listing fees. This was partly offset by the increase in net investment income from Margin Funds and higher trading fees from the Derivatives Market
  - Net investment loss on Corporate Funds was \$48 million (2021: income of \$708 million), as the External Portfolio had net fair value losses of \$486 million in 2022 (2021: gains of \$364 million), partly offset by higher investment income from internally-managed Corporate Funds
- Operating expenses were 12 per cent higher than 2021, attributable to higher staff costs and professional fees
- EBITDA<sup>1</sup> was 19 per cent lower than 2021 at \$13,185 million, with EBITDA margin at 72 per cent, 6 per cent lower than 2021
- Profit attributable to shareholders was \$10,078 million, 20 per cent lower than the record 2021

### **Key Financials**

	2022	2021	
	\$m	\$m	Change
Revenue and other income			
Core business revenue	18,374	20,103	(9%)
HKEX Foundation donation income	130	139	(6%)
Net investment (loss)/income of Corporate Funds	(48)	708	N/A
	18,456	20,950	(12%)
Operating expenses	5,095	4,529	12%
EBITDA	13,185	16,269	(19%)
Profit attributable to shareholders	10,078	12,535	(20%)
Capital expenditure	1,184	1,127	5%
Basic earnings per share	\$7.96	\$9.91	(20%)
First interim dividend per share	\$3.45	\$4.69	(26%)
Second interim dividend per share	\$3.69	\$4.18	(12%)
	\$7.14	\$8.87	(20%)
Dividend payout ratio	90%	90%	-

### **Key Market Statistics**

	2022	2021	Change
ADT of equity products traded on the Stock Exchange <sup>1</sup> (\$bn)	109.0	146.6	(26%)
ADT of DWs, CBBCs and warrants traded on the Stock Exchange (\$bn)	15.9	20.1	(21%)
ADT traded on the Stock Exchange <sup>1,2</sup> (Headline ADT) (\$bn)	124.9	166.7	(25%)
ADT of Northbound Trading of Stock Connect <sup>1</sup> (RMBbn)	100.4	120.1	(16%)
ADT of Southbound Trading of Stock Connect <sup>1</sup> (\$bn)	31.7	41.7	(24%)
ADV of derivatives contracts traded on the Futures Exchange ('000 contracts)	<b>715</b> ⁴	538	33%
ADV of stock options contracts traded on the Stock Exchange ('000 contracts)	588	637	(8%)
Chargeable ADV <sup>3</sup> of metals contracts traded on the LME ('000 lots)	506	547	(7%)
ADT of Northbound Bond Connect (RMBbn)	32.2 <sup>4</sup>	26.6	21%

1 Includes buy and sell trades under Stock Connect

2 ADT of Southbound Trading is included within Headline ADT.

3 Chargeable ADV excludes administrative trades (Admin Trades) and other non-chargeable trades.

4 New record high in 2022

<sup>1</sup> For the purposes of this announcement, EBITDA is defined as earnings before interest expenses and other finance costs, taxation, depreciation and amortisation. It excludes the Group's share of results of the joint ventures. EBITDA margin is calculated based on EBITDA divided by revenue and other income less transaction-related expenses.

# **Financial Highlights**

- Q4 2022 revenue and other income of \$5,201 million was 10 per cent higher than Q4 2021, reaching record fourth quarter high
  - Core business revenue was up 7 per cent against Q4 2021, attributable to the increase in net investment income from Margin Funds
  - Net investment income on Corporate Funds was up 52 per cent against Q4 2021 due to higher interest income and higher fair value gains of the External Portfolio, but was partly offset by a non-recurring valuation gains of long-term equity investments in 2021
- Operating expenses were up 12 per cent, attributable to higher staff costs and professional fees
- EBITDA margin remained the same at 74 per cent
- Profit attributable to shareholders was \$2,979 million, 11 per cent higher than Q4 2021, reaching record fourth quarter high

# **Key Financials**

	Q4 2022 \$m	Q4 2021 \$m	Change
Revenue and other income			
Core business revenue	4,772	4,458	7%
HKEX Foundation donation income	53	26	104%
Net investment income of Corporate Funds	376	248	52%
	5,201	4,732	10%
Operating expenses	1,348	1,200	12%
EBITDA	3,807	3,498	9%
Profit attributable to shareholders	2,979	2,674	11%
Capital expenditure	411	404	2%
Basic earnings per share	\$2.35	\$2.11	11%

### **Key Market Statistics**

-	Q4 2022	Q4 2021	Change
ADT of equity products traded on the Stock Exchange <sup>1</sup> (\$bn)	113.6	108.2	5%
ADT of DWs, CBBCs and warrants traded on the Stock Exchange (\$bn)	13.6	18.2	(25%)
ADT traded on the Stock Exchange <sup>1,2</sup> (Headline ADT) (\$bn)	127.2	126.4	1%
ADT of Northbound Trading of Stock Connect <sup>1</sup> (RMBbn)	97.6	110.9	(12%)
ADT of Southbound Trading of Stock Connect <sup>1</sup> (\$bn)	39.4	27.9	41%
ADV of derivatives contracts traded on the Futures Exchange ('000 contracts)	842 <sup>4</sup>	506	66%
ADV of stock options contracts traded on the Stock Exchange ('000 contracts)	641	510	26%
Chargeable ADV <sup>3</sup> of metals contracts traded on the LME ('000 lots)	482	555	(13%)
ADT of Northbound Bond Connect (RMBbn)	32.4	27.7	17%
4. Includes hurrend call trades under Stack Connect			

1 Includes buy and sell trades under Stock Connect

2 ADT of Southbound Trading is included within Headline ADT.

3 Chargeable ADV excludes administrative trades (Admin Trades) and other non-chargeable trades.

4 New record quarterly high

# **CHAIRMAN'S STATEMENT**

2022 was a good year of strategic progress for HKEX, despite ongoing macro challenges and uncertainties. We have delivered a resilient full-year performance, reflecting the continued robustness and strength of our organisation and our markets. A significant number of important strategic initiatives were accomplished or announced during the year, which have positioned us well to continue to lead and shape the development of the region's global capital markets, supporting our vision to build the Marketplace of the Future.

# **Our Performance**

The volatile macro environment during 2022 continued to impact trading and volumes across global markets, and Hong Kong was no exception. However, market sentiment began to improve in the fourth quarter, resulting in a strong end to the year for HKEX. Throughout the year we were also pleased to see strong performance in the Hong Kong Derivatives Market, with new trading records set across our USD/CNH Futures and a number of other individual derivatives products. Trading through Stock Connect remained resilient, and Northbound Bond Connect trading continued to record new highs in trading volume and number of investors. Driven by the renewed momentum in our IPO market in the second half of the year, Hong Kong remained as one of the world's most active IPO fundraising hubs, raising a total of \$104.6 billion in 2022.

The chargeable average daily volume of metals contracts traded on the LME decreased by 7 per cent from 2021, amid challenging market conditions.

Total revenue and other income of the Group, for the year ended 31 December 2022, amounted to \$18,456 million and the profit attributable to shareholders was \$10,078 million, down 12 per cent and 20 per cent respectively, from the record highs in 2021.

# Dividend

The Board declared payment of a second interim dividend of \$3.69 per share, wholly in cash, which, together with the first interim dividend of \$3.45 per share paid in September 2022, results in a full-year dividend of \$7.14 per share.

# **Strategic Update**

In 2022, we made notable progress in strengthening our mutual market connectivity, diversifying our product offerings and enhancing the attractiveness, liquidity and vibrancy of our markets, further deepening our value proposition as a gateway connecting China and the world.

Of particular note was the inclusion of ETFs in Stock Connect, the announcement of the launch of Swap Connect and the proposed inclusion of Hong Kong primary-listed international companies in the Southbound Stock Connect, each marking a new milestone in the further development and connectivity between Hong Kong and Mainland China's capital markets. The launch of Core Climate, Hong Kong's new international carbon marketplace, was another highlight and supports both our commitment to the regional and global growth of a vibrant carbon ecosystem and a healthy sustainable future for us all. In December 2022, we announced that the HKD-RMB Dual Counter Model will be introduced in the first half of 2023, supporting the continued internationalisation of the RMB and further elevating Hong Kong's role as the world's premier offshore RMB hub; we also launched a new Hong Kong SPAC listing framework in January 2022 as well as a market consultation on new listing rules for specialist technology companies in October 2022, which all continue to enhance Hong Kong's reputation as the global listing venue of choice.

Through these initiatives, and other initiatives, we continue to strengthen the global competitiveness and relevance of our markets, reinforcing our leadership role at the heart of the global financial community.

# Market Quality and Sustainability

As a leading global exchange group, we are mindful of our responsibilities and the vital role we play in enhancing both the quality of our markets and advancing sustainability across the region and globally.

Through the Hong Kong International Carbon Market Council, established in July 2022, we are collaborating with leading corporates and financial institutions to further enhance Core Climate, facilitating Hong Kong's growth as a premier carbon hub in Asia and beyond, contributing to global efforts towards a low-carbon economy. We are also working closely with the Guangzhou Futures Exchange and the China Emissions Exchange, among others, to explore opportunities in carbon finance in the Greater Bay Area. During 2022, we continued to promote transparency and disclosure of sustainable-themed products through STAGE, our multi-asset sustainable finance platform which now displays more than 110 sustainable-focused products from leading issuers. Our centralised ESG resources platform, ESG Academy, continues to drive market education and provide insights on ESG reporting and best practices to support and guide listed issuers and the broader business community in their sustainability journeys.

Throughout the year, the LME continued its leadership role in driving supply chain sustainability across the global metals industry, in particular, through a number of enhancements of its fast expanding digital credential register, LMEpassport, providing greater comparability and transparency in carbon emissions data. In addition, we were pleased to see that 96 per cent of the LME-listed brands met the first reporting deadline on 30 June 2022 to comply with the LME's responsible sourcing policy underpinned by guidelines set by OECD.

Among our ongoing efforts to promote high standard of governance and disclosure practices among listed issuers in Hong Kong, we amended the Listing Rules to become the first exchange in the world to end single-gender boards for new IPO applicants in 2022, with all listed issuers mandated to follow suit by the end of 2024. We also enhanced share schemes regulation for listed issuers in January 2023 to provide informative disclosure and uphold robust shareholder protection. We are now seeking market feedback on our proposals to expand the paperless listing regime in support of our commitment to sustainability and further enhance our operational efficiency, without compromising investor protection.

Specific details of the Group's performance, achievements and market initiatives in 2022 are set out in the Chief Executive Officer's Review and Business Review sections of this announcement.

# **Corporate Responsibility**

At HKEX, we recognise that our role and responsibilities go beyond our duties as a market operator, a regulator and a corporate. That is why we seek to lead by example in promoting best-in-class standards of governance, a strong corporate culture and building a long-term sustainable future for both our markets and our communities.

In 2022, we engaged an independent external consultant to evaluate the performance of the boards of HKEX and its clearing subsidiary, OTC Clear. The evaluation concluded that both of these two boards are effective, and that the HKEX Board had made material progress across aspects since the prior independent board evaluation in 2019.

Building on our unique role in connecting markets and the wider community, we hosted our inaugural HKEX Impact Summit in December 2022, championing corporate philanthropy and fostering stronger collaboration between business and society. Through the HKEX Foundation, we donated over \$130 million in 2022 to support a wide range of projects focusing on financial literacy, diversity and inclusion, poverty relief and environmental stewardship through our two flagship charitable programmes - the HKEX Charity Partnership Programme and HKEX Impact Funding Scheme, as well as directly through partnerships with local charities.

Underscoring its commitment to responsible supply chains, the LME continued its funding partnership with the charities Pact and The Impact Facility, supporting their multi-year projects to tackle child labour and children's rights issues in African mining communities. The LME also established partnership with Inspire, an education charity based in the UK, to support initiatives focusing on bringing positive impact on local schools and young people's lives.

Details can be found in our 2022 CSR Report, which will be available on the HKEX Group website together with the 2022 Annual Report.

# Outlook

Looking ahead, the macro economic environment looks set to remain challenging and uncertain. Concerns over a global economic slowdown, persistent inflation and ongoing geopolitical tensions will continue to be the key factors shaping the performance of capital markets, while sustainability will remain a broader shared agenda across countries and sectors.

As a purpose-driven organisation and a leading global exchange group, we are fully committed to promoting the long-term sustainability of financial markets and the prosperity of our stakeholders. Our steadfast focus on driving connectivity, innovation and sustainability across our markets and client centricity across our business ensures that we are well placed to meet challenges and capture future growth opportunities.

I would like to take this opportunity to express my gratitude to my fellow Board members for their support and contribution throughout 2022. On behalf of the Board, I would like to extend sincere appreciation to Mr Rafael Gil-Tienda and Mr Stephen Yiu, who will retire from the Board after the conclusion of the 2023 AGM. I would also like to thank members of the International Advisory Council and the Mainland China Advisory Group for their invaluable insights and guidance during the year.

Finally, I would like to thank our shareholders and other valued stakeholders for their ongoing trust and support. I would also like to express heartfelt appreciation to all our employees for their resolute commitment and hard work in pursuing excellence, helping us to progress our strategic priorities and supporting the long-term health of our communities.

Laura M CHA Chairman

# CHIEF EXECUTIVE OFFICER'S REVIEW

HKEX had a busy and productive year in 2022. Against, at times, a challenging macroeconomic and geopolitical backdrop, HKEX delivered solid results, with the second half of the year showing signs of encouraging momentum in the IPO market and a particularly strong performance in the Derivatives Market. Results for the final quarter of the year were the best fourth quarter on record.

Throughout the year, we have focused on delivering our vision to build the Marketplace of the Future, which we articulated at our Corporate Day in March. The three strategic imperatives that underpin this vision are *Connecting China and the World, Connecting Capital with Opportunities*, and *Connecting Today with Tomorrow*. These strategic imperatives provided a clear framework for our energies during 2022, as we executed to strengthen the long-term health and vitality of our business and our markets and support the attractiveness of Hong Kong as a unique East-West superconnector.

One of the most significant highlights of 2022 was the beginning of a new chapter in the Hong Kong "Connect" story: the HKEX Connect franchise expanded at a pace not seen since the launch of Stock Connect in 2014 with ETF Connect going live, the announcement of the planned launch of Swap Connect and a number of other extensions and enhancements to the programme. At the same time, we marked significant milestones in enhancing the attractiveness and competitiveness of our markets. These included our proposal on new listing rules for specialist technology companies, the launch of our carbon trading platform, Core Climate, which along with other initiatives will continue to shape the future of capital markets in the region and beyond for many years to come.

These, and other developments during the year, put us in a strong position to support the megatrends of innovation, sustainability, and the exponential growth of China's capital markets and economy – megatrends that are shaping a world in which Asia is becoming increasingly important.

# Market highlights

- IPO market resilience against challenging macroeconomic conditions 90 listings<sup>2</sup>, raising \$104.6 billion, 65 per cent of which was for the new economy sector, putting Hong Kong in the top four markets globally in 2022.
- Northbound Bond Connect ADT reached a record high of RMB32.2 billion, up 21 per cent yearon-year (YoY).
- Stock Connect ADT reflected macro equity market conditions, with Northbound ADT at RMB100.4 billion, down 16 per cent YoY, and Southbound ADT at \$31.7 billion, down 24 per cent YoY.
- The inclusion of international companies in Southbound Stock Connect was announced.
- A consultation paper on new listing rules for specialist technology companies was published, providing a new fundraising channel for "companies of tomorrow".
- Our Stock Connect programme welcomed the inclusion of ETFs for the first time.
- Swap Connect, a new mutual access programme between Hong Kong and Mainland China's interbank interest rate swap market, was announced.
- Announcement of the planned introduction of a HKD-RMB Dual Counter Model, alongside a new Dual Counter Market Making Programme in the Hong Kong securities market.
- Announcement of the planned roll-out of China Treasury Bond Futures trading in Hong Kong.
- Core Climate, Hong Kong's first carbon trading platform, launched.
- Special Purpose Acquisition Company (SPAC) listing route launched, giving issuers an alternative route to market.

# **Primary market**

Macroeconomic and geopolitical conditions led to weak sentiment and softness across the global IPO market. Set against this backdrop, Hong Kong's primary market performed well relative to others, retaining its position as one of the world's most active international fundraising hubs. HKEX welcomed 90 new listings raising \$104.6 billion. Moreover, 63 of those took place in the second half of the year – more than double that of the first half. The last month of the year saw 21 listings.

<sup>2</sup> Includes 1 transfer (2021: 2 transfers) of listings from GEM to Main Board

Our market also continued to be a leading fundraising venue for many of the "companies of tomorrow" -62 of the IPOs in 2022 were from the new economy sector, accounting for 65 per cent of capital raised during the period. On the back of this resilient performance, we enter 2023 with signs of renewed momentum and a robust pipeline.

# Secondary market

It was a solid year for HKEX's secondary markets, despite global market fragility. Headline ADT in the Cash Market was \$124.9 billion. While this was a decline of 25 per cent from the exceptional highs of 2021, the performance was consistent with long-term normalised levels and reflected broader global market softness.

HKEX's Derivatives Market had a buoyant year. In 2022, HKEX continued to see robust volumes in the MSCI China A 50 Connect (USD) Index Futures contract, as well as recording a new trading volume high in USD/CNH Futures in October. Hong Kong is already home to the world's most extensive and vibrant offshore A-share derivatives ecosystems and is increasingly seen as a preferred risk management centre in the region.

The average daily number of contracts traded on the Futures Exchange reached a record high, with ADV up 33 per cent YoY. HKEX's suite of Options on Futures contracts – the Hang Seng Index Futures Options and Hang Seng China Enterprises Index Futures Options – saw record highs, with combined open interest with a notional value of over US\$64 billion.

# **Strategic Development Review**

In March, we were pleased to host HKEX Corporate Day, where we shared our vision and strategy with investors, analysts, and other stakeholders, setting out a roadmap to build the Marketplace of the Future.

Three strategic imperatives underpin this vision:

- Connecting China and the World;
- · Connecting Capital with Opportunities; and
- Connecting Today with Tomorrow.

Throughout the year, we delivered against this strategy as part of a transformative journey that continues to support and enhance the long-term development of Hong Kong's financial markets and the city's global role as an East-West superconnector.

# **Connecting China and the World**

Sitting at the heart of the most international city in China and the most Chinese city outside the Mainland, HKEX is uniquely positioned to facilitate the vital two-way flows of capital between China and the world – two-way flows that are expected to grow exponentially over the next decade.

To build on this unique position of strength, we continued to help Chinese capital access global opportunities and bring the China growth story to international investors in 2022. In fact, this was a defining year for HKEX's Connect franchise, with the announcements of significant new initiatives that will propel it into the future.

### A new chapter in our Connect story

In July, we went live with the inclusion of ETFs in Stock Connect for the first time. We also announced the introduction of Swap Connect, offering mutual access between Hong Kong and Mainland China's interbank interest rate swap markets.

In September, these enhancements were followed by support from the CSRC in relation to:

- Eligible primary-listed international companies would be included in Southbound Stock Connect for the first time;
- RMB counters would be added to Stock Connect; and
- China Treasury Bond Futures would be made available in Hong Kong.

Including international companies in Southbound Stock Connect is potentially game-changing for Hong Kong as an IFC. In addition, all three initiatives are significant foundational pillars for the future growth of Hong Kong as a world-class international listing, risk-management, and offshore RMB hub.

At the same time, we continued to make smaller but essential upgrades to our Connect franchise. For example, in August, we announced Stock Connect trading calendar enhancements, adding new trading days and improving access to the platform.

### Forging strong partnerships

We also continued to build relations with key stakeholders in the Mainland. As pandemic restrictions began to ease, I had the pleasure of visiting our partners in Beijing, Guangzhou, and Shenzhen during the year to discuss future opportunities.

At HKEX, we are incredibly excited by the opportunities in the Greater Bay Area and we were delighted to sign a new strategic cooperation agreement with the Shenzhen Stock Exchange and a memorandum of understanding with the Guangzhou-based China Emissions Exchange. The latter will see us exploring Greater Bay Area and international carbon opportunities.

# **Connecting Capital with Opportunities**

Connectivity is in the DNA of HKEX, and to continuously enhance our markets' attractiveness, depth, vibrancy, and diversity, we keep seeking to connect capital with opportunities. In 2022, this involved enhancing our market structure and expanding our product ecosystem.

### Supporting the fundraising needs of tomorrow

In our primary market, we launched the SPAC listing route, giving issuers an alternative route to market. The first SPAC was listed in March, and there were five listed as we closed out the year.

Seeking to support further the fundraising needs of innovative companies in the new economy sector, we published a consultation paper on new listing rules for specialist technology companies in October. The proposed new rules will provide a new channel for companies from five technology sectors to seek a listing in Hong Kong, further building on the existing vibrant and diverse new economy ecosystem that characterises our capital markets.

This caters to the funding needs of large-scale advanced technology companies at an early commercialisation stage. It also adds more choice for investors as it will attract new issuers to our markets. More importantly, it provides even more opportunities to connect the ideas and ambitions of the innovative companies of tomorrow to global capital.

### Building Asia's derivatives trading hub

In our secondary markets, we made significant progress in strengthening our position as Asia's derivatives trading hub, reflecting increased customer demand for hedging and risk management tools.

In August, the first MSCI China A 50 Connect Index Derivative Warrants were listed – Hong Kong's first A-share structured products. We also launched the Hang Seng TECH Index Futures Options in November, alongside further enhancements to our existing Hang Seng TECH Index derivatives products, providing investors with even more choice and flexibility.

