

Pursuant to Chapter 38 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited, the Securities and Futures Commission regulates Hong Kong Exchanges and Clearing Limited in relation to the listing of its shares on The Stock Exchange of Hong Kong Limited. The Securities and Futures Commission takes no responsibility for the contents of this announcement, makes no representation as to its accuracy or completeness, and expressly disclaims any liability whatsoever for any loss howsoever arising from or in reliance upon the whole or any part of the contents of this announcement.



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

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

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

2020 FINAL RESULTS, DIVIDEND AND CLOSURE OF REGISTER OF MEMBERS

STRATEGIC AND FINANCIAL HIGHLIGHTS

Calvin Tai, Interim Chief Executive said:

“HKEX had a strong year in 2020, despite the challenging macroeconomic environment. Revenue and other income, and profit both reached record highs for the third consecutive year. Cash Market turnover, Stock Connect and Bond Connect volumes all achieved new highs, and together with a buoyant IPO market, offset the impact of the low interest rate environment on investment income. We continue to execute and deliver on our Strategic Plan, capturing new growth opportunities and we remain fully focused on managing both costs and risks. With robust trading volumes, a strong IPO pipeline, and an expanding product portfolio, I am confident that HKEX will continue to play a vital role connecting investors, corporates and markets around the world, delivering on its vision to be the Global Markets Leader in the Asian Time Zone.”

Strategic Highlights

Corporate News

- 23 Mar Introduced innovative virtual IPO ceremonies to welcome new listings
- 27 May Signed a licensing agreement with MSCI to launch Asia and emerging markets futures and options
- 27 Jun 20th Anniversary of HKEX as a listed company
- 3 Jul 3rd Anniversary of Bond Connect
- 17 Nov 6th Anniversary of Stock Connect

Regulation

- 16 Mar HKEX and SFC jointly released guidance on the publication of annual reports in light of the Covid-19 pandemic
- 8 Apr SFC, HKEX and FSR jointly released consultation conclusions on the introduction of an Uncertificated Securities Market
- 29 Apr Updated guidance materials for pre-revenue biotech companies
- 7 Aug Published a consultation paper on review of disciplinary powers and sanctions
- 30 Oct Published consultation conclusions on corporate weighted voting rights
- 27 Nov Published a consultation paper on Main Board profit requirement
- 18 Dec Published consultation conclusions on paperless listing and subscription regime

Products and Services

- 27 Mar HKEX welcomed the first Iron Ore Futures ETF
- 1 Jun Introduced new spread tables and continuous quoting market making obligations for ETPs
- 5 Jun HKEX welcomed the listing of the first commodity L&I product
- 8 Jun Launched USD and CNH Silver Futures
- 6 Jul Launched the first tranche of MSCI Futures
- 9 Jul OTC Clear launched clearing services for HONIA-based interest rate products
- 10 Jul Launched Master SPSA service to enhance Stock Connect
- 27 Jul HKEX welcomed the first Hong Kong-listed A-share L&I products
- 23 Oct HKEX welcomed the first Hong Kong/Mainland ETF cross-listing
- 23 Nov Launched Hang Seng TECH Index Futures
- 18 Dec QME launched its first on-exchange cement contract

Market Operations

- 1 Feb New rules on optimising its warehouse network introduced by LME
- 11 May Implemented the first phase enhancements of Volatility Control Mechanism
- 15 Jun OTC Clear completed the first trade via client clearing
- 9 Jul LME commenced publishing off-warrant stocks data to deliver increased transparency of global metal availability
- 13 Jul Structured product listing cycle shortened to three trading days
- 19 Oct Launched a range of enhancements to the Pre-Opening Session
- 16 Nov Published a concept paper on FINI, a proposal to digitalise Hong Kong's IPO settlement process
- 23 Nov Introduced Synapse, a settlement acceleration platform for Stock Connect, to be launched in 2022
- 26 Nov QME launched a natural gas trading platform in Mainland China
- 27 Nov SEHK, SSE and SZSE agreed to include Hong Kong-listed pre-revenue biotech companies and A-shares listed on Shanghai's STAR Market in Stock Connect trading

Corporate Social Responsibility

- 6 Mar Published guidance materials on ESG reporting
- 17 Jun Officially launched HKEX Foundation and Charity Partnership Programme
- 1 Dec Launched STAGE, HKEX's Sustainable and Green Exchange
- 16 Dec LME moved ahead on sustainability strategy and LMEpassport roll-out
- 17 Dec Awarded as the Financial Education Champion by the Investor and Financial Education Council

Financial Highlights

- Record financial results for the third consecutive year
- 2020 revenue and other income was up 18 per cent against 2019:
 - Core business revenue was up 24 per cent compared with 2019, reflecting higher trading and clearing fees driven by record headline ADT
 - Stock Connect revenue and other income reached a record high of \$1,926 million, up 91 per cent against 2019
- Net investment income dropped 18 per cent against 2019, due to the lower fair value gains on collective investment schemes and lower interest income
- Operating expenses were 11 per cent higher than 2019. Excluding HKEX Foundation charitable donations¹, operating expenses were up 8 per cent, attributable to annual payroll adjustments and increased headcount arising from the acquisition of BayConnect in June 2019, and higher IT costs and professional fees
- EBITDA² was 19 per cent higher than 2019, with EBITDA margin² at 77 per cent, 2 per cent higher than 2019
- Profit attributable to shareholders rose by 23 per cent, to a record high of \$11,505 million

Key Financials

	2020 \$m	2019 \$m	Change
Revenue and other income			
Core business revenue	16,856	13,582	24%
HKEX Foundation donation income ¹	106	-	N/A
Net investment income	2,228	2,729	(18%)
	19,190	16,311	18%
Operating expenses ¹	4,439	3,997	11%
EBITDA	14,641	12,263	19%
Profit attributable to shareholders	11,505	9,391	23%
Basic earnings per share	\$9.11	\$7.49	22%
First interim dividend per share	\$3.71	\$3.72	(0%)
Second interim dividend per share	\$4.46	\$2.99	49%
	\$8.17	\$6.71	22%
Dividend payout ratio	90%	90%	-

Key Market Statistics

	2020	2019	Change
ADT of equity products traded on the Stock Exchange ³ (\$bn)	110.9*	69.2	60%
ADT of DWs, CBBs and warrants traded on the Stock Exchange (\$bn)	18.6	18.0	3%
ADT traded on the Stock Exchange ^{3,4} (Headline ADT) (\$bn)	129.5*	87.2	49%
ADT of Northbound Trading of Stock Connect ³ (RMBbn)	91.3*	41.7	119%
ADT of Southbound Trading of Stock Connect ^{3,4} (\$bn)	24.4*	10.8	126%
ADV of derivatives contracts traded on the Futures Exchange ('000 contracts)	607	626	(3%)
ADV of stock options contracts traded on the Stock Exchange ('000 contracts)	526*	442	19%
Chargeable ADV ⁵ of metals contracts traded on the LME ('000 lots)	571	617	(7%)
ADT of Bond Connect (RMBbn)	19.8*	10.7	85%

* New record highs in 2020

1 HKEX Foundation was established to deepen HKEX's connectivity and long-standing commitment to our communities. From 2H 2020 onwards, the donation income from the Stock Code Balloting Charity Scheme were received by HKEX Foundation, and the amounts previously paid by the issuers directly to the Hong Kong Community Chest were paid by HKEX Foundation. As a result, HKEX recorded donation income of \$106 million, under revenue and other income, and HKEX Foundation charitable donations of \$112 million, under operating expenses in 2020.

2 For the purposes of this announcement, EBITDA is defined as earnings before interest expenses and other finance costs, taxation, depreciation and amortisation. It excludes the Group's share of results of the joint ventures and other non-recurring costs arising from the proposed combination with LSEG. EBITDA margin is calculated based on EBITDA divided by revenue and other income less transaction-related expenses.

3 Includes buy and sell trades under Stock Connect

4 ADT of Southbound Trading is included within Headline ADT.

5 Chargeable ADV excludes administrative trades (Admin Trades) and other non-chargeable trades. Admin Trades were introduced in 2017 to meet requirements resulting from MiFID II.

CHAIRMAN'S STATEMENT

2020 was a milestone year for HKEX, marked by the 20th anniversary of our own listing, and record trading activity on our markets. The year will be one that will be remembered for the many challenges arising from the Covid-19 global pandemic, escalating geopolitical tensions, and economic fragility. Throughout, HKEX demonstrated its resilience and strength, providing fully functioning, well-regulated markets, deftly adapting to change, innovating and reinforcing its relevance at the heart of global financial community. This ensured that despite the prevailing macro environment, HKEX had a productive and successful year, and that the business enters 2021 well-placed for capitalising on the opportunities ahead.

Our Performance

Total revenue and other income of the Group for the year ended 31 December 2020 reached a record high of \$19.2 billion, up 18 per cent from 2019, resulting in a record profit attributable to shareholders of \$11,505 million, up 23 per cent.

The Group's strong financial performance reflected the resilience and adaptability of our businesses during a challenging year. Our securities market in Hong Kong set new trading activity records in 2020, and trading volumes on both Stock Connect and Bond Connect reached new highs. Driven by the strong growth momentum in biotech and new economy company fundraisings, HKEX ranked second globally for IPO fundraisings in 2020, raising a total of \$400.2 billion, the highest amount since 2010.

Since March 2020, for only the second time in its 140 year history, the LME has conducted its markets and pricing electronically, seamlessly responding to the challenges of the global pandemic. Whilst the chargeable average daily volume of metals contracts traded on the LME fell by 7 per cent from 2019, the trading fees for 2020 increased by 5 per cent, driven by the fee tariff increment effective 1 January 2020.

Dividend

The Board declared payment of a second interim dividend of \$4.46 per share, wholly in cash, which, together with the first interim dividend of \$3.71 per share paid in September 2020, results in a record full-year dividend of \$8.17 per share.

Strategic Update

Against a challenging backdrop, we made significant progress in delivering on our stated strategy to be China Anchored, Globally Connected and Technology Empowered. Our efforts to enhance the competitiveness and attractiveness of our markets have further strengthened our ability to capture future growth opportunities and sustain our success. Of particular note for 2020 was our agreement with MSCI to strengthen our derivatives franchise, with the introduction of MSCI Asia and Emerging Markets Index futures and options to Hong Kong's markets; the announcement of the launch of HKEX Synapse, a new integrated settlement platform; our proposals to streamline the Hong Kong's IPO settlement cycle through the introduction of FINI; and our efforts to support the global strength of our IPO market, especially for biotech and new economy companies.

We recently became a minority shareholder of Guangzhou Futures Exchange Co., Ltd., a newly established futures exchange in the Guangdong-Hong Kong-Macao Greater Bay Area, which will focus on serving the real economy and green development initiatives.

Further details on these initiatives and a range of other strategic developments, market and product initiatives are set out in the Chief Executive's Review and Business Review sections of this announcement.

Market Quality

Market quality and sustainability are central to our role as a leading global exchange group. Through the promotion of market integrity, efficiency and resilience we support the health of our markets and we know that this is pivotal to ensuring the broader long-term success of Hong Kong as an international financial centre.

In 2020, we continued to improve our market microstructure. This included enhancements to our Pre-Opening Session and Volatility Control mechanisms in our Hong Kong securities market; and a shortened structured products listing cycle to three trading days. Following a thorough review of the Hong Kong derivatives market trading suspension on 5 September 2019, we also introduced a number of new measures and enhancements to our systems and processes to provide better risk management, oversight and communication in the event of any future major market incidents.

Underscoring our strong commitment to sustainability, in December we launched HKEX's Sustainable and Green Exchange (STAGE), Asia's first multi-asset sustainable investment product platform which has been very well received by the market. STAGE, by providing greater information, access and transparency on a wide range of sustainable-themed products in Asia, has positioned us strongly at the forefront of the development of sustainable and green finance market in Hong Kong and the region. Our commitment to championing sustainability extends to all areas of our business. As part of its strategy, the LME announced a number of sustainable initiatives, including launch plans for a digital credential register, LMEpassport, to provide greater visibility on sustainability criteria including emissions.

During the year, we issued market consultations on proposals to enhance the Exchange's disciplinary regime and the profit requirement for Main Board listings. After carefully considering market feedback, the Exchange also published conclusions to its consultation on Corporate Weighted Voting Rights (WVR) beneficiaries, and introduced new grandfathering arrangements to enable qualifying issuers with Corporate WVR to seek secondary listings in Hong Kong. We also announced amendments to the Listing Rules for the implementation of a paperless listing and subscription regime.

Specific details of the Group's performance, achievements, and market initiatives in 2020 are set out in the Chief Executive's Review and Business Review sections of this announcement.

Corporate Responsibility

At HKEX, we recognise that our responsibilities go beyond our status as a stock exchange group. Our commitment to being a responsible corporate leader and our role in the community are integral parts of our business, our strategy and of our future.

In 2020, we conducted internal evaluations of the performance of the boards of HKEX and its subsidiaries, OTC Clear, the LME and LME Clear. The evaluations concluded that all four boards operate effectively, and identified areas for enhancement.

In June, we were proud to launch the HKEX Foundation, and its flagship HKEX Charity Partnership Programme deepening our commitment and connectivity with our communities and anchoring our purpose as an organisation: "Supporting the prosperity of all".

The HKEX Foundation has raised more than \$100 million since its launch, and the monies raised were distributed to community projects that address some of the most pressing needs in our society. Our inaugural \$20 million commitment to HKEX's Charity Partnership Programme, in celebration of HKEX's 20th anniversary of its own listing, will support 10 community projects, focusing on financial literacy, diversity and inclusion, poverty relief, and environmental sustainability, aiming to deliver positive and sustainable impact on local communities. During 2020, the HKEX Foundation also made emergency relief donations of \$10 million in response to the Covid-19 pandemic; made awards in Hong Kong, Mainland China and the UK; introduced a new Hong Kong university scholarship programme; and made direct donations to a number of important projects, campaigns and charities. The LME also continued to promote gender diversity and inclusion across the markets and communities, through a wide range of advocacy and training programmes. Details can be found in our 2020 CSR Report, which will be available on the HKEX Group website together with the 2020 Annual Report.

Outlook

Looking ahead, global financial markets will continue to be shaped by the impact of the Covid-19 pandemic, ongoing geopolitical tensions, US-China trade relations and the anticipated economic recovery. This backdrop presents HKEX with both considerable opportunities, as well as challenges.

Set against this, our role will continue to be ever more relevant in international markets and future global economic prosperity. Our resilience, our ability to connect investors around the world, our unique position as both destination market and gateway to China and our commitment to sustainability make us very well positioned to benefit from future growth opportunities.

On behalf of the Board, I would like to express gratitude to our International Advisory Council members for their insight and guidance during the year, and also to Ms Anita Fung, Mr Chan Tze Ching, Dr Fred Hu and Mr John Williamson, who will retire after the conclusion of the 2021 AGM, for their invaluable contributions to HKEX during their tenures of service. I also thank my fellow Board members for their support and commitment throughout 2020.

I would also like to convey the Company's deep thanks to Mr Charles Li, who retired as HKEX Chief Executive on 31 December 2020, following more than a decade of outstanding contribution and leadership to the Company and to Hong Kong's financial markets. During Mr Li's tenure as Chief Executive, HKEX successfully transformed from a regional stock exchange into one of the world's premier market infrastructure groups.

