

HKEX

香港交易所

Interim Report 2022

Stock code: 388

Building the Marketplace of the

Future





Contents

02	Strategic and Financial Highlights
10	Chairman’s Statement
14	Management Discussion and Analysis
16	Business Review
34	Financial Review
38	Corporate Governance and Other Information
44	Shareholder Information
45	Auditor’s Independent Review Report
46	Condensed Consolidated Financial Statements (Unaudited)
48	Condensed Consolidated Income Statement (Unaudited)
49	Condensed Consolidated Statement of Comprehensive Income (Unaudited)
50	Condensed Consolidated Statement of Financial Position (Unaudited)
51	Condensed Consolidated Statement of Changes in Equity (Unaudited)
52	Condensed Consolidated Statement of Cash Flows (Unaudited)
53	Notes to the Condensed Consolidated Financial Statements (Unaudited)
71	Glossary

Strategic & Financial Highlights

“

Our results for the first half of 2022 reflect the resiliency and robustness of our business, set against a fragile global macro economic backdrop, ongoing geopolitical tensions, market volatility and the continued impact of the pandemic. Though our numbers were down on the record comparable results last year, reflecting this weak overall market sentiment, we have remained resolutely focused on building our business for the long-term, investing in new initiatives such as a new SPAC regime, ETF Connect and Swap Connect and market enhancements such as Derivatives Holiday Trading and a new VaR Platform. We have also continued to invest in talent, technology and our customer engagement, all central to our vision to create a Marketplace of the Future. We have a strong business, an exceptional team and a clear long-term strategy. We are confident we remain well-placed to capture opportunities ahead.

”



Nicolas Aguzin
Chief Executive Officer

Strategic & Operational Highlights



Corporate

12 Jan

Signed new strategic cooperation agreement with Shenzhen Stock Exchange

29 Mar

HKEX Corporate Day

21 Jun

Re-opening of HKEX Connect Hall

27 Jun

22nd Anniversary of HKEX as a listed company

Market Operations

17 Mar

Aligned all London Mini Futures price bands to 15 per cent with reference to T Session closing price

25 Apr

Upgraded Electronic Communication Platform, enabling clients to exchange files with HKEX

3 May

Volatility Control Mechanism expanded to cover Exchange Traded Products

9 May

Commenced Derivatives Holiday Trading

2 Jun

Published a consultation paper on Revising Position Limits and Large Open Position Reporting Requirements

13 Jun

Launched new Value-at-Risk (VaR) Platform in the Cash Market

17 Jun

Enhanced methodology to calculate the Official Settlement Price of physically-settled HSI Futures Options and HSCEI Futures Options

Products and Services

21 Feb

First metaverse-themed ETF

24 Feb

First pure-play Hong Kong equity ESG ETF

18 Mar

First Special Purpose Acquisition Company

23 Mar

First carbon futures ETF

25 Mar

Announced IR Connect, launched on 7 July 2022

29 Apr

QME launched new soybean contracts

19 May

First Hong Kong Government retail green bond

24 May

LME announced introduction of a range of new sustainability certifications on LMEpassport

27 May

Detailed arrangements for inclusion of ETFs in Stock Connect announced, subsequent launch on 4 July 2022

13 Jun

Introduced additional contract months for HSI Futures and HSCEI Futures

23 Jun

First blockchain ETF

Regulation

22 Apr

Published an information paper on 'Rule Amendments on Bookbuilding and Placing Activities in Equity Capital Market Transactions and Sponsor Coupling to Complement the SFC's New Code of Conduct Provisions and Housekeeping Rule Amendments'

29 Apr

Launched Board Diversity & Inclusion in Focus Repository

Corporate Social Responsibility and ESG

24 Mar

Signed Memorandum of Understanding with Guangzhou-based China Emissions Exchange to explore Greater Bay Area and international carbon opportunities

31 Mar

Launched 2022 HKEX Impact Funding Scheme

16 May

Launched 2022 HKEX Charity Partnership Programme

22 Jun

Launched new HKEX Research Funding Scheme

Financial Highlights

Comparison of 1H 2022 with 1H 2021 Results



1H 2022 revenue and other income of \$8,937 million was 18 per cent lower than record 1H 2021:

- Core business revenue was down 11 per cent against 1H 2021, reflecting lower trading and clearing fees driven by lower Headline ADT, and lower depository fees from e-IPO applications.
- Net investment loss of Corporate Funds was \$378 million (1H 2021: income of \$428 million), due to net fair value losses on the externally-managed investment funds (External Portfolio) of \$511 million (1H 2021: gains of \$321 million), reflecting broader performance of global equity and fixed income markets.

Operating expenses were 11 per cent higher than 1H 2021, attributable to higher staff costs and professional fees, demonstrating our continued investment in talent, infrastructure and strategic initiatives.

EBITDA margin¹ was 72 per cent, 7 per cent lower than record 1H 2021.

Profit attributable to shareholders was \$4,836 million, 27 per cent lower than record 1H 2021.

Revenue and other income

\$8,937

Million

↓ 18%

Profit attributable to shareholders

\$4,836

Million

↓ 27%

Basic earnings per share

\$3.82

↓ 27%

¹ For the purposes of this Interim Report, 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.

Key Financials

	Six months ended 30 Jun 2022 \$m	Six months ended 30 Jun 2021 \$m	Change
Revenue and other income			
Core business revenue	9,278	10,407	(11%)
HKEX Foundation donation income	37	74	(50%)
Net investment (loss)/income of Corporate Funds	(378)	428	N/A
	8,937	10,909	(18%)
Operating expenses	2,456	2,221	11%
EBITDA	6,394	8,607	(26%)
Profit attributable to shareholders	4,836	6,610	(27%)
Capital expenditure	478	536	(11%)
Basic earnings per share	\$3.82	\$5.22	(27%)
Interim dividend per share	\$3.45	\$4.69	(26%)

Key Market Statistics

	Six months ended 30 Jun 2022	Six months ended 30 Jun 2021	Change
ADT of equity products traded on the Stock Exchange ² (\$bn)	119.9	165.8	(28%)
ADT of DWs, CBBCs and warrants traded on the Stock Exchange (\$bn)	18.4	22.4	(18%)
ADT traded on the Stock Exchange ^{2,3} (Headline ADT) (\$bn)	138.3	188.2	(27%)
ADT of Northbound Trading of Stock Connect ² (RMBbn)	103.9	114.4	(9%)
ADT of Southbound Trading of Stock Connect ² (\$bn)	33.2	48.1	(31%)
ADV of derivatives contracts traded on the Futures Exchange ('000 contracts)	705	522	35%
ADV of stock options contracts traded on the Stock Exchange ('000 contracts)	604	688	(12%)
Chargeable ADV ⁴ of metals contracts traded on the LME ('000 lots)	539	544	(1%)
ADT of Northbound Bond Connect (RMBbn)	31.2*	26.6	17%

* New record half-yearly high in 1H 2022

2 Includes buy and sell trades under Stock Connect

3 ADT of Southbound Trading is included within Headline ADT.

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

Financial Highlights

Comparison of Q2 2022 with Q2 2021 Results



Core business revenue for Q2 2022 was 4 per cent lower than Q2 2021 due to lower Headline ADT and lower depository fees from e-IPO applications, but was partly offset by the increase in ADV of the Derivatives Markets and the increase in net investment income from Margin Funds and Clearing House Funds. Total revenue and other income, however, was 14 per cent lower than Q2 2021, as the External Portfolio recorded net fair value losses of \$322 million in Q2 2022 (Q2 2021: gains of \$162 million), reflecting weak sentiment across both equities and fixed income markets.

Operating expenses were up 14 per cent, attributable to higher staff costs reflecting investments in talent and higher recruitment costs.

In Q2 2021, there was a one-off deferred tax charge on acquired LME intangible assets of \$160 million arising from the approval of the change in UK statutory tax rate from 19 per cent to 25 per cent, effective from April 2023.

As a result, Q2 2022 profit attributable to shareholders of \$2,168 million was 22 per cent lower than Q2 2021.

Revenue and other income

\$4,247

Million

↓ 14%

Profit attributable to shareholders

\$2,168

Million

↓ 22%

Basic earnings per share

\$1.71

↓ 22%

Key Financials

	Three months ended 30 Jun 2022 \$m	Three months ended 30 Jun 2021 \$m	Change
Revenue and other income			
Core business revenue	4,514	4,716	(4%)
HKEX Foundation donation income	7	28	(75%)
Net investment (loss)/income of Corporate Funds	(274)	209	N/A
	4,247	4,953	(14%)
Operating expenses	1,278	1,119	14%
EBITDA	2,921	3,798	(23%)
Profit attributable to shareholders	2,168	2,770	(22%)
Capital expenditure	288	205	40%
Basic earnings per share	\$1.71	\$2.19	(22%)

Key Market Statistics

	Three months ended 30 Jun 2022	Three months ended 30 Jun 2021	Change
ADT of equity products traded on the Stock Exchange ² (\$bn)	113.6	133.1	(15%)
ADT of DWs, CBBCs and warrants traded on the Stock Exchange (\$bn)	16.1	18.2	(12%)
ADT traded on the Stock Exchange ^{2,3} (Headline ADT) (\$bn)	129.7	151.3	(14%)
ADT of Northbound Trading of Stock Connect ² (RMBbn)	101.8	101.0	1%
ADT of Southbound Trading of Stock Connect ² (\$bn)	30.9	35.3	(12%)
ADV of derivatives contracts traded on the Futures Exchange ('000 contracts)	704	451	56%
ADV of stock options contracts traded on the Stock Exchange ('000 contracts)	570	546	4%
Chargeable ADV ⁴ of metals contracts traded on the LME ('000 lots)	487	552	(12%)
ADT of Northbound Bond Connect (RMBbn)	29.7	27.8	7%



Laura M CHA
Chairman

Chairman's Statement

In the first half of 2022, global financial markets were characterised by high levels of volatility and weak market sentiment, reflecting economic fragility, geopolitical tensions, including the war in Ukraine, inflationary pressures and the continuing impact of the pandemic. While HKEX was not immune to the impact of these, our organisation and our markets continued to demonstrate their robustness and resilience. Our purpose-driven business is fully focused on delivering our vision to build the Marketplace of the Future.

Amid the uncertain and volatile market conditions, the average daily turnover in Hong Kong's securities market (\$138.3 billion) decreased by 27 per cent from the half-yearly record high in the first half of 2021, while the average daily turnover of ETFs (\$9.7 billion) and the average daily volume of futures and options traded on the derivatives market (1,308,817 contracts) increased by 59 per cent and 8 per cent respectively. Despite a slowdown in IPO activity globally during the first six months of 2022, in Hong Kong our IPO pipeline remained strong. Stock Connect trading remained resilient during the first half of the year, while Northbound Bond Connect trading continued its strong track record of growth, with average daily turnover reaching RMB31.2 billion, up 17 per cent year-on-year.

The chargeable average daily volume of metals contracts traded on the LME was broadly in line with the same period last year. Following the unprecedented events in the nickel market in March 2022, the LME has been working closely with regulators and other stakeholders to put in place additional measures to promote market stability and enhance the efficiency and resilience of the market. Following the implementation of interim measures, such as the introduction of daily price limits, and following market consultation, the LME has announced introduction of new weekly OTC position reporting requirements and extended accountability levels to include OTC positions. An independent review of the nickel market events in March, undertaken by Oliver Wyman, is also under way.

For the six months ended 30 June 2022, the Group recorded total revenue and other income of \$8,937 million and profit attributable to shareholders of \$4,836 million, down 18 per cent and 27 per cent respectively from the record levels in prior year. The Board declared an interim dividend of \$3.45 per share, payable in cash.

On the product front, we have continued to enhance our mutual market connectivity and expand the breadth and diversity of our product ecosystem to reinforce Hong Kong's role as a premier global financial centre, connecting China and the world. The inclusion of eligible ETFs in Stock Connect since 4 July 2022 marked another milestone in our landmark mutual market access programmes, further deepening connectivity between Hong Kong and Mainland China's capital markets and supporting the continued development of the region's ETF ecosystem. With the rollout of the first blockchain ETF, first metaverse-themed ETF, first carbon futures ETF and first pure-play Hong Kong equity ESG ETF during the period, our ETF offering has strengthened and diversified, supporting Hong Kong's position as Asia's preferred ETF marketplace. Through our clearing subsidiary, OTC Clear, we were pleased to announce our partnership with China Foreign Exchange Trade System (CFETS) and Shanghai Clearing House to develop Swap Connect, a new mutual market access programme between Hong Kong and Mainland China's interbank interest rate swap markets.

To ensure that our market stays internationally competitive and attractive, we introduced a new SPAC route to market and enhanced HKEX's listing regime for overseas issuers on 1 January 2022. We are currently conducting a study on revising the listing requirements to meet the fundraising needs of specialist technology companies and will put forward proposals for market consultation as appropriate.

To reinforce HKEX's position as the region's pre-eminent international risk management and trading centre, we were pleased to launch holiday trading for non-Hong Kong dollar denominated futures and options in May 2022. We rolled out our new VaR Platform, with enhanced margining model, in June 2022 to strengthen the resilience of our securities clearing house and promote enhanced transparency and cost efficiency for HKEX market participants. We also launched a new digital investor relations platform, IR Connect, in July 2022, aiming to enhance and expand listed issuers' outreach to investors and the analyst community.

As a purpose-led organisation committed to the long-term prosperity of our whole community, we continue our commitment to our own sustainability journey and to furthering the net-zero transition in the region and beyond. In March 2022, HKEX partnered with the China Emissions Exchange to explore cooperation in tackling climate change and promoting green transformation and sustainable growth of the Greater Bay Area through carbon finance. In July 2022, we established the Hong Kong International Carbon Market Council to gather insights on the development of a Hong Kong-based international carbon market, with best-in-class market infrastructure, products and services. At the LME, in May 2022 we added a range of new certifications and standards to our digital credentials register, LMEpassport, enabling more producers to report on a wide range of sustainability metrics. On the responsible sourcing front, the first reporting deadline for LME-listed brands to comply with the LME requirements, underpinned by the OECD Guidance requirements, was on 30 June 2022. This marked an important step forward in promoting responsible supply chains and underscoring the LME's central role in the global metals industry.

Within our organisation, we initiated a holistic in-depth review of the operating model of our Hong Kong business and operations in January 2022 ensuring that from a people, organisational and risk perspective that we have the optimum structure and foundations in place to deliver on our vision and our strategy. Throughout the period we also continued to expand our technological capabilities to maximise efficiencies and performance and drive client-centricity across our business and initiatives, both in support of our focus to move from an infrastructure-led to a more client-led organisation.

Details of our progress across various initiatives are set out in the Business Review section of this Interim Report.

Through the work of HKEX Foundation, we continued to deepen our engagement and connectivity with our communities during the period. We launched a new funding scheme supporting innovative research projects in partnership with a number of Hong Kong's universities to help provide valuable insight into financial markets, ESG and our shared sustainable future. We also announced the scale up of the funding of our flagship Charity Partnership Programme to \$50 million in May 2022 to support those in need and to bring more meaningful and positive impact to our communities.

As we look forward, we are confident with our resilient business and our resolute focus on our strategic pillars – Connecting China and the World, Connecting Capital with Opportunities, and Connecting Today with Tomorrow – that we remain well placed to capitalise on the opportunities ahead and support the long-term sustainable development of our business, markets and communities. We look forward to working closely with our clients, partners, regulators and other stakeholders to further enhance the attractiveness and vibrancy of our markets and strengthen our leadership role in shaping the future of the region's global capital markets.

Finally, I would like to thank our shareholders and other valued stakeholders for their unwavering support and confidence, and our staff for their outstanding dedication and hard work, which together provide us with an excellent foundation for success in the next stage of our strategic journey.

Laura M CHA

Chairman

Hong Kong, 17 August 2022

Managememe Discussi Analysis

Business Review

Financial Review

nt
on &



Business Review

Overview

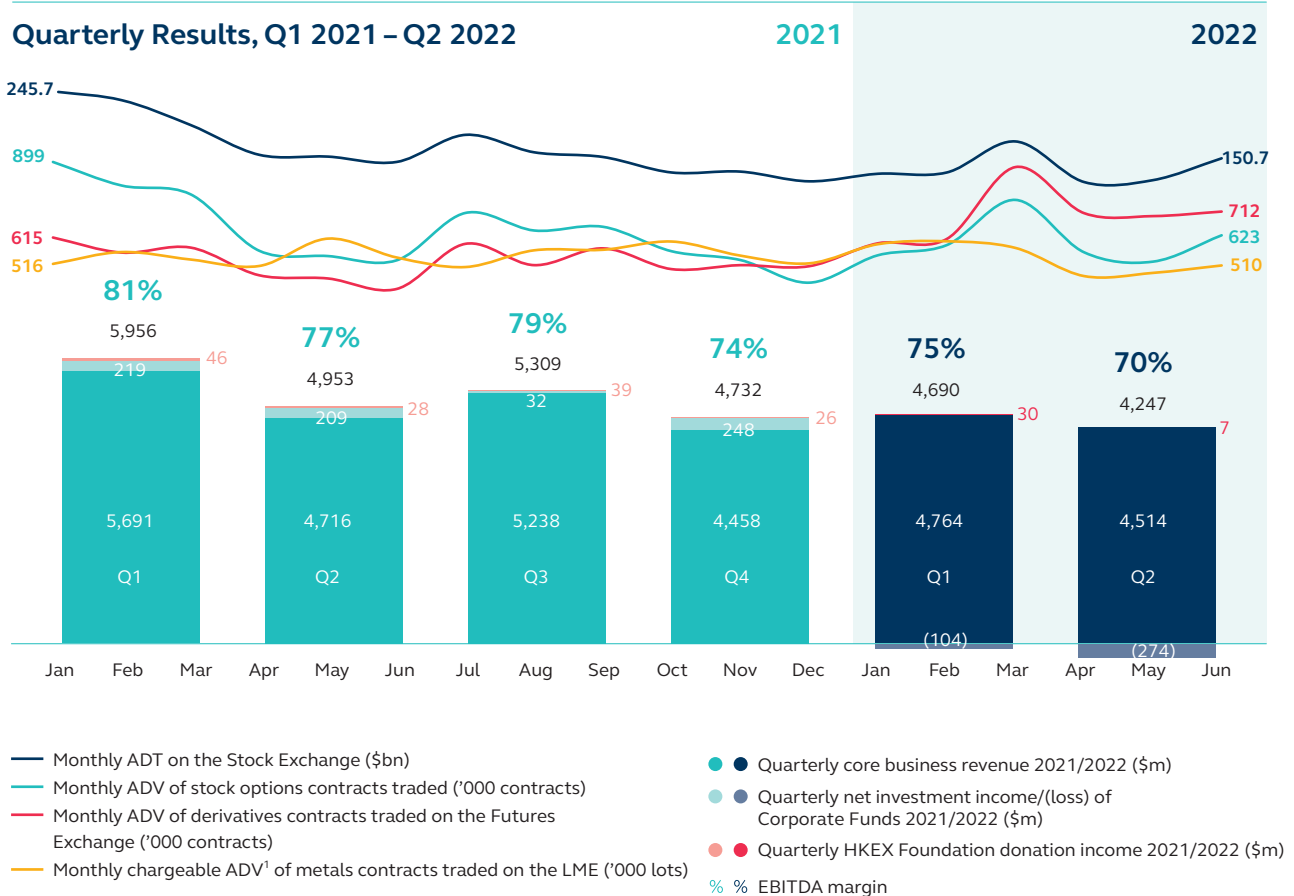


Fig. 1 – Market activity and Group's revenue and other income/(loss)

HKEX's businesses demonstrated robustness and resiliency in 1H 2022, despite global market volatility, geopolitical fragility, and the continued impact of the pandemic. Headline ADT was \$138.3 billion in 1H 2022, 27 per cent lower than the record 1H 2021, and 5 per cent lower than 2H 2021. Increased volatility and increasing demand for HKEX's newly launched derivatives products resulted in solid growth in derivatives contracts traded on HKFE in 1H 2022, with ADV 35 per cent higher than 1H 2021. During 1H 2022, 27 IPOs were listed on our market, reflecting the global market sentiment, but the IPO pipeline remained very strong, with 189 active applications as at 30 June 2022.