Additionally, we introduced several operational enhancements, including derivatives holiday trading in May, allowing investors to trade non-HKD denominated products during Hong Kong holidays when the markets of their underlying securities may be open.

And in December 2022, we announced the launch of a new HKD-RMB Dual Counter Model alongside a Dual Counter Market Making Programme in our securities market, further supporting the listing, trading, and settlement of RMB counters in the market and elevating Hong Kong's role as the world's premier offshore RMB hub.

Appetite for Exchange Traded Products (ETPs) also surged, with our ETPs reaching almost 180, following 29 new additions. These included many firsts, such as the first metaverse ETF, the first

carbon futures ETF, and the first blockchain ETF. Moreover, the average daily turnover of ETPs, including ETFs, increased 56 per cent YoY to \$12.0 billion.

### Connecting capital markets and the physical world

As part of the critical global infrastructure that underpins pricing, investment, and risk management for metals, the LME has been on the frontline during an exceptionally challenging period for the metals industry. Throughout 2022, it demonstrated integrity, resourcefulness, and leadership. The decisions it made have not always been universally applauded, but the LME has always sought to put the interests of the market as a whole first.

The LME has had a challenging year but also a seminal year. I believe that 2022 will come to be seen as a year in the LME's 145-year-old history in which it demonstrated its value as a stable and steadfast institution that works in the interest of and connects all stakeholders across geography, market, and industry in a time of tectonic social, technological and economic change. As a parent company, HKEX continues to fully support the LME as it connects capital markets to the physical world.

### Taking HKEX on the road

With the world starting to move on from the Covid-19 pandemic, we also took to the road to tell the Hong Kong story and meet our partners, clients, and other stakeholders around the globe. I was delighted to be part of the HKEX delegations to the World Economic Forum in Davos, Switzerland, and the Future Investment Initiative in Riyadh, Saudi Arabia, as well as lead the first HKEX delegation to meet customers, investors, shareholders, and the media in Singapore since 2020.

We ended 2022 by reiterating our commitment to support the growth ambitions of our clients worldwide when we announced our New York office opening in December.

### **Connecting Today with Tomorrow**

The global financial industry is rapidly transforming, evolving, and being disrupted by megatrends such as digitisation, big data, personalised finance, and ESG considerations. This is changing how HKEX's clients and investors behave, redefining the future of capital markets and creating exciting new opportunities for our partners and us.

In 2022, we focused on future-proofing our business by modernising our operations and laying the building blocks that will enable us to offer the "products of the future" while continuing to provide the transparency and trustworthiness that make us one of the world's leading exchange groups.

### Fulfilling our role as agents of change

In helping our market participants embrace the opportunities of megatrends, the highlight of 2022 was the launch of Core Climate, Hong Kong's new international carbon marketplace, in October. HKEX has long advocated for ESG governance, disclosure, and investment opportunities. With Core Climate, we marked a major new milestone in this journey by providing a platform for the effective and transparent trading of carbon credits and other green instruments.

In under a month since its launch, approximately 400,000 tonnes of carbon credits from China and around the world were traded on this new platform, placing Core Climate among Asia's most active voluntary carbon marketplaces. The Hong Kong International Carbon Market Council, which was formed in July 2022 and helped shape Core Climate, will continue to provide valuable insights and actively collaborate with HKEX to develop Hong Kong's maturing carbon ecosystem.

We also marked a milestone in our commitment to the highest standards of corporate governance in our markets with the launch of IR Connect in July. This powerful yet accessible investor relations (IR) platform helps Hong Kong-listed companies build connectivity and regular dialogue with their investors.

In addition, our inaugural HKEX Impact Summit became an instant hit on Hong Kong's ESG calendar. Leveraging our strengths as a connector, we devised this event to bring together stakeholders from business, non-profits, government, and academia to build connections and explore the latest trends in corporate philanthropy models. This well-received event demonstrated our continuing commitment – through HKEX Foundation, the markets we operate, and our regulatory function – to build a sustainable healthy community where all our stakeholders and constituents can thrive.

The LME also made significant advances on its sustainability commitments in 2022. In addition to committing to its 2040 net-zero target, it also made enhancements to its digital sustainability credentials register, LMEpassport, and commitments to eliminating human rights abuses and governance issues from metals' supply chains.

Enhancements to LMEpassport will enable greater comparability in carbon emissions data, provide increased transparency on brands using scrap material, and broaden disclosure opportunities to non-LME brands. And in June, 96 per cent of LME brands met the deadline of its first responsible sourcing report, providing information on their chosen tracks to compliance.

### Embracing the digitisation of finance

Innovation is another area in which we achieved many milestones in 2022, most notably when we welcomed Asia's first crypto assets ETFs to our markets in December, providing retail investors with exposure to digital assets in a market that has the highest standards of transparency, regulation, and financial infrastructure.

In 2022, we continued to modernise our operating model, focused on solid risk management, excellent execution, client-centricity, innovation, and collaboration.

Highlights include releasing the implementation plan and technical guide for FINI, our solution to shorten the IPO settlement cycle, and supporting market participants in their transitions. We also upgraded our Electronic Communication Platform to unify client access through Client Connect with enhanced system accessibility; and launched the Value-at-Risk (VaR) platform in our Cash Market.

The LME is also an integral part of our group-wide multi-year modernisation journey. In 2022, it set out its market structure evolution proposals, designed to enable it to modernise and adapt to emerging trends and evolving customers. The LME engaged the market on these proposals and comprehensively analysed the responses. The outcomes are designed to enhance the LME's electronic offering and provide greater transparency while preserving optionality for its diverse global customer base.

# **Strategic Outlook**

The broader challenges of 2022 will likely persist into 2023 – inflationary pressures, geopolitical tensions, economic malaise, and the lasting effects of the Covid-19 pandemic. However, the longer-term opportunities are still there.

The massive opportunities arising from China's ambitious decarbonisation plans will continue to grow. We will continue to see the release of Mainland China's domestic savings, the exponential growth of investment flow in and out of the Mainland, and the acceleration of international participation in the Mainland's economy. Moreover, the flourishing of innovation across the board, from greentech to fintech, in Asia, particularly in the Greater Bay Area, will continue to change the world in which we live.

At HKEX, we are looking at this horizon of opportunity. In the year ahead, we will continue to create the building blocks for this next phase of development. We have a great team, a clear strategy, and a firm focus on the long-term health and success of our business and our markets. We are in an excellent place to capture the opportunities ahead as we build the Marketplace of the Future.

# Appreciation

The HKEX Group delivered solid results and demonstrated resilience during another challenging year globally. More importantly, it laid the groundwork for a new phase of development. This, of course, would not have been possible without our people's talent, hard work, and dedication. I want to take this opportunity to thank every one of them for their contributions.

Our vision to build the Marketplace of the Future is predicated on our ability to remain internationally competitive and to achieve this, we need to keep attracting, nurturing, and empowering the very best talent in the world. In 2022, we were delighted to welcome some highly experienced and talented individuals to the company, including 12 new external MD hires.

I also want to express our appreciation and gratitude to the Securities and Futures Commission, the Hong Kong Monetary Authority, our market participants, our customers, partners, and stakeholders around the globe for their continued support. We are proud that together we have continued to strengthen Hong Kong's financial markets, and we look forward to working closely with you as we build on the developments and achievements of 2022.

Finally, I would like to thank my fellow members of the Board for their support and unwavering trust.

# Nicolas AGUZIN

Director and Chief Executive Officer

# **BUSINESS REVIEW**

# **Overview**



Fig. 1 – Market activity and Group's revenue and other income/(loss)

HKEX continued to demonstrate its resiliency and relevance in 2022 despite, at times, a challenging macroeconomic and geopolitical backdrop. Throughout the year the business remained firmly focused on the delivery of its strategy, building for the long-term and introducing a range of initiatives that will continue to support the long-term health of Hong Kong's financial markets. The second half of the year showed signs of encouraging momentum in the IPO market; and the Derivatives Market performed particularly well, recording strong volumes as global investors increasingly looked to manage their regional risk. The final quarter of the year was very good for HKEX, with the business reporting record fourth quarter revenue and profits.

Throughout the year, global market sentiment was impacted by concerns over inflation and slowing economic growth and Hong Kong was not immune to this: Headline ADT in 2022 was 25 per cent down on record 2021 volumes, to \$124.9 billion. However, the HKEX Derivatives Market performed well in 2022 with the number of derivatives contracts traded on HKFE reaching a record high and ADV<sup>3</sup> 33 per cent up on 2021, reflecting both increased hedging needs in a volatile market environment and increased demand for HKEX's newly launched derivatives contracts. The IPO market showed encouraging signs of recovery in the second half of the year with proceeds more than four times those raised in the first half: a total 90 new companies listed on HKEX's markets in 2022, complementing the 29 ETP listings and 368 new debt security listings. The IPO pipeline remains robust, with 93 active applications as at 31 December 2022.

Core business revenue for 2022 was \$18,374 million, 9 per cent lower than the record revenue reported in 2021, though in line with the broader long-term trend. This decline reflected reduced trading and clearing fees from lower Headline ADT and Stock Connect Northbound ADT, a decrease in depository, custody and nominee services fees from e-IPO applications and lower listing fees from fewer newly listed DWs and CBBCs; this was partly offset by higher trading fees from the Derivatives Market and higher net investment income from Margin Funds. HKEX's External Portfolio was impacted by the weak overall performance of the global equities and fixed income markets, recording net fair value losses of \$486 million in 2022 (2021: gains of \$364 million). As a result, total revenue and other

<sup>3</sup> ADV of derivatives contracts traded on the Futures Exchange and ADV of metals contracts traded on the LME were calculated based on the sum of ADV of the individual products.

income declined by 12 per cent against record 2021 numbers, though this was much lower than the percentage drop in Headline ADT, reflecting the successful diversification of the Group's business in recent years.

Operating expenses increased by 12 per cent against 2021, mainly due to higher staff costs and the professional fees incurred in relation to the LME's nickel market incident.

Looking ahead to 2023, sentiment has become more optimistic, reflecting better than expected recent economic data, a relaxation in global monetary and fiscal tightening and Mainland China's stated commitment to continued opening-up. Some uncertainties will persist, particularly around the strength and speed of economic recovery and the fragile situation in Ukraine; however, despite these challenges, HKEX remains very well-positioned to play an increasingly important role in today's fast-evolving, interconnected global markets.

The Group will continue to focus on its three strategic priorities: leveraging its unique China expertise and access; diversifying the business to connect capital with ideas; and actively embracing the trends and innovation that are shaping our industry and society more broadly. We remain a purpose-driven organisation, fully focused on both the success of our community and our vision, to build the Marketplace of the Future – a liquid, vibrant market that customers and stakeholders from across the world want to be part of.

# **Cash Segment**

# **Key Market Indicators**

2022	2021	Change
109.0	146.6	(26%)
46.2	55.1	(16%)
54.2	65.0	(17%)
15.9	20.1	(21%)
15.8	21.6	(27%)
<b>32.2</b> <sup>4</sup>	26.6	21%
1,792	1,949	(8%)
90	97	(7%)
-	1	(100%)
2,257	2,219	2%
340	353	(4%)
2,597	2,572	1%
35,582	42,273	(16%)
85	108	(21%)
_	109.0 46.2 54.2 15.9 15.8 32.2 <sup>4</sup> 1,792 90 - 2,257 340 2,597 35,582	109.0       146.6         46.2       55.1         54.2       65.0         15.9       20.1         15.8       21.6         32.2 <sup>4</sup> 26.6         1,792       1,949         90       97         -       1         2,257       2,219         340       353         2,597       2,572         35,582       42,273

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1 Excludes DWs, CBBCs and warrants (which are included under the Equity and Financial Derivatives segment); and includes Southbound Trading under Stock Connect

2 Includes buy and sell trades under Stock Connect

3 Includes 1 transfer from GEM (2021: 2 transfers)

4 New record high in 2022

|                                         | 2022<br>\$bn | 2021<br>\$bn | Change |
|-----------------------------------------|--------------|--------------|--------|
| Total equity funds raised on Main Board |              |              |        |
| – IPOs                                  | 104.6        | 331.3        | (68%)  |
| – Post-IPO                              | 146.8        | 438.7        | (67%)  |
| Total equity funds raised on GEM        |              |              |        |
| – IPOs                                  | -            | 0.1          | (100%) |
| – Post-IPO                              | 2.7          | 3.2          | (16%)  |
| Total                                   | 254.1        | 773.3        | (67%)  |

# Analysis of Results

### Summary

|                                               | 2022<br>\$m | 2021<br>\$m | Change |
|-----------------------------------------------|-------------|-------------|--------|
| Trading fees and trading tariffs <sup>1</sup> | 3,363       | 4,468       | (25%)  |
| Stock Exchange listing fees <sup>1</sup>      | 992         | 968         | 2%     |
| Market data fees <sup>1</sup>                 | 657         | 635         | 3%     |
| Other revenue and sundry income               | 43          | 60          | (28%)  |
| Total revenue and other income                | 5,055       | 6,131       | (18%)  |
| Operating expenses <sup>2</sup>               | (732)       | (614)       | 19%    |
| EBITDA                                        | 4,323       | 5,517       | (22%)  |
| EBITDA margin                                 | 86%         | 90%         | (4%)   |

1 Excludes DWs, CBBCs and warrants (which are included under the Equity and Financial Derivatives segment)

2 Includes Listing Division costs apportioned to equity products listed on the Stock Exchange

# **Trading Fees and Trading Tariffs**



1 Excludes DWs, CBBCs and warrants (which are included under the Equity and Financial Derivatives segment) and includes Southbound Trading under Stock Connect

Trading fees decreased by \$1,060 million, or 26 per cent, from \$4,019 million to \$2,959 million, reflecting the 26 per cent decrease in equity products' ADT and lower ADT of Stock Connect Northbound Trading. Trading tariffs were down by 10 per cent due to the decrease in number of trades of equity products.

# **Stock Exchange Listing Fees**

|                                           | 2022<br>\$m | 2021<br>\$m | Change |
|-------------------------------------------|-------------|-------------|--------|
| Annual listing fees                       | 755         | 771         | (2%)   |
| Initial and subsequent issue listing fees | 232         | 191         | 21%    |
| Others                                    | 5           | 6           | (17%)  |
| Total                                     | 992         | 968         | 2%     |



Initial and Subsequent Issue Listing Fees



Total number of newly listed companies

Annual listing fees declined by 2 per cent, reflecting lower average fee per company due to lower average nominal values of listed companies, driven by share consolidation and RMB depreciation. Initial and subsequent issue listing fees were up 21 per cent, mainly due to an increase in forfeitures.

# **EBITDA**

Operating expenses increased by 19 per cent reflecting higher Listing Division allocated costs to the segment, due to higher listing fees from IPO forfeitures (Cash Segment) and lower listing fees received from newly listed DWs and CBBCs (Equity and Financial Derivatives Segment); and higher staff costs from payroll adjustments and increased headcount for strategic initiatives. EBITDA margin decreased from 90 per cent to 86 per cent, due to the decrease in total revenue and other income and increase in operating expenses.

# **Business Update**

Despite tighter macro-environment backdrop, geopolitical tension, and the continued impact of the pandemic, the Hong Kong Cash Market remained robust and resilient in 2022. Headline ADT for the Cash Market was \$124.9 billion in 2022, a decrease of 25 per cent against the record 2021 which was skewed by the exceptionally buoyant Q1 2021 trading activity.

# **Stock Connect**

|                                                   | 2022   | 2021   | Change |
|---------------------------------------------------|--------|--------|--------|
| Northbound Trading value (RMBbn)                  | 23,283 | 27,630 | (16%)  |
| Southbound Trading value (\$bn)                   | 7,236  | 9,343  | (23%)  |
| Total revenue and other income <sup>1</sup> (\$m) | 2,268  | 2,724  | (17%)  |

1 \$1,683 million of which arose from trading and clearing activities (2021: \$2,123 million)

Stock Connect operated smoothly and resiliently in 2022, with Northbound and Southbound ADT of RMB100.4 billion and \$31.7 billion respectively, generating revenue and other income of \$2,268 million in 2022 (2021: \$2,724 million).

#### Key developments of Stock Connect in 2022

- ETFs included into Stock Connect: Effective 4 July 2022, eligible ETFs were included in Stock Connect, supporting the continued growth and development of the ETF ecosystem in both Hong Kong and Mainland China. As at 31 December 2022, there were five eligible Southbound ETFs and 83 eligible Northbound ETFs. Since commencement, the ADT for Southbound and Northbound ETFs were \$908 million and RMB67 million respectively, reaching daily record highs of \$5,390 million and RMB504 million on 29 November 2022 and 25 November 2022 respectively
- Trading calendar enhancements: On 12 August 2022, the SFC and the CSRC announced that the trading calendar between Hong Kong and Mainland China in relation to Stock Connect would be enhanced to facilitate trading on all days where both the Hong Kong and Mainland markets are open, subject to regulatory approval. The preparation time for implementing the enhancement would take approximately six months
- Stock Connect expansion: On 19 December 2022, the SFC and the CSRC announced an in-principle agreement to further expand eligible stocks in Stock Connect. Under the proposal, primary-listed international companies in Hong Kong that fulfil certain eligibility criteria, will become eligible for Southbound Trading; constituent stocks of the SSE A-Share Index and SZSE Composite Index that fulfil certain eligibility criteria, as well as A-shares of A+H companies will be eligible for Northbound Trading. The expansion meets growing investor demand for a broader range of products and further deepens the cross-border market accessibility of the Stock Connect programme

# **Market Structure Development**

Throughout the year HKEX continued to enhance its market microstructure to increase its competitiveness and to enhance operational performance. On 13 December 2022, HKEX announced plans to introduce a new HKD-RMB Dual Counter Model and a Dual Counter Market Making Programme in its securities market, further supporting the listing, trading and settlement of RMB counters in Hong Kong. HKEX expects to commence onboarding for these initiatives in 1H 2023, subject to regulatory approval and market readiness.

Following the SFC's announcement to introduce a new Hong Kong Investor Identification Regime (HKIDR) in 2021, HKEX have been working closely with the SFC and market participants to prepare for the implementation of the HKIDR. On 12 December 2022, the SFC announced that the HKIDR will be launched on 20 March 2023. The implementation of the HKIDR is expected to enable more effective and timely surveillance, reinforce market integrity and enhance investor confidence.

# **Issuer Business**

The macroeconomic and geopolitical backdrop led to weak market sentiment and softness in the global IPO market. However, despite this, HKEX remained one of the world's leading fundraising centres, with a total of 90 company listings raising \$104.6 billion in 2022. After a relatively quiet 1H 2022, the Hong Kong IPO market showed good signs of recovery in 2H 2022, with 63 IPOs raising a total of \$84.9 billion, more than four times the proceeds raised in 1H 2022. The IPO pipeline remained robust throughout the year, with 93 active applications as at the end of 2022.

New economy listings continued to dominate Hong Kong's IPO market in 2022, with HKEX welcoming 62 new economy company listings, contributing 65 per cent of IPO funds raised during the year. In 2022, 11 US-listed Chinese companies completed homecoming listings in Hong Kong, including three secondary listings (NIO, Tencent Music and 360 DigiTech) and eight dual-primary listings (Zhihu, Beike, OneConnect, Tuya, Noah, MINISO, Kanzhun and Kingsoft Cloud).

Following the introduction of the listing regime for special purpose acquisition companies (SPACs) at the beginning of the year, HKEX welcomed five new SPAC listings in 2022, raising a total of \$5.0 billion.

On 7 July 2022, HKEX launched a new digital investor relations platform, IR Connect. The new portal supports Hong Kong listed issuers in facilitating regular dialogue with global investors and the international analyst community and promotes enhanced connectivity in Hong Kong's markets. In its initial phase of roll-out, IR Connect provides listed issuers with free access to shareholder analysis and market data, key stock statistics and research ratings.

### **ETF Market Development**

ADT of ETPs, which include ETFs and L&I Products, surged to \$12.0 billion in 2022 (2021: \$7.7 billion), surpassing 2015 as ETPs' best performing year ever. HKEX listed ETPs recorded the highest single day turnover of \$38.1 billion on 16 March 2022. The increase in trading activity was driven by foundational ecosystem investments and initiatives over the years, that have increased product diversity, improved market efficiency and reduced trading costs.

HKEX ETP new product listings continue to expand, with 29 new ETPs listed in 2022, including the first metaverse-themed ETF, the first carbon futures ETF, the first blockchain ETF, as well as Asia's first crypto asset ETFs. The listing of the first Bitcoin futures ETF and Ether futures ETF in Hong Kong marks an important milestone for the virtual asset ecosystem in Asia.

On 3 May 2022, the Volatility Control Mechanism (VCM) was expanded to cover ETPs to further safeguard market integrity from extreme price volatility.

# **Bond Connect**

In 2022, Bond Connect continued to cement its position as a preferred channel for international investors, evidenced by robust growth in trading volumes and the number of newly registered investors, despite macroeconomic volatility.

Northbound Bond Connect ADT has been setting record highs every year since its launch in 2017, reaching RMB32.2 billion in 2022, up 21 per cent compared with 2021. Trading volumes in November 2022 reached a monthly record high of RMB823.9 billion, trading volumes on 19 January 2022 recorded a daily record high of RMB69.8 billion and the number of trading tickets reached a daily record high of 1,123 on 30 November 2022.

Market participation in Northbound Bond Connect continued to grow throughout 2022 and investor coverage continued to expand globally, with Brazil and Greece being the latest additions. As at 31 December 2022, a total of 784 registered investors (at entity level) from over 30 jurisdictions globally participated in Bond Connect, up 8 per cent from 728 registered investors as at 31 December 2021.