We welcomed Mr Calvin Tai to his new role as the Interim Chief Executive of HKEX on 1 January 2021. The Group will benefit from Mr Tai's broad knowledge of global markets, his thorough understanding of our businesses and his commitment to the success of Hong Kong's financial community.

I also take this opportunity to offer the Board's heartfelt appreciation to our dedicated staff for their hard work, commitment and professionalism during this most challenging of years, ensuring the full functioning of our markets and the continued success of our business. Our appreciation also extends to our Shareholders and other valued stakeholders for their ongoing support, trust and confidence in us.

Laura M CHA

Chairman

CHIEF EXECUTIVE'S REVIEW

The year 2020 was a challenging but productive one for HKEX. We reported record financial results and record trading volumes, and launched an array of new initiatives and products. This was despite the market turbulence brought about by the global pandemic that challenged every community around the world, one that continues to influence the way we live and work today. However, strong HKEX foundations, a clear strategy and robust operations and processes ensured that we made good progress on the delivery of our Strategic Plan against all three strategic pillars: *China Anchored, Globally Connected, and Technology Empowered*. We remained focused on our unique ability to connect East with West, providing access to capital, utilising technology and driving innovation. This has made our markets and our business more competitive, reinforcing our leading position as the go-to international financial market in Asia.

Outstanding Market Performance

Market highlights in 2020
<ul style="list-style-type: none">• Stock Connect Northbound and Southbound reached record turnovers of RMB21,088.6 billion and \$5,508.1 billion respectively, and record ADT of RMB91.3 billion and \$24.4 billion respectively for the year.• Bond Connect turnover also saw record-high with ADT reaching RMB19.8 billion, increasing 85 per cent from 2019.• Our IPO market ranked second globally, with total IPO funds reaching \$400.2 billion (64 per cent from 50 New Economy companies).• Hong Kong now ranks as the second largest fundraising market for biotech companies, which together with WVR and secondary listings, raised a total of \$164.9 billion in 2020.• Hong Kong again took the crown as the world's largest structured products market, for the 14th consecutive year.

Our primary market had another excellent year. Hong Kong ranked second in the world's IPO fundraising league table in 2020: 154 company listings⁶ raised \$400.2 billion in total, a 27 per cent increase on 2019 and the highest amount raised in a single year since 2010. Of these listings, 64 per cent of funds raised were from 50 New Economy companies, including 22 Weighted Voting Rights (WVR), biotech and/or secondary-listed companies which raised IPO funds of \$164.9 billion (2019: \$117.3 billion raised by 10 companies). Hong Kong was the second-largest biotech fundraising centre in the world, achieving this accolade in only 2 years since the launch of our new listing regime in 2018⁷. The Group welcomed some of the world's biggest IPOs of the year, including the secondary listings of JD.com and NetEase in June, raising \$35 billion and \$24 billion respectively. The IPO pipeline remains very strong going into 2021.

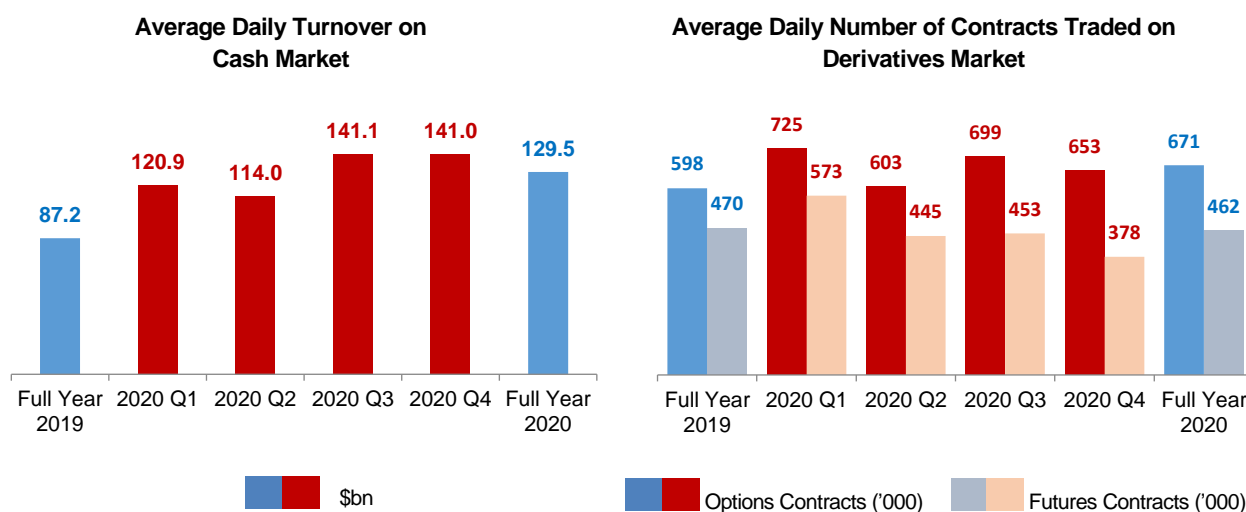
HKEX announced a number of Listing Rule amendments during the year, enhancing the attractiveness and efficiency of the Hong Kong markets whilst at the same time ensuring appropriate investor protections. These amendments included the extension of the current WVR regime to accommodate secondary listings by issuers with corporate WVR structures that meet certain requirements, enhancements to the Chapter 37 Professional Debt Regime, and the implementation of a paperless listing and subscription regime, among others. During the year, we released several market consultations including proposals to increase profit requirements for Main Board Listings, and enhancements to the existing disciplinary regime.

Our secondary markets remained very strong in 2020. The full-year 2020 ADT for the Cash Market reached \$129.5 billion, an increase of 49 per cent compared with 2019, recording many days with turnover in excess of \$200 billion. Total market turnover in 2020 reached \$32,110.1 billion, a new record and a 50 per cent increase on 2019. The market capitalisation of the securities market reached \$47,523.0 billion at the end of December 2020, marking an increase of 25 per cent compared with the end of December 2019.

⁶ Includes 8 transfers of listings from GEM to Main Board and listing by introduction; and excludes investment vehicle(s) pursuant to Chapters 20 and 21 of the Main Board Listing Rules and very substantial acquisition(s)

⁷ Refers to the Main Board Listing Rules Chapters 8A, 18A and 19C

Hong Kong again took the crown as the world's largest structured products market, for the 14th consecutive year, with total securitised derivatives (DWs, CBBCs and Inline Warrants) turnover of \$4,597.3 billion, an increase of 4 per cent compared with 2019; derivatives turnover in the year set a new high of 282,225,200 contracts. Contract volumes of many structured products set new records in 2020, including but not limited to mini HSI Futures, and weekly HSI and HSCEI options. The newly launched Hang Seng TECH Index Futures and Options gained strong traction, providing investors with new risk management tools for Hong Kong-listed technology companies.



Strategic Development Review

China Anchored

The internationalisation of the RMB continues apace, and the gradual opening-up of China offers significant opportunities for global investors. Hong Kong, as the largest offshore RMB centre, is uniquely placed to act as a global connector between international and Mainland Chinese markets. During 2020, HKEX played an active role in support of Mainland outbound portfolio diversification, as well as enabling global access to Mainland securities investments through two-way cross-border facilitation.

We celebrated the sixth anniversary of Shanghai-Hong Kong Stock Connect and the fourth anniversary of Shenzhen-Hong Kong Stock Connect in 2020, both of which have fundamentally changed and enhanced regional capital markets. As at the end of 2020, total cumulative turnover on Northbound and Southbound Stock Connect were over RMB40 trillion and \$14 trillion respectively, having recorded many record volumes throughout the year. The success of the programme is evidenced by a significant increase in quantity of cross-border holdings: as at 31 December 2020, Hong Kong and international investors held a total of RMB2.3 trillion in A-shares, compared with RMB86.5 billion as at 31 December 2014, the year Stock Connect was first introduced. Meanwhile, Mainland investors held HK\$2.1 trillion worth of Hong Kong-listed shares, up from HK\$13.1 billion as at 31 December 2014.

Working closely with regulators and onshore exchanges, we are committed to continuing to add breadth and depth to our landmark Mutual Market Access programme. Eligible pre-revenue biotech companies listed in Hong Kong and A-shares listed on the Shanghai Stock Exchange's Sci-Tech Innovation Board (STAR Market) were included in the Southbound and Northbound trading of Stock Connect in December 2020 and February 2021 respectively. Starting in January 2021 and subject to certain conditions, Mainland annuity funds were also given the green light to invest in Hong Kong market via Stock Connect. We signed a Memorandum of Understanding (MOU) with the Shenzhen Stock Exchange (SZSE) in relation to an ETF Cross-Listing Scheme, and welcomed two ETFs listed each on the SEHK and SZSE to our markets in October 2020.

Bond Connect demonstrated excellent momentum during 2020, with daily and monthly turnover setting multiple new records throughout the year. A number of enhancements were introduced, including fee reductions, trading hour extensions and the expansion in the number of foreign exchange settlement banks. Bond Connect's successful operations were one of the key factors leading to the inclusion of Mainland bonds in major global indices, including FTSE Russell's scheduled inclusion of Chinese sovereign bonds in its benchmark bond index in 2021. Throughout the year, Bond Connect has continued to be embraced by international investors; as at the end of 2020, 2,352 global institutional investors across 34 jurisdictions had been on-boarded, compared with 1,601 across 31 jurisdictions at the end of 2019. Total net inflows as at end-2020 reached RMB1.2 trillion, compared with RMB133.4 billion at end-2017, the year it was launched.

In 2020, Qianhai Mercantile Exchange (QME) launched the Mainland's third natural gas spot trading platform and first on-exchange cement contracts, actively expanding product offerings beyond base metals. Driven by this series of new initiatives, as well as expanded pipeline transportation and warehousing capacity, total trading volume in 2020 reached RMB13.2 billion, compared with RMB1.6 billion in 2019. We are also pleased to announce that HKEX recently became one of the founding shareholders of the newly set up Guangzhou Futures Exchange, marking another milestone in our commitment to the Greater Bay Area.

Globally Connected

In response to structural shifts in the investment management industry and evolving investment trends, we have provided enhanced product offerings to cater to the different trading strategies of our broad client base. We also introduced a large number of microstructure enhancements to drive market efficiency and reduce market friction. From July to September, we launched 38 MSCI Asia and Emerging Market Index Futures, representing a major step forward in the expansion of HKEX's derivatives product offering, strongly supported by new trading hours arrangements and enhanced incentives for liquidity providers and proprietary traders. Other new launched products include the first listings of Iron Ore Futures ETF, Commodity L&I products, A-share L&I products, and Hang Seng TECH Index Futures and Options.

OTC Clear became the first clearing house to offer clearing services for interest rate products benchmarked to the Hong Kong Dollar Overnight Index Average (HONIA). Notional amount cleared was US\$149.0 billion, 25 per cent lower than 2019.

Despite having to move to electronic trading in the wake of the pandemic, the LME continued to operate robust and efficient markets, with deep liquidity, for participants from the metals and financial trading communities around the world. Of note during 2020, was the introduction of cash-settled contracts, the launch of Silver Futures, the expansion of a new ferrous suite of contracts, greater engagement with the battery materials and electric vehicle industries and a commitment to develop a transparent lithium pricing solution. As part of our efforts to make metals a cornerstone of a sustainable future, a new digital credentials register, LMEpassport, is gradually being rolled out across the LME's physically settled metals, requiring certificates of analysis (CoAs), starting in 2021.

Technology Empowered

We have continued to focus on capturing the benefits of the accelerating pace of technological innovation in our industry. Throughout an extremely challenging year, we were able to maintain robustness and stability in all of our major trading, clearing, settlement and market data dissemination systems despite notable market volatility, and deploying flexible working arrangements for HKEX staff. Utilising various digital channels, we expanded outreach and engagement to issuers and market participants, including a selection of new e-Forms in place of physical submissions and the design and launch of an innovative "virtual listing ceremony" for new issuers.

A number of key initiatives were also announced or launched during the year:

- We launched a concept paper on FINI (Fast Interface for New Issuance), to reduce the time between IPO pricing, and trading, by as much as 80 per cent, from its current average of more than five business days, to as little as one business day, deploying technology to drive efficiency, alleviate funding lock-ups and digitalise Hong Kong's IPO franchise.

- We announced HKEX Synapse, a settlement acceleration platform for Northbound Stock Connect, which will utilise smart contract technology to automate and streamline post trade processes. With target implementation in 2022, we hope to encourage more Stock Connect trading through offering increased post trade automation and enhanced risk management for investors.
- We announced the adoption of a pioneering paperless listing and subscription regime, and online display of certain documents, to be rolled out in 2021.
- The LME suspended Ring trading to safeguard the wellbeing of members and adhere to social distancing guidelines in 2020. Reflecting the smooth transition experience to electronic pricing as a result, in January 2021, the LME published proposals to permanently move towards becoming an electronic venue (including the Ring and the inter-office market). It also plans to fully rebuild its electronic trading platform, LMEselect, to refresh trading infrastructure and add an all-new onscreen options market.
- The market-wide soft launch of the Orion Risk Platform (previously known as NextGen Risk Management) in January 2021 will significantly consolidate and improve the robustness of our post trade risk management measures. The platform creates a single risk engine for risk monitoring and risk exposure calculation across all markets, together with a centralised Report Access Platform for convenient data retrieval.

Our Innovation Lab applied innovative technologies to core business functions, including deployment of Robotic Process Automation (RPA) across the business, and the application of artificial intelligence to support regulatory reviews and market surveillance. Internally across all offices, during the year we utilised an enhanced range of digital tools to deliver operational efficiency and flexibility in our working environment.

Pandemic Response

As well as enhancing our technological capabilities, this year we rolled out a number of programmes to support our stakeholders and communities during the pandemic. Working closely with the SFC, we provided guidance for listed issuers on disclosure of results announcements during the early phase of the Covid-19 outbreak, and subsequently released guidance in relation to exemptions to general meetings in April in accordance with local pandemic development.

During a year of many challenges, HKEX was fully committed to supporting our communities and being a responsible corporate leader. We made emergency relief donations of \$10 million in Hong Kong, Mainland China and the UK. We also offered \$10,000 invoice credits as relief measure to each of the eligible Exchange Participants (EPs) in August, with an option to donate to the HKEX Foundation, HKEX's charitable and philanthropic entity.

In December 2020 we were pleased to launch our new GO BEYOND graduate internship programme, which will provide up to 50 recent graduates with a unique six-month internship at the heart of Asian capital markets. The programme seeks to support young talent in a difficult market and to develop and strengthen Hong Kong's competitiveness, as one of the region's major financial services employers.

Strategic Outlook

2021 looks to be another year of uncertainty. However, the availability of a portfolio of vaccines, China's faster-than-expected economic rebound and a global commitment to far-reaching sustainability goals, all give cause for optimism.

2021 will be the third and final year of the current Strategic Plan. Alongside strong risk management, and a resolute focus on costs, as always, we will remain ardently focused on the successful execution of the plan to capture further growth opportunities in the region and beyond, helping realise our vision to be the "Global Markets Leader in the Asian Time Zone".