Core business revenue for 1H 2022 was \$9,278 million, 11 per cent lower than the record 1H 2021, due to lower trading and clearing fees from lower Headline ADT and lower depository fees from e-IPO applications. Affected by the broader performance of global equities and fixed income markets, HKEX's externally-managed investment funds (External Portfolio) recorded net fair value losses of \$511 million during 1H 2022 (1H 2021: gains of \$321 million). As a result, total revenue and other income for 1H 2022 dropped by 18 per cent against 1H 2021. Operating expenses increased by 11 per cent against 1H 2021, mainly due to higher staff costs and professional fees.

¹ Chargeable ADV excludes administrative trades (Admin Trades) and other non-chargeable trades.

For Q2 2022, core business revenue was 5 per cent lower than Q1 2022. This reflected the 11 per cent lower Headline ADT and 17 per cent decrease in LME chargeable ADV, and the decrease in Stock Exchange listing fees from the lower number of newly listed DWs and CBBCs; this was partly offset by the seasonal increase in depository fees and higher net investment

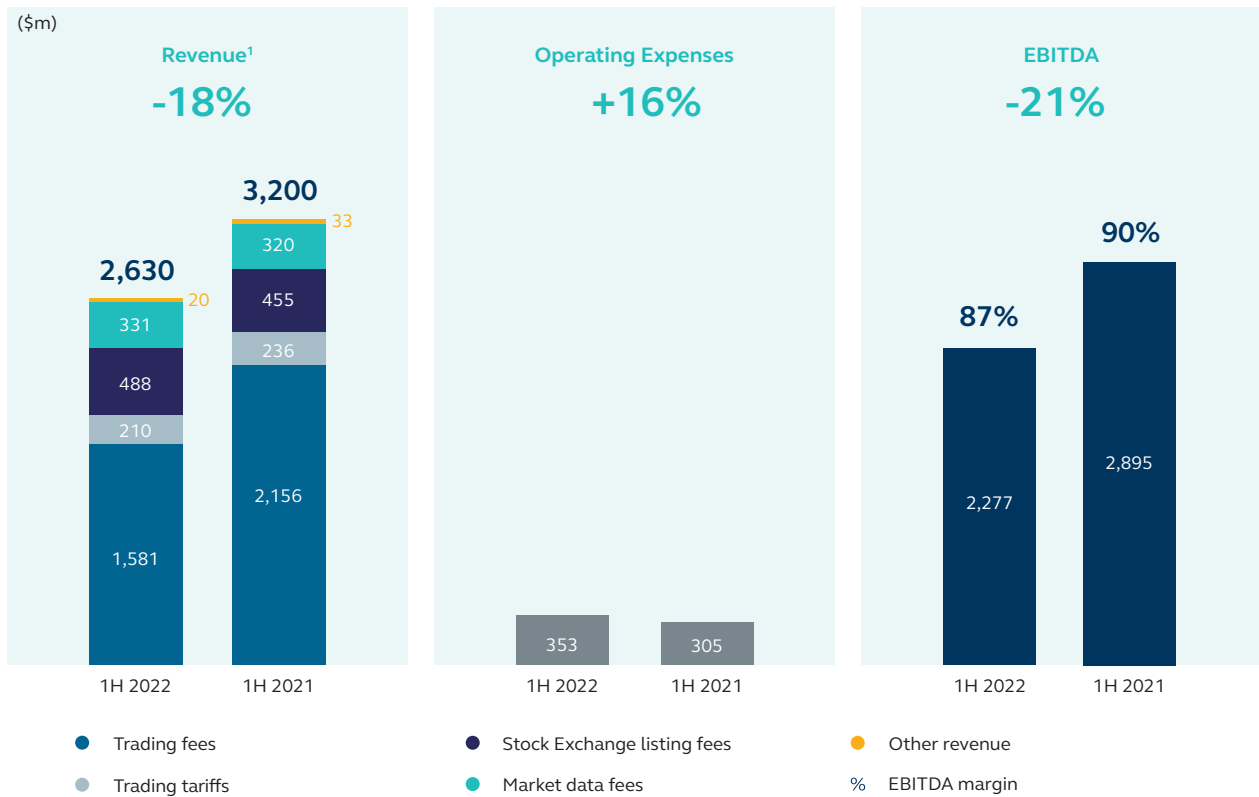
returns of the Margin Funds. Total revenue and other income for Q2 2022 was \$4,247 million, 9 per cent lower than Q1 2022, due to the decrease in core business revenue and fair value losses of the External Portfolio (Q2 2022: losses of \$322 million; Q1 2022: losses of \$189 million).

Analysis of Results and Business Update by Operating Segment

	Six months ended 30 June 2022				Six months ended 30 June 2021			
	Revenue and other income \$m	Transaction-related expenses \$m	Revenue and other income less transaction-related expenses \$m	EBITDA \$m	Revenue and other income \$m	Transaction-related expenses \$m	Revenue and other income less transaction-related expenses \$m	EBITDA \$m
Results by segment:								
Cash	2,630	-	2,630	2,277	3,200	-	3,200	2,895
Equity and Financial Derivatives	1,650	(82)	1,568	1,220	1,731	(63)	1,668	1,331
Commodities	697	-	697	351	723	-	723	399
Post Trade	3,744	(5)	3,739	3,275	4,224	(18)	4,206	3,760
Technology	551	-	551	401	523	-	523	375
Corporate Items	(335)	-	(335)	(1,130)	508	-	508	(153)
	8,937	(87)	8,850	6,394	10,909	(81)	10,828	8,607

Cash Segment Analysis of Results

1H 2022 vs 1H 2021



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

Revenue was down 18 per cent and EBITDA was down 21 per cent compared with 1H 2021.

Trading fees decreased by \$575 million, or 27 per cent compared with 1H 2021, attributable to the 28 per cent decrease in ADT of equity products traded on the Stock Exchange and the 9 per cent decrease in ADT of Northbound Stock Connect. Included in trading fees were Northbound Stock Connect trading fees of \$269 million (1H 2021: \$296 million) and Southbound Stock Connect trading fees of \$85 million (1H 2021: \$125 million). Trading tariffs dropped by 11 per cent, driven by the decrease in equity products traded.

Despite the drop in number of new IPOs during the period, Stock Exchange listing fees increased by \$33 million, mainly due to an increase in forfeitures.

Operating expenses increased by 16 per cent due to higher Listing Division allocated costs, reflecting higher listing fees from IPO forfeitures and lower listing fees from newly listed DWs and CBBCs.

Business Update

In 1H 2022, the trading activities of the Hong Kong securities market were at a similar level to 2H 2021, with Headline ADT marginally down by 5 per cent. As compared with 1H 2021, Headline ADT saw a 27 per cent decrease, as the trading activities were exceptionally buoyant in Q1 2021.

Stock Connect operated smoothly and resiliently in 1H 2022, with Northbound and Southbound ADT at RMB103.9 billion and \$33.2 billion respectively. During 1H 2022, Stock Connect generated revenue and other income of \$1,185 million (1H 2021: \$1,320 million), of which \$879 million (1H 2021: \$1,018 million) arose from trading and clearing activities.

Following the joint announcement made by the China Securities Regulatory Commission (CSRC) and the SFC on 27 May 2022, ETFs were included in Stock Connect on 4 July 2022. The inclusion supports the development of the ETF ecosystem in both Hong Kong and Mainland China, meeting the growing investor demand for a broader range of products and further facilitating the two-way opening up of regional capital markets.

The Hong Kong IPO market was relatively quiet during 1H 2022 reflecting global market sentiment, in particular economic fragility, geopolitical events and the continuing impact of the pandemic. In 1H 2022, HKEX welcomed 27 listings raising \$19.7 billion, down 91 per cent compared with 1H 2021. Following the introduction of the listing regime for special purpose acquisition companies (SPACs), HKEX welcomed two SPAC listings in 1H 2022, raising a total of \$2.0 billion. HKEX's IPO pipeline remained very strong throughout, with 189 active applications including 11 SPAC applications as at 30 June 2022, providing optimism for a resumption in primary activity as sentiment improves. In June 2022, we welcomed Zai Lab as the first company to convert from a secondary listing to a primary listing on the Main Board. Alibaba and Bilibili also announced their plans for conversion by the end of 2022. This underpins Hong Kong's role as a preferred and attractive market for homecoming issuers.

On 7 July 2022, HKEX launched a new digital investor relations platform, IR Connect. The new portal enables Hong Kong listed issuers to build connectivity and regular dialogue with the global investor and analyst community. The first phase of IR Connect provides listed issuers with free access to shareholding analysis and market data, key stock statistics and research ratings.

ADT of ETPs, which include ETFs and L&I Products, increased to \$11.8 billion in 1H 2022, up 64 per cent from \$7.2 billion in 1H 2021. During the period, ETPs recorded the highest single day turnover of \$38.1

Key Market Indicators

	Six months ended 30 Jun 2022	Six months ended 30 Jun 2021
ADT of equity products traded on the Stock Exchange ^{1,2} (\$bn)	119.9	165.8
ADT of Northbound Trading – Shanghai-Hong Kong Stock Connect ² (RMBbn)	48.5	52.8
ADT of Northbound Trading – Shenzhen-Hong Kong Stock Connect ² (RMBbn)	55.4	61.6
ADT of Southbound Trading – Shanghai-Hong Kong Stock Connect ² (\$bn)	17.0	23.1
ADT of Southbound Trading – Shenzhen-Hong Kong Stock Connect ² (\$bn)	16.2	25.0
ADT of Northbound Bond Connect (RMBbn)	31.2 ⁴	26.6
Average daily number of trades of equity products traded on the Stock Exchange ^{1,2} ('000)	1,900	2,097
Number of newly listed companies on the Main Board ³	27	45
Number of newly listed companies on GEM	–	1
Total equity funds raised		
– IPOs (\$bn)	19.7	211.7
– Post-IPO (\$bn)	95.3	275.6
Number of companies listed on the Main Board at 30 Jun	2,223	2,190
Number of companies listed on GEM at 30 Jun	345	364
Number of trading days	120	121

1 Excludes \$18.4 billion (1H 2021: \$22.4 billion) of ADT of DWs, CBBs and warrants (which are included under the Equity and Financial Derivatives segment) and includes ADT of Southbound Trading under Stock Connect

2 Includes buy and sell trades under Stock Connect

3 Includes 1 transfer from GEM (1H 2021: 1 transfer)

4 New record half-yearly high in 1H 2022

billion on 16 March 2022. In addition, HKEX's ETP new product listing continues to expand, with 10 new ETPs listed during 1H 2022, including the first metaverse-themed ETF, first pure-play Hong Kong equity ESG ETF, first carbon futures ETF, and first blockchain ETF. On 3 May 2022, the Volatility Control Mechanism (VCM) was expanded to cover ETPs to further safeguard market integrity from extreme price volatility.

In 1H 2022, Northbound Bond Connect's trading volume continued its overall growth momentum despite market volatility, with ADT in 1H 2022 reaching a record half-yearly high of RMB31.2 billion, representing year-on-year growth of 17 per cent. Single-day trading volume recorded an all-time high of RMB69.8 billion on 19 January 2022, and trading volume in January 2022 reached a record monthly high of RMB780.7 billion. As at 30 June 2022, a total of 757 registered investors from 36 jurisdictions participated in Northbound Bond Connect, up 4 per cent from 728 registered investors as at 31 December 2021.

The listed bond market flourished in 1H 2022, with a total of 226 bonds listed on the Stock Exchange, raising a total of \$524 billion. The first Hong Kong Government retail green bonds were listed on 19 May, raising \$20.0 billion from retail investors. As at 30 June 2022, the total number of listed bonds reached 1,777, with total amount outstanding exceeding \$6 trillion.

HKEX's Sustainable and Green Exchange (STAGE) continued to gain traction. As at 30 June 2022, there were a total of 106 sustainability-focused products from leading issuers displayed on STAGE, including green, social, sustainable or similar bonds, from issuers across different sectors, as well as ESG-related ETPs.

On 5 July 2022, HKEX announced the launch of the Hong Kong International Carbon Market Council, partnering with a number of leading regional corporates and financial institutions to develop an international carbon market that leverages Hong Kong's position as a leading global financial centre. This is a significant step forward in the collective journey to achieving net zero.

During 1H 2022, HKEX continued to promote transparency and a strong compliance culture in our marketplace, including the following key initiatives:

- (i) In April 2022, HKEX published the results and findings of the 2021 Annual Attestation

and Inspection Programme, and commenced the 2022 Annual Attestation and Inspection Programme with focus on three areas: (1) China Connect rules; (2) risk management; and (3) clearing rules obligation.

- (ii) HKEX published various communication materials including two quarterly Compliance Bulletins and three guidance notes to market participants; and hosted multiple education seminars and compliance roundtables to highlight recent updates in HKEX rules and regulations, compliance issues and good practices.

In Q1 2022, HKEX initiated a review to holistically modernise the operating model of HKEX's Hong Kong businesses, looking at structure, processes, people, and performance measures. Through this extensive programme, management seeks to strengthen the Execution Pillars of the Marketplace of the Future: namely client centricity, operational excellence, talent and culture, and a risk and controls mindset. The formation of the centralised Client Services Department in May 2022 is one of the first results of this exercise. The department acts as an oversight function for various client touch points across the businesses, and focuses on progressively modernising HKEX's client interface and engagement, seeking to deliver a more integrated client journey that begins with onboarding and extends to the entire spectrum of client interactions with HKEX.

On 22 April 2022, the Stock Exchange published an information paper on Rule Amendments on Bookbuilding and Placing Activities in Equity Capital Market Transactions and Sponsor Coupling to Complement the SFC's New Code of Conduct Provisions and Housekeeping Rule Amendments. New requirements resulting from the Rule changes apply to listing applications submitted on or after 5 August 2022 for specified types of placings.