### Key developments of Bond Connect in 2022

- On 4 July 2022, Bond Connect celebrated its 5th anniversary with the announcement of the planned launch of Swap Connect, which will enable investors to participate in the financial derivatives markets in the Mainland and Hong Kong
- On 4 July 2022, a new Northbound primary service was launched, which allows offshore investors to participate in China Interbank Bond Market (CIBM) new issuances directly with onshore underwriters through BCCL's ePrime system
- Effective 11 July 2022, BCCL lowered its service fee for Bond Connect for the third time since 2017, demonstrating its commitment to further facilitate international participation in the CIBM and reducing international investors' trading costs

# Listed Bond Market Development

In 2022, 368 new debt securities were listed on the Stock Exchange, with a total issuance amount of \$780 billion. Among these were 75 new green/ESG-related bond listings, raising a total of \$228 billion (2021: 95 listings raising \$283 billion). Total turnover value of debt securities during the year reached \$133 billion, an increase of 28 per cent compared with 2021.

# **Sustainable Finance**

HKEX's Sustainable and Green Exchange (STAGE) continued to gain support from the market and as at 31 December 2022, there were a total of 115 sustainable-focused products displayed on STAGE, including green, social, sustainable or similar bonds, and ESG-related ETPs, from a range of issuers and sectors.

In 2022, HKEX continued its contribution and advocacy towards achieving a low-carbon global economy, with a number of key initiatives set out below.

#### Key initiatives relating to Carbon and ESG in 2022

- In March 2022, HKEX signed a **MOU with the China Emissions Exchange (CEEX)** to jointly explore the development of a voluntary carbon emission reduction programme in the Guangdong-Hong Kong-Macao Greater Bay Area
- In July 2022, HKEX partnered with 12 leading regional corporates and financial institutions to launch the Hong Kong International Carbon Market Council. The focus of the collaboration was to develop an international carbon market, contributing to the realisation of carbon neutrality goals and the development of the green and sustainable finance ecosystem in Hong Kong, Mainland China and beyond
- On 28 October 2022, HKEX launched Core Climate, a new international carbon marketplace that seeks to connect capital with climate-related products and opportunities in Hong Kong, Mainland China, Asia and beyond. Core Climate aims to provide an easy-access, one stop and integrated carbon marketplace that includes trading, custody and settlement functions for corporates, investors and project owners across the climate value chain. Since its launch, the platform recorded more than 40 trades by over 20 participants, representing a total volume of around 400,000 tonnes of carbon credits
- Throughout 2022, **HKEX hosted a number of 'ESG Academy' events**, promoting strong ESG stewardship amongst listed issuers and the listed issuer community. These included events focused on De-carbonisation and Diversity
- HKEX hosted its inaugural HKEX Impact Summit in December, connecting corporate change-makers and social innovators, facilitating a valuable two-way dialogue on corporate philanthropy and fostering stronger bonds between businesses and society. The Impact Summit explored a broad range of topics on philanthropy trends, new models of non-governmental organisation (NGO) governance and projects that exemplify the creation of shared value

# Market Surveillance and Compliance

Throughout 2022, HKEX has continued its efforts in promoting transparency and a strong compliance culture across our business and markets, with a number of key initiatives, as set out below.

#### Key initiatives on promoting market surveillance and compliance in 2022

- Conducted the 2022 Annual Attestation and Inspection Programme with a focus on three areas: (1) China Connect rules, (2) risk management and (3) clearing rules obligations
- Migrated various surveillance related functions to an enhanced Electronic Communication Platform (ECP), optimising the client experience
- Developed and implemented new Large Open Position (LOP) Reporting arrangements for Derivatives Holiday Trading
- Hosted several education seminars and compliance sharing session, highlighting recent updates to HKEX rules, regulations and compliance issues

# **Listing Regulation**

In 2022, the Stock Exchange issued various proposals and conclusions on Listing Rules amendments, as set out in the following table.

### Key Proposals and Conclusions in 2022

|                                                                                                          | Consultation<br>paper <sup>1</sup> | Consultation conclusions <sup>1</sup> | Effective date<br>of changes<br>(if any) |
|----------------------------------------------------------------------------------------------------------|------------------------------------|---------------------------------------|------------------------------------------|
| <ul> <li>Proposed Amendments to Listing Rules relating to Share<br/>Schemes of Listed Issuers</li> </ul> | October 2021                       | July 2022                             | 1 January 2023                           |
| Listing Regime for Specialist Technology Companies                                                       | October 2022                       | 1H 2023<br>(tentative)                | -                                        |
| Proposals to Expand the Paperless Listing Regime and<br>Other Rule Amendments                            | December 2022                      | 2H 2023<br>(tentative)                | -                                        |

1 All the consultation papers and conclusions are available under the News Centre (Market Consultations) section of the HKEX Market website.

#### Key Initiatives by the Stock Exchange to Promote Issuers' Self-compliance with the Listing Rules

- Published new guidance letters on (i) guidance for overseas issuers; (ii) change of listing status from secondary listing to dual-primary or primary listing; and (iii) Special Purpose Acquisition Companies
- Published semi-annual (i) Listing Division Newsletter; (ii) Listed Issuer Regulation Newsletter; and (iii) Enforcement Bulletin
- Published (i) Review of Issuers' Annual Reports 2021 and (ii) 2022 Analysis of ESG Practice Disclosure
- Launched "Board Diversity & Inclusion in Focus" repository to aid access to information on and transparency around board diversity
- Launched an e-learning module on trading arrangements for corporate actions as part of the new e-learning series on ongoing compliance requirements under the Listing Rules

Details of the consultations and other main policy changes and updates arising in 2022, as well as the proposals under review in 2023 and beyond, will be set out in the 2022 Listing Committee Report.

# **IPO Processing, Compliance and Monitoring**

The following tables illustrate the work of the Stock Exchange in processing new listings and monitoring issuers' compliance for the purposes of maintaining an orderly, informed, and fair market under Section 21 of the SFO.

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#### Stock Exchange's IPO Work

|                                                                                                          | 2022 | 2021 |
|----------------------------------------------------------------------------------------------------------|------|------|
| Number of listing applications vetted <sup>1</sup>                                                       | 318  | 408  |
| Number of applications brought to the Listing Committees (or their delegates) for decisions <sup>2</sup> | 126  | 118  |
| <ul> <li>within 120 calendar days</li> </ul>                                                             | 21   | 48   |
| <ul> <li>between 121 to 180 calendar days</li> </ul>                                                     | 28   | 47   |
| <ul> <li>after more than 180 calendar days</li> </ul>                                                    | 77   | 23   |
| <ul> <li>Number of applications for which approval was granted in principle <sup>3</sup></li> </ul>      | 153  | 153  |
| Number of requests for guidance from listing applicants or their advisers seeking clarifications of      |      |      |
| listing matters                                                                                          | 111  | 209  |
| <ul> <li>Average response time (in business days)</li> </ul>                                             | 14   | 14   |
| Number of listing applications for transfer of listing from GEM to Main Board accepted                   | 1    | 5    |
| Applications listed <sup>4</sup>                                                                         | 120  | 132  |
| <ul> <li>New listing applications rejected <sup>5</sup></li> </ul>                                       | -    | 1    |
| New listing applications withdrawn                                                                       | 5    | 9    |
| New listing applications returned                                                                        | -    | 2    |
| Application in process at year-end                                                                       | 65   | 131  |

1 Comprises 187 (2021: 316) new applications and 131 (2021: 92) existing applications brought forward from previous year

2 Refers to listing applications heard by the Listing Committees (or their delegates) for the first time and excludes Chapter 20 listing applications

3 Includes 27 (2021: 35) investment vehicles. At the end of 2022, 28 (2021: 23) approved applications had not yet been listed, and 32 (2021: 15) approved applications had lapsed during the year

4 Includes 30 (2021: 34) investment vehicles listed on Main Board and no deemed new listings (2021: Nil)

5 No rejection decision in 2022 (2021: Nil) was subsequently reversed upon review.

#### Number of Compliance and Monitoring Actions

|                                                                                              | 2022   | 2021   |
|----------------------------------------------------------------------------------------------|--------|--------|
| Announcements of issuers vetted                                                              | 55,954 | 65,315 |
| Circulars of issuers vetted                                                                  | 3,182  | 3,296  |
| <ul> <li>Share price and trading volume monitoring actions undertaken<sup>1</sup></li> </ul> | 7,045  | 12,541 |
| Complaints handled                                                                           | 1,098  | 1,075  |
| Cases (including complaints) referred to Listing Enforcement Department for investigation    | 71     | 93     |

1 In 2022, monitoring actions undertaken included 424 enquiries (2021: 608) on unusual share price and trading volume movements, and the actions undertaken led to 24 resumption announcements (2021: 30) on trading suspensions.

#### Long Suspension

|                                                                                                                                        |      | oard | GE   | M    |
|----------------------------------------------------------------------------------------------------------------------------------------|------|------|------|------|
| Status of Long Suspended Companies                                                                                                     | 2022 | 2021 | 2022 | 2021 |
| Resumption of trading of securities during the year                                                                                    | 31   | 26   | 7    | 6    |
| Cancellation of listing after expiry of prescribed remedial periods during the year                                                    | 30   | 18   | 10   | 12   |
| Cancellation of listing under grandfathered provisions during the year<br>(Main Board Rule 6.01A(2)(a) or (c) or GEM Rule 9.14A(2)(b)) | 6    | 3    | -    | 1    |
| Voluntary withdrawal of listing during the year                                                                                        | 2    | 2    | -    | -    |
| Companies suspended for 3 months or more at year-end                                                                                   | 89   | 90   | 17   | 16   |

Updates on the work in respect of listed companies' compliance and insights and observations that may assist listed companies in their own compliance, can be found in the semi-annual "Listed Issuer Regulation Newsletter".

# **Listing Enforcement**

The enforcement statistics set out below represent a high level overview of the enforcement work undertaken in 2022 by the Stock Exchange.

#### **Enforcement Statistics**

|                                 | 2022 | 2021 |
|---------------------------------|------|------|
| Cases <sup>1, 2, 3</sup>        | 141  | 164  |
| Public sanctions <sup>4</sup>   | 29   | 35   |
| Regulatory letters <sup>5</sup> | 19   | 12   |

1 Figures represent cases handled by Listing Enforcement in 2022 (including those carried over from the previous year and those ongoing at year-end).

2 At the end of 2022, there were 37 ongoing investigations (2021: 61).

3 Out of the enforcement cases opened in 2022, none of them (2021: 3) originated from complaint.

4 The number of investigation cases that resulted in a public sanction. Actions taken at a lower level in the same case, e.g., private reprimand, are not included.

5 The number of cases involving issuance of at least one regulatory letter (i.e., a warning or guidance letter) where, following investigation, disciplinary proceedings before the Listing Committee were not considered appropriate against any party. These letters are recorded as part of the compliance history for the relevant party.

Further details and information relating to enforcement work (including the Stock Exchange's general approach, disciplinary procedures and recent cases) can be found on the HKEX Market website and via the semi-annual publication "Enforcement Bulletin", and will be included in the 2022 Listing Committee Report.

# **Costs of the Listing Function**

The costs associated with the front line regulation of listed issuers, performed by the Listing Committee and the Listing Division, are absorbed by the Cash and Equity and Financial Derivatives segments in proportion to the listing fee income of the two segments.

# **Equity and Financial Derivatives Segment**

# **Key Market Indicators**

|                                                                                               | 2022                    | 2021              | Change |
|-----------------------------------------------------------------------------------------------|-------------------------|-------------------|--------|
| ADT of DWs, CBBCs and warrants traded on the Stock Exchange (\$bn                             | ) 15.9                  | 20.1              | (21%)  |
| Average daily number of trades of DWs, CBBCs and warrants traded on the Stock Exchange ('000) | 351                     | 416               | (16%)  |
| ADV of derivatives contracts traded on the Futures Exchange <sup>1</sup><br>('000 contracts)  | <b>712</b> <sup>2</sup> | 536               | 33%    |
| ADV of stock options contracts traded on the Stock Exchange ('000 contracts)                  | 588                     | 637               | (8%)   |
| Number of newly listed DWs                                                                    | 11,874                  | 16,684            | (29%)  |
| Number of newly listed CBBCs                                                                  | 35,017                  | 42,807            | (18%)  |
| ADV of contracts traded during After-Hours Trading (AHT) <sup>1</sup> ('000 contracts)        | <b>107</b> <sup>2</sup> | 68                | 57%    |
|                                                                                               | At<br>31 Dec 2022       | At<br>31 Dec 2021 | Change |
| Open interest of futures and options <sup>1</sup> ('000 contracts)                            | 10,938                  | 9,916             | 10%    |

1 Excludes London Metal Mini Futures, Gold Futures, Silver Futures and Iron Ore Futures contracts (which are included under the Commodities segment)

2 New record high in 2022

# Analysis of Results

# Summary

|                                                                  | 2022<br>\$m | 2021<br>\$m | Change |
|------------------------------------------------------------------|-------------|-------------|--------|
| Trading fees and trading tariffs <sup>1</sup>                    | 2,050       | 2,027       | 1%     |
| Stock Exchange listing fees                                      | 923         | 1,217       | (24%)  |
| Market data fees <sup>1</sup>                                    | 196         | 183         | 7%     |
| Other revenue and sundry income                                  | 7           | 9           | (22%)  |
| Total revenue and other income                                   | 3,176       | 3,436       | (8%)   |
| Less: Transaction-related expenses                               | (165)       | (126)       | 31%    |
| Total revenue and other income less transaction-related expenses | 3,011       | 3,310       | (9%)   |
| Operating expenses <sup>2</sup>                                  | (695)       | (665)       | 5%     |
| EBITDA                                                           | 2,316       | 2,645       | (12%)  |
| EBITDA margin <sup>3</sup>                                       | 77%         | 80%         | (3%)   |

1 Excludes cash equities (which are included under the Cash segment)

2 Includes Listing Division costs apportioned to DWs, CBBCs and warrants listed on the Stock Exchange

3 EBITDA margin is calculated based on EBITDA divided by total revenue and other income less transaction-related expenses.

# **Trading Fees and Trading Tariffs**



1 Excludes London Metal Mini Futures, Gold Futures, Silver Futures and Iron Ore Futures contracts (which are included under the Commodities segment)

Excludes trading fees and trading tariffs allocated to the Post Trade segment (Derivatives contracts traded on the Futures Exchange – 2022:
 \$352 million; 2021: \$260 million; stock options contracts – 2022: \$95 million; 2021: \$104 million)

Trading fees and trading tariffs for the segment are generated from both the trading of derivatives on the Stock Exchange (DWs, CBBCs, warrants, and stock options); and the trading of futures and options on the Futures Exchange. A portion of the trading fees and trading tariffs for futures and options contracts is allocated to the Post Trade segment, as the trading and clearing fees of these products are bundled together in the form of trading fees and trading tariffs.

Trading fees and trading tariffs from DWs, CBBCs and warrants decreased by \$153 million, or 20 per cent, to \$629 million (2021: \$782 million), attributable to the 21 per cent decrease in ADT and the 16 per cent decrease in the average daily number of trades.

Derivatives trading fees of the Futures Exchange increased by \$165 million, or 18 per cent, reflecting the increase in the number of derivatives contracts traded during the year, reaching a record high in 2022. The increase was partly offset by lower fees per contract, attributable to fee waivers or discounts granted for certain newly launched products and a lower proportion of higher fee contracts (including HSI futures and options) being traded in 2022. Together with the trading fees allocated to the Post Trade segment and the clearing fees received from Participants, the total trading and clearing fees

generated from derivatives contracts traded on the Futures Exchange amounted to \$1,489 million in 2022 (2021: \$1,225 million).

Despite an 8 per cent decrease in ADV, trading tariffs of stock options contracts rose by \$11 million, or 4 per cent, as a larger proportion of higher fee contracts was traded in 2022.

# **Stock Exchange Listing Fees**



Stock Exchange listing fees for the segment are mainly derived from initial and subsequent issue listing fees for DWs and CBBCs. The fees decreased by \$294 million or 24 per cent, reflecting the decrease in number of newly listed DWs and CBBCs compared with the record 2021.

# **EBITDA**

Transaction-related expenses include licence fees and other costs which directly vary with trading transactions. These expenses increased by \$39 million, or 31 per cent, mainly due to an increase in licence fees for the higher number of derivatives contracts traded.

Operating expenses increased by \$30 million, 5 per cent, due to higher staff costs associated with new initiatives and an increase in IT maintenance costs, as a result of upgrades to the Derivatives platform and networks, partly offset by lower Listing Division allocated costs. EBITDA margin decreased from 80 per cent to 77 per cent, reflecting the decrease in total revenue and other income less transaction-related expenses and increase in operating expenses.

# **Business Update**

Driven by the increased popularity of newly launched products and an increase in cross product trading activities, the total number of futures and options contracts traded<sup>4</sup> in 2022 reached a record high of 319,847,360, up 11 per cent on 2021. HSCEI Futures and Hang Seng TECH Index Futures were major contributors to growth, reaching record high ADV of 183,068 contracts and 75,923 contracts respectively, a 43 per cent and 416 per cent increase compared with 2021 respectively.

In addition, ADV of derivatives contracts traded on HKFE<sup>4</sup> and ADV of contracts traded during AHT<sup>4</sup> also recorded all-time highs in 2022, reaching 712,123 contracts and 107,474 contracts respectively.

# New Record Highs – Full Year Trading Volume

|                                        | 2022Pre-2022Number of contractsNumber of contracts |             |        |
|----------------------------------------|----------------------------------------------------|-------------|--------|
| Total Futures and Options <sup>1</sup> | 319,847,360                                        | 295,820,120 | (2018) |
| HSCEI Futures                          | 45,034,706                                         | 37,451,281  | (2018) |
| Hang Seng TECH Index Futures           | 18,677,024                                         | 3,650,057   | (2021) |
| RMB Currency Futures - USD/CNH Futures | 3,499,105                                          | 1,938,891   | (2019) |
| Weekly HSI Options                     | 2,734,821                                          | 2,078,915   | (2021) |
| MSCI Taiwan (USD) Index Futures        | 1,929,068                                          | 1,566,224   | (2021) |

1 Excludes London Metal Mini Futures, Gold Futures, Silver Futures and Iron Ore Futures contracts (which are included under the Commodities segment)

<sup>4</sup> Excludes London Metal Mini Futures, Gold Futures, Silver Futures and Iron Ore Futures contracts (which are included under the Commodities segment)

# New Record Highs – Single-day Trading Volume and Open Interest

|                                                        | Single-day Tra | ding Volume | <u>Open i</u> | nterest   |
|--------------------------------------------------------|----------------|-------------|---------------|-----------|
|                                                        | Date           | Number of   | Date          | Number of |
|                                                        | (2022)         | contracts   | (2022)        | contracts |
| HSI Futures Options                                    | 26 May         | 49,375      | 15 Dec        | 141,586   |
| Mini HSI Futures                                       | N/A            | N/A         | 29 Sep        | 31,150    |
| Weekly HSI Options                                     | 4 Nov          | 29,065      | 9 Dec         | 19,701    |
| HSCEI Futures                                          | 28 Nov         | 578,563     | 28 Dec        | 758,877   |
| HSCEI Futures Options                                  | 5 Dec          | 70,542      | 15 Dec        | 1,079,146 |
| Mini HSCEI Options                                     | 25 Nov         | 40,319      | 28 Nov        | 84,583    |
| Hang Seng TECH Index Futures                           | 25 Oct         | 306,517     | 29 Dec        | 187,004   |
| Hang Seng TECH Index Options                           | 28 Sep         | 6,947       | 25 Nov        | 38,788    |
| MSCI China A 50 Connect (USD)<br>Index Futures         | 16 Feb         | 65,682      | 18 Jan        | 42,718    |
| MSCI Japan Net Total Return<br>(USD) Index Futures     | 15 Jun         | 31,792      | 17 Jun        | 18,262    |
| MSCI China Net Total Return<br>(USD) Index Futures     | 13 Dec         | 23,566      | 14 Jun        | 34,522    |
| MSCI Hong Kong Net Total<br>Return (USD) Index Futures | 13 Sep         | 10,040      | 13 Sep        | 8,691     |
| MSCI Taiwan Net Total Return<br>(USD) Index Futures    | N/A            | N/A         | 16 Dec        | 31,697    |
| RMB Currency Futures -<br>USD/CNH Futures              | 28 Oct         | 47,104      | N/A           | N/A       |
| RMB Currency Futures - Mini<br>USD/CNH Futures         | 25 Apr         | 30,203      | 14 Mar        | 11,480    |

### Average Daily Volume of Major Futures and Options Contracts



# **Equity Futures and Options Market Development**

The Hang Seng TECH Index Products continued to gain traction during the year, recording several daily record highs for volume and open interest (OI). Enhancements were made to the product suite in November 2022 to allow investors to better manage their risks, including the introduction of Hang Seng TECH Index Options in the AHT Session, and the introduction of additional contract months for Hang Seng TECH Index Futures and Hang Seng TECH Index Options.

Since the introduction of the two physically-settled Options on Futures Contracts (HSI Futures Options and HSCEI Futures Options) in 2021, ADV of the two products increased more than four fold compared

with 2021<sup>5</sup> and OI of these products at 31 December 2022 increased more than seven fold compared with 31 December 2021. HSCEI Futures Options attained several daily record volume highs throughout 2022, with the latest record being 70,542 contracts traded on 5 December 2022. In view of the increasing popularity of these products, HKEX enhanced its offering with the introduction of Hang Seng TECH Index Futures Options on 28 November 2022. Since launch, 10,641 contracts have been traded; and OI has been steadily increasing and stood at 9,761 contracts as of 31 December 2022.