Appreciation

The Group has demonstrated extraordinary resilience in 2020. This would not have been possible without our HKEX Group staff, who have worked tirelessly during a year of many challenges, not only supporting our business, but the broader communities in which we operate. My sincere thanks to each of them for their contributions.

I would like to express our gratitude to the senior executives who have recently left the Company, including former Chief Executive Mr Charles Li, for their contribution and service throughout the years. We too, are pleased to have welcomed a number of new executives to HKEX, including Mr Richard Wise, new Group Chief Risk Officer, and Ms Glenda So, new Head of Post Trade to the Group.

I would also like to thank the SFC, the Hong Kong Monetary Authority, market participants, our partners, friends and stakeholders for their unending support. Finally, I would like to thank my fellow members of the Board for their trust and unwavering support. We are well placed to meet the opportunities and challenges ahead.

TAI Chi Kin, Calvin

Director and Interim Chief Executive
Co-President & Chief Operating Officer

MANAGEMENT DISCUSSION AND ANALYSIS

BUSINESS REVIEW

Overview

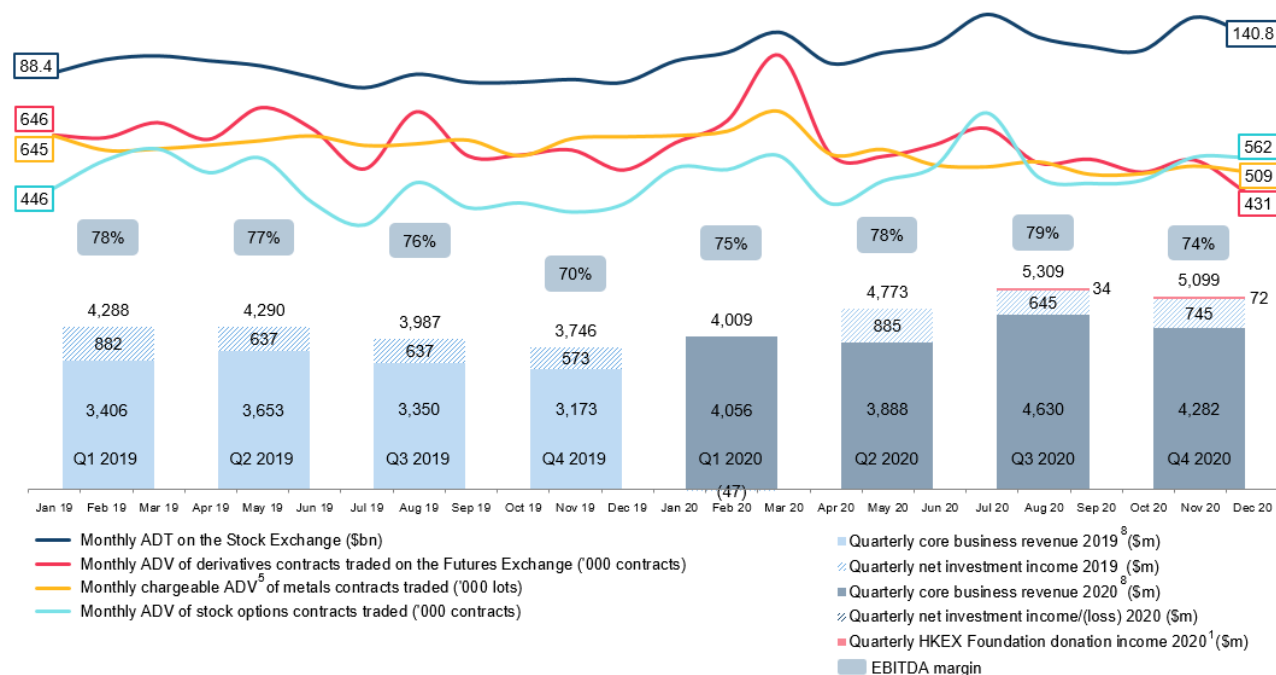


Fig. 1 – Market activity and Group's revenue and other income

2020 was a strong year for HKEX. Revenue and other income, and profit, reached record highs for the third consecutive year, despite the challenging geopolitical and macroeconomic backdrop and unprecedented impact caused by Covid-19. Headline ADT⁹ reached a record high of \$129.5 billion, 49 per cent above 2019, and 21 per cent above the previous high of 2018. Stock Connect trading volumes also saw record highs with Northbound and Southbound ADT being 119 per cent and 126 per cent higher than 2019 respectively. The Hong Kong IPO market continued to be buoyant, with HKEX ranked second globally by IPO funds raised in 2020, boosted by a number of sizable secondary listings of US-listed Chinese companies, as well as an influx of new economy and biotech companies to our markets.

Revenue and other income reached a record high of \$19.2 billion, up 18 per cent against 2019. The increase in trading and clearing fees was partly offset by lower net investment income, arising from lower interest income and lower fair value gains on collective investment schemes (2020: \$487 million; 2019: record gains of \$789 million). Operating expenses increased by 11 per cent compared with 2019. Excluding HKEX Foundation charitable donations¹ of \$112 million, operating expenses were up 8 per cent, mainly due to higher staff costs from annual payroll adjustments and increased headcount arising from the acquisition of BayConnect in June 2019, higher IT and computer maintenance expenses for new IT systems and upgraded networks, and higher professional fees incurred for strategic projects and other business initiatives.

Looking ahead, there are positive signs of early economic recovery, especially in China, and this together with the roll-out of Covid-19 vaccinations globally and continued policy support by the world's major central banks provides cause for optimism. However uncertainty remains, and the road to full economic recovery will not be straightforward. The Group will continue its focus on executing and delivering upon its Strategic Plan 2019-2021, whilst adopting a prudent approach to cost control and risk management, seeking growth opportunities and ensuring the continued resilience and robustness of its markets.

⁸ Revenue and other income, excluding net investment income and HKEX Foundation donation income

⁹ ADT of equity products, DWs, CBBCs and warrants traded on the Stock Exchange

2020 marked the second year of the Group's Strategic Plan 2019-2021. Our vision to be ***the Global Markets Leader in the Asian Time Zone – Connecting China, Connecting the World*** remains the central cornerstone of our strategy, focused on the three pillars of being China Anchored, Globally Connected, and Technology Empowered.

Progress made, up to the date of this announcement, is set out in the table below and further elaborated upon in the Business Update section in each of the operating segments:

China Anchored

- **Enhance Stock Connect:** Inclusion of biotech companies into Southbound eligible securities list; inclusion of eligible A shares listed on Shanghai's STAR Market and their corresponding H shares into Stock Connect; launch of the investor identification regime for Southbound Trading; new Master Special Segregated Account service to support Northbound Trading; announced the proposed launch of Synapse in Q1 2022 to automate and streamline post trade workflow for Northbound Stock Connect
 - **Enhance Bond Connect:** Enhancements to settlement cycles (special settlement cycles and recycling settlement, longer settlement cycle available on Tradeweb and Bloomberg); extension of trading hours; access to defaulted bond market; fee reduction; increase in foreign exchange settlement banks; launch of electronic bond issuance system
 - **Extend our onshore capabilities in the Mainland:** Launch of natural gas and cement products on the QME; HKEX is investing in a minority stake in the newly-established Guangzhou Futures Exchange Co. Ltd. (GFE), which provides HKEX with the opportunity to help build and promote the development of China's derivatives market
-

Globally Connected

- **Develop a listing and capital raising hub for major global and regional companies:** Listing of new economy and healthcare companies, including NetEase, JD.com and JD Health; homecoming listing of nine secondary listed companies
 - **Enhance structure of our IPO regime:** New grandfather arrangements to enable qualifying issuers with corporate WVR to seek secondary listings in Hong Kong; shortening of the structured product listing cycle from five to three trading days; publication of the FINI concept paper for shortening of IPO settlement cycle; paperless listing & subscription regime to be effective in July 2021
 - **Enhance our product ecosystem across asset classes:** Launch of MSCI Asia and Emerging Markets Index Futures, Hang Seng TECH Index Futures and Options, USD and CNH denominated Silver Futures in Hong Kong; official launch of STAGE with 34 sustainable-themed products displayed
 - **Become the ETF issuance and trading hub for the Asia Pacific time zone:** New listing of the first Iron Ore Futures ETF, the first commodity-based L&I Product, the first active equity ETF, the first ETF under master-feeder structure, the first ESG China A shares ETF, the first batch of A share L&I Products, the first four Hang Seng TECH Index ETFs, the first two Hang Seng TECH Index L&I Products; introduction of a new spread table and continuous quoting market making obligations; waiver of stamp duty on stock transfers for ETP market makers; launch of the Hong Kong-Mainland ETF Cross-listing Scheme with the first two products listed on SZSE and HKEX respectively
 - **Improve our market microstructure:** Enhancement to Volatility Control Mechanism (VCM) and Pre-Opening Session; enhancement to third party clearing arrangement; automation of Large Open Position (LOP) Reporting and roll out of a new surveillance system for LOP and Position Limit; enhancement to the buy-in exemption clauses and capital-based position limit policy; continued to implement new rules and disclosures to optimise the LME's warehouse network
-

Technology Empowered

- **Modernise our systems:** Relocation of the secondary data centre to a Tier 3 data centre and kick-off of the hardware obsolescence replacement for various trading and clearing systems
 - **Leverage new technology:** Continued deployment of new technologies across HKEX businesses, led by HKEX Innovation Lab including deployment of Artificial Intelligence (AI) to assist in annual report compliance review, scaling up of Robotics, proposed launch of Synapse, proposed deployment of intelligent technology for FINI, and proposed digital transformation to deliver paperless IPO applications and issuer disclosures
-

Cash Segment

Key Market Indicators

	2020	2019	Change
ADT of equity products traded on the Stock Exchange ^{1,2} (\$bn)	110.9⁴	69.2	60%
ADT of Northbound Trading – Shanghai-Hong Kong Stock Connect ² (RMBbn)	39.1⁴	21.3	84%
ADT of Northbound Trading – Shenzhen-Hong Kong Stock Connect ² (RMBbn)	52.2⁴	20.4	156%
ADT of Southbound Trading – Shanghai-Hong Kong Stock Connect ^{1,2} (\$bn)	13.1⁴	6.8	93%
ADT of Southbound Trading – Shenzhen-Hong Kong Stock Connect ^{1,2} (\$bn)	11.3⁴	4.0	183%
ADT of Bond Connect (RMBbn)	19.8⁴	10.7	85%
Average daily number of trades of equity products traded on the Stock Exchange ^{1,2} ('000)	1,618⁴	1,157	40%
Number of newly listed companies on Main Board ³	146	168	(13%)
Number of newly listed companies on GEM	8	15	(47%)
Number of companies listed on Main Board at 31 Dec	2,170	2,071	5%
Number of companies listed on GEM at 31 Dec	368	378	(3%)
Total	2,538	2,449	4%
Market capitalisation of companies listed on Main Board at 31 Dec (\$bn)	47,392	38,058	25%
Market capitalisation of companies listed on GEM at 31 Dec (\$bn)	131	107	22%

1 Excludes \$18.6 billion (2019: \$18.0 billion) of ADT of DWs, CBBCs 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 8 transfers from GEM (2019: 20)

4 New record highs in 2020

	2020 \$bn	2019 \$bn	Change
Total equity funds raised on Main Board			
– IPOs	399.6	313.2	28%
– Post-IPO	343.8	136.7	151%
Total equity funds raised on GEM			
– IPOs	0.6	1.0	(40%)
– Post-IPO	3.0	3.3	(9%)
Total	747.0	454.2	64%

Stock Connect – New Record Highs in 2020

	2020	2019	Change
Northbound Trading value (RMBbn)	21,089	9,757	116%
Southbound Trading value (\$bn)	5,508	2,841	94%
Total revenue and other income ¹ (\$m)	1,926	1,009	91%

1 \$1,485 million of which arose from trading and clearing activities (2019: \$699 million)

Analysis of Results

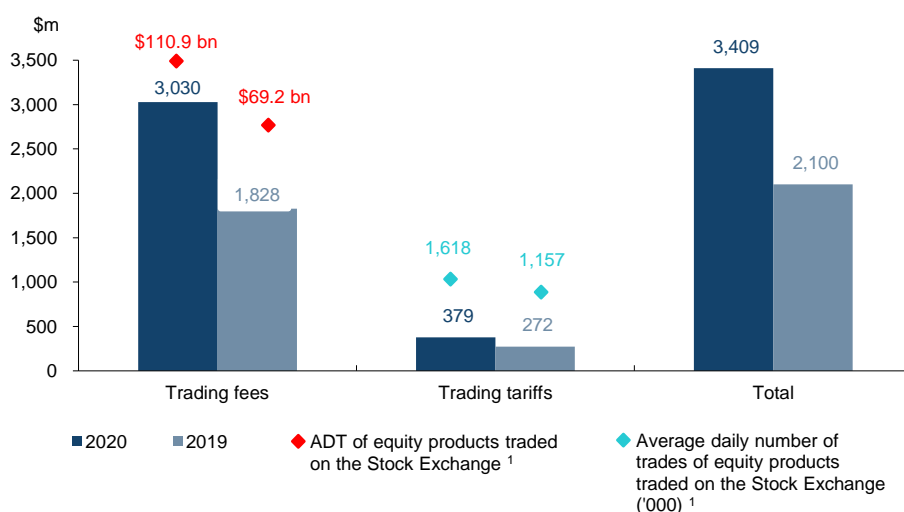
Summary

	2020 \$m	2019 \$m	Change
Trading fees and trading tariffs ¹	3,409	2,100	62%
Stock Exchange listing fees ¹	930	954	(3%)
Market data fees ¹	565	508	11%
Other revenue	87	84	4%
Total revenue	4,991	3,646	37%
Operating expenses ²	(595)	(603)	(1%)
EBITDA	4,396	3,043	44%
EBITDA margin	88%	83%	5%

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

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

Trading Fees and Trading Tariffs

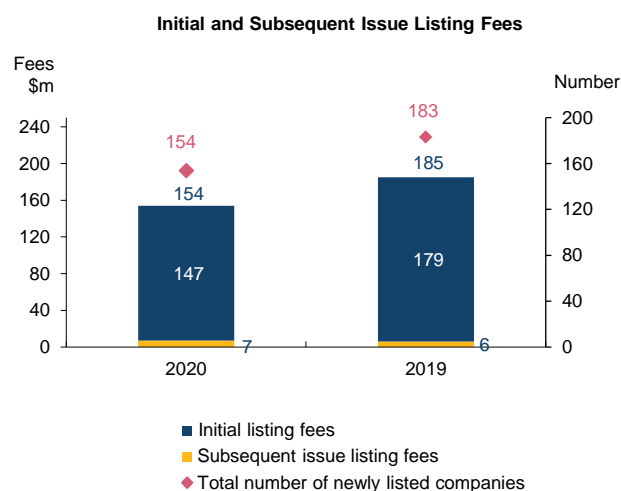


Trading fees increased by \$1,202 million (66 per cent), more than the 60 per cent increase in equity products ADT. This was primarily due to record fees from Stock Connect Northbound Trading of \$457 million (2019: \$213 million). Trading tariffs increased by 39 per cent, in line with the increase in number of trades of equity products.