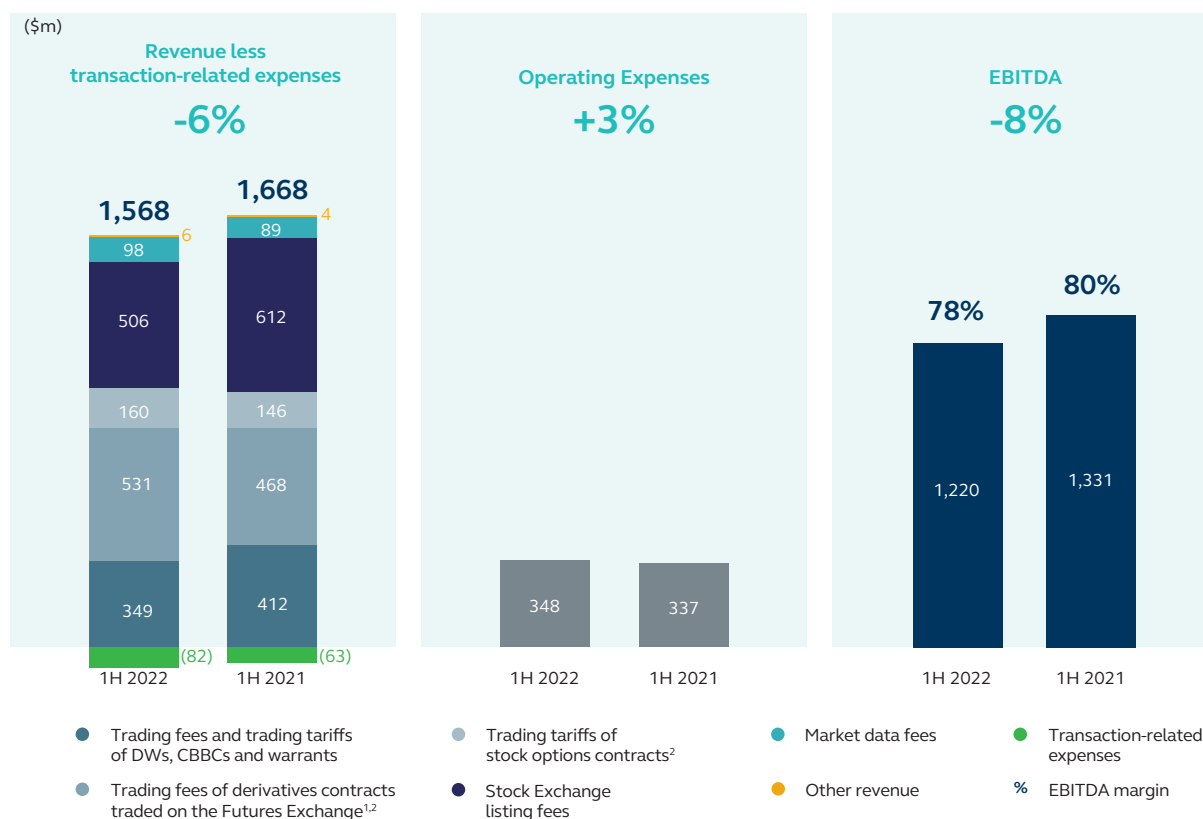
In addition, the Stock Exchange published the following guidance materials during 1H 2022:

Guidance materials

- Semi-annual (i) Listing Division Newsletter, (ii) Listed Issuer Regulation Newsletter and (iii) Enforcement Bulletin
- A "Review of Issuers' Annual Reports – 2021" on findings and recommendations from a review of issuers' annual reports for the 2020 financial year end
- "Board Diversity & Inclusion in Focus" repository to aid access to information on and transparency around board diversity; and ESG in Practice through the ESG Academy to support issuers' ESG practices
- A new guidance letter on the qualifications and obligations of a trustee/custodian regarding the operation of the escrow account of a SPAC
- A new e-Learning module on trading arrangements for corporate actions as part of a new e-Learning series dedicated to ongoing compliance requirements under the Listing Rules

Equity and Financial Derivatives Segment Analysis of Results

1H 2022 vs 1H 2021



1 Excludes London Metal Mini Futures, Gold Futures, Silver Futures and Iron Ore Futures contracts (which are included under the Commodities segment)
2 Excludes trading fees and trading tariffs allocated to the Post Trade segment

Revenue, less transaction-related expenses, was down 6 per cent; and EBITDA was down 8 per cent compared with 1H 2021.

Trading fees and trading tariffs of DWs, CBBCs and warrants dropped by 15 per cent compared with 1H 2021, attributable to the 18 per cent decrease in ADT and the 10 per cent decrease in average daily number of trades.

Futures Exchange derivatives trading fees² increased by \$63 million or 13 per cent due to the increase in

derivatives contracts ADV, but this was partly offset by lower fees per contract, attributable to fee waivers for certain newly launched products and a lower proportion of higher fee contracts (including HSI futures and options) being traded in 1H 2022.

Stock Exchange listing fees decreased by 17 per cent due to a decrease in the number of newly listed DWs and CBBCs compared with the record 1H 2021.

Operating expenses increased by 3 per cent due to increase in cash incentives relating to new products.

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

Business Update

Key Market Indicators

	Six months ended 30 Jun 2022	Six months ended 30 Jun 2021
ADT of DWs, CBBCs and warrants traded on the Stock Exchange (\$bn)	18.4	22.4
Average daily number of trades of DWs, CBBCs and warrants traded on the Stock Exchange ('000)	388	433
ADV of derivatives contracts traded on the Futures Exchange ¹ ('000 contracts)	701	521
ADV of stock options contracts traded on the Stock Exchange ('000 contracts)	604	688
Number of newly listed DWs	6,157	8,247
Number of newly listed CBBCs	19,413	21,017
ADV of contracts traded during After-Hours Trading (AHT) ¹ ('000 contracts)	117	67
Number of trading days ²	122	121

	At 30 Jun 2022	At 30 Jun 2021
Open interest of futures and options contracts ¹ ('000 contracts)	10,466	11,650

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

2 Includes 2 holiday trading days (1H 2021: nil)

ADV of derivatives contracts traded² in 1H 2022 was 1,305,424 contracts, 8 per cent higher than 1H 2021 and 16 per cent higher than 2H 2021, mainly attributable to an increase in ADV for both HSCEI Futures and Hang Seng TECH Index Futures. A daily record volume was achieved on 16 March 2022 with over 2.8 million derivatives contracts traded.

Driven by both volatility and the increased popularity of newly launched products, as well as an increase in cross-product trading activities, a number of futures and options contracts reached single-day record highs in volume and open interest (OI) during 1H 2022:

	Single-day Trading Volume		Open Interest	
	Date (2022)	Number of contracts	Date (2022)	Number of contracts
HSI Futures Options	26 May	49,375	26 May	73,312
Mini HSI Futures	N/A	N/A	17 Mar	27,632
Weekly HSI Options	16 Mar	22,683	17 Mar	15,316
HSCEI Futures Options	15 Mar	45,363	16 Jun	418,219
Hang Seng TECH Index Futures	27 Jun	205,115	27 Jun	143,153
MSCI China A 50 Connect (USD) Index Futures	16 Feb	65,682	18 Jan	42,718
MSCI Japan Net Total Return (USD) Index Futures	15 Jun	31,792	17 Jun	18,262
MSCI China Net Total Return (USD) Index Futures	14 Jun	22,774	14 Jun	34,522
MSCI Taiwan Net Total Return (USD) Index Futures	N/A	N/A	17 Mar	28,026
USD/CNH Futures	25 Apr	39,149	N/A	N/A
Mini USD/CNH Futures	25 Apr	30,203	14 Mar	11,480

Hang Seng TECH Index Futures, introduced in November 2020, posted record highs for both single-day trading volume and OI in 1H 2022. ADV increased by more than seven times in 1H 2022 compared with 1H 2021, reaching 64,928 contracts. OI reached 106,808 contracts as at 30 June 2022, doubling that of 31 December 2021.

ADV of MSCI China A 50 Connect (USD) Index Futures performed well in 1H 2022, with ADV of 19,863 contracts, up 72 per cent against the ADV during the period since launch (18 October 2021) to 31 December 2021. From 1 July 2022, the trading fee waiver of the China A 50 Connect (USD) Index Futures has been replaced by a 50 per cent trading fee discount.

The two physically-settled options on futures contracts, HSI Futures Options and HSCEI Futures Options, continued to gain traction since launch in August 2021. The aggregate ADV of the two products was 14,653 contracts in 1H 2022, an increase of over 250 per cent compared with ADV of 4,072 contracts during the period since launch on 23 August 2021 to 31 December 2021. OI of these two products recorded multiple record highs during 1H 2022, and

OI increased from 90,201 contracts as at 31 December 2021 to 393,134 contracts as at 30 June 2022.

Trading volume in RMB currency derivatives increased due to stronger demand for currency hedging tools as a result of intensified currency market volatility in 1H 2022. Compared with 1H 2021, trading volume of USD/CNH Futures and Mini USD/CNH Futures increased 101 per cent and 97 per cent to 1,580,451 contracts and 646,781 contracts respectively in 1H 2022.

HKEX successfully launched Derivatives Holiday Trading (DHT) on 9 May 2022, enabling investors to actively manage their derivatives product portfolios during Hong Kong holidays. Up to 30 June 2022, there were two holiday trading days since launch and operation was smooth. A total of 17,859 contracts were traded, and the trading volume on the first holiday trading day was 55 per cent of the ADV during 1H 2022. In addition, on the first holiday trading day, MSCI China A 50 Connect Index Futures reached a record high in T+1 Session with 3,134 contracts traded (72 per cent higher than the previous record).

During 1H 2022, HKEX continued to enhance its market microstructure, with a number of key initiatives, including:

Market microstructure enhancements

- On 6 April 2022, two revisions to capital adjustment methodology on single stock futures and single stock options in relation to spin-off came into effect. The revisions were (i) revising the adjustment ratio formula for capital adjustment in relation to spin-offs and (ii) introducing an adjustment ratio floor at 0.1 on contract size or contract multiplier adjustment. The aim of the revisions was to protect market integrity and to maintain an orderly market when there are spin-offs
- On 2 June 2022, HKEX published a consultation paper proposing a new 5-tier position limit regime for single stock options and futures market, removing additional position limits, and revising the Large Open Position (LOP) reporting requirements for mini HSI and mini HSCEI derivatives contracts. The consultation period ended on 30 June 2022, and HKEX published the consultation conclusion on 28 July 2022
- On 13 June 2022, HKEX introduced additional contract months for HSI Futures and HSCEI Futures, providing more hedging flexibility for market participants
- On 17 June 2022, HKEX enhanced the methodology to calculate the Official Settlement Price (OSP) of the physically-settled HSI Futures Options and HSCEI Futures Options by incorporating price references between 3:55 p.m. and 4:00 p.m. on the contracts' expiry day

In 1H 2022, seven issuers diversified their offering, issuing DWs with non-HK underlying, including Nasdaq 100 Index, S&P 500 Index and Dow Jones Industry Average Index. The number of newly listed US Index Derivative Warrants was 139 in 1H 2022, a 276 per cent increase compared with 2H 2021. ADT on these DWs of \$170.5 million was recorded during 1H 2022. With the recent inclusion of the MSCI China A 50 Connect Index in the eligible list for DW issuance, Hong Kong's first A-share structured products were listed on

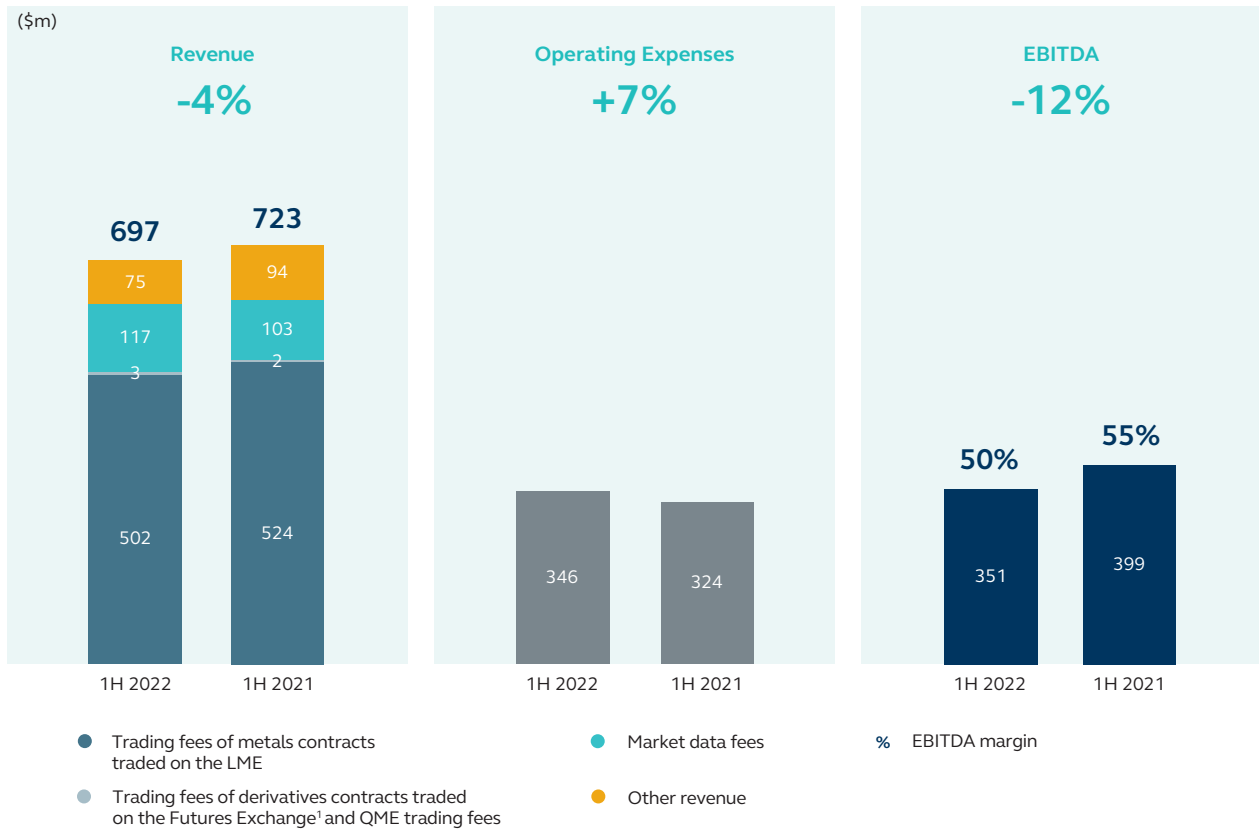
8 August 2022. The products provide investors with a new tool to risk manage China-focused investments, further enhancing the competitiveness of our A-share product ecosystem.

HKEX was awarded the "Best Structured Product and Derivatives Exchange" in the "Asia-Pacific Awards 2022" organised by Structured Retail Products³, for the third consecutive year.

3 An organisation providing data and market intelligence on structured products

Commodities Segment Analysis of Results

1H 2022 vs 1H 2021



¹ Includes London Metal Mini Futures, Gold Futures, Silver Futures and Iron Ore Futures contracts only

Revenue was down 4 per cent and EBITDA was down 12 per cent compared with 1H 2021.

LME trading fees decreased by \$22 million (4 per cent) due to a decrease in total chargeable metals contracts traded in 1H 2022, and lower average fee per contract.

Operating expenses increased by 7 per cent, due to legal fees associated with claims relating to the nickel market, and higher staff costs and IT costs incurred by LME.

Business Update

Trading on the nickel market resumed following the unprecedented events on 8 March 2022, which led to the LME's decision to suspend trading and cancel trades. Since then, the LME has introduced several new measures, including daily price limits across its main contracts. The LME additionally consulted on, and subsequently announced, the introduction of a weekly OTC position reporting framework and accountability levels for all LME physically delivered metals; and has commissioned an independent review of factors that contributed to market conditions in the nickel market in the period leading up to, and including, 8 March 2022, to be conducted by Oliver Wyman. In addition, both the Financial Conduct Authority and the Bank of England have announced that they will undertake their own separate reviews.

On 24 May 2022, the LME announced the introduction of a range of new sustainability certifications on its digital credentials register, LMEpassport, enabling more producers to report on a wider range of sustainability metrics. As at 30 June 2022, 30 producers have published over 190 disclosures under the LME's sustainability taxonomy, more than double the number published at its launch in October 2021. The taxonomy covers ESG measures, and is designed to ensure that all aspects of sustainability – and the ways in which LME-listed brands are addressing them – can be reflected. In addition, the scope of LMEpassport's Certificate of Analysis (CoA) requirements was extended to lead and zinc brands on 1 June 2022.

30 June 2022 marked the first reporting deadline for the LME's responsible sourcing rules – a set of requirements that aim to ensure that all LME-listed brands (those listed for good delivery) meet globally accepted standards for responsible sourcing. The LME is now reviewing the submissions.

In light of the low levels of trading activity within the LMEprecious market, the LMEprecious Service was withdrawn, effective 11 July 2022, following discussions with market participants.

In Hong Kong, USD Gold and Silver Futures volumes and USD London Metal Mini Futures grew substantially, with 195,348 contracts and 206,282 contracts traded in 1H 2022, compared with 3,251 contracts and 137,012 contracts traded in 1H 2021 respectively. On 17 March 2022, HKEX aligned the price band across all London Mini Futures to 15 per

Key Market Indicators

	Six months ended 30 Jun 2022	Six months ended 30 Jun 2021
ADV of metals contracts traded on the LME ('000 lots)		
Aluminium	227	228
Copper	117	125
Zinc	90	83
Nickel	60	63
Lead	40	39
Others	5	6
Total chargeable ADV excluding Admin Trades ¹	539	544
Chargeable Admin Trades ¹	29	26
Other non-chargeable trades	1	1
Total ADV	569	571
Number of trading days	123	124

	At 30 Jun 2022	At 30 Jun 2021
Total futures market open interest ('000 lots)	1,483	1,885

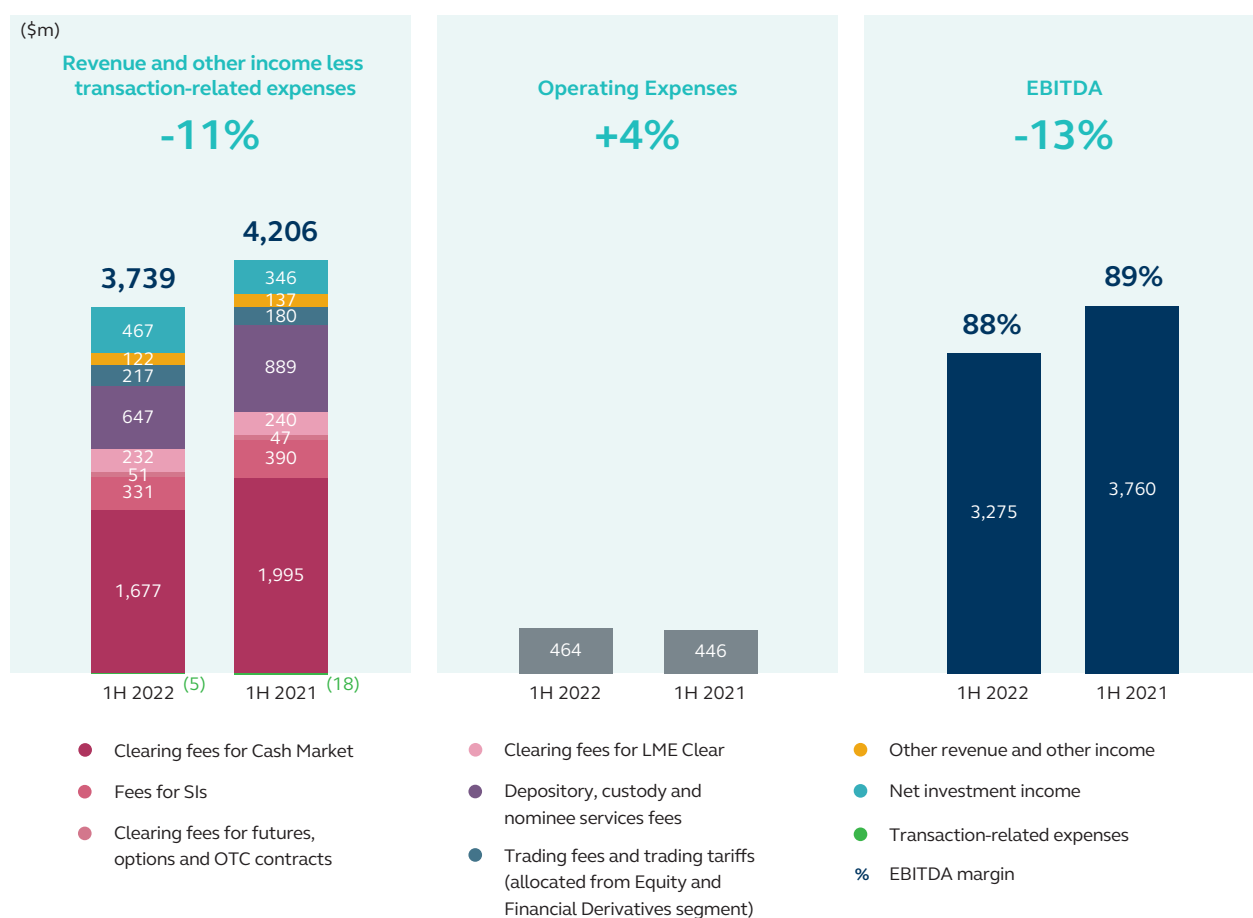
¹ Admin Trades are chargeable at a lower fee rate of US\$0.04 per contract.

cent with reference to the T Session closing price. To further facilitate a better price discovery process with minimal disruption to participants' operations, HKEX optimised this mechanism effective from 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.