The trading fee waiver on MSCI China A 50 Connect (USD) Index Futures has been replaced by a 50 per cent market-wide trading fee discount, effective 1 July 2022. ADV of this product reached 16,882 contracts in 2022, a 46 per cent increase against ADV in 2021<sup>6</sup>; and the number of contracts traded reached a daily record high of 65,682 contracts on 16 February 2022.

# **Market Structure Development**

Derivatives Holiday Trading was successfully launched on 9 May 2022. The initiative enabled investors to actively manage their non-HKD derivatives portfolios during Hong Kong holidays. There have been seven holiday trading days since launch and operations have been smooth. A total of 66,509 contracts were traded during the holiday trading days, and the ADV of the products traded on the seven holiday trading days was close to 40 per cent of the ADV of the same products during 2022.

In view of the increasing liquidity and volatility of the Hang Seng TECH Index Futures market, the Futures Exchange applied a Volatility Control Mechanism and Dynamic Price Banding Mechanism to the market, effective from 17 October 2022. These mechanisms are designed to protect the market from extreme volatility and prevent potential market disruption caused by error orders in the event that prices significantly deviate from the prevailing market.

On 21 November 2022, HKEX revised the T Session closing time from 16:30 to 18:30 for selected MSCI Price Return, MSCI Net Total Return and Currency Futures and Options. This revision allows investors to capture the changes in the underlying market movements in the same trading session without interruption, so as to better manage their exposures and to minimise any mark-to-market discrepancy between the futures/options and underlying instruments.

# **Fixed Income and Currency (FIC) Development**

In 2022, the RMB currency derivatives market continued to grow, reflecting increased market demand for currency risk management tools to hedge the volatile CNH FX spot market. USD/CNH Futures contract celebrated its 10-year anniversary in September 2022 and its trading volume set a new annual record of 3,499,105 contracts in 2022, more than double compared with 2021; the contract also reached a daily record high of 47,104 contracts on 28 October 2022. The cash-settled mini USD/CNH Futures contract, which was launched in 2021, continued to gain traction and set a daily record high of 30,203 contracts on 25 April 2022; its annual trading volume in 2022 was 1,001,190 contracts, up 26 per cent compared with 2021.

Following the support explicitly expressed by the CSRC in September 2022, HKEX plans to launch China Treasury Bond Futures, which will provide international investors additional risk management tools for China's onshore bond markets.

# **Structured Products**

Hong Kong was the world's largest structured products market for the 16th consecutive year. Despite the challenging market conditions in 2022, the structured products market remained vibrant and diverse. During 2022, a total of 46,891 structured products were listed. ADT of CBBCs, DWs and warrants was \$15.9 billion in 2022, accounting for 13 per cent of Headline ADT.

Throughout the year, HKEX strived to expand and diversify the range of products and underlyings, providing customers and global investors with more choice and opportunity in Hong Kong's markets. On 8 August 2022, HKEX welcomed the listing of Hong Kong's first A-share structured products, the MSCI China A 50 Connect Index DWs. The products offer investors a capital efficient China A-share

<sup>5</sup> During the period since launch on 23 August 2021 to 31 December 2021

<sup>6</sup> During the period since launch on 18 October 2021 to 31 December 2021

risk management tool, marking a significant milestone in the development of Hong Kong's A-share ecosystem. As at 31 December 2022, there were a total of 75 DWs listed by seven issuers.

HKEX expanded its range of CBBCs by reintroducing US indices in 2022, broadening investor opportunity to hedge overseas market risk. US index CBBCs made their return on 14 September 2022, with a total of 68 new listings up to 31 December 2022. US index structured products recorded an ADT of \$171.2 million in 2022.

# **Commodities Segment**

# **Key Market Indicators**

|                                                          | 2022<br>'000 lots | 2021<br>'000 lots | Change |
|----------------------------------------------------------|-------------------|-------------------|--------|
| ADV of metals contracts traded on the LME                |                   |                   |        |
| Aluminium                                                | 210               | 229               | (8%)   |
| Copper                                                   | 119               | 120               | (1%)   |
| Zinc                                                     | 85                | 87                | (2%)   |
| Nickel                                                   | 47                | 65                | (28%)  |
| Lead                                                     | 39                | 41                | (5%)   |
| Others                                                   | 6                 | 5                 | 20%    |
| Total chargeable ADV excluding Admin Trades <sup>1</sup> | 506               | 547               | (7%)   |
| Chargeable Admin Trades <sup>1</sup>                     | 28                | 25                | 12%    |
| Other non-chargeable trades                              | -                 | 1                 | (100%) |
| Total ADV                                                | 534               | 573               | (7%)   |

1 Admin Trades are chargeable at lower fee rate of US\$0.04 per contract.

|                                    | At<br>31 Dec 2022<br>'000 lots | At<br>31 Dec 2021<br>'000 lots | Change |
|------------------------------------|--------------------------------|--------------------------------|--------|
| Total futures market open interest | 1,438                          | 1,702                          | (16%)  |

# **Analysis of Results**

# Summary

|                                                     | 2022<br>\$m | 2021<br>\$m | Change |
|-----------------------------------------------------|-------------|-------------|--------|
| Trading fees and trading tariffs                    | 977         | 1,072       | (9%)   |
| Market data fees                                    | 228         | 216         | 6%     |
| Other revenue and sundry income:                    |             |             |        |
| Commodities stock levies and warehouse listing fees | 43          | 78          | (45%)  |
| LME financial OTC booking fees                      | 45          | 53          | (15%)  |
| Others                                              | 51          | 59          | (14%)  |
| Total revenue and other income                      | 1,344       | 1,478       | (9%)   |
| Operating expenses                                  | (751)       | (695)       | 8%     |
| EBITDA                                              | 593         | 783         | (24%)  |
| EBITDA margin                                       | 44%         | 53%         | (9%)   |

# **Trading Fees and Trading Tariffs**



LME trading fees declined by \$98 million, down 9 per cent due to the 7 per cent decrease in chargeable ADV of metals contracts traded in 2022 and lower average fees per contract.

- 1 Includes London Metal Mini Futures, Gold Futures, Silver Futures and Iron Ore Futures contracts
- 2 Chargeable ADV excludes Admin Trades and other non-chargeable trades.

# **Other Revenue and Sundry Income**

Commodities stock levies and warehouse listing fees declined by \$35 million, or 45 per cent, due to lower warehouse stock levels and lower LMEsword warrant activities, driven by higher demand of metals.

### **EBITDA**

Operating expenses increased by \$56 million, up 8 per cent, primarily due to legal and professional fees relating to the nickel market incident in early 2022, partly offset by lower operating costs incurred by the LME due to depreciation of sterling. EBITDA margin decreased from 53 per cent to 44 per cent, due to the decrease in total revenue and other income and increase in operating expenses.

# **Business Update**

### LME

Since the Ring reopened on 6 September 2021, the LME's market has adjusted well to the "split pricing" approach, where Official Prices are established on the Ring and Closing Prices are established electronically.

Unprecedented events in the LME's nickel market on 8 March 2022 led to the LME's decision to suspend trading, having concluded that the market had become disorderly, and ensure that no trading arrangements made on the LME's nickel market that morning prior to the suspension should result in binding contracts under the LME Rulebook. Since then the LME and LME Clear have put in place several measures to ensure an orderly resumption of trading for nickel. These include the application of daily upper and lower price limits for outright nickel contracts (as well as in all base metals contracts); improved visibility of both on-exchange and OTC client positions in nickel; and additional reporting in relation to aggregate on-exchange and OTC nickel positions. The LME and LME Clear separately commissioned an independent review conducted by Oliver Wyman, which sought to (i) form a thorough understanding of what led to the market conditions in the nickel market at the time; (ii) consider the factors that contributed to these conditions; (iii) identify actions that could be taken by the LME and LME Clear to reduce the likelihood of similar market conditions arising in the future; and (iv) mitigate and minimise the impact of them in the event they were to arise. Oliver Wyman's report was published on 10 January 2023 and the LME and LME Clear are preparing an implementation plan setting out how it proposes to deliver against the recommendations in the Oliver Wyman report, which will be published to the market by the end of Q1 2023.

LMEpassport, the LME's digital register for metal data, has continued to gain traction in 2022. More than 30,000 Certificates of Analysis are now available in the system and LMEpassport has also seen strong growth in ESG disclosures. The system now supports a range of new sustainability certifications, enabling greater comparability in carbon emissions data, increasing transparency of brands using scrap material, and allowing disclosure opportunities to non-LME brands. LMEpassport's first artisanal mining (ASM) standard has also been integrated into the platform, supporting the formalisation of ASM in supply chains. As of 31 December 2022, 220 LME-listed brands have published over 375 disclosures under the LME's sustainability taxonomy.

The first reporting deadline for the LME's responsible sourcing rules was on 30 June 2022: these are a mandatory set of requirements that aims to ensure that all LME listed brands meet globally accepted standards for responsible sourcing; and that all LME listed brands must adhere to in order to remain listed on the LME. 96 per cent of LME listed brands complied with the first reporting deadline. Those not complying are in the process of being suspended or delisted, depending on their situation.

In October 2022, the LME and LME Clear committed to its own 2040 net-zero target (for scope 1, 2 and 3 emissions), and will use the Science Based Targets initiative to formalise its strategy.

LME's new contracts, steel scrap and steel rebar, saw volumes increase by 60 per cent and 66 per cent compared with 2021 respectively; new liquidity programmes launched on 1 November 2022 have been designed to build on this to attract new participants and significantly improve liquidity accessible on-screen. The LME also launched 15-minute delayed quotes from LMEselect on Ime.com for a selection of steel contracts and several initiatives to increase market engagement including tailored reports and focused events.

### **HKFE Commodities Product Development**

In Hong Kong, USD Gold Futures volumes grew substantially, with 423,547 contracts traded in 2022, compared with 74,272 in 2021. On 17 March 2022, HKEX aligned the price band across all London Mini Futures to 15 per cent with reference to the T Session closing price. To further facilitate a better price discovery process with minimal disruption to participants' operations, there was a further enhancement to this mechanism on 5 August 2022 – if the deviation between the T Session closing price at HKEX and the latest LME closing price exceeds 5 per cent, HKEX will use the LME closing price as the reference price to determine the next day's price band range. This is especially useful when there is significant price movement on the London Mini Futures during Hong Kong public holidays.

### QME

Despite the Covid-19 pandemic and lockdowns in Shenzhen and Shanghai in 2022, total trading turnover at QME grew by 144 per cent year-on-year, reaching RMB79.4 billion in 2022. With the successful launch of a new soybean product in April 2022, QME's product portfolio was further expanded this year. In July 2022, QME carried out a pilot case for RMB settlement in cross-border commodities trading via Cross-Border Interbank Payment System (CIPS), China's onshore yuan clearing and settlement system.

# Post Trade Segment

# **Key Market Indicators**

|                                                                                          | 2022  | 2021  | Change |
|------------------------------------------------------------------------------------------|-------|-------|--------|
| ADT on the Stock Exchange (\$bn)                                                         | 124.9 | 166.7 | (25%)  |
| Average daily number of Stock Exchange trades ('000)                                     | 2,143 | 2,365 | (9%)   |
| Average value per Stock Exchange trade (\$'000)                                          | 58    | 71    | (18%)  |
| Average daily value of Settlement Instructions (SIs) for<br>Stock Exchange trades (\$bn) | 293.0 | 403.2 | (27%)  |
| Average daily number of SIs for Stock Exchange trades ('000)                             | 112   | 127   | (12%)  |
| Average value per SI for Stock Exchange trades (\$'000)                                  | 2,613 | 3,171 | (18%)  |
| ADT of Northbound Trading of Stock Connect <sup>1</sup> (RMBbn)                          | 100.4 | 120.1 | (16%)  |
| Average daily value of SIs for Northbound Trading of<br>Stock Connect (RMBbn)            | 27.4  | 32.5  | (16%)  |
| Portfolio values of Northbound Trading of Stock Connect<br>at 31 Dec (RMBbn)             | 2,242 | 2,760 | (19%)  |
| Portfolio values of Southbound Trading of Stock Connect<br>at 31 Dec (\$bn)              | 2,233 | 2,250 | (1%)   |
| Chargeable ADV <sup>2</sup> of metals contracts traded on the LME ('000 lots)            | 506   | 547   | (7%)   |

1 Includes buy and sell trades under Stock Connect

2 Chargeable ADV excludes Admin Trades (which are chargeable at a lower clearing fee rate of US\$0.02 per contract) and other nonchargeable trades.

# **Analysis of Results**

### Summary

|                                                                                               | 2022<br>\$m | 2021<br>\$m | Change |
|-----------------------------------------------------------------------------------------------|-------------|-------------|--------|
| Clearing and settlement fees                                                                  | 4,335       | 5,214       | (17%)  |
| Depository, custody and nominee services fees                                                 | 1,260       | 1,543       | (18%)  |
| Trading fees and trading tariffs – allocated from<br>Equity and Financial Derivatives segment | 447         | 364         | 23%    |
| Other revenue and sundry income                                                               | 196         | 278         | (29%)  |
|                                                                                               | 6,238       | 7,399       | (16%)  |
| Net investment income                                                                         | 1,404       | 596         | 136%   |
| Total revenue and other income                                                                | 7,642       | 7,995       | (4%)   |
| Less: Transaction-related expenses                                                            | (11)        | (26)        | (58%)  |
| Total revenue and other income less transaction-related                                       |             |             |        |
| expenses                                                                                      | 7,631       | 7,969       | (4%)   |
| Operating expenses                                                                            | (938)       | (844)       | 11%    |
| EBITDA                                                                                        | 6,693       | 7,125       | (6%)   |
| EBITDA margin <sup>1</sup>                                                                    | 88%         | 89%         | (1%)   |

1 EBITDA margin is calculated based on EBITDA divided by total revenue and other income less transaction-related expenses.



# **Clearing and Settlement Fees**

1 Chargeable ADV excludes Admin Trades (which are chargeable at a lower clearing fee rate of US\$0.02 per contract) and other nonchargeable trades.

Clearing and settlement fees for the Cash Market (including Stock Exchange trades and Northbound Trading) decreased by 19 per cent to \$3,157 million in 2022 (2021: \$3,883 million); and total fees for SIs decreased by 17 per cent to \$624 million in 2022 (2021: \$751 million). The decreases were primarily driven by reduced number of transactions, and lower clearing fees from Stock Connect Northbound Trading due to lower trading volume.

Clearing fees for LME Clear fell by 9 per cent due to the decrease in chargeable ADV of metals contracts traded on the LME.

# **Depository, Custody and Nominee Services Fees**

Depository, custody and nominee services fees do not directly vary with changes in trading volumes. The fees declined by \$283 million, or 18 per cent, to \$1,260 million in 2022 (2021: \$1,543 million), mainly due to a decrease in e-IPO service fees from lower number of e-IPO applications.

# **Trading Fees and Trading Tariffs**

Trading fees and trading tariffs allocated from the Equity and Financial Derivatives segment for clearing derivatives products rose by 23 per cent, due to a 33 per cent increase in ADV of derivatives contracts traded on the Futures Exchange, partly offset by an 8 per cent decrease in ADV of stock options traded (see commentary in the Equity and Financial Derivatives segment).

### **Other Revenue and Sundry Income**

Other revenue decreased by \$82 million, mainly due to lower accommodation income collected from LME Clear CPs on cash collateral as USD investment returns rose above the benchmark interest rate stipulated in the rules of LME Clear.

### **Net Investment Income**



The increase in the average size of Margin Funds during the year was attributable to higher average Margin Fund size of LME Clear, due to higher margin requirements per contract, reflecting heightened volatility; and higher average HKCC Margin Fund size, due to increase in open interests, partly offset by lower margin requirements per contract.

The increase in the average size of Clearing House Funds during the year was attributable to higher average fund size of LME Clear due to changes in risk exposures.

### The analysis of net investment income is as follows:

|                             | 2022                   |                                   |                        |                                   |              |
|-----------------------------|------------------------|-----------------------------------|------------------------|-----------------------------------|--------------|
|                             | HK Clearin             | ng Houses                         | LME C                  | Clear                             |              |
|                             | Margin<br>Funds<br>\$m | Clearing<br>House<br>Funds<br>\$m | Margin<br>Funds<br>\$m | Clearing<br>House<br>Funds<br>\$m | Total<br>\$m |
| Net investment income from: |                        |                                   |                        |                                   |              |
| - Cash and bank deposits    | 1,037                  | 47                                | 90                     | 23                                | 1,197        |
| - Debt securities           | 106                    | 32                                | 69                     | -                                 | 207          |
| Total net investment income | 1,143                  | 79                                | 159                    | 23                                | 1,404        |
| Net investment return       | 1.00%                  | 0.78%                             | 0.14%                  | 0.18%                             | 0.55%        |

|                             | 2021                   |                                   |                        |                                   |              |
|-----------------------------|------------------------|-----------------------------------|------------------------|-----------------------------------|--------------|
|                             | HK Clearing Houses     |                                   | LME Clear              |                                   |              |
|                             | Margin<br>Funds<br>\$m | Clearing<br>House<br>Funds<br>\$m | Margin<br>Funds<br>\$m | Clearing<br>House<br>Funds<br>\$m | Total<br>\$m |
| Net investment income from: |                        |                                   |                        |                                   |              |
| - Cash and bank deposits    | 464                    | 5                                 | 74                     | 11                                | 554          |
| - Debt securities           | 32                     | 1                                 | 5                      | -                                 | 38           |
| - Exchange gains            | 4                      | -                                 | -                      | -                                 | 4            |
| Total net investment income | 500                    | 6                                 | 79                     | 11                                | 596          |
| Net investment return       | 0.47%                  | 0.05%                             | 0.09%                  | 0.10%                             | 0.27%        |

Net investment income increased by \$808 million, mainly due to higher HKD and USD deposit rates in 2022 and higher average Margin Fund sizes, partly offset by the increase in interest rebates paid to the CPs from higher base rates.

# **EBITDA**

Operating expenses increased by \$94 million, up 11 per cent, due to higher legal and professional fees incurred relating to the nickel market incident, an increase in staff costs from payroll adjustments and higher investment and custodian fees charged on LME Clear Margin Funds. EBITDA margin decreased marginally by 1 per cent to 88 per cent due to the decrease in total revenue and other income less transaction-related expenses and increase in operating expenses.

# **Business Update**

# **Cash and Derivatives Clearing**

On 13 June 2022, HKEX introduced a new Value-at-Risk (VaR) Platform in its securities market. The VaR Platform replaces the previously applied flat rate model with a new VaR model based on individual stock volatility. This significantly strengthens HKEX's resilience and enhances capital efficiency for HKSCC CPs. While the overall margin coverage of HKSCC improved, the overall margin paid by HKSCC CPs was reduced.

The development of Fast Interface for New Issuance (FINI), HKEX's new platform for Hong Kong IPO settlement, remained on track in 2022. User registration was launched in November 2022, and market readiness activities are ongoing. System testing has started, and market rehearsals are scheduled to take place in 1H 2023.

# **OTC Clear**

A joint announcement was made on 4 July 2022 by the SFC, the Hong Kong Monetary Authority (HKMA) and the People's Bank of China (PBoC) on the collaboration between HKEX, China Foreign Exchange Trade System (CFETS) and Shanghai Clearing House (SHCH) to develop Swap Connect, the latest milestone in the development of the HKEX Connect franchise. This will be the world's first derivatives market access scheme, allowing international investors to trade and clear onshore RMB interest rate swaps in Mainland China without changing their existing trading and settlement practices. In its initial stage, Swap Connect will connect Hong Kong and international investors with Mainland China's interbank interest rate swap market through a Northbound route, providing the risk management tools for international investors to trade onshore China fixed income investments. Swap Connect also supports the internationalisation of the RMB and strengthens Hong Kong's unique position as an international financial centre with unrivalled connectivity to China.

OTC Clear cleared a total notional amount of US\$226.8 billion in 2022, up 102 per cent compared to 2021, with clearing volume of Cross Currency Swaps (CCS) doubling that of 2021 to US\$128.0 billion. With strong clearing demand, Deliverable FX (DFX) and Non-deliverable interest rate swaps (NDIRS) clearing volume also grew significantly and reached a record high of US\$15.0 billion and US\$30.3 billion in 2022, compared with US\$3.2 billion and US\$9.2 billion cleared in 2021 respectively.

# **Technology Segment**

# Analysis of Results

# Summary

|                                                                    | 2022<br>\$m | 2021<br>\$m | Change |
|--------------------------------------------------------------------|-------------|-------------|--------|
| Network, terminal user, data line and software<br>sub-license fees | 751         | 720         | 4%     |
| Hosting Services fees                                              | 290         | 257         | 13%    |
| BayConnect sales and service revenue and other income              | 104         | 73          | 42%    |
| Total revenue and other income                                     | 1,145       | 1,050       | 9%     |
| Operating expenses                                                 | (322)       | (305)       | 6%     |
| EBITDA                                                             | 823         | 745         | 10%    |
| EBITDA margin                                                      | 72%         | 71%         | 1%     |

# Network, Terminal User, Data Line and Software Sub-license Fees

Network fees rose by \$31 million or 4 per cent, as increased usage of the Orion Central Gateway and China Connect Central Gateway by EPs was partly offset by the lower fees from the sale of new throttles.

### **Hosting Services Fees**

Hosting Services fees increased 13 per cent due to growth in both new customer subscriptions and increased usage by existing customers, with over 37 newly subscribed racks in 2022. As at 31 December 2022, 96 EPs were using HKEX's Hosting Services. These EPs generated, in aggregate, approximately 64 per cent of the Cash Market turnover and trading volume of the Derivatives Market in 2022.