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

Stock Exchange Listing Fees

	2020 \$m	2019 \$m	Change
Annual listing fees	768	760	1%
Initial and subsequent issue listing fees	154	185	(17%)
Others	8	9	(11%)
Total	930	954	(3%)



Annual listing fees increased by 1 per cent, less than the increase in total number of listed companies, as the average listing fee of the newly listed companies in 2020 were lower than that at 31 December 2019.

Initial and subsequent issue listing fees decreased by 17 per cent mainly due to a decrease in forfeitures.

EBITDA

Operating expenses decreased by 1 per cent due to lower allocated costs of the Listing Division to this segment. This reflects the decrease in listing fees from equities, compared with the increase in listing fees from DWs and CBBCs, which are under the Equity and Financial Derivatives segment. EBITDA margin rose from 83 per cent to 88 per cent due to the increase in revenue.

Business Update

The Hong Kong Cash Market performed resiliently in 2020. On 31 December 2020, market capitalisation of listed companies on the market reached a record high of \$47,523 billion. Trading activities were strong during the year with record headline ADT of \$129.5 billion, up 49 per cent from 2019. On 11 November 2020, trading turnover reached the third record high at \$268 billion.

Stock Connect

Stock Connect experienced strong flows in both Southbound and Northbound Trading in 2020. Northbound ADT reached a record high of RMB91.3 billion, 119 per cent higher than 2019, and Southbound ADT reached a record high of \$24.4 billion, 126 per cent higher than 2019. In addition, daily record highs were set for Northbound Trading (RMB191.2 billion on 7 July 2020) and Southbound Trading (\$60.2 billion on 6 July 2020). As a result, Stock Connect generated record high revenue and other income for the fourth consecutive year at \$1,926 million in 2020, and accounted for 10 per cent of the Group's total revenue and other income.

Stock Connect was enhanced during the year, with expansion in the scope of eligible stocks for both Northbound and Southbound Trading. Subsequent to the inclusion of biotech stocks (listed under Chapter 18A of the Main Board Listing Rules with the "B" marker removed) into the Southbound eligible securities list, effective from September 2020, HKEX, SSE and SZSE further jointly announced on 27 November 2020 Stock Connect inclusion arrangements for pre-revenue biotech companies (listed under Chapter 18A with the "B" marker), effective on 28 December 2020, as well as for eligible A shares listed on the SSE's STAR Market and their corresponding H shares into Stock Connect, effective on 1 February 2021.

On 13 January 2020, the investor identification regime for Southbound Trading was successfully launched, facilitating enhanced market surveillance and orderly operation of Stock Connect.

Market Structure Development

HKEX continues to focus on enhancing its market microstructure for the benefit of all market participants. The VCM in the securities market was enhanced in two phases to further strengthen the stock level safeguards during extreme price volatility, and to reflect changes in international practice and regulatory guidance. The first phase, which includes further securities coverage expansion and tiered triggering thresholds, was successfully implemented on 11 May 2020. As of 31 December 2020, 19 VCM triggers were recorded and market operations to date have been smooth. The second phase, which further allows multiple triggers per VCM security in the Continuous Trading Session, is planned to be introduced in Q1 2021.

Effective 19 October 2020, the Pre-opening Session adopted a number of features from the Closing Auction Session, including a two-stage price limit, allowing short selling, allowing at-auction limit orders and random commencement of auction matching. These enhancements aim to increase the Hong Kong securities market's competitiveness by introducing a more robust and stable opening auction to improve price discovery and trading liquidity before the market opens.

Issuer Business

During 2020, HKEX welcomed 154 listed companies, raising a total of \$400.2 billion, ranking second globally¹⁰ by funds raised and fourth globally¹⁰ by number of IPOs.

IPOs in 2020 featured new economy listings such as NetEase and JD.com; healthcare issuers such as JD Health; 14 biotech issuers listed under Chapter 18A; along with notable traditional economy companies such as Nongfu Spring. Furthermore, there was a growth in homecoming listings and HKEX attracted a total of nine secondary listed companies in 2020.

As of 31 December 2020, companies listed under the New Chapters of the Main Board Listing Rules (Chapters 8A, 18A and 19C) since their introduction in April 2018 have raised \$376 billion. In 2020, IPOs under the New Chapters represented 41 per cent of total IPO funds raised of the year. The market capitalisation of these companies represented 23 per cent of the total market capitalisation of the Hong Kong Cash Market at 31 December 2020, and the trading turnover of these companies represented 16 per cent of the total turnover of equity products traded on the Stock Exchange in 2020. The Hong Kong market continues to be an attractive market for new economy listings due to its robust and established regulatory framework, its connectivity and its global investor base.

In response to Covid-19 social distancing measures, HKEX provided virtual support to the IPO market by conducting a number of events and conferences online, providing remote communication and services to issuers, and conducting virtual listing ceremonies. In September 2020, HKEX organised its first ever online "HKEX Biotech Summit 2020" which gathered scientists, biotech entrepreneurs, investors, technology experts and policymakers to share industry insights and trends on the biotech industry and capital markets.

HKEX also focused on expanding its outreach and engagement overseas, particularly in Southeast Asia, including organising its first Southeast Asia Forum, conducted online. Looking forward, HKEX will continue to focus on enhancing Hong Kong's competitiveness as a premier listing location for companies across the globe.

ETF Market Development

ADT of ETPs, which includes ETFs and L&I Products, increased 28 per cent to \$6.4 billion in 2020 (2019: \$5.0 billion). In particular, L&I Products saw a strong uptick in investor interest, with ADT more than doubling from \$0.6 billion in 2019 to \$1.5 billion in 2020. On 22 May 2020, the turnover of L&I Products reached a daily record high of \$5.1 billion.

¹⁰ Source: Dealogic

Key initiatives of ETPs introduced during 2020

- HKEX expanded its product suite, welcoming the first Iron Ore Futures ETF, the first commodity-based L&I Product, the first active equity ETF, the first ETF under master-feeder structure, the first ESG China A shares ETF, the first batch of A share L&I Products, the first four Hang Seng TECH Index ETFs, and the first two Hang Seng TECH Index L&I Products. On 28 August 2020, the first Hang Seng TECH Index ETF achieved a record high first trading day ETF turnover of \$3.0 billion
 - On 1 June 2020, HKEX introduced a new spread table and continuous quoting market making obligations to enhance the liquidity of ETPs. In the first seven months following launch, the median spreads of ETPs listed in Hong Kong decreased by more than 30 per cent while the top 10 most actively traded ETPs saw their median spreads compressed by more than 50 per cent, significantly reducing the cost for investors to trade ETPs
 - From 1 August 2020, the Hong Kong Government waived the stamp duty on stock transfers for ETP market makers when creating and redeeming ETP units. This lowers the transaction cost of ETP activities in the primary market and supports the liquidity growth in the ETF underlying Hong Kong stocks
 - On 23 October 2020, the first two products under the Hong Kong-Mainland ETF Cross-listing Scheme were listed on SZSE and HKEX respectively. Through the new scheme, ETF issuers are able to list feeder funds that are built on master funds listed across the border. By the end of 2020, the four cross-listed ETFs accounted for \$860 billion of assets under management (AUM)
-

Bond Connect

In 2020, Bond Connect continued to gain strong recognition from international investors, with robust growth in trading volume, net inflows, foreign holdings, as well as the number of new registered investors.

Chinese government bonds were included in the JPMorgan Government Bond Index-Emerging Markets indices on 28 February 2020, driving new overseas index trackers to Bond Connect. Furthermore, on 24 September 2020, FTSE Russell announced that Chinese government bonds would be included in the FTSE World Government Bond Index (WGBI), with inclusion scheduled to start with the October 2021 profiles. This will mark the third entry of Chinese bonds into a major global bond index.

ADT of Bond Connect has been setting record high every year since its launch in 2017, reaching RMB19.8 billion in 2020, up 85 per cent compared with 2019. Trading volume in November 2020 reached a monthly record high of RMB485 billion, while single-day trading volume recorded an all-time high of RMB36.9 billion on 16 December 2020. Net inflows amounted to RMB535 billion in 2020, with a monthly record high of RMB75.5 billion in July. As of 31 December 2020, the overall foreign investor holdings of domestic debt securities in the China Interbank Bond Market rose to RMB3,255 billion, up 49 per cent from RMB2,188 billion as of 31 December 2019.

Market participation in Bond Connect continued to grow steadily throughout 2020. As at 31 December 2020, a total of 2,352 institutional investors from 34 jurisdictions globally have been admitted to Bond Connect, up 47 per cent from 1,601 institutional investors as at 31 December 2019.

Key initiatives implemented in 2020 to enhance connectivity and market infrastructure

- On 30 March 2020, Bond Connect started to support special settlement cycles (settle T+4 and beyond) via paper submission and recycling settlement (settle failed trades within three business days). Starting from Q4 2020, Bond Connect investors were able to select settlement cycles up to T+10 via Tradeweb and Bloomberg, without the need for paper submission
 - On 6 April 2020, trading and settlement services were expanded to support Bond Connect investors to access the defaulted bond market in China
 - On 1 July 2020, Bond Connect service fee was reduced by 20 per cent and 33 per cent for bonds with short and long tenor respectively
 - On 21 September 2020, Bond Connect trading hours were extended to 20:00 from 16:30 (China Standard Time) for transactions settling T+1 and beyond
 - On 24 September 2020, Bond Connect investors were able to select up to three foreign exchange (FX) settlement banks to conduct their currency conversion and for FX risk management needs
 - On 20 October 2020, ePrime, an international electronic bond issuance system for book building, pricing, and allocation of offshore securities, was launched. Subsequently, Agricultural Development Bank of China and China Development Bank completed their offshore RMB bond issuance via ePrime and successfully raised RMB5.7 billion and RMB6.5 billion in October and November 2020 respectively
-

Listed Bond Market Development

In 2020, there were 430 new listings of debt securities on the Stock Exchange, with a total issuance amount of \$1,529 billion. Moreover, total turnover value of debt securities reached \$66 billion (including \$3 billion turnover of iBond), an increase of 8 per cent compared with 2019.

As part of the ongoing development of the bond market in Hong Kong, HKEX enhanced the listing regime for debt issues to professional investors in November 2020. The enhancement seeks to balance the need to safeguard investors whilst maintaining an effective listing platform, by promoting disclosure quality and consistency in the market.

Market Data Business

Regular seminars were hosted to provide a communication platform for market participants including EPs, information vendors and application software providers to learn more about the latest market data developments and share their ideas and feedback. Two live webinars were held on 24 November 2020, with registrants from over 200 companies.

Sustainable Finance

On 1 December 2020, HKEX announced the launch of the Sustainable and Green Exchange (STAGE). At launch a total of 34 sustainable-themed products from leading Asian corporates were displayed on STAGE including sustainability, green, and transition bonds from issuers across different sectors as well as ESG-related ETPs. The resources library on STAGE provides case studies, webcasts, videos, guidance materials, research papers and other publications aimed at helping market participants enrich their understanding of sustainable finance, green products, ESG integration and sustainable investing. HKEX is working closely with local, regional and international partners to further expand the contents on STAGE.

Listing Regulation

In 2020, the Stock Exchange issued various proposals and conclusions on Listing Rules amendments as set out in the following table. Details of the consultations and other main policy issues arising in 2020, as well as the proposals under review in 2021 and beyond, will be set out in the 2020 Listing Committee Report.

Key Proposals and Conclusions in 2020

	Consultation paper ¹	Consultation conclusions ¹	Effective date of changes (if any)
• Codification of General Waivers and Principles relating to IPOs and Listed Issuers and Minor Rule Amendments	August 2019	August 2020	1 October 2020
• Review of Chapter 37 – Debt Issues to Professional Investors only	December 2019	August 2020	1 November 2020
• Corporate WVR Beneficiaries	January 2020	October 2020	30 October 2020 ²
• Proposals to Introduce a Paperless Listing & Subscription Regime, Online Display of Documents and Reduction of the Types of Documents on Display	July 2020	December 2020	5 July 2021/ 4 October 2021 ³
• Review of Listing Rules relating to Disciplinary Powers and Sanctions	August 2020	1H 2021 (tentative)	-
• The Main Board Profit Requirement	November 2020	1H 2021 (tentative)	-

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

2 The changes relate to an addition to grandfathering arrangements for issuers controlled by corporate WVR beneficiaries that seek a secondary listing under Chapter 19C of the Listing Rules and that are primary listed on certain exchanges on or before publication of the consultation conclusions.

3 Listing Rule amendments relating to the Paperless Listing and Subscription Regime will take effect on 5 July 2021 and Listing Rule amendments relating to the Online Display of Documents and the Reduction of Documents on Display will take effect on 4 October 2021.

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

- Issued joint statements with the SFC in relation to (i) listed issuers' results announcements and (ii) general meetings in light of the Prevention and Control of Disease (Prohibition on Group Gathering) Regulation
- Issued series of listing decisions on interpretation of the Listing Rules, including (i) the minimum market capitalisation requirement under Main Board Listing Rule 8.09(2) after a proposed spin-off and (ii) guidance on why the Stock Exchange rejected and returned certain listing applications
- Published new guidance letters on (i) disclosure in listing documents for biotech companies; (ii) experience and qualification requirements of a company secretary; and (iii) guidance on continuing obligations of authorised collective investment schemes listed under Chapter 20 of the Main Board Listing Rules
- Published semi-annual (i) Listing Division Newsletter; (ii) Listed Issuer Regulation Newsletter; and (iii) Enforcement Bulletin
- Published (i) ESG guidance materials including an e-training course, a new guide for board and directors and the step-by-step ESG reporting guidance and (ii) corporate governance materials including Analysis of 2019 Corporate Governance Practice Disclosure and Making Inroads into Good Corporate Governance and ESG Management – Perspectives from Industry Practitioners
- Launched two e-Learning modules on (i) Connected Transaction Rules and (ii) Notifiable Transaction Rules as part of the new e-learning series on ongoing compliance requirements under the Listing Rules

IPO Processing, Compliance and Monitoring

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

Stock Exchange's IPO Work

	2020	2019
• Number of listing applications vetted ¹	357	467
• Number of applications brought to the Listing Committees (or their delegates) for decisions ²	154	221
– within 120 calendar days	52	117
– between 121 to 180 calendar days	39	67
– after more than 180 calendar days	63	37
• Number of applications for which approval was granted in principle ³	179	209
• Number of requests for guidance from listing applicants or their advisers seeking clarifications of listing matters	181	127
– Average response time (in business days)	10	10
• Number of listing applications for transfer of listing from GEM to Main Board accepted	12	27
• Applications listed ⁴	181	197
• New listing applications rejected ⁵	1	26
• New listing applications withdrawn	6	21
• New listing applications returned	-	4
• Application in process at year-end	92	126

1 Comprises 231 (2019: 300) new applications and 126 (2019: 167) existing applications brought forward from previous year

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

3 At the end of 2020, 20 (2019: 33) approved applications had not yet been listed, and 4 (2019: 5) approved applications had lapsed during the year.

4 Includes 27 investment vehicles listed on Main Board and deemed new listings (2019: 14)

5 No rejection decision in 2020 (2019: 7) was subsequently reversed upon review.

Number of Compliance and Monitoring Actions

	2020	2019
• Announcements of issuers vetted	68,522	62,977
• Circulars of issuers vetted	2,696	2,350
• Share price and trading volume monitoring actions undertaken ¹	10,535	7,939
• Complaints handled	475	438
• Cases (including complaints) referred to Listing Enforcement Department for investigation	78	74

1 In 2020, monitoring actions undertaken included 360 enquiries (2019: 677) on unusual share price and trading volume movements, and the actions undertaken led to 19 resumption announcements (2019: 29) on trading suspensions.