As a result of the Covid-19 pandemic and lockdowns in Shenzhen and Shanghai, metals trading on QME, especially copper trading in the Yangtze River Delta, was adversely impacted. Nevertheless, total trading turnover in 1H 2022 was RMB27.8 billion, more than three times of that in 1H 2021. On 29 April 2022, QME officially launched new soybean contracts.

Post Trade Segment Analysis of Results

1H 2022 vs 1H 2021



Revenue and other income, less transaction-related expenses, was down 11 per cent and EBITDA was down 13 per cent compared with 1H 2021.

Clearing and settlement fees for the Cash Market and for Settlement Instructions (SIs) decreased by 16 per cent and 15 per cent respectively. This was primarily driven by a lower number of transactions. Clearing fees from Stock Connect Northbound Trading also dropped by 13 per cent to \$435 million (1H 2021: \$501 million), due to reduced trading volume.

Depository, custody and nominee services fees decreased from \$889 million in 1H 2021 to \$647 million in 1H 2022, mainly due to a decrease in e-IPO service fees from a lower number of e-IPO applications.

Net investment income increased by \$121 million compared with 1H 2021. This reflected the higher average fund sizes of Margin Funds, and the higher HKD and USD deposit rates in 1H 2022, but was affected by the lagging effect due to maturity profile of the deposits.

The analysis of net investment income is as follows:

	Six months ended 30 Jun 2022				
	HK Clearing Houses		LME Clear		Total \$m
	Margin Funds \$m	Clearing House Funds \$m	Margin Funds \$m	Clearing House Funds \$m	
Net investment income from:					
– Cash and bank deposits	309	5	82	9	405
– Debt securities	41	3	15	–	59
– Exchange gains	3	–	–	–	3
Total net investment income	353	8	97	9	467
Average fund size (\$bn)	119.3	10.5	129.1	12.4	271.3
Annualised net investment return	0.59%	0.15%	0.15%	0.15%	0.34%

	Six months ended 30 Jun 2021				
	HK Clearing Houses		LME Clear		Total \$m
	Margin Funds \$m	Clearing House Funds \$m	Margin Funds \$m	Clearing House Funds \$m	
Net investment income from:					
– Cash and bank deposits	270	3	46	6	325
– Debt securities	18	1	2	–	21
Total net investment income	288	4	48	6	346
Average fund size (\$bn)	102.1	10.3	83.9	12.2	208.5
Annualised net investment return	0.56%	0.08%	0.11%	0.10%	0.33%

Operating expenses increased by 4 per cent, due to higher investment and custodian fees charged for LME Clear Margin Funds from higher fund sizes and higher legal fees incurred for the claims relating to the nickel market.

Business Update

The development of the FINI platform progressed well during the period. Working closely with market participants to support them in the transition, HKEX published an implementation plan and several technical guides in May 2022.

HKEX launched the new Value-at-Risk (VaR) Platform in its securities market on 13 June 2022. The VaR Platform adopts a new VaR model based on individual stock volatility, replacing the previously applied flat-rate model for the calculation of margin and default fund contributions of HKSCC CPs. This significantly strengthens HKEX's resilience and enhances cost efficiency for CPs.

With reference to the joint announcement of the People's Bank of China, the SFC and the Hong Kong Monetary Authority on 4 July 2022, OTC Clear is working in partnership with China Foreign Exchange Trade System (CFETS) and Shanghai Clearing House (SHCH) to build Swap Connect, a new mutual access programme that will allow international investors to trade and clear Mainland China's onshore RMB interest rate swaps without changing their existing trading and settlement practices. Swap Connect is the next significant milestone in progressing the further development and connectivity between Hong Kong and Mainland China's financial markets, promoting the sustainable growth of both markets, and further enhancing Hong Kong's status as an international financial centre. Preparatory work to launch Swap Connect is expected to take around six months, subject to regulatory approval.

Due to increased market volatility driven in part by USD interest rate hikes, OTC Clear's total clearing volume grew substantially with US\$100.7 billion notional cleared in 1H 2022, up 70 per cent compared with 1H 2021. In particular, USD/CNH Cross Currency Swaps (CCS) clearing volume reached a record half-yearly high of US\$51.2 billion, up 85 per cent compared with the previous half-yearly record of US\$27.7 billion in 1H 2021.

Key Market Indicators

	Six months ended 30 Jun 2022	Six months ended 30 Jun 2021
ADT traded on the Stock Exchange ¹ (\$bn)	138.3	188.2
Average daily number of Stock Exchange trades ('000)	2,288	2,530
Average daily value of SIs for Stock Exchange trades (\$bn)	326.8	450.4
Average daily number of SIs for Stock Exchange trades ('000)	120	134
ADT of Northbound Trading of Stock Connect ¹ (RMBbn)	103.9	114.4
Average daily value of SIs for Northbound Trading of Stock Connect (RMBbn)	29.8	31.6
Chargeable ADV ² of metals contracts traded on the LME ('000 lots)	539	544

1 Includes buy and sell trades under Stock Connect

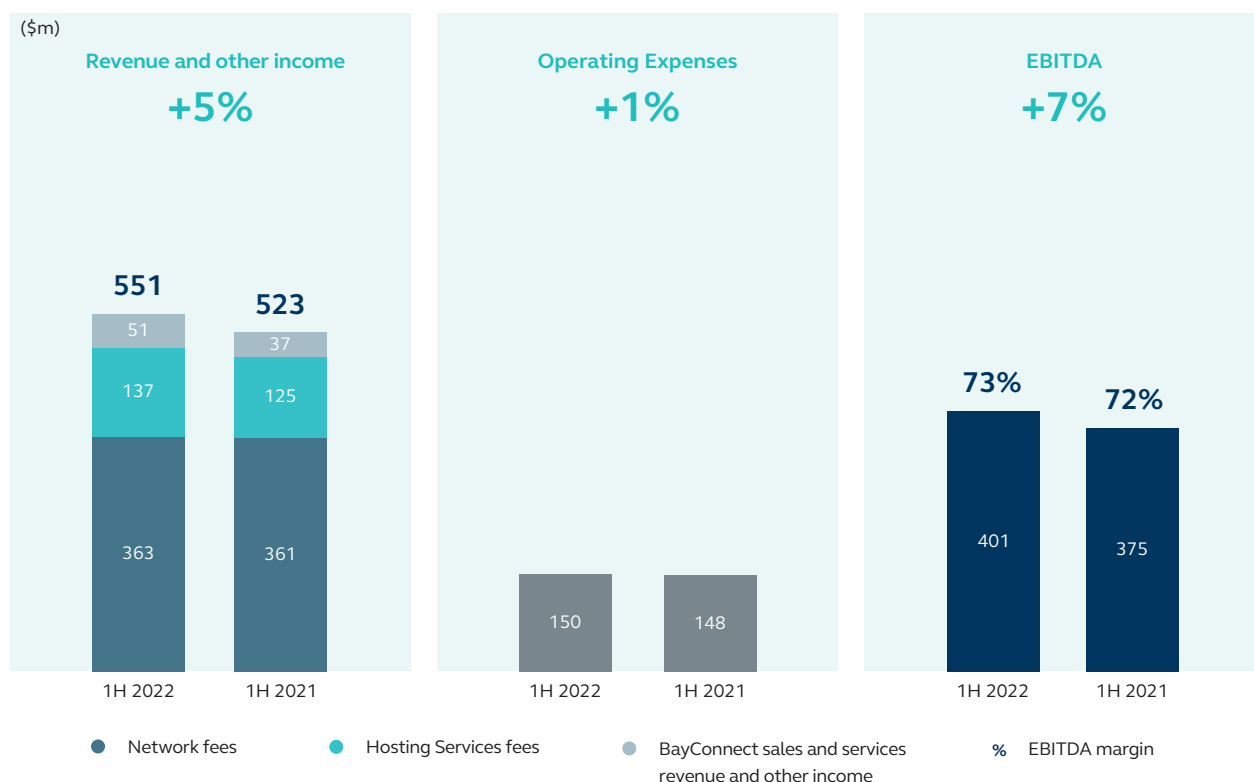
2 Chargeable ADV excludes Admin Trades (which are chargeable at a lower clearing fee rate of US\$0.02 per contract) and other non-chargeable trades.

OTC Clear continues to support ongoing benchmark reform within the market and the facilitation and adoption of risk free rates (RFR). Over 96 per cent of USD derivatives cleared in 1H 2022 referenced the Secured Overnight Financing Rate (SOFR) benchmark rate, indicating high adoption of SOFR in the market. OTC Clear completed a market consultation in July setting out the proposed USD LIBOR conversion approach in preparation for the USD LIBOR cessation by June 2023.

In addition, OTC Clear further expanded its membership base with the admission of a second clearing broker and a new client via the Settlement Sponsorship Membership model.

Technology Segment Analysis of Results

1H 2022 vs 1H 2021



Revenue and other income was up 5 per cent and EBITDA was up 7 per cent compared with 1H 2021.

During 1H 2022, network fees rose marginally by \$2 million, as increased usage of the Orion Central Gateway and China Connect Central Gateway by EPs was mostly offset by lower fees from the sale of new throttles.

Hosting Services fees rose by 10 per cent due to growth in both new customer subscriptions and increased usage by existing customers.

Business Update

During 1H 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. On the Commodities Market, a power outage at the LME's third party data centre at around closing time on 10 January 2022 resulted in a temporary market interruption to the LME's electronic trading platform (LMEselect). The root cause has been identified and corrective measures have been implemented and more recovery drills planned.

In line with HKEX's strategy of building more seamless access to platforms and putting client journeys at the forefront of our priorities in application development, HKEX further enhanced its client engagement by upgrading its Electronic Communication Platform (ECP) on 25 April 2022, 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.

In order to support the Hong Kong Investor Identification Regime (HKIDR), HKEX is enhancing the ECP and Orion Trading Platform – Securities Market (OTP-C) to facilitate the submission of investor information required for securities trading under HKIDR. Related system development has now been completed and market participation of an end-to-end test session for HKIDR is already underway. Market rehearsals will be further arranged in 2H 2022 to verify readiness of the market before the launch of HKIDR.

Hosting Services completed fit-out and the addition of extra high power density computer racks during the period, enriching HKEX's hosting product portfolio. To further meet customer demands, Hosting Services is fitting out a new data hall which will be ready for service in Q4 2022.

Corporate Items

Analysis of Results

"Corporate Items" is not a business segment but comprises central income (including net investment income of Corporate Funds and HKEX Foundation donation income), the cost 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.

	Six months ended 30 Jun 2022 \$m	Six months ended 30 Jun 2021 \$m
Net investment (loss)/income	(378)	428
HKEX Foundation donation income	37	74
Others	6	6
Total revenue and other income	(335)	508
Operating expenses:		
– HKEX Foundation charitable donations	(56)	(69)
– Others	(739)	(592)
EBITDA	(1,130)	(153)

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

	Six months ended 30 Jun 2022 \$m	Six months ended 30 Jun 2021 \$m
Net investment (loss)/income from:		
– External Portfolio	(511)	321
– Cash and bank deposits	115	92
– Equity securities ¹	(12)	4
– Debt securities	5	–
– Exchange gains	25	11
Total net investment (loss)/income	(378)	428
Average fund size (\$bn)	34.3	34.2
Annualised net investment return	(2.20%)	2.50%

1 Investments in minority stakes of unlisted companies

Net investment loss from Corporate Funds was \$378 million, compared with net investment income of \$428 million in 1H 2021. This was principally due to net fair value losses on the External Portfolio.

Market concerns about inflation risk, aggressive interest rate hike expectations and the potential implications on global growth, together with continued geopolitical fragility triggered a sharp global asset repricing in 1H 2022. As a result, the External Portfolio had net fair value losses of \$511 million in 1H 2022, as opposed to the net fair value gains of \$321 million in 1H 2021.

As both equities and fixed income markets suffered declines, the External Portfolio recorded losses across the board, regardless of strategy, during 1H 2022 as follows:

Strategy	Six months ended 30 Jun 2022 \$m	Six months ended 30 Jun 2021 \$m
Public Equities	(296)	182
Diversifiers	(69)	146
Government Bonds and Mortgage-backed Securities	(146)	(7)
Total	(511)	321

Given ongoing significant market volatility and its impact on HKEX's earnings, together with the uncertainty of a rising interest rate environment and the risk of global economic pressures, \$2 billion will be redeemed from the External Portfolio in 2H 2022 to reduce volatility on earnings. The redemption proceeds will be invested internally with the rest of the Corporate Funds.

Excluding HKEX Foundation charitable donation expenses, operating expenses increased by 25 per cent against 1H 2021 due to increased staff costs from increased headcount for strategic projects and higher recruitment costs.

Business Update

In 1H 2022, HKEX continued to play an active role in shaping the long-term sustainability of global financial markets. Our Corporate Social Responsibility focus continued to be on our markets, our people and our operations. HKEX's promotion of good corporate governance and ESG stewardship through industry knowledge sharing and leadership on best practices, in particular, has been a cornerstone of our outreach during 1H 2022. In addition, as part of our ongoing efforts to promote good corporate governance, HKEX launched a new diversity repository to enhance access to information and transparency around board diversity.

To reinforce our commitment to tackling climate change, HKEX continued to facilitate the transition to a net-zero global economy across its markets, business and operations. During 1H 2022, we focused on ongoing development of sustainable and

green finance offering through HKEX's Sustainable and Green Exchange, STAGE; as well as through education and active engagement with regulators, industry practitioners, professional bodies and other stakeholders.

HKEX Foundation, HKEX's dedicated charitable channel, has further strengthened its charity partnership and engagement with the community. During 1H 2022, HKEX Foundation donated a total of \$56 million to different charitable causes. These included the emergency relief donation for the Covid-19 pandemic, the launch of the 2022 HKEX Charity Partnership Programme and the enhanced HKEX Impact Funding Scheme, supporting a wide range of projects focusing on Financial Literacy, Diversity and Inclusion, Poverty Relief and Environmental Sustainability.

Expenses, Other Costs and Taxation

Operating Expenses

	Six months ended 30 Jun 2022 \$m	Six months ended 30 Jun 2021 \$m	Change
Staff costs and related expenses	1,667	1,495	12%
IT and computer maintenance expenses	363	338	7%
Premises expenses	58	57	2%
Product marketing and promotion expenses	50	36	39%
Professional fees	77	48	60%
HKEX Foundation charitable donations	56	69	(19%)
Other operating expenses	185	178	4%
Total	2,456	2,221	11%

Staff costs and related expenses increased by \$172 million (12 per cent) mainly due to an increase in headcount for strategic projects, payroll adjustments and higher recruitment costs, demonstrating our commitment to continuous investment in skills and talent.

IT and computer maintenance expenses increased by \$25 million (7 per cent), attributable to higher maintenance expenses for new systems and upgraded networks, and costs incurred for cloud-based IT systems.

Product marketing and promotion expenses increased by \$14 million (39 per cent), principally attributable to cash incentives relating to new products.

Professional fees increased by \$29 million (60 per cent), due primarily to legal costs incurred in respect of claims relating to the nickel market, higher fees incurred for strategic projects and other business initiatives in 1H 2022.

Depreciation and Amortisation

	Six months ended 30 Jun 2022 \$m	Six months ended 30 Jun 2021 \$m	Change
Depreciation and amortisation	717	662	8%

Depreciation and amortisation increased by \$55 million (8 per cent), due to the completion of a new secondary data centre and new IT systems and upgrades in 2H 2021 and 1H 2022.

During 1H 2022, the Group incurred capital expenditure⁴ of \$478 million, a decrease of 11 per cent from 1H 2021.

Finance Costs

	Six months ended 30 Jun 2022 \$m	Six months ended 30 Jun 2021 \$m	Change
Finance costs	73	77	(5%)

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

Taxation

	Six months ended 30 Jun 2022 \$m	Six months ended 30 Jun 2021 \$m	Change
Taxation	817	1,317	(38%)

Taxation decreased due to lower profit before taxation in 1H 2022, and 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.