# **EBITDA**

Operating expenses increased by \$17 million (6 per cent) due to an increase in staff costs from payroll adjustments and increased headcount for new initiatives. EBITDA margin rose from 71 per cent in 2021 to 72 per cent in 2022, reflecting the higher percentage increase in total revenue and other income compared to the percentage increase in operating expenses.

# **Business Update**

# **Trading and Clearing Systems**

During 2022, despite market volatility and challenges posed by the pandemic on work arrangements, all of HKEX's major trading, clearing, settlement and market data dissemination systems for the Cash and Derivatives Markets continued to perform robustly. In the Commodities Market, a power outage at the LME's third party data centre on 10 January 2022 resulted in a temporary market interruption to the LME's electronic trading platform (LMEselect). The root cause was subsequently identified and corrective measures have been duly implemented.

In January 2022, HKEX improved the infrastructure resilience of its derivatives platforms, Hong Kong Futures Automated Trading System (HKATS) and Derivatives Clearing and Settlement System (DCASS), by implementing additional hot standby servers to achieve a higher level of hardware redundancy.

On 25 April 2022, HKEX upgraded its Electronic Communication Platform (ECP), a platform for clients to exchange files with HKEX. The new platform unifies client access through Client Connect, with enhanced system accessibility and resilience and paves the way for new functionality, in turn supporting the health of the whole market.

To support the new HKIDR to be launched in March 2023, HKEX has further enhanced the ECP and Orion Trading Platform – Securities Market (OTP-C), to facilitate the submission of investor information required, and market rehearsals have been completed successfully. To prepare for the launch, Relevant Regulated Intermediaries have been permitted to submit their client identification data to the Exchange via the enhanced ECP since 19 December 2022.

In response to the continuing growth of the Derivatives Market and to maintain the quality of our market data services, a widely adopted compression mechanism was introduced to the Orion Market Data Platform – Derivatives Market (OMD-D) Derivatives Lite (D-Lite) Stock Option Market (SOM) datafeed in November 2022. This implementation eases the risks of bandwidth increase for clients, lowering their operating costs, and is more sustainable than increasing the bandwidth headroom in the long run. The mechanism will be further implemented in the Derivatives Standard (DS) SOM datafeed in Q1 2023.

# **Hosting Services**

In 1H 2022, Hosting Services completed an upgrade and offered high power density racks to enrich the hosting product portfolio. In October 2022, the fit-out of a new Hosting Services data hall was completed and is now in service to meet customer demands.

# **Corporate Items**

"Corporate Items" is not a business segment but comprises central income (including net investment income of the Corporate Funds and HKEX Foundation donation income), the costs of central support functions that provide services to all operating segments, HKEX Foundation charitable donations and other costs not directly related to any operating segments.

# **Analysis of Results**

# Summary

|                                        | 2022<br>\$m | 2021<br>\$m | Change |
|----------------------------------------|-------------|-------------|--------|
| Net investment (loss)/income           | (48)        | 708         | N/A    |
| HKEX Foundation donation income        | 130         | 139         | (6%)   |
| Others                                 | 12          | 13          | (8%)   |
| Total revenue and other income         | 94          | 860         | (89%)  |
| Operating expenses:                    |             |             |        |
| - HKEX Foundation charitable donations | (136)       | (105)       | 30%    |
| - Others                               | (1,521)     | (1,301)     | 17%    |
| EBITDA                                 | (1,563)     | (546)       | 186%   |

# **Net Investment Income**



Average fund size of Corporate Funds decreased marginally due to decreases in fair values of the External Portfolio, as cash generated by the business was mostly deployed to fund the payment of cash dividends and capital expenditure.

### The analysis of net investment (loss)/income is as follows:

|                                    | 2022    | 2021  |
|------------------------------------|---------|-------|
|                                    | \$m     | \$m   |
| Net investment (loss)/income from: |         |       |
| - External Portfolio               | (486)   | 364   |
| - Cash and bank deposits           | 459     | 172   |
| - Equity securities <sup>1</sup>   | (21)    | 121   |
| - Debt securities                  | 17      | 2     |
| - Exchange (losses)/gains          | (17)    | 49    |
| Total net investment (loss)/income | (48)    | 708   |
| Net investment return              | (0.14%) | 2.06% |

1 Investments in minority stakes of unlisted companies

Net investment income from Corporate Funds decreased by \$756 million compared with 2021 due to net fair value losses on the External Portfolio in 2022 and the non-recurring gains on valuation of long-term equity investments in 2021, partly offset by higher interest income from internally-managed Corporate Funds, reflecting higher deposit rates in 2022.

The fair value (losses)/gains on the External Portfolio came from funds invested in the following strategies:

| Strategy                                           | 2022<br>\$m | 2021<br>\$m |
|----------------------------------------------------|-------------|-------------|
| Public equities                                    | (327)       | 222         |
| Diversifiers                                       | 38          | 113         |
| Government Bonds and Mortgage-backed<br>Securities | (197)       | 29          |
| Total fair value (losses)/gains                    | (486)       | 364         |

In 2022, as part of HKEX's External Portfolio de-risking commitments, \$2 billion was redeemed from the External Portfolio. The redemption proceeds are invested internally with the rest of the Corporate Funds and help to reduce the impact of market volatility on HKEX earnings.

# **EBITDA**

Excluding HKEX Foundation charitable donation expenses (funded by HKEX Foundation income), operating expenses increased by 17 per cent against 2021, due to increased staff costs from increased headcount for strategic initiatives.

EBITDA decreased by \$1,017 million mainly due to the decrease in net investment income of Corporate Funds and increase in operating expenses.

# **Business Update**

# **Corporate Social Responsibility**

Throughout 2022, HKEX continued to play an active role in shaping the long-term sustainability of global financial markets. HKEX, as a corporate, regulator and market operator, was committed to promoting good corporate governance and ESG stewardship through the ongoing publication of training and guidance materials, industry knowledge sharing and demonstrating leadership on best practices.

To reinforce its commitment in tackling climate change, the Group continued to make efforts in facilitating the transition to a net-zero global economy across its markets, business and operations. Throughout the year, the Group focused on the development of a regional and global sustainable finance ecosystem, including the establishment of the Hong Kong International Carbon Market Council in July and the launch of Core Climate, a new voluntary international carbon trading market, in October. Core Climate seeks to facilitate effective and transparent trading of carbon credits and other instruments to support the global transition to net zero. The Group also continued to promote sustainable and green finance through HKEX's STAGE and enhance sustainability transparency for the LME's traded metals through its digital credentials register, LMEpassport, which supports producers in reporting on a wide range of sustainability metrics.

As a purpose-led organisation committed to the long-term prosperity of its community, HKEX hosted its inaugural HKEX Impact Summit in December (see details in the Cash segment). Other key CSR and sustainability initiatives implemented throughout 2022 included the annual "HKEX Goes Green" campaign promoting environmental stewardship across our markets and operations; the launch of a digital volunteering platform for HKEX staff and the first-ever group-wide Global Wellness Challenge, promoting employee wellness and community engagement. Further information on HKEX's CSR activities will be set out in HKEX's 2022 CSR Report.

# **HKEX Foundation and Group Philanthropy**

HKEX Foundation continued to act as HKEX's dedicated charitable channel, facilitating and advocating for meaningful change through programmes that build better lives and a better community. Through HKEX Foundation, HKEX continued to deepen its engagement and connectivity with the community. During the year, HKEX Foundation funded a wide range of projects and charities focusing on financial literacy, diversity and inclusion, poverty relief and environmental sustainability. HKEX strengthened its partnerships with local charitable bodies and social enterprises through scaling up the HKEX Charity
Partnership Programme and the HKEX Impact Funding Scheme. Complementing the existing HKEX Foundation University Scholarship Programme, HKEX Foundation was pleased to introduce a new Research Funding Scheme during the year, supporting innovative university-backed research projects that help to provide valuable insight into financial markets, ESG and broader sustainability. In London, the LME announced a new partnership with Inspire, a charity and an education business partnership which seeks to empower young people to reach their full potential and realise their ambitions.

In 2022, HKEX Foundation raised \$156 million (including \$26 million donation from HKEX), principally from HKEX's Stock Code for Charity Scheme, and made a total of \$136 million charitable donations to various causes in the community. Since its establishment, HKEX Foundation has donated over \$350 million, supporting more than 60 projects, directly benefitting more than 430,000 individuals in Hong Kong. As at 31 December 2022, the Foundation had a cumulative surplus of \$22 million for future donations and expenditures.

## Expenses, Other Costs and Taxation



#### **Operating Expenses**

Staff costs and related expenses increased by \$376 million (13 per cent) mainly due to an increase in headcount for strategic initiatives and payroll adjustments, reflecting HKEX's commitment to continuous investment in skills and talent.

IT and computer maintenance expenses consumed by the Group, excluding costs of services and goods directly consumed by participants of \$74 million (2021: \$81 million), were \$658 million (2021: \$634 million). The increase was mainly attributable to higher maintenance expenses for new IT systems and upgraded networks.

Product marketing and promotion expenses increased by \$13 million (11 per cent), due to higher marketing expenses and cash incentives relating to new products.

Professional fees increased by \$122 million (78 per cent), due primarily to legal and professional fees incurred for claims and independent reviews relating to the nickel market incident.

#### **Depreciation and Amortisation**

|                               | 2022<br>\$m | 2021<br>\$m | Change |
|-------------------------------|-------------|-------------|--------|
| Depreciation and amortisation | 1,459       | 1,354       | 8%     |

Depreciation and amortisation increased by \$105 million (8 per cent), due to the completion of a new secondary data centre, the refurbishment of the Connect Hall, and new IT systems and upgrades in 2H 2021 and 2022.

#### **Finance Costs**

|               | 2022<br>\$m | 2021<br>\$m | Change |
|---------------|-------------|-------------|--------|
| Finance costs | 138         | 154         | (10%)  |

Finance costs decreased due to lower interest expense on lease liabilities.

#### **Taxation**

|          | 2022<br>\$m | 2021<br>\$m | Change |
|----------|-------------|-------------|--------|
| Taxation | 1,564       | 2,343       | (33%)  |

Taxation decreased due to lower profit before taxation and higher non-taxable investment income in 2022 and reflecting the one-off deferred tax charge of \$160 million recorded in 2021 on acquired LME intangible assets arising from approval of the change of statutory UK tax rate.

## FINANCIAL REVIEW

## Analysis of Results by Quarter

## **Quarterly Results**

|                                                             | Q1 2022             | Q2 2022        | Q3 2022             | Q4 2022             | Total 2022          |
|-------------------------------------------------------------|---------------------|----------------|---------------------|---------------------|---------------------|
| Trading fees and trading tariffs                            | <u>\$m</u><br>1,915 | \$m<br>1,638   | <u>\$m</u><br>1,513 | <u>\$m</u><br>1,771 | <u>\$m</u><br>6,837 |
| Clearing and settlement fees                                | 1,234               | 1,057          | 973                 | 1,071               | 4,335               |
| Stock Exchange listing fees                                 | 561                 | 433            | 459                 | 462                 | 1,915               |
| Depository, custody and nominee services fees               | 226                 | 421            | 380                 | 233                 | 1,260               |
| Market data fees                                            | 268                 | 278            | 263                 | 272                 | 1,081               |
| Other revenue and sundry income                             | 397                 | 383            | 356                 | 406                 | 1,542               |
| Net investment income                                       | 59                  | 30             | 334                 | 933                 | 1,356               |
| HKEX Foundation donation income                             | 30                  | 7              | 40                  | 53                  | 130                 |
| Revenue and other income                                    | 4,690               | 4,247          | 4,318               | 5,201               | 18,456              |
| Less: Transaction-related expenses                          | (39)                | (48)           | (43)                | (46)                | (176)               |
| Revenue and other income less transaction-related expenses  | 4,651               | 4,199          | 4,275               | 5,155               | 18,280              |
| Operating expenses                                          |                     |                |                     |                     |                     |
| Staff costs and related expenses                            | (803)               | (864)          | (831)               | (826)               | (3,324)             |
| IT and computer maintenance<br>expenses                     | (172)               | (191)          | (176)               | (193)               | (732)               |
| Premises expenses                                           | (28)                | (30)           | (30)                | (32)                | (120)               |
| Product marketing and promotion<br>expenses                 | (33)                | (17)           | (29)                | (50)                | (129)               |
| Professional fees                                           | (32)                | (45)           | (80)                | (122)               | (279)               |
| HKEX Foundation charitable donations                        | (23)                | (33)           | (63)                | (17)                | (136)               |
| Other operating expenses                                    | (87)                | (98)           | (82)                | (108)               | (375)               |
|                                                             | (1,178)             | (1,278)        | (1,291)             | (1,348)             | (5,095)             |
| EBITDA                                                      | 3,473               | 2,921          | 2,984               | 3,807               | 13,185              |
| Depreciation and amortisation                               | (354)               | (363)          | (355)               | (387)               | (1,459)             |
| Operating profit                                            | 3,119               | 2,558          | 2,629               | 3,420               | 11,726              |
| Finance costs                                               | (36)                | (37)           | (32)                | (33)                | (138)               |
| Share of profits less losses of joint<br>ventures           | 25                  | 17             | 14                  | 15                  | 71                  |
| Profit before taxation                                      | 3,108               | 2,538          | 2,611               | 3,402               | 11,659              |
| Taxation                                                    | (445)               | (372)          | (343)               | (404)               | (1,564)             |
| Profit for period/year                                      | 2,663               | 2,166          | 2,268               | 2,998               | 10,095              |
| Loss/(profit) attributable to non-<br>controlling interests | 5                   | 2              | (5)                 | (19)                | (17)                |
| Profit attributable to shareholders                         | 2,668               | 2,168          | 2,263               | 2,979               | 10,078              |
|                                                             | Q1 2021<br>\$m      | Q2 2021<br>\$m | Q3 2021<br>\$m      | Q4 2021<br>\$m      | Total 2021<br>\$m   |
| Revenue and other income                                    | 5,956               | 4,953          | 5,309               | 4,732               | 20,950              |
| Profit attributable to shareholders                         | 3,840               | 2,770          | 3,251               | 2,674               | 12,535              |
|                                                             |                     |                |                     |                     |                     |

#### **Analysis of Quarterly Results**



Profit for the first three quarters of 2022 were lower than 2021, as a result of lower Headline ADT from weak market sentiment, and the fair value losses of the External Portfolio.

Market sentiment improved in the fourth quarter, and Headline ADT increased by 30 per cent against Q3 2022 to \$127.2 billion, 1 per cent higher than Q4 2021. Coupled with the fair value gains of the External Portfolio, and higher net interest income under higher interest rate environment, Q4 2022 revenue and other income reached all time record fourth quarter high.

## Changes to Key Items in Consolidated Statement of Financial Position

#### (A) Significant Financial Assets and Financial Liabilities by Funds

|                                                                               | At<br>31 Dec 2022<br>\$m | At<br>31 Dec 2021<br>\$m | Change |
|-------------------------------------------------------------------------------|--------------------------|--------------------------|--------|
| Financial assets                                                              |                          |                          |        |
| Cash and cash equivalents                                                     | 184,965                  | 181,361                  | 2%     |
| Financial assets measured at fair value through profit or loss                | 6,964                    | 9,437                    | (26%)  |
| Financial assets measured at fair value through other<br>comprehensive income | 14,962                   | 9,755                    | 53%    |
| Financial assets measured at amortised cost                                   | 70,494                   | 51,828                   | 36%    |
| Derivative financial instruments                                              | 80,718                   | 91,424                   | (12%)  |
| Total                                                                         | 358,103                  | 343,805                  | 4%     |

The Group's financial assets comprised financial assets of Corporate Funds, Margin Funds, Clearing House Funds, derivative financial instruments (including base, ferrous, and precious metals derivatives contracts, and forward foreign exchange contracts), and cash prepayments and collateral for A-shares traded under Stock Connect, as follows:

|                                              | At<br>31 Dec 2022<br>\$m | At<br>31 Dec 2021<br>\$m | Change |
|----------------------------------------------|--------------------------|--------------------------|--------|
| Financial assets                             |                          |                          |        |
| Corporate Funds <sup>1</sup>                 | 34,830                   | 33,794                   | 3%     |
| Margin Funds <sup>2</sup>                    | 217,693                  | 191,240                  | 14%    |
| Clearing House Funds                         | 22,052                   | 19,975                   | 10%    |
| Derivative financial instruments             | 80,718                   | 91,424                   | (12%)  |
| Cash prepayments and collateral for A-shares | 2,810                    | 7,372                    | (62%)  |
| Total                                        | 358,103                  | 343,805                  | 4%     |

1 Includes \$1,298 million (31 December 2021: \$1,267 million) solely used for supporting contributions to default funds (Skin-in-the-Game), and default fund credits for HKSCC Guarantee Fund and HKCC Reserve Fund

2 Excludes Settlement Reserve Fund and Settlement Guarantee Fund paid to ChinaClear and margin receivable from CPs of \$10,209 million (31 December 2021: \$12,764 million), which are included in accounts receivable, prepayments and deposits

|                                                                                             | At<br>31 Dec 2022<br>\$m | At<br>31 Dec 2021<br>\$m | Change |
|---------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------|
| Financial liabilities                                                                       |                          |                          |        |
| Derivative financial instruments                                                            | 80,705                   | 91,424                   | (12%)  |
| Margin deposits, Mainland security and settlement deposits,<br>and cash collateral from CPs | 227,902                  | 203,536                  | 12%    |
| CPs' contributions to Clearing House Funds                                                  | 21,205                   | 19,182                   | 11%    |
| Total                                                                                       | 329,812                  | 314,142                  | 5%     |

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The increase in financial assets and financial liabilities of Margin Funds at 31 December 2022 compared with 31 December 2021 was mainly attributable to increased contributions from HKCC CPs and members of LME Clear due to higher margin requirements and increased open positions of futures and options on HKCC, partly offset by decreased contributions from HKSCC CPs due to lower Cash Market turnover and lower Stock Connect trading volume.

Financial assets and financial liabilities of Clearing House Funds at 31 December 2022 were higher than the balance at 31 December 2021, as higher contributions required from members of LME Clear were partly offset by lower contributions from SEOCH CPs, in response to changes in risk exposures.

Margin Funds and Clearing House Funds of LME Clear are mainly invested in overnight reverse repurchase investments, where high quality assets are held against such investments as collateral. In Hong Kong, Clearing House Funds are predominantly kept overnight or invested in Exchange Fund Bills issued by the Hong Kong Monetary Authority due to regulatory requirements. For Margin Funds, a certain proportion of the funds are kept overnight to meet withdrawal requests from CPs (approximately 20 per cent at 31 December 2022), a certain proportion is invested in long-term investment grade debt securities (approximately 5 per cent at 31 December 2022) and the remaining funds are invested in time deposits with maturity of up to 12 months (weighted original maturity of seven months as at 31 December 2022).

Financial assets of Corporate Funds at 31 December 2022 increased by 3 per cent compared with 31 December 2021, as cash generated by the business over the past year was mostly offset by the cash paid for the 2021 second interim dividend and 2022 first interim dividend, and decrease in fair value of the External Portfolio.

A portion of the Corporate Funds is invested in a diversified portfolio of investment funds which are designed to enhance returns and mitigate portfolio volatility and asset class concentration risk. Further details of investments in the External Portfolio by strategy employed are as follows:

| Strategy                                        | At<br>31 Dec 2022<br>\$m | At<br>31 Dec 2021<br>\$m | Change |
|-------------------------------------------------|--------------------------|--------------------------|--------|
| Public Equities                                 | 1,027                    | 1,774                    | (42%)  |
| Diversifiers                                    | 3,943                    | 4,949                    | (20%)  |
| Government Bonds and Mortgage-backed Securities | 1,340                    | 2,020                    | (34%)  |
| Total                                           | 6,310                    | 8,743                    | (28%)  |

#### (B) Fixed Assets, Intangible Assets, Right-of-use Assets and Capital Commitments

The total net book value of the Group's fixed assets and intangible assets rose by \$31 million from \$20,577 million at 31 December 2021 to \$20,608 million at 31 December 2022. The increase was mainly due to additions of assets<sup>7</sup> of \$1,184 million partly offset by depreciation and amortisation of \$1,153 million. Additions during the year were mainly related to the development and upgrade of various trading and clearing systems (notably trading systems for Commodities Market), and the development of a new data hall for Hosting Services.

The Group's operating leases, which mainly relate to leases of office premises, are recognised as right-of-use assets. Such assets decreased by \$292 million to \$1,604 million (31 December 2021: \$1,896 million), mainly due to depreciation during the year.

<sup>7</sup> Exclude right-of-use assets recognised under HKFRS 16: Leases

The Group's capital commitments<sup>7</sup> at 31 December 2022, including those authorised by the Board but not yet contracted for, amounted to \$1,024 million (31 December 2021: \$815 million). They were mainly related to the development and upgrade of IT systems including the cash, derivatives and commodities trading and clearing systems.

## (C) Significant Investments Held, Material Acquisitions and Disposals of Subsidiaries, and Future Plans for Material Investments or Capital Assets

Save for those disclosed in this announcement, there were no other significant investments held, nor were there material acquisitions or disposals of subsidiaries during the year under review. Apart from those disclosed in this announcement, there were no material investments or additions of capital assets authorised by the Board at the date of this announcement.