Long Suspension

Status of Long Suspended Companies	Main Board		GEM	
	2020	2019	2020	2019
Resumption of trading of securities during the year	12	22	3	4
Cancellation of listing after expiry of prescribed remedial periods during the year	15	7	7	2
Cancellation of listing under grandfathered provisions during the year (Main Board Rule 6.01A(2)(a) or (c) or GEM Rule 9.14A(2)(b))	8	6	1	4
Voluntary withdrawal of listing during the year	-	1	-	-
Companies suspended for 3 months or more at year-end	64	68	17	15

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

Listing Enforcement

The enforcement statistics set out below represent a high level overview of the enforcement work undertaken in 2020 by the Stock Exchange.

Further details and information relating to enforcement work (including the Stock Exchange's general approach, disciplinary procedures and recent cases) can be found at the HKEX Market website and in the semi-annual "Enforcement Bulletin", and will be set out in the 2020 Listing Committee Report.

Enforcement Statistics

	2020	2019
Investigations ^{1, 2, 3}	128	112
Public sanctions ⁴	13	13
Regulatory letters ⁵	9	15

1 Figures cover all cases which were investigated in 2020 (both concluded cases and ongoing investigations at year-end).

2 At the end of 2020, there were 54 ongoing investigations (2019: 28).

3 In 2020, 4 enforcement cases (2019: 4) originating from complaints were subject to enforcement investigation.

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

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

Costs of the Listing Function

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

Equity and Financial Derivatives Segment

Key Market Indicators

	2020	2019	Change
ADT of DWs, CBBCs and warrants traded on the Stock Exchange (\$bn)	18.6	18.0	3%
Average daily number of trades of DWs, CBBCs and warrants traded on the Stock Exchange ('000)	344	296	16%
ADV of derivatives contracts traded on the Futures Exchange ¹ ('000 contracts)	606	624	(3%)
ADV of stock options contracts traded on the Stock Exchange ('000 contracts)	526 ²	442	19%
Number of newly listed DWs	12,128 ²	8,939	36%
Number of newly listed CBBCs	38,039 ²	24,732	54%
Number of newly listed Inline Warrants	780	923	(15%)
ADV of contracts traded during After-Hours Trading ¹ ('000 contracts)	94 ²	82	15%

	At 31 Dec 2020	At 31 Dec 2019	Change
Open interest of futures and options ¹ ('000 contracts)	11,260	9,695	16%

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

2 New record highs in 2020

Analysis of Results

Summary

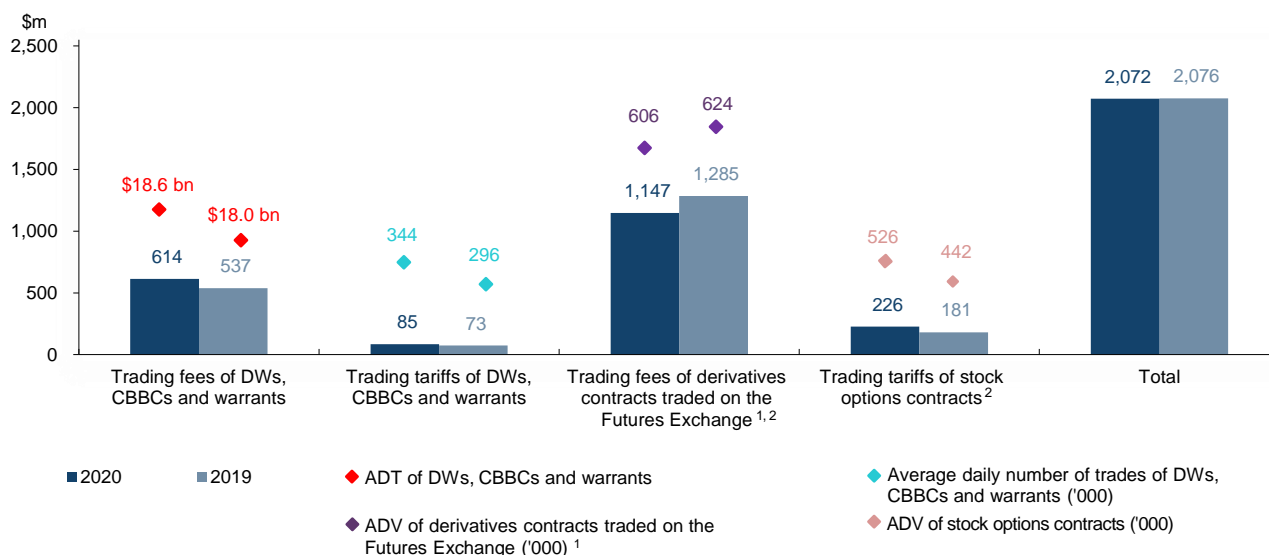
	2020 \$m	2019 \$m	Change
Trading fees and trading tariffs ¹	2,072	2,076	(0%)
Stock Exchange listing fees	969	679	43%
Market data fees ¹	192	218	(12%)
Other revenue	8	15	(47%)
Total revenue	3,241	2,988	8%
Less: Transaction-related expenses	(85)	(41)	107%
Total revenue less transaction-related expenses	3,156	2,947	7%
Operating expenses ²	(607)	(510)	19%
EBITDA	2,549	2,437	5%
EBITDA margin ³	81%	83%	(2%)

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

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

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

Trading Fees and Trading Tariffs



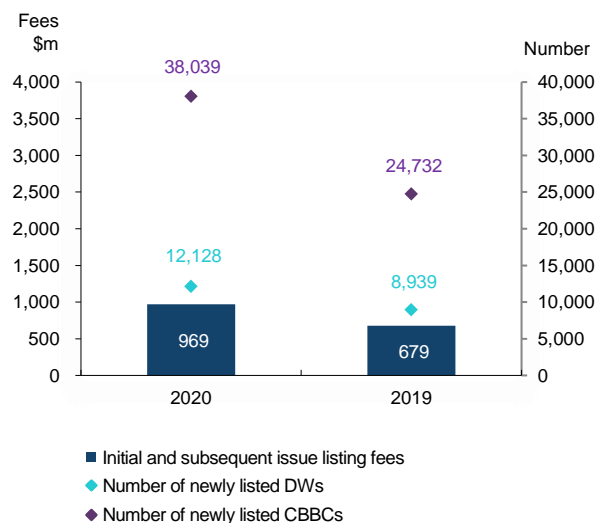
- 1 Excludes London Metal Mini Futures, Gold Futures, Silver Futures and Iron Ore Futures contracts (which are included under the Commodities segment)
- 2 Excludes trading fees and trading tariffs allocated to the Post Trade segment (Derivatives contracts traded on the Futures Exchange – 2020: \$303 million; 2019: \$308 million; stock options contracts – 2020: \$86 million; 2019: \$72 million)

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

2020 saw record new issues of DWs and CBBCs, and a 16 per cent increase in the average daily number of trades. As a result, trading fees and trading tariffs from DWs, CBBCs and warrants increased by \$89 million or 15 per cent to \$699 million (2019: \$610 million), higher than the 3 per cent increase in ADT due to higher trading fees.

Derivatives trading fees of the Futures Exchange decreased by \$138 million, or 11 per cent, attributable to the decrease in number of derivatives contracts traded on the Futures Exchange, as investors took a “risk-off” approach during heightened volatility. The decrease in trading fees and trading tariffs was higher than the 3 per cent drop in ADV, due to a lower proportion of higher fee contracts, including HSI futures and options, being traded during 2020.

Stock Exchange Listing Fees



Stock Exchange listing fees are mainly derived from initial and subsequent issue listing fees for DWs and CBBCs. The fees increased by \$290 million or 43 per cent, reflecting the record number of newly listed DWs and CBBCs in 2020.

EBITDA

Transaction-related expenses include licence fees and other costs which directly vary with trading transactions. The increase was partially driven by the licence fees for the new MSCI index futures contracts launched since July 2020.

Operating expenses increased by \$97 million (19 per cent) due to higher allocated costs of the Listing Division, reflecting the increase in listing fees from DWs and CBBCs compared with the decrease in listing fees from equities, and increase in incentives relating to the new MSCI index futures contracts. EBITDA increased by 5 per cent year-on-year, though EBITDA margin decreased from 83 per cent to 81 per cent, reflecting the higher percentage increase in operating expenses compared to the percentage increase in revenue.

Business Update

The Hong Kong Derivatives Market demonstrated resilient growth in 2020. The total number of futures and options contracts traded in 2020 was 281,871,221¹¹, up 7 per cent on 2019. A number of key futures and options contracts reached new record highs (see below).

New Record Highs – Full Year Trading Volume

	2020 Number of contracts	Pre-2020 record Number of contracts
Mini HSI Futures	27,902,077	24,664,381 (2018)
Mini HSI Options	3,345,582	3,343,429 (2019)
Weekly HSI Options	1,191,533	246,717 (2019)
Stock Futures	1,141,729	917,358 (2019)
Stock Options	131,021,660	127,279,101 (2018)

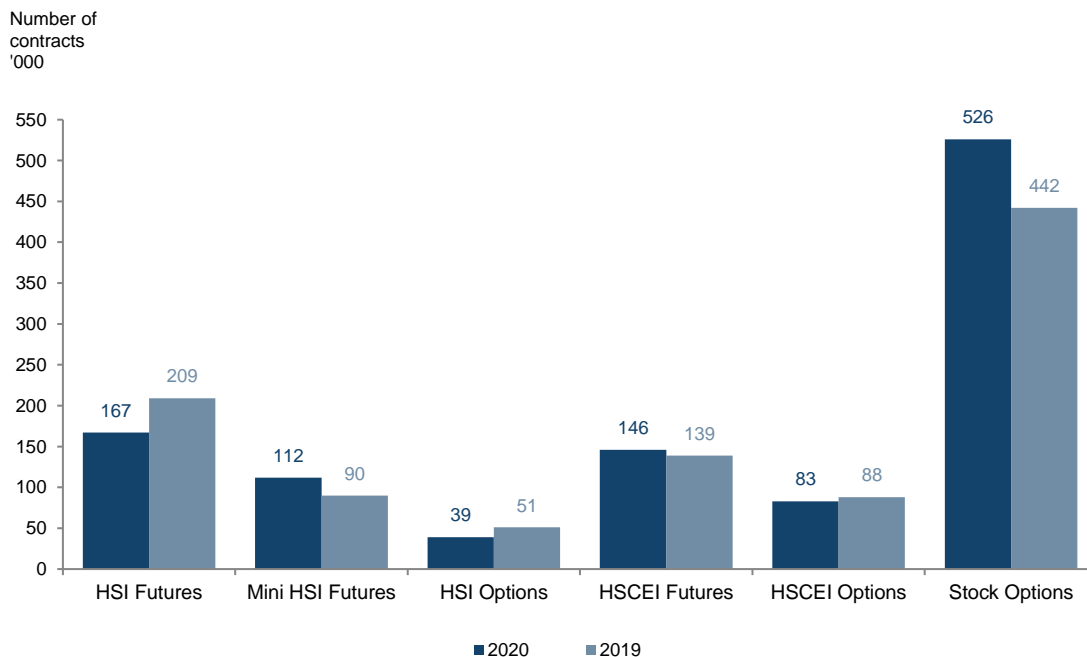
New Record Highs – Single-day Trading Volume and Open Interest

	<u>Single-day Trading Volume</u>		<u>Open interest</u>	
	Date (2020)	Number of contracts	Date (2020)	Number of contracts
Mini HSI Futures	19 Mar	298,812	N/A	N/A
Weekly HSCEI Options	30 Jan	7,166	30 Dec	12,097
Weekly HSI Options	6 Feb	17,027	6 Nov	13,274
MSCI Taiwan Net Total Return (USD) Index Futures ¹	17 Sep	19,207	18 Sep	22,092
MSCI EM Asia Net Total Return (USD) Index Futures ¹	21 Oct	28,242	10 Nov	28,512
MSCI Taiwan (USD) Index Futures ¹	24 Nov	42,363	29 Oct	65,267
MSCI Indonesia Net Total Return (USD) Index Futures ¹	10 Dec	12,700	15 Dec	13,668
MSCI Japan Net Total Return (USD) Index Futures ¹	17 Dec	10,600	31 Dec	10,748
Stock Options	6 Jul	1,545,227	N/A	N/A

¹ Launched in July 2020

¹¹ Excludes London Metal Mini Futures, Gold Futures, Silver Futures and Iron Ore Futures contracts (which are included under the Commodities segment)

Average Daily Volume of Major Futures and Options Contracts



Equity Futures and Options Market Development

Stock options were a major contributor to growth in 2020, with ADV reaching a record high of 526,191 contracts, a 19 per cent increase compared with 2019. In addition, a daily record high of 1,545,227 stock options contracts were traded on 6 July 2020. During 2020, 11 new stock option classes were introduced and 32 out of 106 option classes reached new daily volume record highs.

Trading volume in the After-Hours Trading (T+1) Session continued to grow, with ADV in 2020 reaching a historical high of 94,224 contracts, up 15 per cent from 2019. In addition, the number of equity index futures and options traded in the T+1 Session reached a daily record high of 303,482 contracts on 18 March 2020.

In 2020, HKEX successfully launched 38 new MSCI index futures contracts. The launch represents a major step forward in the expansion of HKEX's derivatives product portfolio and significantly adds to the breadth and depth of the Hong Kong markets. Among the newly introduced products, two are in Japanese Yen (JPY) and one is in Singapore Dollar (SGD), marking the first JPY and SGD derivatives contracts traded in the Hong Kong market. Moreover, a revision of opening hours and the introduction of pre-market opening period for the MSCI Taiwan (USD) Index Futures and MSCI Taiwan Net Total Return (USD) Index Futures became effective on 28 September 2020, facilitating investors' ability to react to market events and price movements over a longer period. In view of the increasing number of equity index futures with foreign market underlyings, HKEX plans to extend trading and clearing of the selected derivatives to cover Hong Kong public holidays, allowing investors to respond to the underlying market movement during those days.

As at 31 December 2020, the MSCI suite recorded a total of 704,050 contracts traded since launch, and 62,975 contracts in open interest. MSCI Taiwan (USD) Index Futures and MSCI Taiwan Net Total Return (USD) Index Futures were among the most active contracts out of the 38 MSCI index futures contracts launched.

HKEX introduced Hang Seng TECH Index Futures on 23 November 2020. The product has been well received with 49,122 contracts traded since launch and 4,721 contracts in open interest as at 31 December 2020. To provide investors a further option to manage their risk exposures to Hong Kong-listed technology companies, the Hang Seng TECH Index Options was launched in January 2021.

To allow broader investors to participate in the newly introduced MSCI and Hang Seng TECH products, HKEX filed applications to the US Commodity Futures Trading Commission (CFTC), with a total of 29 MSCI and the Hang Seng TECH futures contracts certified to be offered and sold to persons in the US.