4 Exclude right-of-use assets recognised under HKFRS 16: Leases

Financial Review

Significant Financial Assets and Financial Liabilities by Funds

	At 30 Jun 2022 \$m	At 31 Dec 2021 \$m	Change
Financial assets			
Cash and cash equivalents	209,501	181,361	16%
Financial assets measured at fair value through profit or loss	170,447	100,861	69%
Financial assets measured at fair value through other comprehensive income	13,459	9,755	38%
Financial assets measured at amortised cost	70,273	51,828	36%
Total	463,680	343,805	35%

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

	At 30 Jun 2022 \$m	At 31 Dec 2021 \$m	Change
Financial assets			
Corporate Funds ¹	33,949	33,794	0%
Margin Funds ²	240,939	191,240	26%
Clearing House Funds	27,272	19,975	37%
Base, ferrous, and precious metals derivatives contracts cleared through LME Clear	161,520	91,424	77%
Cash prepayments and collateral for A-shares	-	7,372	(100%)
Total	463,680	343,805	35%

1 Includes \$1,194 million (31 December 2021: \$1,267 million) solely used for supporting contributions to default funds and default fund credits for HKSCC Guarantee Fund, SEOCH Reserve Fund and HKCC Reserve Fund

2 Excludes Settlement Reserve Fund and Settlement Guarantee Fund paid to ChinaClear and margin receivable from CPs of \$8,512 million (31 December 2021: \$12,764 million), which are included in accounts receivable, prepayments and deposits

	At 30 Jun 2022 \$m	At 31 Dec 2021 \$m	Change
Financial liabilities			
Base, ferrous, and precious metals derivatives contracts cleared through LME Clear	161,520	91,424	77%
Margin deposits, Mainland security and settlement deposits, and cash collateral from CPs	249,451	203,536	23%
CPs' contributions to Clearing House Funds	26,487	19,182	38%
Total	437,458	314,142	39%

The increase in financial assets and financial liabilities of Margin Funds at 30 June 2022 compared with 31 December 2021 was due to increase in contributions from HKCC CPs from increased open positions and higher margin requirements, and increase in contributions required from members of LME Clear due to increased market volatility.

The increase in financial assets and financial liabilities of Clearing House Funds at 30 June 2022 compared with 31 December 2021 was mainly due to higher contributions required from members of LME Clear 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

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 are as follows:

Strategy	At 30 Jun 2022 \$m	At 31 Dec 2021 \$m	Change
Public Equities	1,553	1,774	(12%)
Diversifiers	4,841	4,949	(2%)
Government Bonds and Mortgage-backed Securities	1,862	2,020	(8%)
Total	8,256	8,743	(6%)

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 30 per cent at 30 June 2022), a certain proportion is invested in long-term investment grade debt securities (approximately 4 per cent at 30 June 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 30 June 2022).

Financial assets of Corporate Funds at 30 June 2022 were broadly flat compared with 31 December 2021 as cash generated by the business over the past six months was offset by the cash paid for the 2021 second interim dividend and the decrease in fair value of the externally-managed investment funds (External Portfolio).

Working Capital, Financial Resources and Gearing

Working capital dropped by \$315 million or 1 per cent to \$28,790 million at 30 June 2022 (31 December 2021: \$29,105 million). The decrease was primarily due to the 2021 second interim dividend of \$5,290 million paid in March 2022 and net decrease in non-current liabilities of \$221 million as certain liabilities became repayable within twelve months, partly offset by profit of \$4,836 million generated during 1H 2022 and net decrease in non-current assets of \$390 million.

At 30 June 2022, the Group's outstanding borrowings represented written put options to non-controlling interests of \$428 million (31 December 2021: \$426

million). As a result, 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 debt¹ is defined as gross debt less cash and cash equivalents of Corporate Funds (excluding those reserved for supporting contributions to default funds and default fund credits for Clearing House Funds), and adjusted capital as all components of equity attributable to shareholders other than designated reserves.

¹ 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.

Banking facilities have been put in place for contingency purposes. At 30 June 2022, the Group's total available banking facilities for its daily operations amounted to \$21,280 million (31 December 2021: \$21,249 million), which included \$14,779 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 Trading Support Facility to support the trading of RMB stocks listed on the Stock Exchange. At 30 June 2022, the total amount of the facilities was HK\$29,630 million (31 December 2021: HK\$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 30 June 2022, 88 per cent (31 December 2021: 83 per cent) of the Group's cash and cash equivalents were denominated in HKD or USD.

Capital Expenditure and Commitments

During 1H 2022, the Group incurred capital expenditure² of \$478 million (1H 2021: \$536 million) 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 capital expenditure commitments at 30 June 2022, including those authorised by the Board but not yet contracted for, amounted to \$665 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, and the development of a new data hall for Hosting Services.

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

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

Pledges of Assets

Details of pledges of assets are included in note 26 to the Unaudited Condensed Consolidated Financial Statements of this Interim Report.

² Exclude right-of-use assets recognised under HKFRS 16: Leases

Exposure to Fluctuations in Exchange Rates and Related Hedges

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

Margin deposits received by the Group in Hong Kong are mainly denominated in HKD (approximately 80 per cent at 30 June 2022), and foreign currency margin deposits received are hedged by investments in the same currencies. Unhedged investments in USD should 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 and equity investments) at 30 June 2022 amounted to HK\$4,136 million, of which HK\$482 million were non-USD exposures (31 December 2021: HK\$2,524 million, of which HK\$545 million were non-USD exposures).

Contingent Liabilities

Details of contingent liabilities are included in note 24 to the Unaudited Condensed Consolidated Financial Statements of this Interim Report.

Changes since 31 December 2021

There were no other significant changes in the Group's financial position or from the information disclosed under Management Discussion and Analysis in the annual report for the year ended 31 December 2021.

Review of Financial Statements

The Audit Committee has reviewed the Group's Unaudited Condensed Consolidated Financial Statements for the six months ended 30 June 2022 in conjunction with HKEX's external auditor. Based on this review and discussions with the management, the Audit Committee was satisfied that the Unaudited Condensed Consolidated Financial Statements were prepared in accordance with applicable accounting standards and fairly present the Group's financial position and results for the six months ended 30 June 2022.

Corporate Governance and Other Information

(As of 17 August 2022)

Board and Committees

Board

Independent Non-executive Directors

Laura May-Lung CHA * GBM, GBS, JP (Chairman)
 Nicholas Charles ALLEN
 Apurv BAGRI
 CHEAH Cheng Hye
 CHEUNG Ming Ming, Anna
 CHOW WOO Mo Fong, Susan *
 Rafael GIL-TIENDA *
 HUNG Pi Cheng, Benjamin * BBS, JP
 LEUNG Nisa Bernice Wing-Yu * MH, JP
 LEUNG Pak Hon, Hugo
 YIU Kin Wah, Stephen * JP
 ZHANG Yichen

Executive Director

Alejandro Nicolas AGUZIN (Chief Executive Officer)

Group Company Secretary

FU Yat Hung, David

Committees

Audit Committee

YIU Kin Wah, Stephen (Chairman)
 Nicholas Charles ALLEN
 CHEUNG Ming Ming, Anna
 LEUNG Nisa Bernice Wing-Yu
 LEUNG Pak Hon, Hugo

Board Executive Committee

Laura May-Lung CHA (Chairman)
 Alejandro Nicolas AGUZIN
 CHEAH Cheng Hye
 CHEUNG Ming Ming, Anna
 LEUNG Pak Hon, Hugo

Corporate Social Responsibility Committee

Laura May-Lung CHA (Chairman)
 Alejandro Nicolas AGUZIN
 CHEUNG Ming Ming, Anna
 CHOW WOO Mo Fong, Susan
 ZHANG Yichen

Investment Committee

CHEAH Cheng Hye (Chairman)
 HUNG Pi Cheng, Benjamin
 LEUNG Pak Hon, Hugo
 ZHANG Yichen

* Government Appointed Director

** Appointed by the Financial Secretary

△ Established under Section 65 of the SFO

1 Member by virtue of being deputy chairman of the Listing Committee of the Stock Exchange

2 Member by virtue of being chairman of the Listing Committee of the Stock Exchange

Committees (continued)

Listing Operation Governance Committee

CHOW WOO Mo Fong, Susan (Chairman)
 Renu BHATIA ¹
 LEUNG Pak Hon, Hugo
 Keith Timothy POGSON ²
 YIU Kin Wah, Stephen

Nomination and Governance Committee

Laura May-Lung CHA (Chairman)
 Apurv BAGRI
 CHEAH Cheng Hye
 Rafael GIL-TIENDA
 HUNG Pi Cheng, Benjamin
 ZHANG Yichen

Remuneration Committee

Rafael GIL-TIENDA (Chairman)
 Apurv BAGRI
 Laura May-Lung CHA
 CHEAH Cheng Hye
 CHEUNG Ming Ming, Anna
 CHOW WOO Mo Fong, Susan

Risk Committee

CHOW WOO Mo Fong, Susan (Chairman)
 Nicholas Charles ALLEN
 Laura May-Lung CHA
 LEUNG Nisa Bernice Wing-Yu
 LEUNG Pak Hon, Hugo
 YIU Kin Wah, Stephen

Risk Management Committee (statutory) [△]

Laura May-Lung CHA ³ (Chairman)
 CHAN Ka Chai, Clara ** ⁴
 CHOW WOO Mo Fong, Susan
 David Allen GRIMME ** ⁵
 KWOK Pui Fong, Miranda **
 LEUNG Chung Yin, Rico ** ⁶
 LEUNG Pak Hon, Hugo
 SUN Yu **

³ Member by virtue of being HKEX's Chairman

⁴ Member by virtue of being Executive Director (Monetary Management) of the Hong Kong Monetary Authority

⁵ Member by virtue of being the Chairman of Hong Kong Interbank Clearing Limited

⁶ Member by virtue of being Executive Director (Supervision of Markets) of the SFC

International Advisory Council

HKEX has established an International Advisory Council to provide the Board with insight and expertise from around the world, on business, economics, technology, and finance, drawing on the extensive skills and experience of its members. Following the expiry of Marcus Wallenberg's membership on the Council in May 2022, the Council comprises six members, and is chaired by HKEX Chairman.

Members of International Advisory Council

- Laura M CHA (Chairman)
- Stuart GULLIVER
- Mary SCHAPIRO
- Weijian SHAN
- Neil SHEN
- Joseph TSAI

Changes in Information

Changes in Directors' other major offices which are required to be disclosed under Rule 13.51B(1) of the Main Board Listing Rules are set out below.

	Appointment (effective)	Cessation (effective)
Laura M Cha		
• Unilever PLC (listed on Euronext Amsterdam and London Stock Exchange) – non-executive director	–	4 May 2022
• Executive Council of the Hong Kong Special Administrative Region – non-official member	–	1 Jul 2022
Cheah Cheng Hye		
• HKEX – member of Panel Member Selection Committee ¹	–	27 Apr 2022
– chairman of Cash Market Consultative Panel ²	–	1 Jun 2022
Anna Cheung		
• HKEX – member of Remuneration Committee	27 Apr 2022	–
Benjamin Hung		
• Chief Executive's Council of Advisers on Innovation and Strategic Development – non-official member	–	1 Jul 2022
Hugo Leung		
• HKEX – chairman of Panel Member Selection Committee ¹	–	27 Apr 2022
– chairman of Derivatives Market Consultative Panel ²	–	1 Jun 2022
• OTC Clear – independent non-executive director	27 Apr 2022	–
Nisa Leung		
• HKEX – member of Panel Member Selection Committee ¹	–	27 Apr 2022
• New Horizon Health Limited * – non-executive director	–	28 Feb 2022
Stephen Yiu		
• HKEX – member of Panel Member Selection Committee ¹	–	27 Apr 2022
– chairman of Clearing Consultative Panel ²	–	1 Jun 2022
Zhang Yichen		
• HKEX – member of Nomination and Governance Committee	27 Apr 2022	–
– member of Panel Member Selection Committee ¹	–	27 Apr 2022

* Listed on the Stock Exchange

1 The Panel Member Selection Committee of HKEX was dissolved with effect from the conclusion of the 2022 AGM on 27 April 2022, with the roles and functions of the Committee being transferred to the relevant subsidiaries of HKEX.

2 With effective from 1 June 2022, the Cash Market Consultative Panel, the Clearing Consultative Panel and the Derivatives Market Consultative Panel, which provide market expertise and advice to the Group in relation to the trading and clearing in Hong Kong's securities and derivatives markets, have become consultative panels of SEHK, HKSCC and HKFE respectively, and are chaired by management representatives of HKEX.

Following the updates to the composition of the appeal committees of the regulated entities within the Group that were considered by the Board in the first quarter of 2022, the Independent Non-executive Directors may be appointed as the chairman or members of hearing(s) held by the appeal committee(s) from time to time.

The biographies of the current Directors are available in the About HKEX (Our Structure) section of the HKEX Group website.

Non-executive Directors' Remuneration

At the 2022 AGM, Shareholders approved the Board's recommendation to adjust the remuneration of Non-executive Directors of HKEX and members of certain Board committees to align with market practice and commensurate with the commitment required to discharge their legal and fiduciary responsibilities. Details of the adjustment of Non-executive Directors' remuneration are set out in HKEX's circular to Shareholders dated 16 March 2022.

The current level of remuneration of the Non-executive Directors for their service on the Board and, where applicable, on certain Board Committees is set out below.

	\$
Board	
– Chairman	3,500,000
– Other Non-executive Director	920,000
Audit Committee, Remuneration Committee and Risk Committee	
– Chairman	300,000
– Other member	180,000
Board Executive Committee, Corporate Social Responsibility Committee, Investment Committee, Listing Operation Governance Committee, and Nomination and Governance Committee	
– Chairman	250,000
– Other member	170,000

The above remuneration is payable to Non-executive Directors for services rendered by each of them for the period between the conclusion of each AGM and the conclusion of the AGM to be held in the immediately following year until Shareholders otherwise determine, provided that such remuneration be payable in proportion to the period of service in the case of a Non-executive Director who has not served the entire period.

Save as disclosed above, there is no other information required to be disclosed under Rule 13.51B(1) of the Main Board Listing Rules.

Compliance with Corporate Governance Code

Throughout the six months ended 30 June 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 Provision 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.

Compliance with Model Code

HKEX has adopted the Model Code as its own code of conduct regarding Directors' securities transactions. In response to a specific enquiry by the Company, all Directors confirmed that they complied with the Model Code at all applicable times during the six months ended 30 June 2022.

Directors' Interests and Short Positions in Shares and Underlying Shares of HKEX

The interests and short positions of Directors, including the Chief Executive Officer, in the shares and underlying shares of HKEX (within the meaning of Part XV of the SFO) as at 30 June 2022 as recorded in the register required to be kept under Section 352 of the SFO, or as otherwise notified to HKEX and the SFC under the Model Code, are set out below.

Long Positions in Shares and Underlying Shares of HKEX

Name of Director	Number of shares/underlying shares held				Total	% of HKEX ¹ shares in issue
	Personal interests	Family interests	Corporate interests	Other interests		
Nicolas Aguzin	401,583 ²	–	–	–	401,583	0.03
Anna Cheung	300	–	–	–	300	0.00
Stephen Yiu	–	2,000 ³	–	–	2,000	0.00

¹ Based on 1,267,836,895 HKEX shares in issue as at 30 June 2022

² It included Mr Aguzin's interest in Awarded Shares and shares acquired out of the dividends from the Awarded Shares in an aggregate of 193,559 shares which remained unvested under the Share Award Scheme. Details of Mr Aguzin's interest in Awarded Shares are set out in "Share Award Scheme" below.

³ Mr Yiu's spouse was the beneficial owner of those shares.

Save as disclosed above, none of the Directors had any interests or short positions in the shares, underlying shares or debentures of HKEX or any of its associated corporations (within the meaning of Part XV of the SFO) as at 30 June 2022 as recorded in the register required to be kept under Section 352 of the SFO, or as otherwise notified to HKEX and the SFC under the Model Code.

Apart from the Share Award Scheme, during the six months ended 30 June 2022, neither HKEX nor any of its subsidiary undertakings was a party to any arrangements to enable the Directors to acquire benefits by means of the acquisition of shares in, or debentures of, HKEX or any other body corporate. Save as disclosed above, during the six months ended 30 June 2022, none of the Directors (including their spouses and children under the age of 18) had any interests in or was granted any right to subscribe for the securities of HKEX or its associated corporations (within the meaning of Part XV of the SFO), or had exercised any such rights.

Other Persons' Interests and Short Positions in Shares and Underlying Shares of HKEX

Minority Controllers

As at the date of this Interim Report, other than the Government which has been a Minority Controller since 7 September 2007, 12 entities have been approved by the SFC as Minority Controllers. According to the Participant Shareholding Report as at 30 June 2022, these Minority Controllers in aggregate held approximately 76 per cent of HKEX shares in issue. More information about Minority Controllers is set out in the Corporate Governance section of the HKEX Group website.

Other persons' interests and short positions in the shares and underlying shares of HKEX (within the meaning of Part XV of the SFO) as at 30 June 2022 as recorded in the register required to be kept under Section 336 of the SFO are set out below.

Long Positions in Shares and Underlying Shares of HKEX

Name	Capacity	Number of shares/ underlying shares held	Total	% of HKEX ¹ shares in issue
JPMorgan Chase & Co. (JPMC)	Interest of corporation controlled by JPMC	7,489,380	71,313,339 ²	5.62
	Investment manager	34,953,667		
	Person having a security interest in shares	229,114		
	Trustee	34,695		
	Approved lending agent	28,606,483		
HKSAR Government (for the account of the Exchange Fund)	Beneficial owner	74,840,961 ³	74,840,961	5.90

Short Positions in Shares and Underlying Shares of HKEX

Name	Capacity	Number of shares/ underlying shares held	Total	% of HKEX ¹ shares in issue
JPMC	Interest of corporation controlled by JPMC	9,026,385	9,026,385 ⁴	0.71

¹ Based on 1,267,836,895 shares in issue as at 30 June 2022

² It included an aggregate interest in 2,681,476 underlying shares through JPMC's holding of certain listed derivatives (physically settled: 417,600 shares; cash settled: 138,600 shares; convertible instruments: 177,011 shares) and unlisted derivatives (physically settled: 272,426 shares; cash settled: 1,675,839 shares).