#### (D) Equity attributable to Shareholders and Return on Equity

Equity attributable to shareholders increased by \$102 million to \$49,728 million at 31 December 2022 (31 December 2021: \$49,626 million). This arose principally from the increase in retained earnings of \$374 million mainly attributable to profit for the year less dividends declared or paid, but was partly offset by decrease in revaluation reserve arising from the fair value losses of fixed rate debt securities held under the Margin Funds.



Return on equity decreased by 5 per cent due to lower profit for 2022 compared with the record 2021.

1 Based on equity attributable to shareholders at year-end

## Liquidity, Financial Resources and Gearing

Working capital increased by \$425 million to \$29,530 million at 31 December 2022 (31 December 2021: \$29,105 million). The increase was mainly due to profit attributable to shareholders of \$10,078 million, partly offset by payment of 2021 second interim dividend and 2022 first interim dividend of \$9,656 million.

At 31 December 2022, the Group had the following outstanding borrowings:

|                                                      | At 31 Dec 2              | 022      | At 31 Dec 20      | 021         |
|------------------------------------------------------|--------------------------|----------|-------------------|-------------|
|                                                      | Carrying<br>value<br>\$m | Maturity | Carrying<br>value | Moturity    |
| Written put options to non-<br>controlling interests | 491                      | N/A      | \$m<br>426        | MaturityN/A |

At 31 December 2022, the Group had a gross gearing ratio (i.e., gross debt divided by adjusted capital) of 1 per cent (31 December 2021: 1 per cent), and a net gearing ratio (i.e., net debt divided by adjusted capital) of zero per cent (31 December 2021: zero per cent). For this purpose, gross debt is defined as total borrowings (excluding lease liabilities) and net debt<sup>8</sup> is defined as gross debt less cash and cash equivalents of Corporate Funds (excluding those reserved for supporting contributions

<sup>8</sup> Net debt is zero when the amount of cash and cash equivalents of Corporate Funds (excluding those reserved for supporting contributions to default funds and default fund credits for Clearing House Funds) is higher than gross debt.

to default funds and default fund credits for Clearing House Funds), and adjusted capital as all components of equity attributable to shareholders of HKEX other than designated reserves.

At 31 December 2022, the Group's total available banking facilities for its daily operations amounted to \$22,839 million (31 December 2021: \$21,249 million), which included \$16,338 million (31 December 2021: \$14,748 million) of committed banking facilities and \$6,500 million (31 December 2021: \$6,500 million) of repurchase facilities.

The Group has also put in place foreign exchange facilities for its daily clearing operations and for the RMB Equity Trading Support Facility to support the trading of RMB stocks listed on the Stock Exchange. At 31 December 2022, the total amount of the facilities was \$28,493 million (31 December 2021: \$31,041 million).

In addition, the Group has arranged contingency banking facilities amounting to RMB13,000 million (31 December 2021: RMB13,000 million) for settling payment obligations to ChinaClear should there be events that disrupt normal settlement arrangements for Stock Connect.

At 31 December 2022, 88 per cent (31 December 2021: 83 per cent) of the Group's cash and cash equivalents were denominated in HKD or USD.

## **Pledges of Assets**

LME Clear receives securities and gold bullion as non-cash collateral for margins posted by its CPs. The total fair value of this non-cash collateral was US\$619 million (HK\$4,831 million) at 31 December 2022 (31 December 2021: US\$971 million (HK\$7,570 million)). LME Clear is obliged to return this non-cash collateral upon request when the CPs' collateral obligations have been substituted with cash collateral or otherwise discharged. LME Clear is permitted to sell or pledge such collateral in the event of the default of a CP. Any non-cash collateral lodged at central securities depositories or custodians is subject to a lien or pledge for the services they provide in respect of the collateral held.

LME Clear also holds securities as collateral in respect of its investments in overnight triparty reverse repurchase agreements under which it is obliged to return equivalent securities to the counterparties at maturity of the reverse repurchase agreements. The fair value of this collateral was US\$14,982 million (HK\$116,934 million) at 31 December 2022 (31 December 2021: US\$13,513 million (HK\$105,351 million)). Such non-cash collateral, together with certain financial assets amounting to US\$923 million (HK\$7,206 million) at 31 December 2022 (31 December 2021: US\$400 million (HK\$3,117 million)), have been pledged to LME Clear's investment agent and custodian banks under security arrangements for the settlement and depository services they provide in respect of the collateral and investments held.

Non-cash collateral is not recorded on the consolidated statement of financial position of the Group.

## **Exposure to Fluctuations in Exchange Rates and Related Hedges**

The functional currency of the Hong Kong and PRC entities are either HKD or RMB and the functional currency of the LME entities is USD. Foreign exchange risks arise mainly from the Group's investments and bank deposits in currencies other than HKD and USD and its GBP expenditure for the LME entities.

Forward foreign exchange contracts and foreign currency bank deposits may be used to hedge the currency exposure of the Group's non-HKD and non-USD assets and liabilities and highly probable forecast transactions to mitigate risks arising from fluctuations in exchange rates.

Foreign currency margin deposits received by the Group in Hong Kong are mainly hedged by investments in the same currencies, and unhedged investments in USD may not exceed 20 per cent of the Margin Funds. For LME Clear, investments of Margin Fund and Default Fund will generally be in the currency in which cash was received.

The aggregate net open foreign currency positions (excluding the External Portfolio) at 31 December 2022 amounted to \$2,120 million, of which \$193 million were non-USD exposures (31 December 2021: \$2,524 million, of which \$545 million were non-USD exposures).

## **Contingent Liabilities**

At 31 December 2022, the Group's material contingent liabilities were as follows:

- (a) The Group had a contingent liability in respect of potential calls to be made by the SFC to replenish all or part of compensation less recoveries paid by the Unified Exchange Compensation Fund established under the repealed Securities Ordinance up to an amount not exceeding \$71 million (31 December 2021: \$71 million). Up to 31 December 2022, no calls had been made by the SFC in this connection.
- (b) The Group had undertaken to indemnify the Collector of Stamp Revenue against any underpayment of stamp duty by its Participants of up to \$200,000 for each Participant. In the unlikely event that all of its 598 trading Participants (31 December 2021: 638) covered by the indemnity at 31 December 2022 defaulted, the maximum liability of the Group under the indemnity would amount to \$120 million (31 December 2021: \$128 million).
- (c) HKEX had given an undertaking in favour of HKSCC to contribute up to \$50 million in the event of HKSCC being wound up while it is a wholly-owned subsidiary of HKEX or within one year after HKSCC ceases to be a wholly-owned subsidiary of HKEX, for payment of the liabilities of HKSCC contracted before HKSCC ceases to be a wholly-owned subsidiary of HKEX, and for the costs of winding up.
- (d) Material litigation

At 31 December 2022, the LME and LME Clear have been named as defendants in two judicial review claims filed in the English High Court.

On 8 March 2022, the LME, in consultation with LME Clear, suspended trading in all nickel contracts with effect from 08:15 UK time, and cancelled all trades executed on or after 00:00 UK time on 8 March. This decision to suspend trading was taken because the nickel market had become disorderly. Cancellations were made retrospectively to take the market back to the last point in time at which the LME could be confident that the market was operating in an orderly manner. It should be stressed that the LME always acted in the interests of the market as a whole.

The claims seek to challenge the LME's decision to cancel the claimants' alleged trades in nickel contracts executed on or after 00:00 UK time on 8 March 2022. The claimants have alleged that this was unlawful on public law grounds and/or constituted a violation of their human rights. The LME management is of the view that the claims are without merit and the LME is contesting them vigorously.

Based on the progress of the judicial review process, the LME does not currently have sufficient information to estimate the financial effect (if any) of the claims, the timing of the ultimate resolution of the proceedings, or what the eventual outcomes might be. Accordingly, no provision has been made in these consolidated financial statements.

## CONSOLIDATED INCOME STATEMENT FOR THE YEAR ENDED 31 DECEMBER 2022

|                                                            | Note | 2022<br>\$m | 2021<br>\$m |
|------------------------------------------------------------|------|-------------|-------------|
| Trading fees and trading tariffs                           |      | 6,837       | 7,931       |
| Clearing and settlement fees                               |      | 4,335       | 5,214       |
| Stock Exchange listing fees                                |      | 1,915       | 2,185       |
| Depository, custody and nominee services fees              |      | 1,260       | 1,543       |
| Market data fees                                           |      | 1,081       | 1,034       |
| Other revenue                                              | 3    | 1,506       | 1,564       |
| Revenue                                                    |      | 16,934      | 19,471      |
| Investment income                                          |      | 3,627       | 1,351       |
| Interest rebates to Participants                           |      | (2,271)     | (47)        |
| Net investment income                                      | 4    | 1,356       | 1,304       |
| HKEX Foundation donation income                            |      | 130         | 139         |
| Sundry income                                              |      | 36          | 36          |
| Revenue and other income                                   |      | 18,456      | 20,950      |
| Less: Transaction-related expenses                         |      | (176)       | (152)       |
| Revenue and other income less transaction-related expenses |      | 18,280      | 20,798      |
| Operating expenses                                         |      |             |             |
| Staff costs and related expenses                           |      | (3,324)     | (2,948)     |
| Information technology and computer maintenance expenses   |      | (732)       | (715)       |
| Premises expenses                                          |      | (120)       | (117)       |
| Product marketing and promotion expenses                   |      | (129)       | (116)       |
| Professional fees                                          |      | (279)       | (157)       |
| HKEX Foundation charitable donations                       |      | (136)       | (105)       |
| Other operating expenses                                   | 5    | (375)       | (371)       |
|                                                            |      | (5,095)     | (4,529)     |
| EBITDA                                                     |      | 13,185      | 16,269      |
| Depreciation and amortisation                              |      | (1,459)     | (1,354)     |
| Operating profit                                           |      | 11,726      | 14,915      |
| Finance costs                                              | 6    | (138)       | (154)       |
| Share of profits less losses of joint ventures             |      | 71          | 80          |
| Profit before taxation                                     |      | 11,659      | 14,841      |
| Taxation                                                   | 7    | (1,564)     | (2,343)     |
| Profit for the year                                        |      | 10,095      | 12,498      |
| Profit/(loss) attributable to:                             |      |             |             |
| Shareholders of HKEX                                       |      | 10,078      | 12,535      |
| Non-controlling interests                                  |      | 17          | (37)        |
| Profit for the year                                        |      | 10,095      | 12,498      |
| Basic earnings per share                                   | 8(a) | \$7.96      | \$9.91      |
| Diluted earnings per share                                 | 8(b) | \$7.95      | \$9.89      |

## CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME FOR THE YEAR ENDED 31 DECEMBER 2022

|                                                                                                                    | 2022<br>\$m | 2021<br>\$m |
|--------------------------------------------------------------------------------------------------------------------|-------------|-------------|
| Profit for the year                                                                                                | 10,095      | 12,498      |
| Other comprehensive income                                                                                         |             |             |
| Items that may be reclassified subsequently to profit or loss:                                                     |             |             |
| Currency translation differences of foreign subsidiaries                                                           | (46)        | 104         |
| Cash flow hedges, net of tax                                                                                       | 12          | (2)         |
| Changes in fair value of financial assets measured at fair value through<br>other comprehensive income, net of tax | (293)       | (8)         |
| Other comprehensive (loss)/income                                                                                  | (327)       | 94          |
| Total comprehensive income                                                                                         | 9,768       | 12,592      |
| Total comprehensive income/(loss) attributable to:                                                                 |             |             |
| Shareholders of HKEX                                                                                               | 9,759       | 12,626      |
| Non-controlling interests                                                                                          | 9           | (34)        |
| Total comprehensive income                                                                                         | 9,768       | 12,592      |

# CONSOLIDATED STATEMENT OF FINANCIAL POSITION AT 31 DECEMBER 2022

|                                                                                          | _    |                | At 31 Dec 2022     | 2            |                | At 31 Dec 2021     |              |
|------------------------------------------------------------------------------------------|------|----------------|--------------------|--------------|----------------|--------------------|--------------|
|                                                                                          | Note | Current<br>\$m | Non-current<br>\$m | Total<br>\$m | Current<br>\$m | Non-current<br>\$m | Total<br>\$m |
| Assets                                                                                   | Note | ψΠ             | ψΠ                 | ψΠ           | ψΠ             | ψΠ                 | ψΠ           |
| Cash and cash equivalents                                                                | 10   | 184,965        | -                  | 184,965      | 181.361        | -                  | 181,361      |
| Financial assets measured at fair value                                                  | 10   | 10 1,000       |                    | 10 1,000     | 101,001        |                    | ,            |
| through profit or loss                                                                   | 10   | 6,177          | 787                | 6,964        | 8,491          | 946                | 9,437        |
| Financial assets measured at fair value<br>through other comprehensive income            | 10   | 14,962         | -                  | 14,962       | 9,755          | -                  | 9,755        |
| Financial assets measured at amortised cost                                              | 10   | 70,285         | 209                | 70,494       | 51,302         | 526                | 51,828       |
| Derivative financial instruments                                                         | 10   | 80,718         | -                  | 80,718       | 91,424         | -                  | 91,424       |
| Accounts receivable, prepayments and deposits                                            | 11   | 25,354         | 21                 | 25,375       | 32,717         | 21                 | 32,738       |
| Tax recoverable                                                                          |      | 17             | -                  | 17           | 19             | -                  | 19           |
| Interests in joint ventures                                                              |      | -              | 291                | 291          | -              | 244                | 244          |
| Goodwill and other intangible assets                                                     |      | -              | 18,968             | 18,968       | -              | 18,972             | 18,972       |
| Fixed assets                                                                             |      | -              | 1,640              | 1,640        | -              | 1,605              | 1,605        |
| Right-of-use assets                                                                      |      | -              | 1,604              | 1,604        | -              | 1,896              | 1,896        |
| Deferred tax assets                                                                      |      | -              | 53                 | 53           | -              | 25                 | 25           |
| Total assets                                                                             |      | 382,478        | 23,573             | 406,051      | 375,069        | 24,235             | 399,304      |
| Liabilities and equity                                                                   |      |                |                    |              |                |                    |              |
| Liabilities                                                                              |      |                |                    |              |                |                    |              |
| Derivative financial instruments                                                         |      | 80,705         | -                  | 80,705       | 91,424         | -                  | 91,424       |
| Margin deposits, Mainland security and settlement deposits, and cash collateral from CPs |      | 227,902        | -                  | 227,902      | 203,536        | -                  | 203,536      |
| Accounts payable, accruals and other liabilities                                         | 12   | 19,054         | -                  | 19,054       | 28,335         | -                  | 28,335       |
| Deferred revenue                                                                         |      | 1,076          | 333                | 1,409        | 1,100          | 354                | 1,454        |
| Taxation payable                                                                         |      | 2,172          | -                  | 2,172        | 1,153          | -                  | 1,153        |
| Other financial liabilities                                                              |      | 40             | -                  | 40           | 513            | -                  | 513          |
| CPs' contributions to Clearing House Funds                                               |      | 21,205         | -                  | 21,205       | 19,182         | -                  | 19,182       |
| Lease liabilities                                                                        |      | 297            | 1,448              | 1,745        | 299            | 1,760              | 2,059        |
| Borrowings                                                                               | 13   | 430            | 61                 | 491          | 340            | 86                 | 426          |
| Provisions                                                                               |      | 67             | 90                 | 157          | 82             | 98                 | 180          |
| Deferred tax liabilities                                                                 |      | -              | 1,072              | 1,072        | -              | 1,132              | 1,132        |
| Total liabilities                                                                        |      | 352,948        | 3,004              | 355,952      | 345,964        | 3,430              | 349,394      |
| Equity                                                                                   |      |                |                    |              |                |                    |              |
| Share capital                                                                            |      |                |                    | 31,918       |                |                    | 31,896       |
| Shares held for Share Award Scheme                                                       |      |                |                    | (918)        |                |                    | (901)        |
| Employee share-based compensation reserve                                                |      |                |                    | 346          |                |                    | 306          |
| Hedging and revaluation reserves                                                         |      |                |                    | (266)        |                |                    | 15           |
| Exchange reserve                                                                         |      |                |                    | (155)        |                |                    | (117)        |
| Designated reserves                                                                      |      |                |                    | 686          |                |                    | 623          |
| Reserve relating to written put options to non-<br>controlling interests                 |      |                |                    | (430)        |                |                    | (369)        |
| Retained earnings                                                                        | 14   |                |                    | 18,547       |                |                    | 18,173       |
| Equity attributable to shareholders of HKEX                                              |      |                | -                  | 49,728       |                |                    | 49,626       |
| Non-controlling interests                                                                |      |                |                    | 371          |                |                    | 284          |
| Total equity                                                                             |      |                |                    | 50,099       |                |                    | 49,910       |
| Total liabilities and equity                                                             |      |                |                    | 406,051      |                |                    | 399,304      |
| Net current assets                                                                       |      |                |                    | 29,530       |                |                    | 29,105       |

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

#### 1. Basis of Preparation and Accounting Policies

These consolidated financial statements have been prepared in accordance with HKFRSs issued by the HKICPA.

The financial information relating to the years ended 31 December 2022 and 2021 included in this preliminary announcement of annual results 2022 does not constitute the Company's statutory annual consolidated financial statements for those years but is derived from those financial statements. Further information relating to these statutory financial statements required to be disclosed in accordance with section 436 of the Companies Ordinance is as follows:

The Company has delivered the financial statements for the year ended 31 December 2021 to the Registrar of Companies as required by section 662(3) of, and Part 3 of Schedule 6 to, the Companies Ordinance and will deliver the financial statements for the year ended 31 December 2022 in due course.

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

#### (a) Adoption of new/revised HKFRSs

In 2022, the Group has adopted the following amendments to HKFRSs which are pertinent to the Group's operations:

| Amendments to HKAS 16               | Property, Plant and Equipment: Proceeds before Intended Use <sup>2</sup>                                                    |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Amendments to HKAS 37               | Provisions, Contingent Liabilities and Contingent Assets: Onerous<br>Contracts – Cost of Fulfilling a Contract <sup>2</sup> |
| Amendments to HKFRS 3               | Business Combinations: Reference to the Conceptual Framework <sup>2</sup>                                                   |
| Amendments to HKFRS 16              | Leases: COVID-19-Related Rent Concessions beyond 30 June 2021 <sup>1</sup>                                                  |
| A normal language and to LUCED a 20 | 240, 2020.                                                                                                                  |

Annual Improvements to HKFRSs 2018-2020:

| Amendments to HKFRS 9               | Financial Instruments: Fees in the "10 per cent" Test for<br>Derecognition of Financial Liabilities <sup>2</sup> |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Amendments to Illustrative Examples | Leases: Lease Incentives <sup>2</sup>                                                                            |

accompanying HKFRS 16

<sup>1</sup> Effective for accounting periods beginning on or after 1 April 2021

<sup>2</sup> Effective for accounting periods beginning on or after 1 January 2022

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

(b) New/revised HKFRSs issued before 31 December 2022 but not yet effective and not early adopted

The Group has not applied the following amendments to HKFRSs which were issued before 31 December 2022 and are pertinent to its operations but not yet effective:

| Amendments to HKAS 1  | Presentation of Financial Statements: Classification of Liabilities<br>as Current or Non-current <sup>2</sup>       |
|-----------------------|---------------------------------------------------------------------------------------------------------------------|
| Amendments to HKAS 1  | Presentation of Financial Statements: Non-current Liabilities with<br>Covenants <sup>2</sup>                        |
| Amendments to HKAS 1  | Presentation of Financial Statements: Disclosure of Accounting<br>Policies <sup>1</sup>                             |
| Amendments to HKAS 8  | Accounting Policies, Changes in Accounting Estimates and<br>Errors: Definition of Accounting Estimates <sup>1</sup> |
| Amendments to HKAS 12 | Income Taxes: Deferred Tax related to Assets and Liabilities arising from a Single Transaction <sup>1</sup>         |

<sup>1</sup>Effective for accounting periods beginning on or after 1 January 2023

<sup>2</sup> Effective for accounting periods beginning on or after 1 January 2024

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

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

#### 2. Operating Segments

The Group determines its operating segments in a manner consistent with internal management reports that are used to make strategic decisions provided to the chief operating decision-maker.