Fixed Income and Currency (FIC) Development

The RMB currency derivatives market gained momentum in the second half of 2020 amid continued appreciation of the RMB since May. A total of 1,777,418 contracts of USD/CNH Futures and Options contracts were traded during 2020, while open interest amounted to 30,706 contracts as at 31 December 2020, up 24 per cent from 31 December 2019, as the contracts were increasingly utilised by investors to manage their currency risk exposures.

The INR/USD Futures contracts established new daily records multiple times during the year, including the latest daily record high of 5,035 contracts on 2 March 2020, and a total of 169,336 INR/USD Futures contracts were traded during 2020. To better facilitate management of risks in longer tenors, additional contract months were added to INR/USD Futures and INR/CNH Futures in June and July respectively.

The 7th annual HKEX RMB FIC Conference was hosted in September 2020, in a virtual format with over 1,600 market participants and professionals attending. Speakers and panelists from over 20 organisations shared their views on the FIC landscape, including future developments in the Chinese bond and derivatives markets and electronic bond market development.

Structured Products

Trading activities of structured products also experienced a strong year in 2020. ADT of CBBCs, DWs, and warrants was \$18.6 billion, up 3 per cent from 2019 and accounted for 14 per cent of total market turnover. During 2020, a total of 50,947 structured products were listed, exceeding the previous record of 38,472 in 2018 by 32 per cent. HKEX has been working with market participants to simplify workflow and enhance market efficiency.

In July 2020, the listing cycle of structured products was shortened from five to three trading days, after the adoption of electronic submission of documents and other streamlined processes. The shorter cycle enhances market efficiency on product issuance, as more products are available in any given time frame.

HKEX has also been expanding the list of both local and overseas eligible underlying assets for structured product issuances in response to increasing market interest, with the S&P 500 and Hang Seng TECH Index becoming eligible underlying assets in September and November 2020 respectively. Such expansion further enhances the attractiveness of Hong Kong's structured products market.

Market Data Business

In 2020, HKEX continued its effort in promoting derivatives products globally. The Market Data Marketing Programme for New Derivatives Products was extended for another year to the end of 2021, continuing the subscriber fees waiver for information vendors where their clients are located in eight promoting regions, namely Mainland China, Korea, Taiwan, Malaysia, India, Thailand, Vietnam and Singapore.

Commodities Segment

Key Market Indicators

	2020	2019	Change
ADV of metals contracts traded on the LME ('000 lots)			
Aluminium	237	236	0%
Copper	128	131	(2%)
Zinc	90	109	(17%)
Nickel	67	89	(25%)
Lead	42	42	0%
Others	7	10	(30%)
Total chargeable ADV excluding Admin Trades ¹	571	617	(7%)
Chargeable Admin Trades ¹	37	46	(20%)
Non-chargeable Admin Trades ¹ and other non-chargeable trades	2	34	(94%)
Total ADV	610	697	(12%)

¹ Admin Trades were introduced in 2017 to meet requirements resulting from MiFID II. These trades were not chargeable prior to 1 May 2019, but became chargeable at US\$0.04 per contract thereafter.

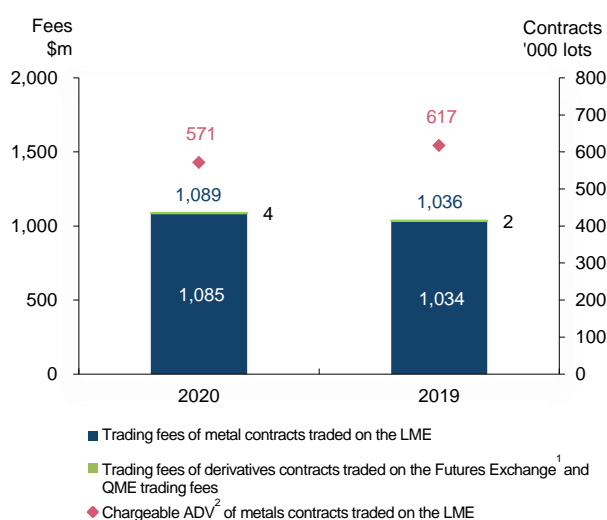
	At 31 Dec 2020	At 31 Dec 2019	Change
Total futures market open interest ('000 lots)	2,044	2,170	(6%)

Analysis of Results

Summary

	2020 \$m	2019 \$m	Change
Trading fees and trading tariffs	1,089	1,036	5%
Market data fees	196	193	2%
Other revenue:			
Commodities stock levies and warehouse listing fees	67	63	6%
Financial OTC booking fees	49	45	9%
Others	53	62	(15%)
Total revenue and other income	1,454	1,399	4%
Operating expenses	(692)	(668)	4%
EBITDA	762	731	4%
EBITDA margin	52%	52%	-

Trading Fees and Trading Tariffs



Chargeable ADV of metal contracts traded on the LME decreased by 7 per cent as financial users took a “risk-off” approach in response to Covid-19 uncertainty. LME trading fees, however, increased by \$51 million (5 per cent) due to the fee increment effective from 1 January 2020 and higher proportion of trades conducted on the electronic trading platform due to the temporary closure of the Ring, which generated higher fees.

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

2 Chargeable ADV excludes Admin Trades (which became chargeable from May 2019 at a lower trading fee rate of US\$0.04 per contract) and other non-chargeable trades.

EBITDA

Operating expenses rose by \$24 million (4 per cent), mainly attributable to higher IT maintenance expenses and higher professional fees incurred for operational resilience and strategic projects. As the percentage increase in revenue was the same as the percentage increase in operating expenses, EBITDA margin remained stable at 52 per cent.

Business Update

LME

The LME demonstrated its resiliency and adaptability throughout the year. Due to Covid-19 and reflecting guidance from the British Government, the LME suspended trading activity on the Ring, and temporarily shifted to electronic pricing, with effect from 23 March 2020. Since then, the LME’s metals prices have been generated on the basis of activity on the LME’s electronic trading platform, supported by implied pricing functionality.

Business development initiatives have progressed well, with several of the cash-settled futures contracts launched in 2019 seeing active trading volumes in 2020. The LME will introduce new cash-settled contracts in 1H 2021, including a lithium contract to serve the needs of the growing battery materials sector, additional aluminium products, and additional steel contracts to complement the existing suites, subject to regulatory approval.

In March 2020, the LME launched a new incentive programme to encourage liquidity providing trades, and published a roadmap to an enhanced options market following a market wide discussion paper.

The LME has continued to invest in its global physical ecosystem throughout 2020, continuing with the implementation of enhanced warehousing rules and disclosures, the development of a new electronic warranting process, ongoing progress with responsible sourcing, and plans for electronic certificates of analysis via a new LMEpassport platform. The LME’s physical network has continued to provide an effective storage mechanism under Covid-19 and during the current economic slowdown.

In August 2020, the LME issued two discussion papers. The first paper covered the LME’s sustainability plans and laid out its proposed way forward to make metals a cornerstone of a sustainable future. These proposals included a platform to support voluntary transparency on sustainability criteria (LMEpassport), a spot trading platform for the pricing and trading of sustainable metal, and new contracts for the electric vehicle and recycled economies. The second paper described

the LME's planned launch of LMEpassport, a digital credentials register. Both of these papers received broad market support and will be progressed into 2021.

Numerous regulatory initiatives were undertaken in 2020 in response to regulatory changes, including implementing new pre-trade transparency arrangements for the inter-office market, implementation of the Senior Managers Regime for benchmark administrators, and for Brexit.

Due for delivery in 2022, the LME will upgrade its electronic trading platform (LMEselect) to refresh its trading infrastructure and add an enhanced onscreen options market.

In January 2021, the LME issued a discussion paper on future market structure which covered four main topics:

- The Ring and reference prices – proposing to make a permanent shift to its electronic venue for pricing (away from the Ring), which is expected to benefit the market by broadening direct participation during the price discovery periods and increasing overall transparency.
- Enhancing liquidity in the market – incentivising electronic trading on the member-to-member market to bring greater liquidity to the central electronic venue.
- Margin methodology – considering a move to “realised variation margin” methodology commonly used by other futures exchanges, which will increase trading efficiency, provide greater standardisation and remove some barriers to entry to the LME's market.
- Market conduct – exploring the introduction of additional disclosures and policies to strengthen market conduct.

HKFE Commodities Product Development

In Hong Kong, USD and CNH denominated Silver Futures were successfully launched on 8 June to broaden HKEX's precious metal product suite and further address investors' trading, hedging and risk management needs in precious metals. In 2020, a total of 68,682 contracts of Gold Futures and 1,282 contracts of Silver Futures were traded, with 1,351 kilograms of gold and 8,850 kilograms of silver physically delivered against the contracts.

In addition, USD London Metal Mini Futures and Iron Ore Futures volumes continued to grow, with a total of 186,947 contracts and 97,048 contracts traded in 2020 respectively, 537 per cent and 73 per cent higher than 2019.

In July 2020, an online HKEX Commodities Forum was hosted. The three-day forum attracted participation from more than 1,000 industry players globally to share insights on metals markets as well as opportunities and challenges during the Covid-19 period.

QME

In 2020, QME's trading turnover was eight times that of 2019, a result of further improvements in trading models and continuous growth in QME's client base. Breakthroughs were made in new product offerings, including the launch of a natural gas contract in August, and a cement contract in December, on top of the base metals product suite including alumina and copper cathode contracts. QME became the third natural gas trading platform in Mainland China and the first marketplace to introduce cement trading on-exchange. QME's warehouse ecosystem has started to serve clients' financing need, and QME this year gained industry-wide recognition as one of the KPMG's China Fintech 50 companies.

Post Trade Segment

Key Market Indicators

	2020	2019	Change
ADT on the Stock Exchange (\$bn)	129.5²	87.2	49%
Average daily number of Stock Exchange trades ('000)	1,962²	1,453	35%
Average value per trade (\$)	65,984	59,988	10%
Average daily value of Settlement Instructions (SIs) settled by CCASS (\$bn)	346.1	238.4	45%
Average daily number of SIs ('000)	115	95	21%
Average value per SI (\$)	3,011,015	2,510,576	20%
Chargeable ADV ¹ of metals contracts traded on the LME ('000 lots)	571	617	(7%)

1 Chargeable ADV excludes Admin Trades (which became chargeable from May 2019 at a lower clearing fee rate of US\$0.02 per contract) and other non-chargeable trades.

2 New record highs in 2020

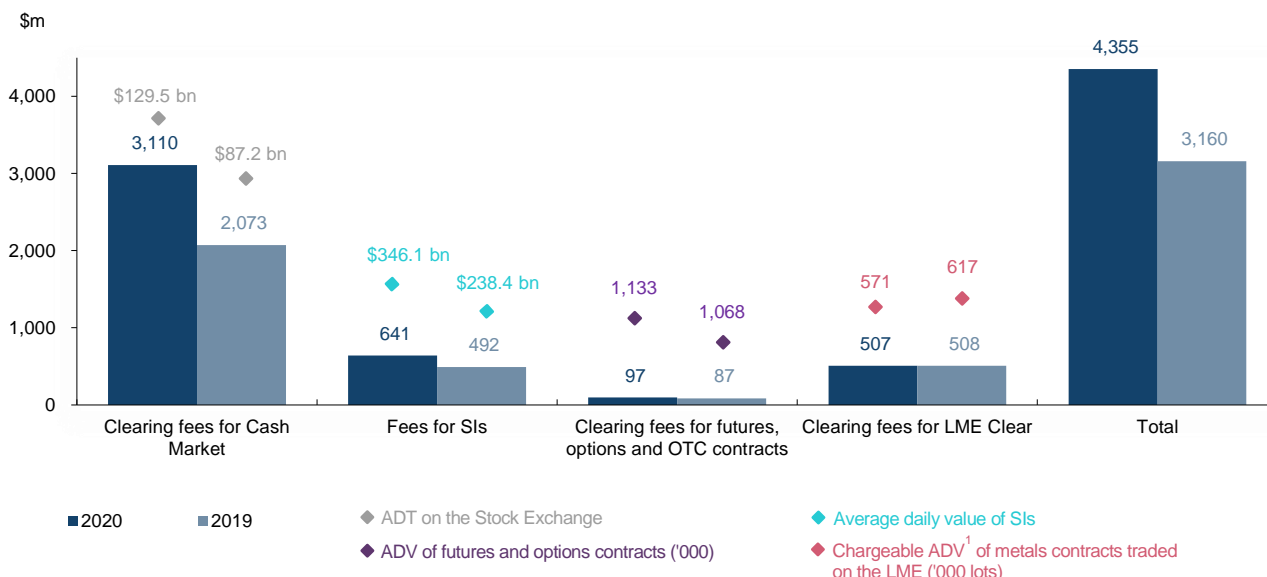
Analysis of Results

Summary

	2020 \$m	2019 \$m	Change
Clearing and settlement fees	4,355	3,160	38%
Depository, custody and nominee services fees	1,264	1,052	20%
Trading fees and trading tariffs – allocated from Equity and Financial Derivatives segment	389	380	2%
Other revenue and sundry income	243	138	76%
	6,251	4,730	32%
Net investment income	1,386	1,496	(7%)
Total revenue and other income	7,637	6,226	23%
Less: Transaction-related expenses	(25)	(10)	150%
Total revenue and other income less transaction-related expenses	7,612	6,216	22%
Operating expenses	(860)	(814)	6%
EBITDA	6,752	5,402	25%
EBITDA margin ¹	89%	87%	2%

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

Clearing and Settlement Fees



¹ Chargeable ADV excludes Admin Trades (which became chargeable from May 2019 at a lower clearing fee rate of US\$0.02 per contract) and other non-chargeable trades.

Clearing and settlement fees for Cash Market and SIs increased by 50 per cent and 30 per cent respectively compared with 2019. The increases were primarily driven by a higher number of transactions, and record fees from Stock Connect Northbound Trading of \$779 million (2019: \$364 million).

Despite the 7 per cent decrease in chargeable ADV⁵ of metals contracts traded on the LME, clearing fees for LME Clear were at the same level as 2019, due to the fee increment effective from 1 January 2020.

Depository, Custody and Nominee Services Fees

Depository, custody and nominee services fees do not directly vary with changes in market activity. They rose by \$212 million or 20 per cent due to higher e-IPO service fees and Stock Connect portfolio fees, partly offset by lower scrip fees.

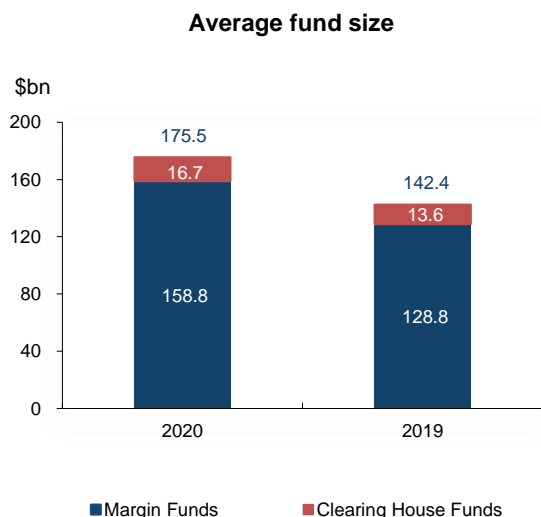
Trading Fees and Trading Tariffs

Trading fees and trading tariffs allocated from the Equity and Financial Derivatives segment for clearing derivatives products increased by 2 per cent, due to a 19 per cent increase in ADV of stock options traded, partly offset by a 3 per cent decrease in ADV of derivatives contracts traded on the Futures Exchange (see commentary in the Equity and Financial Derivatives segment).