³ Based on Hong Kong Monetary Authority's notification to HKEX on 4 June 2018

⁴ It included an aggregate interest in 7,570,996 underlying shares through JPMC's holding of certain listed derivatives (physically settled: 903,400 shares; cash settled: 1,205,620 shares; convertible instruments: 66,379 shares) and unlisted derivatives (physically settled: 3,091,846 shares; cash settled: 2,303,751 shares).

Save as disclosed above, no other persons had any interests or short positions in the shares or underlying shares of HKEX as at 30 June 2022 as recorded in the register required to be kept under Section 336 of the SFO, or as otherwise notified to HKEX and the Stock Exchange.

Share Award Scheme

HKEX has adopted the Share Award Scheme to recognise the contributions of certain employees and help in retaining them for the Group's operations and further development. The Scheme was adopted by the Board on 14 September 2005 (Adoption Date) and shall be valid until 31 December 2025. The maximum number of shares which can be awarded under the Scheme is 3 per cent (i.e., 31,871,575 shares) of HKEX shares in issue as at the Adoption Date and the maximum number of shares which can be awarded to a selected employee in the Scheme is 1 per cent (i.e., 10,623,858 shares). The rules of the Scheme are available in the Corporate Governance section of the HKEX Group website.

Since the Adoption Date and up to 30 June 2022, a total of 15,385,970 shares had been awarded under the Scheme, representing about 1.4 per cent of the number of HKEX shares in issue on the Adoption Date. As at 30 June 2022, taking into account the shares acquired out of the dividends from the shares held under the trust, there were 2,299,161 shares held in trust under the Scheme (excluding shares vested but not yet transferred to awardees). Further details of the Scheme are set out in note 20 to the Unaudited Condensed Consolidated Financial Statements.

Non-executive Directors are not entitled to participate in the Share Award Scheme. Details of the interests of the Chief Executive Officer in the Awarded Shares are set out below.

	Date of ² award	Number of Awarded Shares	As at 1 Jan 2022	Number of shares ¹			As at 30 Jun 2022	Vesting ³ period
				Shares acquired during the six months ended 30 Jun 2022 out of the dividends	Vested during the six months ended 30 Jun 2022	Lapsed during the six months ended 30 Jun 2022		
Nicolas Aguzin	2 Jun 2021	211,756 ⁴	213,692	2,356	108,024	-	108,024	24 May 2022 – 24 May 2023
	9 Mar 2022	84,603	-	932	-	-	85,535	7 Dec 2023 – 7 Dec 2024

1 This includes share acquired out of the dividends from the Awarded Shares according to the Scheme.

2 This refers to the date on which the trustee allocated the Awarded Shares to Mr Aguzin.

3 Save for the award granted referred to in note 4 below, the Awarded Shares and the related income are vested in two equal tranches in the second and third year after the grant.

4 The award was granted under the Scheme pursuant to the employment contract entered into by Mr Aguzin with the Company. The Awarded Shares and the related income are vested in two equal tranches on the first and second anniversary of the date of grant.

Purchase, Sale or Redemption of HKEX's Listed Securities

During the six months ended 30 June 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 115,300 HKEX shares at a total consideration of \$42 million.

Sustainable Workplace

During the six months ended 30 June 2022, the Group organised 100 in-house courses for employees to enhance their job knowledge, skills and well-being. Moreover, the Group sponsored a total of 72 employees to attend external training.

As at 30 June 2022, the Group had 2,186 permanent employees and 162 temporary employees. HKEX's remuneration policy has remained unchanged since the date of the 2021 Annual Report. Information regarding employees' remuneration and benefits for the six months ended 30 June 2022 is set out in note 7 to the Unaudited Condensed Consolidated Financial Statements of this Interim Report.

Details of HKEX's principles and practices related to governance and sustainability are set out in the Corporate Governance and Corporate Social Responsibility sections of the HKEX Group website.

Shareholder Information

Interim Dividend

The Board has declared an interim dividend of \$3.45 per share for the year ending 31 December 2022, payable in cash.

Key Dates for 2022 Interim Dividend

Ex-dividend date	30 August 2022
Latest time to lodge transfer documents for registration with HKEX's registrar	At 4:30 pm on 31 August 2022
Closure of HKEX's Register of Members	1 to 2 September 2022 (both dates inclusive)
Record date	2 September 2022
Despatch of dividend warrants	14 September 2022

Registration for News Alerts

Shareholders who would like to be notified when HKEX publishes its corporate communications on the HKEXnews website can register for the News Alerts service in the Market Data section of the HKEX Market website (www.hkex.com.hk).

The Investor Relations section of the HKEX Group website contains further information which may be of interest to Shareholders.

Electronic Communication

This Interim Report is printed in English and Chinese, and is available in the Investor Relations (Regulatory Disclosure) section of the HKEX Group website (www.hkexgroup.com).

Shareholders are encouraged to access HKEX's corporate communications electronically via the HKEX Group website to help protect the environment. Shareholders may at any time change their choice of language or means of receiving HKEX's corporate communications free of charge by giving not less than seven days' notice to HKEX's registrar. The Investor Relations (Shareholder Services) section of the HKEX Group website sets out the relevant arrangements for Shareholders to make such change request(s).

HKEX's Registrar – Hong Kong Registrars Limited

For corporate communications:

By post: 17M Floor, Hopewell Centre
183 Queen's Road East
Wan Chai, Hong Kong

By email: hkex.ecom@computershare.com.hk

For transfer of shares:

Address: Shops 1712-1716, 17th Floor
Hopewell Centre
183 Queen's Road East
Wan Chai, Hong Kong

Tel: +852 2862 8555
Fax: +852 2865 0990/+852 2529 6087

Auditor's Independent Review Report

Report on Review of Interim Financial Information To the Board of Directors of Hong Kong Exchanges and Clearing Limited

(incorporated in Hong Kong with limited liability)

Introduction

We have reviewed the interim financial information set out on pages 48 to 70, which comprises the interim condensed consolidated statement of financial position of Hong Kong Exchanges and Clearing Limited (the "Company") and its subsidiaries (together, the "Group") as at 30 June 2022 and the interim condensed consolidated income statement, the interim condensed consolidated statement of comprehensive income, the interim condensed consolidated statement of changes in equity and the interim condensed consolidated statement of cash flows for the six-month period then ended, and notes, comprising significant accounting policies and other explanatory information. The Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited require the preparation of a report on interim financial information to be in compliance with the relevant provisions thereof and Hong Kong Accounting Standard 34 "Interim Financial Reporting" issued by the Hong Kong Institute of Certified Public Accountants. The directors of the Company are responsible for the preparation and presentation of this interim financial information in accordance with Hong Kong Accounting Standard 34 "Interim Financial Reporting". Our responsibility is to express a conclusion on this interim financial information based on our review and to report our conclusion solely to you, as a body, in accordance with our agreed terms of engagement and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report.

Scope of Review

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

Conclusion

Based on our review, nothing has come to our attention that causes us to believe that the interim financial information of the Group is not prepared, in all material respects, in accordance with Hong Kong Accounting Standard 34 "Interim Financial Reporting".

PricewaterhouseCoopers
Certified Public Accountants

Hong Kong, 17 August 2022

Condensed Consolidated Financial Statements

(Unaudited)

ed



Condensed Consolidated Income Statement

(Unaudited)

	Note	Six months ended 30 Jun 2022 \$m	Six months ended 30 Jun 2021 \$m
Trading fees and trading tariffs	4	3,553	4,124
Clearing and settlement fees		2,291	2,672
Stock Exchange listing fees		994	1,067
Depository, custody and nominee services fees		647	889
Market data fees		546	512
Other revenue		757	786
Revenue		8,788	10,050
Investment income		299	796
Interest rebates to Participants		(210)	(22)
Net investment income	5	89	774
HKEX Foundation donation income		37	74
Sundry income		23	11
Revenue and other income		8,937	10,909
Less: Transaction-related expenses	6	(87)	(81)
Revenue and other income less transaction-related expenses		8,850	10,828
Operating expenses			
Staff costs and related expenses	7	(1,667)	(1,495)
Information technology and computer maintenance expenses		(363)	(338)
Premises expenses		(58)	(57)
Product marketing and promotion expenses		(50)	(36)
Professional fees		(77)	(48)
HKEX Foundation charitable donations		(56)	(69)
Other operating expenses		(185)	(178)
		(2,456)	(2,221)
EBITDA*		6,394	8,607
Depreciation and amortisation		(717)	(662)
Operating profit		5,677	7,945
Finance costs	8	(73)	(77)
Share of profits less losses of joint ventures		42	38
Profit before taxation		5,646	7,906
Taxation	9	(817)	(1,317)
Profit for the period		4,829	6,589
Profit/(loss) attributable to:			
– Shareholders of HKEX		4,836	6,610
– Non-controlling interests		(7)	(21)
Profit for the period		4,829	6,589
Basic earnings per share	10(a)	\$3.82	\$5.22
Diluted earnings per share	10(b)	\$3.82	\$5.21

* EBITDA represents earnings before interest expenses and other finance costs, taxation, depreciation and amortisation. It excludes the Group's share of results of the joint ventures.

Condensed Consolidated Statement of Comprehensive Income

(Unaudited)

	Six months ended 30 Jun 2022 \$m	Six months ended 30 Jun 2021 \$m
Profit for the period	4,829	6,589
Other comprehensive income		
Items that may be reclassified subsequently to profit or loss:		
Currency translation differences of foreign subsidiaries	66	29
Cash flow hedges, net of tax	(17)	(2)
Changes in fair value of financial assets measured at fair value through other comprehensive income, net of tax	(247)	10
Other comprehensive (loss)/income	(198)	37
Total comprehensive income	4,631	6,626
Total comprehensive income/(loss) attributable to:		
– Shareholders of HKEX	4,642	6,646
– Non-controlling interests	(11)	(20)
Total comprehensive income	4,631	6,626

Condensed Consolidated Statement of Financial Position

(Unaudited)

	Note	At 30 Jun 2022			At 31 Dec 2021		
		Current \$m	Non-current \$m	Total \$m	Current \$m	Non-current \$m	Total \$m
Assets							
Cash and cash equivalents	12	209,501	-	209,501	181,361	-	181,361
Financial assets measured at fair value through profit or loss	12	169,507	940	170,447	99,915	946	100,861
Financial assets measured at fair value through other comprehensive income	12	13,459	-	13,459	9,755	-	9,755
Financial assets measured at amortised cost	12	70,057	216	70,273	51,302	526	51,828
Accounts receivable, prepayments and deposits	13	26,677	21	26,698	32,717	21	32,738
Tax recoverable		-	-	-	19	-	19
Interests in joint ventures		-	262	262	-	244	244
Goodwill and other intangible assets		-	18,997	18,997	-	18,972	18,972
Fixed assets		-	1,590	1,590	-	1,605	1,605
Right-of-use assets		-	1,750	1,750	-	1,896	1,896
Deferred tax assets		-	69	69	-	25	25
Total assets		489,201	23,845	513,046	375,069	24,235	399,304
Liabilities and equity							
Liabilities							
Financial liabilities at fair value through profit or loss	14	161,520	-	161,520	91,424	-	91,424
Margin deposits, Mainland security and settlement deposits, and cash collateral from Clearing Participants	15	249,451	-	249,451	203,536	-	203,536
Accounts payable, accruals and other liabilities	16	19,877	-	19,877	28,335	-	28,335
Deferred revenue		747	351	1,098	1,100	354	1,454
Taxation payable		1,542	-	1,542	1,153	-	1,153
Other financial liabilities		39	-	39	513	-	513
Participants' contributions to Clearing House Funds	17	26,487	-	26,487	19,182	-	19,182
Lease liabilities		300	1,592	1,892	299	1,760	2,059
Borrowings	18	340	88	428	340	86	426
Provisions		108	96	204	82	98	180
Deferred tax liabilities		-	1,082	1,082	-	1,132	1,132
Total liabilities		460,411	3,209	463,620	345,964	3,430	349,394
Equity							
Share capital	19			31,896			31,896
Shares held for Share Award Scheme	19			(861)			(901)
Employee share-based compensation reserve	20			429			306
Hedging and revaluation reserves				(249)			15
Exchange reserve				(47)			(117)
Designated reserves	21			624			623
Reserve relating to written put options to non-controlling interests				(369)			(369)
Retained earnings				17,730			18,173
Equity attributable to shareholders of HKEX				49,153			49,626
Non-controlling interests				273			284
Total equity				49,426			49,910
Total liabilities and equity				513,046			399,304
Net current assets				28,790			29,105

Condensed Consolidated Statement of Changes in Equity

(Unaudited)

	Attributable to shareholders of HKEX									
	Share capital and shares held for Share Award Scheme (note 19) \$m	Employee share-based compensation reserve (note 20) \$m	Hedging and revaluation reserves \$m	Exchange reserve \$m	Designated reserves (note 21) \$m	Reserve relating to written put options to non-controlling interests \$m	Retained earnings \$m	Total \$m	Non-controlling interests \$m	Total equity \$m
At 1 Jan 2022	30,995	306	15	(117)	623	(369)	18,173	49,626	284	49,910
Profit for the period	-	-	-	-	-	-	4,836	4,836	(7)	4,829
Other comprehensive income	-	-	(264)	70	-	-	-	(194)	(4)	(198)
Total comprehensive income	-	-	(264)	70	-	-	4,836	4,642	(11)	4,631
Total transactions with shareholders of HKEX, recognised directly in equity:										
- 2021 second interim dividend at \$4.18 per share	-	-	-	-	-	-	(5,290)	(5,290)	-	(5,290)
- Unclaimed HKEX dividends forfeited	-	-	-	-	-	-	15	15	-	15
- Shares purchased for Share Award Scheme	(42)	-	-	-	-	-	-	(42)	-	(42)
- Vesting of shares of Share Award Scheme	82	(81)	-	-	-	-	(1)	-	-	-
- Employee share-based compensation benefits	-	204	-	-	-	-	-	204	-	204
- UK tax relating to Share Award Scheme	-	-	-	-	-	-	(2)	(2)	-	(2)
- Transfer of reserves	-	-	-	-	1	-	(1)	-	-	-
	40	123	-	-	1	-	(5,279)	(5,115)	-	(5,115)
At 30 Jun 2022	31,035	429	(249)	(47)	624	(369)	17,730	49,153	273	49,426

	Attributable to shareholders of HKEX									
	Share capital and shares held for Share Award Scheme \$m	Employee share-based compensation reserve \$m	Hedging and revaluation reserves \$m	Exchange reserve \$m	Designated reserves \$m	Reserve relating to written put options to non-controlling interests \$m	Retained earnings \$m	Total \$m	Non-controlling interests \$m	Total equity \$m
At 1 Jan 2021	31,406	232	25	(218)	628	(369)	17,214	48,918	318	49,236
Profit for the period	-	-	-	-	-	-	6,610	6,610	(21)	6,589
Other comprehensive income	-	-	8	28	-	-	-	36	1	37
Total comprehensive income	-	-	8	28	-	-	6,610	6,646	(20)	6,626
Total transactions with shareholders of HKEX, recognised directly in equity:										
- 2020 second interim dividend at \$4.46 per share	-	-	-	-	-	-	(5,646)	(5,646)	-	(5,646)
- Unclaimed HKEX dividends forfeited	-	-	-	-	-	-	13	13	-	13
- Shares purchased for Share Award Scheme	(331)	-	-	-	-	-	-	(331)	-	(331)
- Vesting of shares of Share Award Scheme	9	(9)	-	-	-	-	-	-	-	-
- Employee share-based compensation benefits	-	137	-	-	-	-	-	137	-	137
- UK tax relating to Share Award Scheme	-	-	-	-	-	-	4	4	-	4
- Transfer of reserves	-	-	-	-	(6)	-	6	-	-	-
	(322)	128	-	-	(6)	-	(5,623)	(5,823)	-	(5,823)
At 30 Jun 2021	31,084	360	33	(190)	622	(369)	18,201	49,741	298	50,039

Condensed Consolidated Statement of Cash Flows

(Unaudited)

	Note	Six months ended 30 Jun 2022 \$m	Six months ended 30 Jun 2021 \$m
Cash flows from principal operating activities			
Net cash inflow from principal operating activities	22	6,778	8,030
Cash flows from other operating activities			
Net redemption from/(payments to) external fund managers for sales/(purchases) of financial assets measured at fair value through profit or loss		90	(1,450)
Net cash inflow from operating activities		6,868	6,580
Cash flows from investing activities			
Payments for purchases of fixed assets and intangible assets		(616)	(720)
Net (decrease)/increase in financial assets of Corporate Funds:			
(Increase)/decrease in time deposits with original maturities more than three months		(1,097)	1,268
Proceeds received upon maturity of financial assets measured at amortised cost (excluding time deposits)		302	79
Payments for purchases of financial assets measured at amortised cost (excluding time deposits)		(813)	(305)
Payments for financial assets measured at fair value through profit or loss		-	(249)
Interest received from financial assets measured at fair value through other comprehensive income		59	21
Dividend received from a joint venture		24	-
Net cash (outflow)/inflow from investing activities		(2,141)	94
Cash flows from financing activities			
Purchases of shares for Share Award Scheme		(42)	(331)
Payments of other finance costs		(35)	(34)
Dividends paid to shareholders of HKEX		(5,313)	(5,620)
Lease payments			
– Capital elements		(152)	(157)
– Interest elements		(36)	(41)
Net cash outflow from financing activities		(5,578)	(6,183)
Net (decrease)/increase in cash and cash equivalents		(851)	491
Cash and cash equivalents at 1 Jan		12,398	10,442
Exchange differences on cash and cash equivalents		(12)	5
Cash and cash equivalents at 30 Jun		11,535	10,938
Analysis of cash and cash equivalents			
Cash on hand and balances and deposits with banks and short-term investments of Corporate Funds	12	12,076	11,416
Less: Cash reserved for supporting Skin-in-the-Game and default fund credits of clearing houses	12(b)	(541)	(478)
		11,535	10,938

(a) “Cash flows from principal operating activities” is a non-Hong Kong Financial Reporting Standard (non-HKFRS) measure used by management for monitoring cash flows of the Group and represents the cash flows generated from the trading and clearing operations of the four exchanges and five clearing houses and ancillary services of the Group. This non-HKFRS measure may not be comparable to similar measures presented by other companies. Cash flows from principal operating activities and cash flows from other operating activities together represent cash flows from operating activities as defined by Hong Kong Accounting Standard (HKAS) 7: Statement of Cash Flows.