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

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

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

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

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

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

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

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

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

An analysis by operating segment of the Group's EBITDA, profit before taxation and revenue by timing of revenue recognition for the year, is set out as follows:

| -                                                                |             | Equity and<br>Financial |                    | Post         |                   | Corporate    |              |
|------------------------------------------------------------------|-------------|-------------------------|--------------------|--------------|-------------------|--------------|--------------|
|                                                                  | Cash<br>\$m | Derivatives<br>\$m      | Commodities<br>\$m | Trade<br>\$m | Technology<br>\$m | Items<br>\$m | Group<br>\$m |
| Timing of revenue recognition:                                   |             |                         |                    |              |                   |              |              |
| Point in time                                                    | 3,385       | 2,056                   | 1,059              | 5,604        | 88                | 2            | 12,194       |
| Over time                                                        | 1,670       | 1,120                   | 279                | 613          | 1,051             | 7            | 4,740        |
| Revenue                                                          | 5,055       | 3,176                   | 1,338              | 6,217        | 1,139             | 9            | 16,934       |
| Net investment income/(loss)<br>HKEX Foundation donation         | -           | -                       | -                  | 1,404        | -                 | (48)         | 1,356        |
| income                                                           | -           | -                       | -                  | -            | -                 | 130          | 130          |
| Sundry income                                                    | -           | -                       | 6                  | 21           | 6                 | 3            | 36           |
| Revenue and other income                                         | 5,055       | 3,176                   | 1,344              | 7,642        | 1,145             | 94           | 18,456       |
| Less: Transaction-related<br>expenses                            | -           | (165)                   | -                  | (11)         | -                 | -            | (176)        |
| Revenue and other income<br>less transaction-related<br>expenses | 5,055       | 3,011                   | 1,344              | 7,631        | 1,145             | 94           | 18,280       |
| Operating expenses                                               | (732)       | (695)                   | (751)              | (938)        | (322)             | (1,657)      | (5,095)      |
| Reportable segment EBITDA                                        | 4,323       | 2,316                   | 593                | 6,693        | 823               | (1,563)      | 13,185       |
| Depreciation and amortisation                                    | (202)       | (159)                   | (317)              | (363)        | (92)              | (326)        | (1,459)      |
| Finance costs                                                    | (11)        | (9)                     | (6)                | (55)         | (1)               | (56)         | (138)        |
| Share of profits less losses<br>of joint ventures                | 71          | -                       | -                  | -            | -                 | -            | 71           |
| Reportable segment profit<br>before taxation                     | 4,181       | 2,148                   | 270                | 6,275        | 730               | (1,945)      | 11,659       |

|                                                   |             |                                               |                    | 2021                 |                   |                           |              |
|---------------------------------------------------|-------------|-----------------------------------------------|--------------------|----------------------|-------------------|---------------------------|--------------|
|                                                   | Cash<br>\$m | Equity and<br>Financial<br>Derivatives<br>\$m | Commodities<br>\$m | Post<br>Trade<br>\$m | Technology<br>\$m | Corporate<br>Items<br>\$m | Group<br>\$m |
| Timing of revenue recognition:                    |             |                                               |                    |                      |                   |                           |              |
| Point in time                                     | 4,494       | 2,030                                         | 1,176              | 6,656                | 86                | 3                         | 14,445       |
| Over time                                         | 1,636       | 1,405                                         | 288                | 731                  | 960               | 6                         | 5,026        |
| Revenue                                           | 6,130       | 3,435                                         | 1,464              | 7,387                | 1,046             | 9                         | 19,471       |
| Net investment income                             | -           | -                                             | -                  | 596                  | -                 | 708                       | 1,304        |
| HKEX Foundation donation<br>income                | -           | -                                             | -                  | -                    | -                 | 139                       | 139          |
| Sundry income                                     | 1           | 1                                             | 14                 | 12                   | 4                 | 4                         | 36           |
| Revenue and other income                          | 6,131       | 3,436                                         | 1,478              | 7,995                | 1,050             | 860                       | 20,950       |
| Less: Transaction-related<br>expenses             | -           | (126)                                         | -                  | (26)                 | -                 | -                         | (152)        |
| Revenue and other income less transaction-related | 0.404       | 0.010                                         | 4 470              | 7 000                | 4 050             | 000                       | 00 700       |
| expenses                                          | 6,131       | 3,310                                         | 1,478              | 7,969                | 1,050             | 860                       | 20,798       |
| Operating expenses                                | (614)       | (665)                                         | (695)              | (844)                | (305)             | (1,406)                   | (4,529)      |
| Reportable segment EBITDA                         | 5,517       | 2,645                                         | 783                | 7,125                | 745               | (546)                     | 16,269       |
| Depreciation and amortisation                     | (169)       | (142)                                         | (346)              | (358)                | (72)              | (267)                     | (1,354)      |
| Finance costs                                     | (12)        | (12)                                          | (8)                | (66)                 | (2)               | (54)                      | (154)        |
| Share of profits less losses<br>of joint ventures | 80          | _                                             | _                  | -                    | _                 | _                         | 80           |
| Reportable segment profit<br>before taxation      | 5,416       | 2,491                                         | 429                | 6,701                | 671               | (867)                     | 14,841       |

#### (a) Geographical information

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

|                               | Revenu | e           | Non-curren               | it assets                |
|-------------------------------|--------|-------------|--------------------------|--------------------------|
|                               |        | 2021<br>\$m | At<br>31 Dec 2022<br>\$m | At<br>31 Dec 2021<br>\$m |
| Hong Kong (place of domicile) | 14,941 | 17,220      | 5,069                    | 5,307                    |
| United Kingdom                | 1,892  | 2,179       | 17,215                   | 17,137                   |
| Mainland China                | 101    | 72          | 240                      | 294                      |
|                               | 16,934 | 19,471      | 22,524                   | 22,738                   |

#### (b) Information about major customers

In 2022 and 2021, the revenue from the Group's largest customer amounted to less than 10 per cent of the Group's total revenue.

#### 3. Other Revenue

|                                                                 | 2022<br>\$m | 2021<br>\$m |
|-----------------------------------------------------------------|-------------|-------------|
| Network, terminal user, data line and software sub-license fees | 751         | 720         |
| Hosting services fees                                           | 290         | 257         |
| Commodities stock levies and warehouse listing fees             | 43          | 78          |
| Participants' subscription and application fees                 | 77          | 87          |
| Accommodation income (note (a))                                 | 84          | 201         |
| Conversion agency fees                                          | 69          | 43          |
| Sales of Trading Rights                                         | 17          | 22          |
| LME financial over-the-counter booking fees                     | 45          | 53          |
| BayConnect sales and service revenue                            | 98          | 69          |
| Brokerage on IPO direct allotments                              | 1           | 5           |
| Miscellaneous revenue                                           | 31          | 29          |
|                                                                 | 1,506       | 1,564       |

(a) Accommodation income mainly comprises charges on CPs for depositing securities as alternatives to cash deposits of Margin Funds, or depositing currencies whose relevant bank deposit rates are negative, and charges imposed on LME Clear CPs for cash collateral where the investment return on the collateral is below the benchmarked interest rates stipulated in the clearing rules of LME Clear.

#### 4. Net Investment Income

|                                                                                                   | 2022    | 2021  |
|---------------------------------------------------------------------------------------------------|---------|-------|
|                                                                                                   | \$m     | \$m   |
| Gross interest income from financial assets measured at amortised cost                            | 3,944   | 775   |
| Gross interest income from financial assets measured at fair value through other                  |         |       |
| comprehensive income                                                                              | 207     | 38    |
| Interest rebates to Participants                                                                  | (2,271) | (47)  |
| Net interest income                                                                               | 1,880   | 766   |
| Net (losses)/ gains on financial assets mandatorily measured at fair value through profit or loss |         |       |
| - investment funds                                                                                | (486)   | 364   |
| - other investments                                                                               | (21)    | 121   |
|                                                                                                   | (507)   | 485   |
| Others                                                                                            | (17)    | 53    |
| Net investment income                                                                             | 1,356   | 1,304 |

#### 5. Other Operating Expenses

|                                                                              | 2022<br>\$m | 2021<br>\$m |
|------------------------------------------------------------------------------|-------------|-------------|
| Bank charges                                                                 | 16          | 15          |
| Communication expenses                                                       | 8           | 11          |
| Custodian and fund management related fees                                   | 46          | 37          |
| Financial data subscription fees                                             | 52          | 52          |
| Insurance                                                                    | 15          | 12          |
| Non-executive directors' fees                                                | 24          | 22          |
| Office demolition and relocation expenses                                    | 6           | 11          |
| (Write back of provision for)/provision for impairment losses of receivables | (2)         | 7           |
| Repairs and maintenance expenses                                             | 62          | 62          |
| Security expenses                                                            | 21          | 21          |
| Travel expenses                                                              | 26          | 16          |
| Regulatory fees                                                              | 20          | 22          |
| Other miscellaneous expenses                                                 | 81          | 83          |
|                                                                              | 375         | 371         |

#### 6. Finance Costs

|                                                     | 2022<br>\$m | 2021<br>\$m |
|-----------------------------------------------------|-------------|-------------|
| Interest on borrowings                              | 4           | 3           |
| Interest on lease liabilities                       | 68          | 79          |
| Banking facility commitment fees                    | 51          | 54          |
| Negative interest on Euro and Japanese Yen deposits | 15          | 18          |
|                                                     | 138         | 154         |

#### 7. Taxation

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

|                                                         | 2022<br>\$m | 2021<br>\$m |
|---------------------------------------------------------|-------------|-------------|
| Current tax - Hong Kong Profits Tax                     | <b>+</b>    | <b>.</b>    |
| - Provision for the year                                | 1,481       | 1,969       |
| - Over provision in respect of prior years              | (2)         | -           |
|                                                         | 1,479       | 1,969       |
| Current tax - Overseas Tax                              |             |             |
| - Provision for the year                                | 117         | 174         |
| - Under provision in respect of prior years             | -           | 2           |
|                                                         | 117         | 176         |
| Total current tax (note (a))                            | 1,596       | 2,145       |
| Deferred tax                                            |             |             |
| - Origination and reversal of temporary differences     | (32)        | 38          |
| - Impact of changes in UK Corporate Tax rate (note (b)) | -           | 160         |
| Total deferred tax                                      | (32)        | 198         |
| Taxation charge                                         | 1,564       | 2,343       |

(a) Hong Kong Profits Tax has been provided at the rate of 16.5 per cent (2021: 16.5 per cent) on the estimated assessable profit for the year. Taxation on overseas profits has been calculated on the estimated assessable profit at the rates of taxation prevailing in the countries in which the Group operates, with the average corporation tax rate applicable to the subsidiaries in the UK being 19 per cent (2021: 19 per cent).

(b) Through the enactment of the Finance Act 2021 in June 2021, the UK Corporate Tax rate will increase from 19 per cent to 25 per cent from 1 April 2023. As a result, a one-off deferred tax charge on acquired LME intangible assets of \$160 million was recognised to the consolidated income statement during the year ended 31 December 2021.

#### 8. Earnings Per Share

(b)

9.

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

#### (a) Basic earnings per share

|                                                                                                                                                                                                                                                               | 2022                                  | 2021                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|----------------------------------------|
| Profit attributable to shareholders (\$m)                                                                                                                                                                                                                     | 10,078                                | 12,535                                 |
| Weighted average number of shares in issue less shares                                                                                                                                                                                                        |                                       |                                        |
| held for Share Award Scheme (in '000)                                                                                                                                                                                                                         | 1,265,489                             | 1,265,431                              |
| Basic earnings per share (\$)                                                                                                                                                                                                                                 | 7.96                                  | 9.91                                   |
| Diluted earnings per share                                                                                                                                                                                                                                    |                                       |                                        |
|                                                                                                                                                                                                                                                               | 2022                                  | 2021                                   |
| Profit attributable to shareholders (\$m)                                                                                                                                                                                                                     | 10,078                                | 12,535                                 |
| Weighted average number of shares in issue less shares                                                                                                                                                                                                        |                                       |                                        |
| held for Share Award Scheme (in '000)                                                                                                                                                                                                                         | 1,265,489                             | 1,265,431                              |
| Effect of Awarded Shares (in '000)                                                                                                                                                                                                                            | 2,235                                 | 2,140                                  |
| Weighted average number of shares for the purpose of calculating                                                                                                                                                                                              |                                       |                                        |
| diluted earnings per share (in '000)                                                                                                                                                                                                                          | 1,267,724                             | 1,267,571                              |
| Diluted earnings per share (\$)                                                                                                                                                                                                                               | 7.95                                  | 9.89                                   |
|                                                                                                                                                                                                                                                               |                                       |                                        |
| Dividends                                                                                                                                                                                                                                                     |                                       |                                        |
| Dividends                                                                                                                                                                                                                                                     | 2022                                  | 2021                                   |
| Dividends                                                                                                                                                                                                                                                     | 2022<br>\$m                           | 2021<br>\$m                            |
| Dividends<br>First interim dividend paid:                                                                                                                                                                                                                     |                                       |                                        |
|                                                                                                                                                                                                                                                               |                                       |                                        |
| First interim dividend paid:                                                                                                                                                                                                                                  | \$m                                   | \$m<br>5,946                           |
| First interim dividend paid:<br>\$3.45 (2021: \$4.69) per share                                                                                                                                                                                               | \$m<br>4,374                          | \$m<br>5,946                           |
| First interim dividend paid:<br>\$3.45 (2021: \$4.69) per share                                                                                                                                                                                               | \$m<br>4,374<br>(8)                   | \$m<br>5,946<br>(12)                   |
| First interim dividend paid:<br>\$3.45 (2021: \$4.69) per share<br>Less: Dividend for shares held by Share Award Scheme (note (a))                                                                                                                            | \$m<br>4,374<br>(8)                   | \$m<br>5,946<br>(12)                   |
| First interim dividend paid:<br>\$3.45 (2021: \$4.69) per share<br>Less: Dividend for shares held by Share Award Scheme (note (a))<br>Second interim dividend declared (note (b)):                                                                            | \$m<br>4,374<br>(8)<br>4,366          | \$m<br>5,946<br>(12)<br>5,934<br>5,300 |
| First interim dividend paid:<br>\$3.45 (2021: \$4.69) per share<br>Less: Dividend for shares held by Share Award Scheme (note (a))<br>Second interim dividend declared (note (b)):<br>\$3.69 (2021: \$4.18) per share based on issued share capital at 31 Dec | \$m<br>4,374<br>(8)<br>4,366<br>4,678 | \$m<br>5,946<br>(12)<br>5,934          |

(a) The results and net assets of the Share Award Scheme are included in HKEX's financial statements. Therefore, dividends for shares held by the Share Award Scheme were deducted from the total dividends.

(b) The second interim dividend declared after 31 December was not recognised as a liability at 31 December as it had not been approved by the Board.

#### 10. Financial Assets

The Group classifies the financial assets into the following measurement categories:

Cash for A-shares includes:

- (a) RMB cash prepayments received by HKSCC from its CPs for releasing their allocated A-shares on the trade day. Such prepayments will be used to settle HKSCC's CNS obligations payable on the next business day; and
- (b) HKD/USD cash collateral received by HKSCC from its CPs for releasing their allocated A-shares on the trade day. Such collateral will be refunded to the CPs when they settle their RMB CNS obligations on the next business day.

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

Clearing House Funds - the Clearing House Funds, or default funds, are established under the Clearing House Rules. Assets contributed by the CPs and the Group are held by the respective clearing houses (together with the accumulated income less related expenses for the clearing houses in Hong Kong)

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

Financial assets held by the Group which are funded by share capital and funds generated from operations are classified as Corporate Funds (i.e., other than financial assets of Cash for A-shares, Margin Funds, Clearing House Funds and derivative financial instruments).

Derivative financial instruments include outstanding derivatives contracts of LME Clear, which acts as a central counterparty to the base, ferrous and precious metals futures and options contracts traded on the LME, and forward foreign exchange contracts.

Financial assets include cash and cash equivalents, financial assets measured at fair value through profit or loss, financial assets measured at fair value through other comprehensive income, financial assets measured at amortised cost, and derivative financial instruments, details of which are as follows:

|                                                                            | At<br>31 Dec 2022<br>\$m | At<br>31 Dec 2021<br>\$m |
|----------------------------------------------------------------------------|--------------------------|--------------------------|
| Cash and cash equivalents                                                  | 184,965                  | 181,361                  |
| Financial assets measured at fair value through profit or loss             | 6,964                    | 9,437                    |
| Financial assets measured at fair value through other comprehensive income | 14,962                   | 9,755                    |
| Financial assets measured at amortised cost                                | 70,494                   | 51,828                   |
| Derivative financial instruments                                           | 80,718                   | 91,424                   |
|                                                                            | 358,103                  | 343,805                  |

The Group's financial assets comprised financial assets of Cash for A-shares, Margin Funds, Clearing House Funds, Corporate Funds and derivative financial instruments as follows:

|                                                                            | At<br>31 Dec 2022<br>\$m | At<br>31 Dec 2021<br>\$m |
|----------------------------------------------------------------------------|--------------------------|--------------------------|
| Cash for A-shares                                                          |                          |                          |
| Cash and cash equivalents                                                  | 2,810                    | 7,372                    |
| Margin Funds <sup>1</sup>                                                  |                          |                          |
| Cash and cash equivalents                                                  | 147,182                  | 145,586                  |
| Financial assets measured at fair value through other comprehensive income | 11,931                   | 5,283                    |
| Financial assets measured at amortised cost                                | 58,580                   | 40,371                   |
|                                                                            | 217,693                  | 191,240                  |
| Clearing House Funds                                                       |                          |                          |
| Cash and cash equivalents                                                  | 19,021                   | 15,503                   |
| Financial assets measured at fair value through other comprehensive income | 3,031                    | 4,472                    |
|                                                                            | 22,052                   | 19,975                   |
| <u>Corporate Funds</u> (note (a))                                          |                          |                          |
| Cash and cash equivalents                                                  | 15,952                   | 12,900                   |
| Financial assets measured at fair value through profit or loss             | 6,964                    | 9,437                    |
| Financial assets measured at amortised cost                                | 11,914                   | 11,457                   |
|                                                                            | 34,830                   | 33,794                   |
| Derivative financial instruments                                           | 80,718                   | 91,424                   |
|                                                                            | 358,103                  | 343,805                  |

1 Excludes Settlement Reserve Fund and Settlement Guarantee Fund paid to ChinaClear and margin receivable from CPs of \$10,209 million (31 December 2021: \$12,764 million), which are included in accounts receivable, prepayments and deposits.

#### The expected maturity dates of the financial assets are analysed as follows:

|                  |          |         | At 31     | Dec 2022            |             |         |          |         | At 31    | Dec 2021   |             |         |
|------------------|----------|---------|-----------|---------------------|-------------|---------|----------|---------|----------|------------|-------------|---------|
|                  | Clearing |         |           | Clearing Derivative |             |         |          |         | Clearing | Derivative |             |         |
|                  | Cash for | Margin  | House     | Corporate           | financial   |         | Cash for | Margin  | House    | Corporate  | financial   |         |
|                  | A-shares | Funds   | Funds     | Funds               | instruments | Total   | A-shares | Funds   | Funds    | Funds      | instruments | Total   |
|                  | \$m \$   | \$m \$m | n \$m \$m | \$m \$m             | \$m         | \$m     | \$m      | \$m     | \$m      | \$m        | \$m         |         |
| Within 12 months | 2,810    | 217,693 | 22,052    | 33,834              | 80,718      | 357,107 | 7,372    | 191,240 | 19,975   | 32,322     | 91,424      | 342,333 |
| Over 12 months   | -        | -       | -         | 996                 | -           | 996     | -        | -       | -        | 1,472      | -           | 1,472   |
|                  | 2,810    | 217,693 | 22,052    | 34,830              | 80,718      | 358,103 | 7,372    | 191,240 | 19,975   | 33,794     | 91,424      | 343,805 |

(a) At 31 December 2022, financial assets of Corporate Funds of \$1,298 million (31 December 2021: \$1,267 million) were solely used for supporting contributions to default funds (Skin-in-the-Game), and default fund credits for HKSCC Guarantee Fund and HKCC Reserve Fund.

#### 11. Accounts Receivable, Prepayments and Deposits

|                                                                                                                            | At          | At          |
|----------------------------------------------------------------------------------------------------------------------------|-------------|-------------|
|                                                                                                                            | 31 Dec 2022 | 31 Dec 2021 |
|                                                                                                                            | \$m         | \$m         |
| The breakdown of accounts receivable, prepayments and deposits, net of<br>provision for impairment losses, are as follows: |             |             |
| CNS money obligations receivable                                                                                           | 12,793      | 17,921      |
| Settlement Reserve Fund and Settlement Guarantee Fund held by                                                              |             |             |
| ChinaClear                                                                                                                 | 10,206      | 12,757      |
| Other receivables, prepayments and deposits                                                                                | 2,376       | 2,060       |
|                                                                                                                            | 25,375      | 32,738      |

CNS money obligations receivable mature within two days after the trade date. The balance of Settlement Reserve Fund and Settlement Guarantee Fund with ChinaClear is rebalanced on a monthly basis. Fees receivable are due immediately or up to 60 days depending on the type of services rendered. The majority of the remaining accounts receivable, prepayments and deposits were due within three months.

#### 12. Accounts Payable, Accruals and Other Liabilities

The Group's accounts payable, accruals and other liabilities mainly represented the Group's CNS money obligations payable, which accounted for 81 per cent (31 December 2021: 89 per cent) of the total accounts payable, accruals and other liabilities. CNS money obligations payable mature within two days after the trade date. The majority of the remaining accounts payable, accruals and other liabilities would mature within three months.

#### 13. Borrowings

|                                                  | At<br>31 Dec 2022<br>\$m | At<br>31 Dec 2021<br>\$m |
|--------------------------------------------------|--------------------------|--------------------------|
| Written put options to non-controlling interests | 491                      | 426                      |
| Analysed as:                                     |                          |                          |
| Non-current liabilities                          | 61                       | 86                       |
| Current liabilities                              | 430                      | 340                      |
|                                                  | 491                      | 426                      |

Prior to 2022, OTC Clear issued 3,541 non-voting ordinary shares to certain third party shareholders at a total consideration of \$433 million. In December 2022, a further 1,576 non-voting ordinary shares of OTC Clear were issued at a consideration of \$85 million. As part of the arrangement, put options were written by HKEX to the non-controlling interests to sell part or all of their non-voting ordinary shares in OTC Clear to HKEX at the initial subscription prices less accumulated dividends received by the non-controlling interests. The put options are exercisable by the non-controlling interests at any time following the date falling five years after the shares were issued if the non-controlling interests can demonstrate to HKEX that they have used reasonable endeavours for at least three months to find a suitable purchaser for their shares at a price equal to or more than their fair market values. The carrying amount of written put options represents the present value of the amount payable by HKEX to acquire the shares held by non-controlling interests at the date at which the written put options first become exercisable.