Other Revenue and Sundry Income

Other revenue increased by \$105 million mainly due to an increase in accommodation income arising from HKCC CPs placing more Euro and Japanese Yen as collateral, and higher interest shortfall collected from LME Clear CPs on cash collateral, as USD investment return fell below the benchmark interest rate stipulated in the rules of LME Clear.

Net Investment Income



The increase in the average size of Margin Funds during the year was attributable to higher average Margin Fund sizes of LME Clear, HKCC and SEOCH due to higher margin requirements per contract, reflecting heightened volatility.

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

The analysis of net investment income is as follows:

	2020			2019		
	Margin Funds \$m	Clearing House Funds \$m	Total \$m	Margin Funds \$m	Clearing House Funds \$m	Total \$m
Net investment income from:						
- Cash and bank deposits	1,255	78	1,333	1,296	109	1,405
- Debt securities	56	-	56	97	-	97
- Exchange losses	(3)	-	(3)	(6)	-	(6)
Total net investment income	1,308	78	1,386	1,387	109	1,496
Net investment return	0.82%	0.47%	0.79%	1.08%	0.80%	1.05%

Net investment income dropped by \$110 million, mainly due to lower interest income from declining interest rates, partly offset by higher average fund sizes of Margin Funds and Clearing House Funds.

EBITDA

Operating expenses rose by \$46 million (6 per cent), reflecting increases in staff costs due to annual payroll adjustments. EBITDA margin rose from 87 per cent in 2019 to 89 per cent in 2020, due to the 23 per cent increase in revenue and other income.

Business Update

Cash and Derivatives Clearing

Driven by the strong flows in both Northbound and Southbound Trading in 2020, there was a strong increase in the utilisation of Stock Connect clearing services:

- (i) an 89 per cent increase in the average daily value of Northbound SIs in 2020 compared with 2019;
- (ii) the number of Special Segregated Accounts increased by 22 per cent to 11,659 accounts as at 31 December 2020 compared with 9,564 as of 31 December 2019; and
- (iii) both Northbound and Southbound portfolio values of Stock Connect reached record highs in December 2020, with Northbound portfolio value increased by 64 per cent to RMB2,339 billion as at 31 December 2020 (31 December 2019: RMB1,429 billion) and Southbound portfolio value increased by 84 per cent to \$2,096 billion as at 31 December 2020 (31 December 2019: \$1,138 billion).

On 20 April 2020, HKSCC further enhanced its third party clearing arrangement to allow a CCASS CP to continue to self-clear its Exchange Trades, while appointing a General Clearing Participant for clearing its China Connect Securities Trades.

HKEX launched the Master SPSA service on 10 July 2020 as an enhancement to the existing SPSA service to support Northbound Trading. This optional service allows pre-trade checking to be conducted at a fund manager, or aggregate level, helping to increase operational efficiencies whilst maintaining the same post trade settlement processes for consistency.

On 24 November 2020, HKEX announced the launch of Synapse, a settlement acceleration platform for Stock Connect targeting production, proposed for Q1 2022. HKEX Synapse will automate and streamline post trade workflow for Northbound Stock Connect using Digital Asset Modeling Language (DAML) smart contract technology. The improved connectivity and capacity to handle the growing volume of trades flowing through Stock Connect will enhance efficiency and transparency for market participants.

HKEX completed two initiatives in relation to Large Open Position (LOP) Reporting in September 2020. Leveraging the Secure File Transfer Protocol facility, the Large Open Position Report (LOPR) submission has been fully automated to further enhance client experience. In addition, HKEX rolled out a new surveillance system for LOP and Position Limit monitoring by leveraging new technology. The modernised surveillance system further strengthens HKEX's surveillance capacity and supports the growth of HKEX's derivatives products.

To facilitate the clearing of the newly introduced MSCI Singapore and Japan futures contracts, on 28 September 2020, HKCC appointed several settlement banks to support the money settlement of SGD and JPY domestically.

HKSCC enhanced its existing buy-in exemption clauses on 16 November 2020, including the expansion of the scope of contingency situations and removal of buy-in exemption clauses which are no longer applicable after various CCASS enhancements.

On 30 November 2020, HKSCC started using the HKD Real Time Gross Settlement (RTGS) account with the Hong Kong Monetary Authority for settling the HKD central counterparty related payment (ie, CNS related payment and risk management payment) with CPs. This arrangement improves CPs' liquidity for money settlement and aligns with international standards and practice (Principle 9 of PFMI) on managing credit and liquidity risk exposure.

FINI is one of the key initiatives under HKEX's 2019-2021 Strategic Plan, as part of a broader range of market microstructure improvements and shortening of the IPO settlement cycle from T+5 to target, T+1. The initiative introduces a new web-based platform that enables IPO market participants, brokers, share registrars, advisers and regulators to interact digitally and seamlessly to complete the end-to-end IPO settlement process. HKEX has been working with different market stakeholders in platform design, market feedback collection and operational workflow reform over the past 18 months. More than 50 meetings with market stakeholders have been conducted and positive market support has been received. The first milestone was achieved on 16 November 2020 when the FINI concept paper was published for market feedback. The target delivery is estimated to be 2H 2022.

To enhance market transparency and capital efficiency across market participants and enable participants' risks to be managed in accordance with regulatory requirements, HKEX developed the Orion Risk Platform (previously known as NextGen Risk Management) for Cash Market - a new platform that adopts Value at Risk (VAR) methodology to calculate initial margin and default fund. The participants familiarisation program for the Orion Risk Platform started in January 2021.

HKCC and SEOCH enhanced their capital-based position limit (CBPL) policy effective 1 September 2020 to provide higher capital efficiency to the market. CPs meeting certain criteria and with appropriate business needs are allowed to increase their CBPL by one-third of their existing limits.

HKEX completed the 2020 Annual Attestation and Inspection Programme, with focus on three areas: (i) client margin requirements; (ii) risk management; and (iii) China Connect rules. The results and findings were announced to the market in February 2021.

OTC Clear

OTC Clear's Cross Currency Swaps (CCS) clearing volume remained strong during 2020, with notional amount cleared up by 8 per cent compared with 2019. However, the total notional amount cleared by OTC Clear in 2020 dropped 25 per cent, as the low interest rate environment led to a decline in Interest Rate Swaps (IRS) volume. In July 2020, the first IRS contract benchmarked to the HONIA was cleared through OTC Clear, supporting the market adoption of new risk-free reference rate in Hong Kong.

OTC Clear continues to strengthen its position in Asia and broaden its membership base with plans to on-board Japanese banks through the Sponsored Settlement Membership model. In addition, OTC Clear received its Recognised Clearing House (RCH) License from the Monetary Authority of Singapore (MAS) in November 2020, allowing it to offer clearing services to buy-side firms and inter-dealer brokers in Singapore.

Technology Segment

Analysis of Results

Summary

	2020 \$m	2019 \$m	Change
Network, terminal user, data line and software sub-license fees	610	575	6%
Hosting services fees	230	188	22%
BayConnect sales and service revenue and other income	70	33	112%
Total revenue and other income	910	796	14%
Operating expenses	(304)	(245)	24%
EBITDA	606	551	10%
EBITDA margin	67%	69%	(2%)

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

Network fees rose by \$35 million (6 per cent) due to increased throttle usage of the Orion Central Gateway and China Connect Central Gateway by EPs, partly offset by lower fees from sale of new throttles.

Hosting Services Fees

Hosting services fees increased due to organic growth from both new customer subscriptions and increased usage by existing customers, with nearly 40 racks newly subscribed in 2020. As at 31 December 2020, 105 EPs were using HKEX's Hosting Services and 292 racks were subscribed by EPs and other hosting services ecosystem participants. These EPs generated, in aggregate, approximately 51 per cent of the Cash Market turnover and 63 per cent of the trading volume of the Derivatives Market in 2020.

EBITDA

Operating expenses increased by \$59 million (24 per cent) mainly due to inclusion of operating expenses of BayConnect, a 51 per cent subsidiary acquired in June 2019. EBITDA margin fell from 69 per cent in 2019 to 67 per cent in 2020; however overall EBITDA increased by 10 per cent year-on-year.

Business Update

Trading and Clearing Systems

During 2020, despite the market volatility and the challenges posed by Covid-19 on work arrangements, all of HKEX's major trading, clearing, settlement and market data dissemination systems for the Cash, Derivatives and Commodities Markets continued to perform robustly.

HKEX conducted a holistic review on the Hong Kong Futures Automated Trading System, following the half-day suspension of the Derivatives Market in 2019, and published a detailed report on 28 December 2020 on the incident. HKEX took into account recommendations from the SFC and an independent consultant, as well as feedback from EPs and other key stakeholders. This review has resulted in enhancement measures being put in place focusing in particular on incident prevention, detection and handling, mitigation of incident impact, and communication during incidents. These new measures will provide greater support to EPs, investors and other stakeholders in the event of future incidents, and will also help to enhance HKEX's decision-making process during market incidents. HKEX will continue to commit its resources to achieve its goal of operating a highly resilient, fair, informed and orderly market.

The project for hardware obsolescence replacement for various trading and clearing systems, together with the relocation of one of HKEX secondary data centre sites, which was kicked off in early 2020, has been progressing well. After project completion, estimated in Q3 2021, the existing secondary data centre will be relocated to a Tier 3 data centre with a higher level of resilience and lower operating costs.

Innovation Lab

The HKEX Innovation Lab was set up in 2018 to explore, incubate and apply new technologies to modernise HKEX's business and drive technological enhancements for our markets and our business. In 2020, the Innovation Lab successfully incubated FINI (refer to details in the Post Trade segment). It also continued to scale up HKEX's Robotic Process Automation programme, rolled out new data lake infrastructure and analytics tools for the business, and built an award-winning Artificial intelligence (AI) powered tool to facilitate the review of issuers' annual reports by the Listing Division. These initiatives continue to improve operational efficiency and reduce costs for our business.

Equity Investment

In 2020, HKEX acquired a minority stake in Huakong TsingJiao Information Science (Beijing) Limited (TsingJiao) for a total consideration of RMB100 million. TsingJiao specialises in the research and development of multi-party computation technologies, which allows collaborative data analysis without revealing private data during the computation and analysis process. HKEX believes that partnering with TsingJiao has the potential to be one of the building blocks for HKEX in developing its data strategy.

Corporate Items

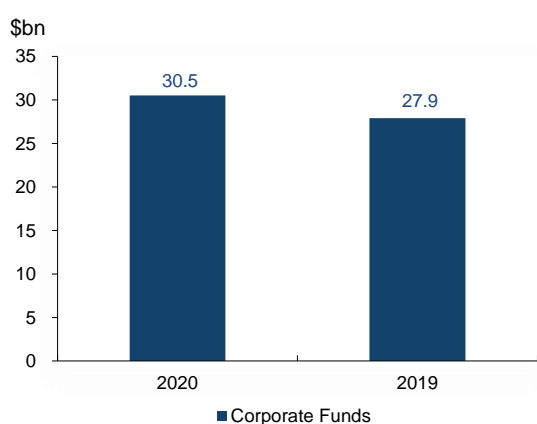
"Corporate Items" is not a business segment but comprises central income (including net investment income of the Corporate Funds and HKEX Foundation donation income), the costs of central support functions that provide services to all operating segments, HKEX Foundation charitable donations and other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

Summary

	2020 \$m	2019 \$m	Change
Net investment income	842	1,233	(32%)
HKEX Foundation donation income	106	-	N/A
Others	9	23	(61%)
Total revenue and other income	957	1,256	(24%)
Operating expenses:			
- HKEX Foundation charitable donations	(112)	-	N/A
- Others	(1,269)	(1,157)	10%
EBITDA	(424)	99	(528%)

Net Investment Income

Average fund size



Average fund size increased principally due to cash generated and retained by the business after payment of cash dividends and the increase in fair values of collective investment schemes.

The analysis of net investment income is as follows:

	2020 \$m	2019 \$m
Net investment income from:		
- Cash and bank deposits	376	437
- Collective investment schemes	487	789
- Debt securities	8	6
- Exchange (losses)/gains	(29)	1
Total net investment income	842	1,233
Net investment return	2.76%	4.42%

Net investment income of Corporate Funds decreased by \$391 million compared with 2019 due to lower fair value gains on collective investment schemes and lower interest income from lower deposit rates.

The decrease in fair value gains on collective investment schemes was mainly due to lower fair value gains of the public equities asset class of \$365 million (2020: \$79 million; 2019: \$444 million).

EBITDA

Excluding HKEX Foundation charitable donations of \$112 million, operating expenses increased by 10 per cent against 2019, due to increased staff costs from annual payroll adjustments, higher recruitment costs and special gratuity payments, higher IT expenses for new IT systems, and higher professional fees incurred for strategic projects and other business initiatives.

Business Update

Equity Investment

Following an initial capital investment of \$50 million for a minority equity interest in Fusion Bank Limited in 2019, HKEX made a further capital injection of \$50 million in April 2020 to facilitate the business launch preparation.

On 21 December 2020, Fusion Bank announced its full public launch in Hong Kong, offering a variety of banking services including savings, time deposits, local fund transfers as well as foreign exchange in HKD, CNY and USD.

Corporate Social Responsibility

Throughout the year, HKEX has continued to innovate and play an active role in shaping the long-term sustainability of global financial markets, focusing on people, operations and communities. HKEX is committed to promoting good corporate governance and ESG stewardship through ongoing publication of training and guidance materials, industry knowledge sharing and leadership on best practices.

Promoting its commitment to Sustainable Finance, in 2020 HKEX launched a new green and sustainable finance platform, STAGE, as well as the LME's sustainability roadmap to further facilitate the low-carbon transition of financial markets, and society more widely.

Other new initiatives have been rolled out alongside the existing CSR and sustainability programmes including the launch of HKEX Foundation and its flagship Charity Partnership Programme, as well as the HKEX University Scholarship Programme. In response to Covid-19, HKEX supported the markets, its employees and the communities through a number of initiatives, such as relief measures for market participants, employees work from home and wellness support programmes and a \$10 million Covid-19 Relief Fund in the communities.