Notes to the Condensed Consolidated Financial Statements

(Unaudited)

1. Basis of Preparation

These unaudited condensed consolidated financial statements are prepared in accordance with HKAS 34: Interim Financial Reporting, issued by the Hong Kong Institute of Certified Public Accountants.

The financial information relating to the year ended 31 December 2021 that is included in these unaudited condensed consolidated financial statements for the six months ended 30 June 2022 as comparative information does not constitute the statutory annual consolidated financial statements of the Company for that year but is derived from those consolidated financial statements. Further information relating to these statutory financial statements required to be disclosed in accordance with section 436 of the Hong Kong Companies Ordinance (Chapter 622) is as follows:

The Company has delivered the consolidated 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 Hong Kong Companies Ordinance (Chapter 622).

The Company's auditor has reported on those consolidated financial statements. The auditor's report was unqualified; did not include a reference to any matters to which the auditor drew attention by way of emphasis without qualifying its report; and did not contain a statement under sections 406(2), 407(2) or (3) of the Hong Kong Companies Ordinance (Chapter 622).

2. Accounting Policies

These unaudited condensed consolidated financial statements should be read in conjunction with the 2021 annual consolidated financial statements. Except as described below, the accounting policies and methods of computation used in the preparation of these unaudited condensed consolidated financial statements are consistent with those used in the annual consolidated financial statements for the year ended 31 December 2021.

(a) Adoption of new/revised Hong Kong Financial Reporting Standards (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 ²
Amendments to HKAS 37	Provisions, Contingent Liabilities and Contingent Assets: Onerous Contracts – Cost of Fulfilling a Contract ²
Amendments to HKFRS 3	Business combinations: Reference to the Conceptual Framework ²
Amendments to HKFRS 16	Leases: COVID-19-Related Rent Concessions beyond 30 June 2021 ¹
Annual Improvements to HKFRSs 2018-2020:	
Amendments to HKFRS 9	Financial Instruments: Fees in the "10 per cent" Test for Derecognition of Financial Liabilities ²
Amendments to Illustrative Examples accompanying HKFRS 16	Leases: Lease Incentives ²

¹ Effective for accounting periods beginning on or after 1 April 2021

² 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.

2. Accounting Policies (continued)

(b) Change in accounting estimates

During the six months ended 30 June 2022, the estimated useful lives of the other computer hardware and software within fixed assets were revised from “three years” to “three to five years” to better reflect the useful life of the assets. The effect of the change in accounting estimate during the period was a decrease in depreciation charge of \$17 million.

3. Operating Segments

The Group determines its operating segments based on the internal management reports that are used to make strategic decisions reviewed by 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 information technology 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 of Hong Kong Limited (Stock Exchange), the Shanghai Stock Exchange and the Shenzhen Stock Exchange through Shanghai-Hong Kong Stock Connect and Shenzhen-Hong Kong Stock Connect (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 Hong Kong Futures Exchange Limited (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, derivative warrants (DWs), callable bull/bear contracts (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 London Metal Exchange (LME), which operates an exchange in the UK for the trading of base and ferrous metals futures and options contracts, and the operations of Qianhai Mercantile Exchange Co., Ltd. (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, namely Hong Kong Securities Clearing Company Limited (HKSCC), The SEHK Options Clearing House Limited (SEOCH), HKFE Clearing Corporation Limited (HKCC), OTC Clearing Hong Kong Limited (OTC Clear) and LME Clear Limited (LME Clear), 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 Technology Company Limited (BayConnect). Its major sources of revenue are network, terminal user, data line and software sub-license fees and hosting services fees.

3. Operating Segments (continued)

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 analysis of revenue by timing of revenue recognition for the period, is set out as follows:

	Six months ended 30 Jun 2022						Group \$m
	Cash \$m	Equity and Financial Derivatives \$m	Commodities \$m	Post Trade \$m	Technology \$m	Corporate Items \$m	
Timing of revenue recognition:							
Point in time	1,799	1,045	547	2,933	32	1	6,357
Over time	831	605	145	332	515	3	2,431
Revenue	2,630	1,650	692	3,265	547	4	8,788
Net investment income/(loss)	-	-	-	467	-	(378)	89
HKEX Foundation donation income	-	-	-	-	-	37	37
Sundry income	-	-	5	12	4	2	23
Revenue and other income	2,630	1,650	697	3,744	551	(335)	8,937
Less: Transaction-related expenses	-	(82)	-	(5)	-	-	(87)
Revenue and other income less transaction-related expenses	2,630	1,568	697	3,739	551	(335)	8,850
Operating expenses	(353)	(348)	(346)	(464)	(150)	(795)	(2,456)
Reportable segment EBITDA	2,277	1,220	351	3,275	401	(1,130)	6,394
Depreciation and amortisation	(97)	(78)	(163)	(181)	(40)	(158)	(717)
Finance costs	(6)	(5)	(3)	(31)	(1)	(27)	(73)
Share of profits less losses of joint ventures	42	-	-	-	-	-	42
Reportable segment profit before taxation	2,216	1,137	185	3,063	360	(1,315)	5,646

3. Operating Segments (continued)

	Six months ended 30 Jun 2021						
	Cash \$m	Equity and Financial Derivatives \$m	Commodities \$m	Post Trade \$m	Technology \$m	Corporate Items \$m	Group \$m
Timing of revenue recognition:							
Point in time	2,406	1,029	579	3,511	54	–	7,579
Over time	794	702	143	362	467	3	2,471
Revenue	3,200	1,731	722	3,873	521	3	10,050
Net investment income	–	–	–	346	–	428	774
HKEX Foundation donation income	–	–	–	–	–	74	74
Sundry income	–	–	1	5	2	3	11
Revenue and other income	3,200	1,731	723	4,224	523	508	10,909
Less: Transaction-related expenses	–	(63)	–	(18)	–	–	(81)
Revenue and other income less transaction-related expenses	3,200	1,668	723	4,206	523	508	10,828
Operating expenses	(305)	(337)	(324)	(446)	(148)	(661)	(2,221)
Reportable segment EBITDA	2,895	1,331	399	3,760	375	(153)	8,607
Depreciation and amortisation	(80)	(69)	(171)	(163)	(39)	(140)	(662)
Finance costs	(6)	(6)	(4)	(33)	(1)	(27)	(77)
Share of profits less losses of joint ventures	38	–	–	–	–	–	38
Reportable segment profit before taxation	2,847	1,256	224	3,564	335	(320)	7,906

4. Trading Fees and Trading Tariffs

	Six months ended 30 Jun 2022 \$m	Six months ended 30 Jun 2021 \$m
Equity securities traded on the Stock Exchange and through Stock Connect DWs, CBBCs and warrants traded on the Stock Exchange	1,791	2,392
Futures and options contracts traded on the Stock Exchange and the Futures Exchange	910	795
Base, ferrous, and precious metals futures and options contracts traded on the LME and QME	503	525
	3,553	4,124

5. Net Investment Income

	Six months ended 30 Jun 2022 \$m	Six months ended 30 Jun 2021 \$m
Gross interest income from financial assets measured at amortised cost	735	438
Gross interest income from financial assets measured at fair value through other comprehensive income	59	21
Interest rebates to Participants	(210)	(22)
Net interest income	584	437
Net (losses)/gains on financial assets mandatorily measured at fair value through profit or loss and financial liabilities at fair value through profit or loss		
– collective investment schemes	(511)	321
– other investments	(12)	4
	(523)	325
Others	28	12
Net investment income	89	774

6. Transaction-related Expenses

Transaction-related expenses comprise of license fees, bank charges and other costs which directly vary with trading and clearing transactions.

7. Staff Costs and Related Expenses

	Six months ended 30 Jun 2022 \$m	Six months ended 30 Jun 2021 \$m
Salaries and other short-term employee benefits	1,361	1,261
Employee share-based compensation benefits of HKEX Share Award Scheme (Share Award Scheme)	204	137
Termination benefits	4	6
Retirement benefit costs (note (a))	98	91
	1,667	1,495

- (a) The Group has sponsored a defined contribution provident fund scheme (ORSO Plan) and a Mandatory Provident Fund scheme (MPF Scheme) for the benefits of its employees in Hong Kong. The Group has also sponsored a defined contribution pension scheme for all employees of LME and LME Clear (LME Pension Scheme), and has joined defined contribution retirement schemes arranged by local government labour and security authorities for employees of its PRC subsidiaries and representative office (PRC Retirement Schemes). The retirement benefit costs charged to the condensed consolidated income statement represent contributions paid and payable by the Group to the ORSO Plan, the MPF Scheme, the LME Pension Scheme, the PRC Retirement Schemes and related fees.

8. Finance Costs

	Six months ended 30 Jun 2022 \$m	Six months ended 30 Jun 2021 \$m
Interest on borrowings	2	2
Interest on lease liabilities	36	41
Banking facility commitment fees	25	26
Negative interest on Euro and Japanese Yen deposits	10	8
	73	77

9. Taxation

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

	Six months ended 30 Jun 2022 \$m	Six months ended 30 Jun 2021 \$m
Current tax – Hong Kong Profits Tax	771	1,080
Current tax – Overseas Tax	85	99
Total current tax	856	1,179
Deferred tax (note (b))	(39)	138
Taxation charge	817	1,317

- (a) Hong Kong Profits Tax has been provided at the rate of 16.5 per cent (2021: 16.5 per cent) and overseas profits tax 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 six months ended 30 June 2021.

10. Earnings Per Share

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

- (a) Basic earnings per share

	Six months ended 30 Jun 2022	Six months ended 30 Jun 2021
Profit attributable to shareholders (\$m)	4,836	6,610
Weighted average number of shares in issue less shares held for Share Award Scheme (in '000)	1,265,460	1,265,672
Basic earnings per share (\$)	3.82	5.22

10. Earnings Per Share (continued)

(b) Diluted earnings per share

	Six months ended 30 Jun 2022	Six months ended 30 Jun 2021
Profit attributable to shareholders (\$m)	4,836	6,610
Weighted average number of shares in issue less shares held for Share Award Scheme (in '000)	1,265,460	1,265,672
Effect of shares awarded under Share Award Scheme (in '000)	1,996	1,879
Weighted average number of shares for the purpose of calculating diluted earnings per share (in '000)	1,267,456	1,267,551
Diluted earnings per share (\$)	3.82	5.21

11. Dividends

	Six months ended 30 Jun 2022 \$m	Six months ended 30 Jun 2021 \$m
Interim dividend declared of \$3.45 (2021: \$4.69) per share at 30 Jun	4,374	5,946
Less: Dividend for shares held by Share Award Scheme at 30 Jun	(8)	(12)
	4,366	5,934

12. Financial Assets

	At 30 Jun 2022 \$m	At 31 Dec 2021 \$m
Cash and cash equivalents	209,501	181,361
Financial assets measured at fair value through profit or loss	170,447	100,861
Financial assets measured at fair value through other comprehensive income	13,459	9,755
Financial assets measured at amortised cost	70,273	51,828
	463,680	343,805

12. Financial Assets (continued)

The Group's financial assets comprised financial assets of cash prepayments and collateral for A-shares (Cash for A-shares), Corporate Funds, Margin Funds, Clearing House Funds and metals derivatives contracts as follows:

	At 30 Jun 2022 \$m	At 31 Dec 2021 \$m
<u>Cash for A-shares (note (a))</u>		
Cash and cash equivalents	-	7,372
<u>Corporate Funds</u>		
Cash and cash equivalents (note (b))	12,076	12,900
Financial assets measured at fair value through profit or loss	8,927	9,437
Financial assets measured at amortised cost (note (b))	12,946	11,457
	33,949	33,794
<u>Margin Funds¹</u>		
Cash and cash equivalents	172,976	145,586
Financial assets measured at fair value through other comprehensive income	10,636	5,283
Financial assets measured at amortised cost	57,327	40,371
	240,939	191,240
<u>Clearing House Funds (note 17)</u>		
Cash and cash equivalents	24,449	15,503
Financial assets measured at fair value through other comprehensive income	2,823	4,472
	27,272	19,975
<u>Metals derivatives contracts</u>		
Financial assets measured at fair value through profit or loss (note (d))	161,520	91,424
	463,680	343,805

1 Excludes Settlement Reserve Fund and Settlement Guarantee Fund paid to China Securities Depository and Clearing Corporation Limited (ChinaClear) and margin receivable from Clearing Participants of \$8,512 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 30 Jun 2022						At 31 Dec 2021					
	Cash for A-shares \$m	Corporate Funds \$m	Margin Funds \$m	Clearing House Funds \$m	Metals derivatives contracts \$m	Total \$m	Cash for A-shares \$m	Corporate Funds \$m	Margin Funds \$m	Clearing House Funds \$m	Metals derivatives contracts \$m	Total \$m
Within twelve months	-	32,793	240,939	27,272	161,520	462,524	7,372	32,322	191,240	19,975	91,424	342,333
Over twelve months	-	1,156	-	-	-	1,156	-	1,472	-	-	-	1,472
	-	33,949	240,939	27,272	161,520	463,680	7,372	33,794	191,240	19,975	91,424	343,805

(a) Cash for A-shares includes:

- (i) Renminbi (RMB) cash prepayments received by HKSCC from its Clearing Participants for releasing their allocated A-shares on the trade day. Such prepayments will be used to settle HKSCC's Continuous Net Settlement (CNS) obligations payable on the next business day; and
- (ii) Hong Kong Dollar/United States Dollar cash collateral received by HKSCC from its Clearing Participants for releasing their allocated A-shares on the trade day. Such collateral will be refunded to the Clearing Participants when they settle their RMB CNS obligations on the next business day.

12. Financial Assets (continued)

- (b) At 30 June 2022, cash and cash equivalents of Corporate Funds of \$541 million (31 December 2021: \$502 million) and financial assets measured at amortised cost of Corporate Funds of \$653 million (31 December 2021: \$765 million) were solely used to support Skin-in-the-Game and default fund credits for HKSCC Guarantee Fund, SEOCH Reserve Fund and HKCC Reserve Fund (note 17(a)).
- (c) The cash and cash equivalents of Margin Funds, Clearing House Funds, Corporate Funds reserved for supporting Skin-in-the-Game and default fund credits of Clearing House Funds (note (b)), and Cash for A-shares are held for specific purposes and cannot be used by the Group to finance other activities. These balances are not included in cash and cash equivalents of the Group for cash flow purpose in the condensed consolidated statement of cash flows.
- (d) Metals derivatives contracts represent the fair value of outstanding base, ferrous, and precious metals futures and options contracts cleared through LME Clear that do not qualify for netting under HKAS 32: Financial Instruments: Presentation, where LME Clear is acting in its capacity as a central counterparty to the contracts traded on the LME. A corresponding amount has been recognised under financial liabilities at fair value through profit or loss (note 14).

13. Accounts Receivable, Prepayments and Deposits

	At 30 Jun 2022 \$m	At 31 Dec 2021 \$m
The breakdown of accounts receivable, prepayments and deposits, net of provision for impairment losses, are as follows:		
CNS money obligations receivable	16,088	17,921
Settlement Reserve Fund and Settlement Guarantee Fund held by ChinaClear	8,511	12,757
Other receivables, prepayments and deposits	2,099	2,060
	26,698	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.

14. Financial Liabilities at Fair Value through Profit or Loss

	At 30 Jun 2022 \$m	At 31 Dec 2021 \$m
<u>Held by LME Clear in its capacity as a central counterparty</u>		
Derivative financial instruments:		
– base, ferrous, and precious metals futures and options contracts cleared through LME Clear (note 12(d))	161,520	91,424

15. Margin Deposits, Mainland Security and Settlement Deposits, and Cash Collateral from Clearing Participants

	At 30 Jun 2022 \$m	At 31 Dec 2021 \$m
Margin deposits, Mainland security and settlement deposits, and cash collateral from Clearing Participants comprised:		
SEOCH Clearing Participants' margin deposits	17,596	21,051
HKCC Clearing Participants' margin deposits	83,668	56,840
HKSCC Clearing Participants' margin deposits, Mainland security and settlement deposits, and cash collateral	25,988	24,353
OTC Clear Clearing Participants' margin deposits	13,289	7,211
LME Clear Clearing Participants' margin deposits	108,910	94,081
	249,451	203,536

16. Accounts Payable, Accruals and Other Liabilities

The Group's accounts payable, accruals and other liabilities mainly represent 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.

17. Clearing House Funds

	At 30 Jun 2022 \$m	At 31 Dec 2021 \$m
The Clearing House Funds comprised:		
Clearing Participants' cash contributions	26,487	19,182
Contribution to OTC Clear Rates and FX Guarantee Resources	156	156
Clearing House Funds reserves (note 21)	610	612
	27,253	19,950
The Clearing House Funds were invested in the following instruments for managing the obligations of the Funds:		
Financial assets of Clearing House Funds (note 12)	27,272	19,975
Less: Other financial liabilities of Clearing House Funds	(19)	(25)
	27,253	19,950
The Clearing House Funds comprised the following Funds:		
HKSCC Guarantee Fund	4,734	4,552
SEOCH Reserve Fund	1,363	1,851
HKCC Reserve Fund	1,762	2,055
OTC Clear Rates and FX Guarantee Fund	2,878	2,778
OTC Clear Rates and FX Guarantee Resources	172	171
LME Clear Default Fund	16,344	8,543
	27,253	19,950

- (a) Contributions by HKSCC, SEOCH and HKCC to their respective default funds (Skin-in-the-Game) are set at 10 per cent of the size of the respective funds, and such contributions, together with default fund credits granted to HKSCC and HKCC Participants, are included in Corporate Funds. At 30 June 2022, the Skin-in-the-Game and default fund credits amounted to \$1,194 million (31 December 2021: \$1,267 million) (note 12(b)).