At 31 December 2022, \$340 million of the written put options were exercisable (31 December 2021: \$340 million) and the remaining \$90 million and \$61 million of the options will become exercisable in October 2023 and December 2027 respectively. During the year ended 31 December 2022, none of the written put options was exercised (2021: none).

The effective interest rate of the options before they are exercisable was 4.1 per cent per annum in 2022 (2021: 3.0 per cent).

#### 14. Retained Earnings

|                                                  | 2022<br>\$m | 2021<br>\$m |
|--------------------------------------------------|-------------|-------------|
| At 1 Jan                                         | 18,173      | 17,214      |
| Profit attributable to shareholders              | 10,078      | 12,535      |
| Transfer (to)/from Clearing House Funds reserves | (59)        | 16          |
| Transfer to PRC statutory reserve                | (4)         | (11)        |
| Dividends:                                       |             |             |
| 2021/2020 second interim dividend                | (5,290)     | (5,646)     |
| 2022/2021 first interim dividend                 | (4,366)     | (5,934)     |
| Unclaimed HKEX dividends forfeited               | 26          | 12          |
| Vesting of shares of Share Award Scheme          | (15)        | (20)        |
| UK tax relating to Share Award Scheme            | (3)         | 7           |
| Change in ownership interest in a subsidiary     | 7           | -           |
| At 31 Dec                                        | 18,547      | 18,173      |

## SCOPE OF WORK OF PRICEWATERHOUSECOOPERS HONG KONG

The financial figures in this announcement of the Group's results for the year ended 31 December 2022 have been agreed by the Group's external auditor, PricewaterhouseCoopers Hong Kong (PwC), to the amounts set out in the Group's draft consolidated financial statements for the year. The work performed by PwC in this respect did not constitute an assurance engagement in accordance with Hong Kong Standards on Auditing, Hong Kong Standards on Review Engagements or Hong Kong Standards on Assurance Engagements issued by the HKICPA, and consequently no assurance has been expressed by PwC on this announcement.

## **REVIEW OF 2022 CONSOLIDATED FINANCIAL STATEMENTS**

The Audit Committee (AC) reviewed the 2022 Consolidated Financial Statements in conjunction with HKEX's external auditor. Based on this review and discussions with management, the AC was satisfied that the Consolidated Financial Statements were prepared in accordance with applicable accounting standards and fairly present the Group's financial position and results for the year ended 31 December 2022.

## DISTRIBUTABLE RESERVES

As at 31 December 2022, HKEX's distributable reserves, calculated under Part 6 of the Companies Ordinance (Chapter 622 of the Laws of Hong Kong), amounted to \$8.4 billion (31 December 2021: \$9.9 billion).

## DIVIDEND

The Board has declared a second interim dividend of \$3.69 per share for 2022 (2021 second interim dividend: \$4.18 per share), which will be payable in cash, to Shareholders whose names appear on HKEX's Register of Members on Monday, 13 March 2023. Dividend warrants are expected to be despatched to Shareholders on Wednesday, 22 March 2023.

Including the first interim dividend, the total dividends for 2022 amount to \$7.14 per share (2021: \$8.87 per share), which represents a payout ratio of 90 per cent (2021: 90 per cent) of the profit attributable to Shareholders, excluding the financial results of HKEX Foundation, for the year ended 31 December 2022. Dividends for shares held in trust under the Share Award Scheme amount to \$17 million (2021: \$22 million).

## **CLOSURE OF HKEX'S REGISTER OF MEMBERS**

For the purposes of determining Shareholders' eligibility to attend and vote at the 2023 AGM, and entitlement to the 2022 second interim dividend, HKEX's Register of Members will be closed as set out below:

| (i)     | <ul> <li>For determining eligibility to attend and vote at the 2023 AGM:</li> <li>Latest time to lodge transfer documents for registration with HKEX's registrar</li> </ul> | At 4:30 pm on 20 April 2023 |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
|         | <ul> <li>Closure of HKEX's Register of Members</li> </ul>                                                                                                                   | 21 to 26 April 2023         |
|         |                                                                                                                                                                             | (both dates inclusive)      |
|         | <ul> <li>Record date</li> </ul>                                                                                                                                             | 26 April 2023               |
| <i></i> |                                                                                                                                                                             |                             |
| (ii)    | For determining entitlement to the 2022 second interim dividend:                                                                                                            |                             |
|         | <ul> <li>Ex-dividend date</li> </ul>                                                                                                                                        | 8 March 2023                |
|         | <ul> <li>Latest time to lodge transfer documents for<br/>registration with HKEX's registrar</li> </ul>                                                                      | At 4:30 pm on 9 March 2023  |
|         | <ul> <li>Closure of HKEX's Register of Members</li> </ul>                                                                                                                   | 10 to 13 March 2023         |
|         |                                                                                                                                                                             | (both dates inclusive)      |
|         | <ul> <li>Record date</li> </ul>                                                                                                                                             | 13 March 2023               |
|         |                                                                                                                                                                             |                             |

During the above closure periods, no transfer of shares will be registered. To be eligible to attend and vote at the 2023 AGM, and to qualify for the 2022 second interim dividend, all properly completed transfer forms accompanied by the relevant share certificates must be lodged for registration with HKEX's registrar, Hong Kong Registrars Limited, at Shops 1712-1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wan Chai, Hong Kong no later than the aforementioned latest time.

## ANNUAL GENERAL MEETING

The 2023 AGM will be held on Wednesday, 26 April 2023 at 4:30 pm at the HKEX Connect Hall on the 1st Floor, One and Two Exchange Square, Central, Hong Kong. The Notice of the 2023 AGM, which constitutes part of a circular to Shareholders, will be sent together with the 2022 Annual Report. The Notice, the circular which sets out details of the business to be conducted at the 2023 AGM, and the proxy form will be available under the Investor Relations section of the HKEX Group website. The results of the voting on the proposed resolutions will be published on the HKEX Group website shortly after the 2023 AGM is held.

Shareholders may appoint the Chairman of the 2023 AGM as their proxy to vote on the resolutions, instead of attending the meeting in person. To ensure the safety of the Shareholders attending the meeting, HKEX may implement additional precautionary measures at the 2023 AGM where appropriate or in accordance with prevailing guidelines published by the Government and regulatory authorities. Details of any such measures will be set out in the circular to Shareholders, and any further updates will be announced as appropriate.

## **ELECTION OF DIRECTORS**

The service term of C H Cheah and Hugo Leung (Elected Directors) will expire at the conclusion of the 2023 AGM. On 22 February 2023, the Nomination and Governance Committee (NGC) nominated C H Cheah and Hugo Leung to the Board for it to recommend to Shareholders for re-election at the 2023 AGM. The nominations were made in accordance with the Nomination Policy and took into account the approved selection criteria for Non-executive Director candidate(s). These include, among others, the candidates' market knowledge and experience, reputation for integrity, and the diversity aspects (including without limitation, gender, age, cultural and educational background, ethnicity, professional experience, skills, knowledge and length of service), with due regard for the benefits of diversity, as set out in the Board Diversity Policy. The NGC took into consideration Mr Cheah's in-depth knowledge of the fund management industry and Mr Leung's extensive experience in the global markets business, as well as their respective contributions to the Board and firm commitments to their roles. The NGC also considered that their re-election as Directors would provide a diversity of skills, expertise and background to the Board, which would benefit the future development of HKEX. The NGC was satisfied with the independence of Mr Cheah and Mr Leung with reference to the criteria laid down in the Main Board Listing Rules. Mr Cheah, who is a member of the NGC, abstained from voting at the Committee meeting when his own nomination was being considered.

On 23 February 2023, the Board accepted the nomination by the NGC and recommended Mr Cheah and Mr Leung to stand for re-election at the 2023 AGM. Neither Mr Cheah nor Mr Leung holds any cross-directorships nor has any significant links with other Directors through involvement in other companies or bodies. Mr Cheah and Mr Leung do not have any service contracts with any member of the Group that are not determinable by the Group within one year without compensation (other than statutory compensation). Their particulars will be set out in the circular to Shareholders.

## COMPLIANCE WITH CORPORATE GOVERNANCE CODE

Throughout 2022, HKEX complied with all code provisions and, where appropriate, adopted the recommended best practices set out in the Corporate Governance Code, with the exception of Code Provisions B.2.2 (retirement by rotation of directors).

The Government Appointed Directors, all being Non-executive Directors, are not subject to election or re-election by Shareholders as their appointments are governed by the SFO. The Chief Executive Officer in his capacity as a Director is not subject to retirement by rotation, as his term on the Board is coterminous with his employment as the Chief Executive Officer with HKEX under HKEX's Articles of Association.

HKEX has applied the principles of the Corporate Governance Code to its corporate governance structure and practices as described in the Corporate Governance Report contained in the 2022 Annual Report and on the HKEX Group website.

## PURCHASE, SALE OR REDEMPTION OF HKEX'S LISTED SECURITIES

During 2022, neither the Company nor any of its subsidiaries purchased, sold, or redeemed any HKEX shares, except that the trustee of the Share Award Scheme, pursuant to the terms of the rules and trust deed of the Share Award Scheme, purchased on the Stock Exchange a total of 1,040,416 HKEX shares at a total consideration of \$350 million.

## PUBLICATION OF 2022 FINAL RESULTS AND ANNUAL REPORT

This announcement is published on the HKEXnews website at <u>www.hkexnews.hk</u> and the HKEX Group website at <u>www.hkexgroup.com/Investor-Relations/Regulatory-Disclosure/Announcements/2023</u>. The 2022 Annual Report will be available on the HKEXnews and HKEX Group websites and despatched to Shareholders on or about Wednesday, 15 March 2023.

By Order of the Board Hong Kong Exchanges and Clearing Limited David Fu Group Company Secretary

Hong Kong, 23 February 2023

As at the date of this announcement, HKEX's Board of Directors comprises 12 Independent Non-executive Directors, namely Mrs Laura May-Lung CHA (Chairman), Mr Nicholas Charles ALLEN, Mr Apurv BAGRI, Mr CHEAH Cheng Hye, Ms CHEUNG Ming Ming, Anna, Mrs CHOW WOO Mo Fong, Susan, Mr Rafael GIL-TIENDA, Mr HUNG Pi Cheng, Benjamin, Ms LEUNG Nisa Bernice Wing-Yu, Mr LEUNG Pak Hon, Hugo, Mr YIU Kin Wah, Stephen and Mr ZHANG Yichen, and one Executive Director, Mr Alejandro Nicolas AGUZIN, who is also the Chief Executive of HKEX.

## GLOSSARY

| 2023 AGM                              | AGM to be held on 26 April 2023                                                                                                                                                                                                                                                                                               |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 360 DigiTech                          | 360 DigiTech, Inc.                                                                                                                                                                                                                                                                                                            |
| ADT                                   | Average daily turnover value                                                                                                                                                                                                                                                                                                  |
| ADV                                   | Average daily volume (in number of contracts/lots)                                                                                                                                                                                                                                                                            |
| AGM(s)                                | HKEX's annual general meeting(s)                                                                                                                                                                                                                                                                                              |
| Awarded Shares                        | Shares awarded under the Share Award Scheme                                                                                                                                                                                                                                                                                   |
| BayConnect                            | BayConnect Technology Company Limited                                                                                                                                                                                                                                                                                         |
| Beike                                 | KE Holdings Inc.                                                                                                                                                                                                                                                                                                              |
| Board                                 | HKEX's board of directors                                                                                                                                                                                                                                                                                                     |
| Bond Connect                          | A mutual bond market access programme between Hong Kong and Mainland<br>China, under which Northbound trading enables overseas investors to invest in<br>the China Interbank Bond Market, and Southbound trading enables Mainland<br>institutional investors to invest in offshore bonds through the Hong Kong bond<br>market |
| Cash Market                           | HKEX's securities related business excluding stock options                                                                                                                                                                                                                                                                    |
| CBBCs                                 | Callable Bull/Bear Contracts                                                                                                                                                                                                                                                                                                  |
| CCASS                                 | Central Clearing and Settlement System                                                                                                                                                                                                                                                                                        |
| CFETS                                 | China Foreign Exchange Trade System                                                                                                                                                                                                                                                                                           |
| Chief Executive Officer or CEO        | HKEX's Chief Executive                                                                                                                                                                                                                                                                                                        |
| ChinaClear                            | China Securities Depository and Clearing Corporation Limited                                                                                                                                                                                                                                                                  |
| CNH                                   | Offshore RMB traded outside Mainland China                                                                                                                                                                                                                                                                                    |
| CNS                                   | Continuous Net Settlement                                                                                                                                                                                                                                                                                                     |
| Corporate Governance Code             | Refers to Appendix 14 to the Main Board Listing Rules                                                                                                                                                                                                                                                                         |
| CPs                                   | Clearing Participants                                                                                                                                                                                                                                                                                                         |
| CSR                                   | Corporate Social Responsibility                                                                                                                                                                                                                                                                                               |
| CSRC                                  | China Securities Regulatory Commission                                                                                                                                                                                                                                                                                        |
| Derivatives Market                    | HKEX's derivatives related business including stock options                                                                                                                                                                                                                                                                   |
| Director(s)                           | HKEX's director(s)                                                                                                                                                                                                                                                                                                            |
| DWs                                   | Derivative warrants                                                                                                                                                                                                                                                                                                           |
| e-IPO                                 | Electronic Initial Public Offering                                                                                                                                                                                                                                                                                            |
| Elected Directors                     | Directors elected by the Shareholders at general meetings                                                                                                                                                                                                                                                                     |
| EP(s)                                 | Exchange Participant(s)                                                                                                                                                                                                                                                                                                       |
| ESG                                   | Environmental, Social and Governance                                                                                                                                                                                                                                                                                          |
| ETF(s)                                | Exchange Traded Fund(s)                                                                                                                                                                                                                                                                                                       |
| ETP(s)                                | Exchange Traded Product(s), which include(s) ETFs and L&I Products                                                                                                                                                                                                                                                            |
| Euro                                  | The official currency of the Eurozone                                                                                                                                                                                                                                                                                         |
| Exchange or SEHK or Stock<br>Exchange | The Stock Exchange of Hong Kong Limited                                                                                                                                                                                                                                                                                       |
| External Portfolio                    | Externally-managed investment funds                                                                                                                                                                                                                                                                                           |
| Financial Secretary                   | Financial Secretary of the HKSAR                                                                                                                                                                                                                                                                                              |
| FINI                                  | Fast Interface for New Issuance                                                                                                                                                                                                                                                                                               |
| Fintech                               | Financial technology                                                                                                                                                                                                                                                                                                          |
| Futures Exchange or HKFE              | Hong Kong Futures Exchange Limited                                                                                                                                                                                                                                                                                            |
| GEM Listing Rules                     | Rules Governing the Listing of Securities on GEM of The Stock Exchange of<br>Hong Kong Limited                                                                                                                                                                                                                                |
| Government                            | HKSAR Government                                                                                                                                                                                                                                                                                                              |

| Government Appointed<br>Director(s)               | Director(s) appointed by the Financial Secretary pursuant to Section 77 of the SFO                                                                                        |
|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Greater Bay Area                                  | Guangdong-Hong Kong-Macao Greater Bay Area                                                                                                                                |
| Group or HKEX Group                               | HKEX and its subsidiaries                                                                                                                                                 |
| Headline ADT                                      | ADT of equity products, DWs, CBBCs and warrants traded on the Stock Exchange                                                                                              |
| HKCC                                              | HKFE Clearing Corporation Limited                                                                                                                                         |
| HKEX Foundation                                   | HKEX Foundation Limited                                                                                                                                                   |
| HKEX or the Company                               | Hong Kong Exchanges and Clearing Limited                                                                                                                                  |
| HKEX Group website                                | www.hkexgroup.com                                                                                                                                                         |
| HKEX Market website                               | www.hkex.com.hk                                                                                                                                                           |
| HKFRS(s)                                          | Hong Kong Financial Reporting Standard(s)                                                                                                                                 |
| HKICPA                                            | Hong Kong Institute of Certified Public Accountants                                                                                                                       |
| HKSAR                                             | Hong Kong Special Administrative Region of the People's Republic of China                                                                                                 |
| HKSCC                                             | Hong Kong Securities Clearing Company Limited                                                                                                                             |
| HSCEI                                             | Hang Seng China Enterprises Index                                                                                                                                         |
| HSI                                               | Hang Seng Index                                                                                                                                                           |
| IFC                                               | International financial centre                                                                                                                                            |
| INED(s)                                           | Independent Non-executive Director(s) of HKEX                                                                                                                             |
| IPO(s)                                            | Initial Public Offering(s)                                                                                                                                                |
| Iron Ore Futures                                  | TSI Iron Ore Fines 62 per cent Fe CFR China Futures                                                                                                                       |
| IT                                                | Information Technology                                                                                                                                                    |
| Kanzhun                                           | Kanzhun Limited                                                                                                                                                           |
| Kingsoft Cloud                                    | Kingsoft Cloud Holdings Limited                                                                                                                                           |
| L&I Products                                      | Leveraged and Inverse Products                                                                                                                                            |
| Listing Committee                                 | Listing Committee of the Main Board and GEM                                                                                                                               |
| Listing Rule(s)                                   | Main Board Listing Rules and GEM Listing Rules                                                                                                                            |
| LME                                               | The London Metal Exchange                                                                                                                                                 |
| LME Clear                                         | LME Clear Limited                                                                                                                                                         |
| London Metal Mini Futures                         | London Aluminium/Zinc/Copper/Nickel/Tin/Lead Mini Futures                                                                                                                 |
| Main Board Listing Rules                          | Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited                                                                                      |
| MD                                                | Managing Director                                                                                                                                                         |
| MINISO                                            | MINISO Group Holding Limited                                                                                                                                              |
| MOU                                               | Memorandum of Understanding                                                                                                                                               |
| MSCI                                              | MSCI Inc.                                                                                                                                                                 |
| NIO                                               | NIO Inc.                                                                                                                                                                  |
| Noah                                              | Noah Holdings Private Wealth and Asset Management Limited                                                                                                                 |
| Northbound Trading or Stock<br>Connect Northbound | Hong Kong and overseas investors trading in eligible securities that are listed<br>on the Shanghai Stock Exchange or the Shenzhen Stock Exchange through<br>Stock Connect |
| OECD                                              | The Organisation for Economic Co-operation and Development                                                                                                                |
| OneConnect                                        | OneConnect Financial Technology Co., Ltd.                                                                                                                                 |
| OTC                                               | Over-the-counter                                                                                                                                                          |
| OTC Clear                                         | OTC Clearing Hong Kong Limited                                                                                                                                            |
| PRC                                               | The People's Republic of China                                                                                                                                            |
| QME                                               | Qianhai Mercantile Exchange Co., Ltd.                                                                                                                                     |
| RMB                                               | Renminbi                                                                                                                                                                  |

| SEOCH                                             | The SEHK Options Clearing House Limited                                                                                                                                                                                                                             |
|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SFC                                               | Securities and Futures Commission                                                                                                                                                                                                                                   |
| SFO                                               | Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong)                                                                                                                                                                                             |
| Shanghai-Hong Kong Stock<br>Connect               | A mutual market access programme that links the stock markets in Shanghai<br>and Hong Kong, enabling investors in Hong Kong and Mainland China to trade<br>and settle shares listed on the other market via the exchange and clearing<br>house in their home market |
| Shareholder(s)                                    | HKEX's shareholder(s)                                                                                                                                                                                                                                               |
| Share Award Scheme or the Scheme                  | The HKEX Employees' Share Award Scheme                                                                                                                                                                                                                              |
| Shenzhen-Hong Kong Stock<br>Connect               | A mutual market access programme that links the stock markets in Shenzhen<br>and Hong Kong, enabling investors in Hong Kong and Mainland China to trade<br>and settle shares listed on the other market via the exchange and clearing<br>house in their home market |
| Southbound Trading or Stock<br>Connect Southbound | Mainland investors trading in eligible securities that are listed on the Stock<br>Exchange through Stock Connect                                                                                                                                                    |
| SPAC(s)                                           | Special purpose acquisition company(ies)                                                                                                                                                                                                                            |
| SSE                                               | Shanghai Stock Exchange                                                                                                                                                                                                                                             |
| STAGE                                             | HKEX's Sustainable and Green Exchange                                                                                                                                                                                                                               |
| Stock Connect                                     | Shanghai-Hong Kong Stock Connect and Shenzhen-Hong Kong Stock<br>Connect                                                                                                                                                                                            |
| SZSE                                              | Shenzhen Stock Exchange                                                                                                                                                                                                                                             |
| Tencent Music                                     | Tencent Music Entertainment Group                                                                                                                                                                                                                                   |
| Тиуа                                              | Tuya Inc.                                                                                                                                                                                                                                                           |
| UK                                                | United Kingdom                                                                                                                                                                                                                                                      |
| US                                                | United States of America                                                                                                                                                                                                                                            |
| US\$/USD                                          | United States dollar                                                                                                                                                                                                                                                |
| Zhihu                                             | Zhihu Inc.                                                                                                                                                                                                                                                          |
| \$/HK\$/HKD                                       | Hong Kong dollar                                                                                                                                                                                                                                                    |
| \$bn/bn                                           | Hong Kong dollar in billion/billion                                                                                                                                                                                                                                 |
| \$m                                               | Hong Kong dollar in million                                                                                                                                                                                                                                         |
| £/GBP                                             | Pound sterling                                                                                                                                                                                                                                                      |
| 1H, 2H                                            | First half, second half (of the year)                                                                                                                                                                                                                               |
| Q1, Q2, Q3, Q4                                    | First quarter, second quarter, third quarter, fourth quarter (of the year)                                                                                                                                                                                          |
|                                                   |                                                                                                                                                                                                                                                                     |