18. Borrowings

	At 30 Jun 2022 \$m	At 31 Dec 2021 \$m
Written put options to non-controlling interests	428	426
Analysed as:		
Non-current liabilities	88	86
Current liabilities	340	340
	428	426

During the six months ended 30 June 2022, none of the written put options was exercised.

19. Share Capital and Shares Held for Share Award Scheme

Issued and fully paid – ordinary shares with no par:

	Number of shares '000	Number of shares held for Share Award Scheme '000	Share capital \$m	Shares held for Share Award Scheme \$m	Total \$m
At 1 Jan 2021	1,267,837	(1,983)	31,891	(485)	31,406
Shares purchased for Share Award Scheme (note (a))	–	(1,455)	–	(681)	(681)
Vesting of shares of Share Award Scheme (note (b))	–	1,067	5	265	270
At 31 Dec 2021	1,267,837	(2,371)	31,896	(901)	30,995
At 1 Jan 2022	1,267,837	(2,371)	31,896	(901)	30,995
Shares purchased for Share Award Scheme (note (a))	–	(115)	–	(42)	(42)
Vesting of shares of Share Award Scheme (note (b))	–	187	–	82	82
At 30 Jun 2022	1,267,837	(2,299)	31,896	(861)	31,035

- (a) During the six months ended 30 June 2022, the Share Award Scheme acquired 115,300 HKEX shares (year ended 31 December 2021: 1,454,300 shares) through purchases on the open market. The total amount paid to acquire the shares during the period was \$42 million (year ended 31 December 2021: \$681 million).
- (b) During the six months ended 30 June 2022, a total of 187,040 HKEX shares (year ended 31 December 2021: 1,066,959 shares) were vested, of which 108,024 shares were for the HKEX's Chief Executive Officer (year ended 31 December 2021: Nil). The total cost of the vested shares was \$82 million (year ended 31 December 2021: \$265 million). During the year ended 31 December 2021, \$5 million was credited to share capital in respect of vesting of certain shares whose fair values were higher than the costs.

20. Employee Share-based Arrangements

The Group operates the Share Award Scheme as part of the benefits of its employees. It allows shares to be granted to employees of the Group, including the Executive Director (Employee Share Awards).

The employee share-based compensation expenses in relation to the share awards are charged to the condensed consolidated income statement under staff costs over the relevant vesting periods with a corresponding increase in employee share-based compensation reserve.

During the six months ended 30 June 2022, details of Employee Share Awards awarded are set out below:

Date of award	Number of shares awarded	Average fair value per share \$	Vesting period
25 Feb 2022	1,600	388.90	17 May 2022 – 17 May 2024
25 Feb 2022	9,300	388.86	10 Jan 2023 – 10 Jan 2025
3 Mar 2022	42,600	366.83	28 Feb 2025
9 Mar 2022	827,630 ^{1,2}	456.07	7 Dec 2023 – 7 Dec 2024
29 Apr 2022	8,100	338.55	1 Sep 2022 – 1 Sep 2024
9 Jun 2022	21,800	357.93	13 Jan 2023 – 31 Dec 2025
13 Jun 2022	5,400	342.99	7 Feb 2023 – 11 Feb 2025

1 162,003 shares were awarded by re-granting the forfeited or unallocated shares held by the Share Award Scheme

2 84,603 shares were awarded to HKEX's Chief Executive Officer

21. Designated Reserves

Designated reserves are segregated for their respective purposes and comprised the following:

	At 30 Jun 2022 \$m	At 31 Dec 2021 \$m
Clearing House Funds reserves (notes (a) and 17)	610	612
PRC statutory reserve	14	11
	624	623

(a) Clearing House Funds reserves

	At 30 Jun 2022 \$m	At 31 Dec 2021 \$m
HKSCC Guarantee Fund reserve	159	165
SEIOCH Reserve Fund reserve	114	114
HKCC Reserve Fund reserve	245	244
OTC Clear Rates and FX Guarantee Fund reserve	77	74
OTC Clear Rates and FX Guarantee Resources reserve	15	15
	610	612

22. Notes to the Condensed Consolidated Statement of Cash Flows

Reconciliation of profit before taxation to net cash inflow from principal operating activities:

	Six months ended 30 Jun 2022 \$m	Six months ended 30 Jun 2021 \$m
Profit before taxation	5,646	7,906
Adjustments for:		
Net interest income	(584)	(437)
Net fair value losses/(gains) on financial assets mandatorily measured at fair value through profit or loss and financial liabilities at fair value through profit or loss	523	(325)
Finance costs	73	77
Depreciation and amortisation	717	662
Employee share-based compensation benefits	204	137
Share of profits less losses of joint ventures	(42)	(38)
Other non-cash adjustments	(20)	12
Net increase in financial assets of Margin Funds	(45,742)	(4,340)
Net increase in financial liabilities of Margin Funds	45,447	4,352
Net increase in Clearing House Fund financial assets	(7,301)	(1,114)
Net increase in Clearing House Fund financial liabilities	7,299	1,120
Decrease in cash prepayments and collateral for A-shares	7,372	6,212
Decrease in Corporate Funds used for supporting Skin-in-the-Game and default fund credits	73	154
Decrease in accounts receivable, prepayments and deposits	1,671	19,425
Decrease in other liabilities	(8,634)	(25,595)
Net cash inflow from principal operations	6,702	8,208
Interest received from financial assets measured at amortised cost and cash and cash equivalents	735	438
Interest paid to Participants	(210)	(22)
Income tax paid	(449)	(594)
Net cash inflow from principal operating activities	6,778	8,030

23. Capital Expenditures and Commitments

During the six months ended 30 June 2022, the Group incurred capital expenditure of \$478 million (2021: \$536 million).

At 30 June 2022, the Group's commitments in respect of capital expenditure were as follows:

	At 30 Jun 2022 \$m	At 31 Dec 2021 \$m
Contracted but not provided for:		
– fixed assets	52	21
– intangible assets	204	175
Authorised but not contracted for:		
– fixed assets	215	361
– intangible assets	194	258
	665	815

24. Contingent Liabilities

At 30 June 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 30 June 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 623 trading Participants (31 December 2021: 638) covered by the indemnity at 30 June 2022 defaulted, the maximum contingent liability of the Group under the indemnity would amount to \$125 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 30 June 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.

As the judicial reviews are still at an early stage, 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. However, the LME management is of the view that the claims are without merit and the LME will contest them vigorously. Accordingly, no provision has been made in these condensed consolidated financial statements.

25. Material Related Party Transactions

- (a) Key management personnel compensation

	Six months ended 30 Jun 2022 \$m	Six months ended 30 Jun 2021 \$m
Salaries and other short-term employee benefits	77	60
Employee share-based compensation benefits	89	35
Retirement benefit costs	4	3
	170	98

- (b) Post-retirement benefit plans

The Group has sponsored an ORSO Plan and the LME Pension Scheme as its post-retirement benefit plans (note 7(a)).

26. Pledges of Assets

LME Clear receives securities and gold bullion as non-cash collateral for margins posted by its Clearing Participants. The total fair value of this non-cash collateral was US\$1,081 million (HK\$8,483 million) at 30 June 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 Clearing Participants' 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 Clearing Participant. 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\$15,485 million (HK\$121,510 million) at 30 June 2022 (31 December 2021: US\$13,513 million (HK\$105,351 million)). Such non-cash collateral, together with certain financial assets amounting to US\$791 million (HK\$6,205 million) at 30 June 2022 (31 December 2021: US\$400 million (HK\$3,117 million)), have been pledged to LME Clear's investment agents 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.

27. Capital Management

At 30 June 2022, the Group had set aside \$4,000 million (31 December 2021: \$4,000 million) of shareholders' funds for the purpose of supporting the risk management regime of the clearing houses in their roles as central counterparties, of which \$2,160 million (31 December 2021: \$2,160 million) had been injected into HKSCC, SEOCH and HKCC as share capital.

28. Fair Value of Financial Assets and Financial Liabilities

(a) Financial assets and financial liabilities carried at fair value

The following tables present the carrying values of financial assets and financial liabilities measured at fair value according to the levels of the fair value hierarchy defined in HKFRS 13: Fair Value Measurement, with the fair value of each financial asset and financial liability categorised based on the lowest level of input that is significant to that fair value measurement. The levels are defined as follows:

- Level 1: fair values measured using quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: fair values measured using valuation techniques in which all significant inputs other than quoted prices included within Level 1 are directly or indirectly based on observable market data.
- Level 3: fair values measured using valuation techniques in which any significant input is not based on observable market data.

28. Fair Value of Financial Assets and Financial Liabilities (continued)

(a) Financial assets and financial liabilities carried at fair value (continued)

Recurring fair value measurements:	At 30 Jun 2022				At 31 Dec 2021			
	Level 1 \$m	Level 2 \$m	Level 3 \$m	Total \$m	Level 1 \$m	Level 2 \$m	Level 3 \$m	Total \$m
Financial assets								
Financial assets measured at fair value through profit or loss:								
– collective investment schemes	1,081	7,175	–	8,256	1,680	7,063	–	8,743
– equity securities	–	–	671	671	–	–	694	694
– base, ferrous, and precious metals futures and options contracts cleared through LME Clear	–	161,520	–	161,520	–	91,424	–	91,424
Financial assets measured at fair value through other comprehensive income:								
– debt securities	10,517	2,942	–	13,459	7,750	2,005	–	9,755
	11,598	171,637	671	183,906	9,430	100,492	694	110,616
Financial liabilities								
Financial liabilities at fair value through profit or loss:								
– base, ferrous, and precious metals futures and options contracts cleared through LME Clear	–	161,520	–	161,520	–	91,424	–	91,424

During the six months ended 30 June 2022 and 30 June 2021, there were no transfers of instruments between Level 1 and Level 2 or transfer into or out of Level 3.

Level 2 fair values of collective investment schemes, debt securities, base, ferrous, and precious metals futures and options contracts have been determined based on quotes from market makers, funds administrators or alternative pricing sources supported by observable inputs. The most significant input are market interest rates, market prices of metals, net asset values and latest redemption prices or transaction prices of the respective collective investment schemes.

The Group's policy is to recognise transfers into and out of fair value hierarchy levels as of the date of the event or change in circumstances that caused the transfer.

Fair value measurements using significant unobservable inputs (Level 3)

	2022 \$m	2021 \$m
At 1 Jan	694	220
Investment in minority stakes in unlisted companies	–	349
(Losses)/gains recognised in profit or loss	(12)	121
(Losses)/gains recognised in other comprehensive income	(11)	4
At 30 Jun 2022/31 Dec 2021	671	694
Total losses or gains recognised for the period/year in the condensed consolidated income statement for assets held at 30 Jun 2022/31 Dec 2021	(12)	121

Level 3 valuations are prepared on bi-annually basis, at each interim and annual reporting date. The assumptions and inputs to the valuation model, the valuation techniques and the valuation results are reviewed and approved by management.

28. Fair Value of Financial Assets and Financial Liabilities (continued)

(a) Financial assets and financial liabilities carried at fair value (continued)

The following table summarises the basis of valuation used in level 3 fair value measurements:

Description	Fair value		Valuation technique	Unobservable inputs	Range
	At 30 Jun 2022 \$m	At 31 Dec 2021 \$m			
Minority stake in Fusion Bank Limited	200	200	Market approach ¹	N/A	N/A
Minority stake in Huakong TsingJiao Information Science (Beijing) Limited	225	236	Market approach ¹	N/A	N/A
Minority stake in Guangzhou Futures Exchange	246	258	Market approach ¹	N/A	N/A
Total	671	694			

¹ The fair value is estimated based on the analysis of the investment's financial position and results, prospects and other factors and by reference to recent market transactions.

Fusion Bank Limited has a virtual banking license granted by the Hong Kong Monetary Authority. The investment is not traded in an active market. The company launched its virtual banking platform in 2020, offering a variety of banking services including savings, time deposits, fund transfers and foreign exchange.

Huakong TsingJiao Information Science (Beijing) Limited is a data technology company, which specialises in the research and development of multi-party computation technologies, allowing collaborative data analysis without revealing private data during the computation and analysis process. The investment is not traded in an active market.

Guangzhou Futures Exchange was officially launched in April 2021, and it seeks to become an innovative and market-oriented exchange with international influence, focusing on serving the real economy and green development initiatives. The investment is not traded in an active market.

28. Fair Value of Financial Assets and Financial Liabilities (continued)

(b) Fair values of financial assets and financial liabilities not reported at fair values

Summarised in the following table are the carrying amounts and fair values of long-term financial assets and financial liabilities not presented in the condensed consolidated statement of financial position at their fair values, except for lease liabilities where disclosure of fair values is not required. These assets and liabilities were classified under Level 2 in the fair value hierarchy.

	At 30 Jun 2022		At 31 Dec 2021	
	Carrying amount in condensed consolidated statement of financial position \$m	Fair value \$m	Carrying amount in condensed consolidated statement of financial position \$m	Fair value \$m
Assets				
Financial assets measured at amortised cost:				
– debt securities maturing over one year ¹	117	117	429	429
– other financial assets maturing over one year ²	99	76	97	87
Liabilities				
Borrowings:				
– written put options to non-controlling interests ³	428	429	426	430
Financial guarantee to the Collector of Stamp Revenue ⁴	20	36	20	56

1 The fair values are provided by a reputable independent financial institution.

2 The fair values are based on cash flows discounted using Hong Kong Government bond rates of a tenor similar to the contractual maturity of the respective assets, adjusted by an estimated credit spread. The discount rates used ranged from 3.20 per cent to 3.70 per cent at 30 June 2022 (31 December 2021: 0.41 per cent to 1.45 per cent).

3 The fair values are based on cash flows discounted using the prevailing market interest rates for loans with similar credit rating and similar tenor of the respective loans. The discount rate used was 3.80 per cent at 30 June 2022 (31 December 2021: 1.70 per cent).

4 The fair values are based on the fees charged by financial institutions for granting such guarantees discounted to perpetuity using a ten-year Hong Kong Government bond rate, adjusted by an estimated credit spread, but capped at the maximum exposure of the financial guarantee. The discount rate used was 4.37 per cent at 30 June 2022 (31 December 2021: 2.84 per cent).

The carrying amounts of short-term financial assets and receivables (e.g., accounts receivable, financial assets measured at amortised cost and cash and cash equivalents) and short-term payables (e.g., accounts payable and other liabilities) approximated their fair values, and accordingly no disclosure of the fair values of these items is presented.

Glossary

- ADT** • Average daily turnover value
- ADV** • Average daily volume (in number of contracts/lots)
- AGM** • HKEX's annual general meeting
- Alibaba** • Alibaba Group Holding Limited
- Awarded Shares** • Shares awarded under the Share Award Scheme
- BayConnect** • BayConnect Technology Company Limited
- BBS** • Bronze Bauhinia Star
- Bilibili** • Bilibili Inc.
- Board** • HKEX's board of directors
- Bond Connect** • A mutual bond market access programme between Hong Kong and Mainland China, under which Northbound trading enables overseas investors to invest in the China Interbank Bond Market, and Southbound trading enables Mainland institutional investors to invest in offshore bonds through the Hong Kong bond market
- Cash Market** • HKEX's securities related business excluding stock options
- CBBCs** • Callable Bull/Bear Contracts
- CFETS** • China Foreign Exchange Trade System
- Chief Executive Officer** • 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
- CP(s)** • Clearing Participant(s)
- CSR** • Corporate Social Responsibility
- 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
- 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 Exchange** • The Stock Exchange of Hong Kong Limited
- Financial Secretary** • Financial Secretary of the Hong Kong Special Administrative Region of the People's Republic of China
- FINI** • Fast Interface for New Issuance
- Futures Exchange or HKFE** • Hong Kong Futures Exchange Limited
- GBM** • Grand Bauhinia Medal
- GBS** • Gold Bauhinia Star
- Government or HKSAR Government** • The Government of the Hong Kong Special Administrative Region of the People's Republic of China
- Government Appointed 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
- HKFRS(s)** • Hong Kong Financial Reporting Standard(s)

HKSCC • Hong Kong Securities Clearing Company Limited

HSCEI • Hang Seng China Enterprises Index

HSI • Hang Seng Index

IPO(s) • Initial Public Offering(s)

Iron Ore Futures • TSI Iron Ore Fines 62 per cent Fe CFR China Futures

IT • Information Technology

JP • Justice of the Peace

L&I Products • Leveraged and Inverse Products

Listing Rule(s) • Main Board Listing Rules and Rules Governing the Listing of Securities on GEM of The Stock Exchange of Hong Kong Limited

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

MH • Medal of Honour

Model Code • Model Code for Securities Transactions by Directors of Listed Issuers, Appendix 10 to the Main Board Listing Rules

MSCI • MSCI Inc.

Northbound Trading or Stock Connect

Northbound • Hong Kong and overseas investors trading in eligible securities that are listed on the Shanghai Stock Exchange or the Shenzhen Stock Exchange through Stock Connect

OECD • The Organisation for Economic Co-operation and Development

OTC • Over-the-counter

OTC Clear • OTC Clearing Hong Kong Limited

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 Connect • A mutual market access programme that links the stock markets in Shanghai and Hong Kong, enabling investors in Hong Kong and Mainland China to trade and settle shares listed on the other market via the exchange and clearing 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 Connect • A mutual market access programme that links the stock markets in Shenzhen and Hong Kong, enabling investors in Hong Kong and Mainland China to trade and settle shares listed on the other market via the exchange and clearing house in their home market

Southbound Trading or Stock Connect

Southbound • Mainland investors trading in eligible securities that are listed on the Stock Exchange through Stock Connect

SPAC(s) • Special purpose acquisition company(ies)

STAGE • HKEX's Sustainable and Green Exchange

Stock Connect • Shanghai-Hong Kong Stock Connect and Shenzhen-Hong Kong Stock Connect

UK • United Kingdom

US • United States of America

US\$/USD • United States dollar

Zai Lab • Zai Lab Limited

\$/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)



**Hong Kong Exchanges and
Clearing Limited**

8/F, Two Exchange Square,
8 Connaught Place, Central, Hong Kong

T (852) 2522 1122 F (852) 2295 3106
info@hkex.com.hk