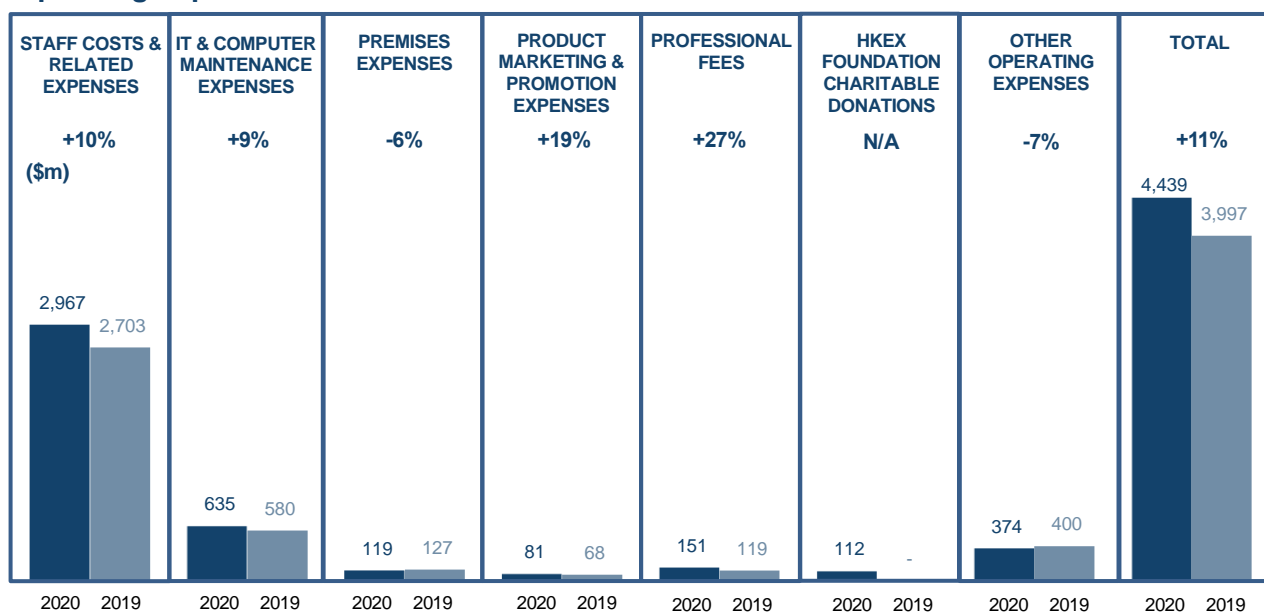
HKEX Foundation

HKEX Foundation (via HKEX Foundation Limited, a controlled structured entity of the Group) was established as HKEX's dedicated charitable channel, with the aim to drive and inspire change by supporting community projects that champion various social and environmental challenges, helping to address global issues at a local level. During 2020, HKEX Foundation funded a wide range of projects and charities, supporting those in need. Initiatives include a \$20 million Charity Partnership Programme, which supported 10 community projects in the HKEX Foundation's four focus areas of financial literacy, diversity and inclusion, poverty relief and environmental sustainability.

From 2H 2020 onwards, the donation income from the Stock Code Balloting Charity Scheme were received by HKEX Foundation, and the amounts previously paid by the issuers directly to the Hong Kong Community Chest were paid by HKEX Foundation.

Expenses, Other Costs and Taxation

Operating Expenses



Staff costs and related expenses increased by \$264 million (10 per cent) mainly due to annual payroll adjustments and increased headcount arising from the acquisition of BayConnect in June 2019.

IT and computer maintenance expenses consumed by the Group, excluding costs of services and goods directly consumed by participants of \$84 million (2019: \$93 million), were \$551 million (2019: \$487 million). The increase was mainly attributable to higher maintenance expenses for new IT systems and upgraded networks, as well as the inclusion of BayConnect.

Professional fees increased by \$32 million (27 per cent) due to higher fees incurred for strategic projects and other business initiatives.

From July 2020 onwards, the donation income from the Stock Code Balloting Charity Scheme were received by HKEX Foundation, and the amounts previously paid by the issuers directly to the Hong Kong Community Chest were paid by HKEX Foundation. As a result, HKEX Foundation charitable donations of \$112 million were recorded under operating expenses in 2020.

Depreciation and Amortisation

	2020 \$m	2019 \$m	Change
Depreciation and amortisation	1,197	1,044	15%

Depreciation and amortisation increased by \$153 million (15 per cent), attributable to an increase in depreciation of right-of-use assets of \$34 million from new and renewed office leases in 2020, and increase in depreciation and amortisation of new IT systems completed in 2H 2019 and 2020.

During 2020, the Group incurred capital expenditure of \$1,388 million, an increase of 30 per cent from 2019.

Finance Costs

	2020 \$m	2019 \$m	Change
Finance costs	181	177	2%

Finance costs increased due to higher negative interest charges on deposits in Euro and Japanese Yen, collected from CPs as collateral.

Taxation

	2020 \$m	2019 \$m	Change
Taxation	1,845	1,561	18%

Taxation increased due to higher profit before taxation in 2020 and a one-off deferred tax charge of \$61 million arising from the change of statutory UK tax rate from 17 per cent to 19 per cent, partly offset by higher non-taxable income.

FINANCIAL REVIEW

Changes to Key Items in Consolidated Statement of Financial Position

(A) Significant Financial Assets and Financial Liabilities by Funds

	At 31 Dec 2020 \$m	At 31 Dec 2019 \$m	Change
Financial assets			
Cash and cash equivalents	157,996	128,152	23%
Financial assets measured at fair value through profit or loss	100,597	57,401	75%
Financial assets measured at fair value through other comprehensive income	7,942	4,569	74%
Financial assets measured at amortised cost	62,688	40,672	54%
Total	329,223	230,794	43%

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 31 Dec 2020 \$m	At 31 Dec 2019 \$m	Change
Financial assets			
Corporate Funds ¹	33,747	29,138	16%
Margin Funds ²	175,129	137,012	28%
Clearing House Funds	21,251	15,176	40%
Base, ferrous, and precious metals derivatives contracts cleared through LME Clear	92,884	48,008	93%
Cash prepayments and collateral for A shares	6,212	1,460	325%
Total	329,223	230,794	43%

1 Includes \$1,241 million (31 December 2019: \$818 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 \$11,879 million (31 December 2019: \$5,524 million), which are included in accounts receivable, prepayments and other deposits

	At 31 Dec 2020 \$m	At 31 Dec 2019 \$m	Change
Financial liabilities			
Base, ferrous, and precious metals derivatives contracts cleared through LME Clear	92,884	48,008	93%
Margin deposits, Mainland security and settlement deposits, and cash collateral from CPs	187,008	142,536	31%
CPs' contributions to Clearing House Funds	20,439	14,394	42%
Total	300,331	204,938	47%

The increase in financial assets and financial liabilities of Margin Funds at 31 December 2020 compared with 31 December 2019 was mainly attributable to increased contributions required from members of LME Clear due to higher margin requirements from higher metal contract prices, increased contributions from HKSCC CPs due to higher market turnover and the increase in Mainland security and settlement deposits attributable to the increase in Stock Connect Northbound Trading, and higher contributions from HKCC and SEOCH CPs due to higher margin requirements and the increase in open positions.

The increase in financial assets and financial liabilities of Clearing House Funds at 31 December 2020 compared to 31 December 2019 was mainly attributable to higher contributions required from members of LME Clear and HKSCC CPs in response to changes in risk exposures.

Financial assets of Corporate Funds at 31 December 2020 increased by \$4,609 million as compared to those at 31 December 2019 due to the retention of cash generated by the business over the past year partly offset by the cash paid for the 2019 second interim dividend and 2020 first interim dividend, and the increase in fair values of collective investment scheme investments.

A portion of the Corporate Funds is invested in collective investment schemes which are designed to enhance returns and mitigate portfolio volatility and asset class concentration risk. At 31 December 2020, the fair value of the Group's collective investment schemes by strategy employed was as follows:

Strategy	At 31 Dec 2020 \$m	At 31 Dec 2019 \$m	Change
Public Equities	1,684	2,440	(31%)
Absolute Return	1,914	1,604	19%
Multi-Sector Fixed Income	2,216	2,583	(14%)
Government Bonds and Mortgage-backed Securities ¹	1,679	2,716	(38%)
Total	7,493	9,343	(20%)

¹ Includes \$264 million invested in money market funds (31 December 2019: \$Nil)

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

The total net book value of the Group's fixed assets and intangible assets rose by \$427 million from \$19,967 million at 31 December 2019 to \$20,394 million at 31 December 2020. The increase was mainly due to additions of assets of \$1,388 million, but was partly offset by depreciation and amortisation of \$892 million, and exchange differences arising mainly from depreciation of USD of \$68 million. Additions during the year were mainly related to the development and upgrade of various trading and clearing systems (notably the Next Generation Post Trade systems), and the relocation of secondary data centre.

In accordance with HKFRS 16, the Group's operating leases are recognised as right-of-use assets. At 31 December 2020, the carrying amounts of these assets amounted to \$2,193 million (31 December 2019: \$2,366 million) and were mainly related to leases of office premises.

The Group's capital expenditure¹² commitments at 31 December 2020, including those authorised by the Board but not yet contracted for, amounted to \$890 million (31 December 2019: \$1,217 million). These related mainly to the development and upgrade of IT systems including the cash, derivatives and commodities trading and clearing systems, and the set up of the new secondary data centre.

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

In 2020, HKEX acquired a minority stake in Huakong TsingJiao Information Science (Beijing) Limited (TsingJiao) for a total consideration of RMB100 million.

¹² Capital expenditure excludes right-of-use assets recognised under HKFRS 16: Leases.

HKEX also made a further capital injection of \$50 million in Fusion Bank Limited in April 2020, bringing the total investment in the bank to \$100 million.

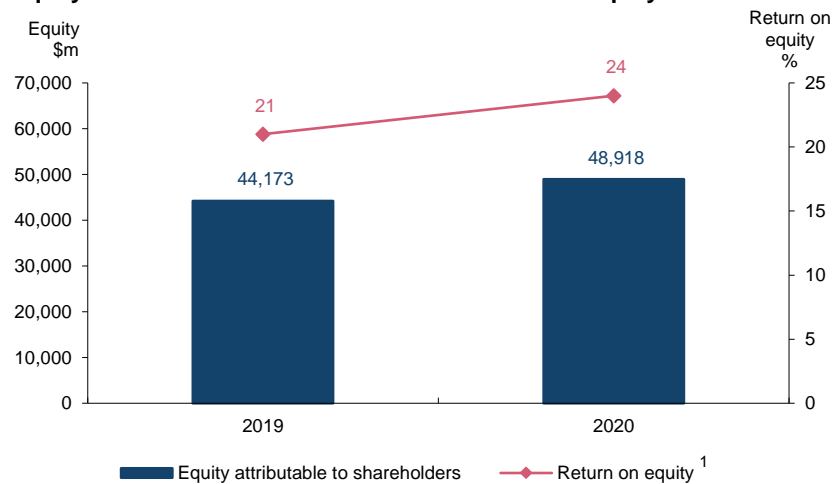
In November 2020, the Group entered into an agreement to acquire a minority stake in Guangzhou Futures Exchange Co. Ltd. (GFE), a newly established futures exchange in the Greater Bay Area, which will focus on serving the real economy and green development initiatives. At 31 December 2020, the total capital investment to be made by the Group was RMB210 million.

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

(D) Equity attributable to Shareholders and Return on Equity

Equity attributable to shareholders increased by \$4,745 million to \$48,918 million at 31 December 2020 (31 December 2019: \$44,173 million). This arose principally from the \$1,428 million of shares issued in lieu of cash dividends and an increase in retained earnings (excluding transfers to designated reserves) of \$3,051 million mainly attributable to profit for the year less dividends declared or paid.

Equity attributable to Shareholders and Return on Equity



Return on equity rose by 3 per cent due to record high profit attributable to shareholders in 2020.

¹ Based on equity attributable to shareholders at year-end

Liquidity, Financial Resources and Gearing

Working capital rose by \$5,101 million to \$29,359 million at 31 December 2020 (31 December 2019: \$24,258 million). The increase was mainly due to profit attributable to shareholders of \$11,505 million and net decrease in non-current assets of \$443 million, partly offset by the payment of 2019 second interim dividend and 2020 first interim dividend (net of scrip dividends) of \$7,025 million.

At 31 December 2020, the Group had the following outstanding borrowings:

	At 31 Dec 2020		At 31 Dec 2019	
	Carrying value \$m	Maturity	Carrying value \$m	Maturity
Written put options to non-controlling interests	423	N/A	418	N/A

At 31 December 2020, the Group had a gross gearing ratio (ie, gross debt divided by adjusted capital) of 1 per cent (31 December 2019: 1 per cent), and a net gearing ratio (ie, net debt divided by adjusted capital) of zero per cent (31 December 2019: zero per cent). For this purpose, gross debt is defined as total borrowings (excluding lease liabilities) and net debt¹³ is defined as gross debt less cash and cash

¹³ 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.

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 of HKEX other than designated reserves.

At 31 December 2020, the Group's total available banking facilities for its daily operations amounted to \$21,223 million (31 December 2019: \$21,246 million), which included \$14,722 million (31 December 2019: \$14,745 million) of committed banking facilities and \$6,500 million (31 December 2019: \$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 31 December 2020, the total amount of the facilities was HK\$30,244 million (31 December 2019: HK\$24,052 million).

In addition, the Group has arranged contingency banking facilities amounting to RMB13,000 million (31 December 2019: RMB13,000 million) for settling payment obligations to ChinaClear should there be events that disrupt normal settlement arrangements for Stock Connect.

At 31 December 2020, 82 per cent (31 December 2019: 74 per cent) of the Group's cash and cash equivalents were denominated in HKD or USD.

Pledges of Assets

LME Clear receives securities, gold bullion and warrants as collateral for margins posted by its CPs. The total fair value of this collateral was US\$2,241 million (HK\$17,376 million) at 31 December 2020 (31 December 2019: US\$1,872 million (HK\$14,586 million)). LME Clear is obliged to return this non-cash collateral upon request when the CPs' collateral obligations have been substituted with cash collateral or otherwise discharged.

LME Clear 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\$11,486 million (HK\$89,061 million) at 31 December 2020 (31 December 2019: US\$8,904 million (HK\$69,378 million)).

The above non-cash collateral, which LME Clear is permitted to sell or repledge in the absence of default by the counterparties, was not recorded on the consolidated statement of financial position of the Group at 31 December 2020. Such non-cash collateral, together with certain financial assets amounting to US\$496 million (HK\$3,845 million) at 31 December 2020 (31 December 2019: US\$474 million (HK\$3,692 million)), have been repledged to LME Clear's investment agent and custodian banks under first floating charge and security arrangements for the settlement and depository services they provide in respect of the collateral and investments held. The floating charge could convert to a fixed charge in the event of contract termination, or default or insolvency of LME Clear.

Exposure to Fluctuations in Exchange Rates and Related Hedges

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

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

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

The aggregate net open foreign currency positions (excluding collective investment schemes) at 31 December 2020 amounted to \$2,750 million, of which \$382 million were non-USD exposures (31 December 2019: \$1,744 million, of which \$150 million were non-USD exposures).

Contingent Liabilities

At 31 December 2020, 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 2019: \$71 million). Up to 31 December 2020, 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 635 trading Participants (31 December 2019: 658) covered by the indemnity at 31 December 2020 defaulted, the maximum contingent liability of the Group under the indemnity would amount to \$127 million (31 December 2019: \$132 million).
- (c) HKEX has 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.

CONSOLIDATED INCOME STATEMENT FOR THE YEAR ENDED 31 DECEMBER 2020

	Note	2020 \$m	2019 \$m
Trading fees and trading tariffs		6,959	5,592
Stock Exchange listing fees		1,899	1,633
Clearing and settlement fees		4,355	3,160
Depository, custody and nominee services fees		1,264	1,052
Market data fees		953	919
Other revenue	3	1,405	1,209
Revenue		16,835	13,565
Investment income		2,577	3,977
Interest rebates to Participants		(349)	(1,248)
Net investment income	4	2,228	2,729
HKEX Foundation donation income		106	-
Sundry income		21	17
Revenue and other income		19,190	16,311
Less: Transaction-related expenses		(110)	(51)
Revenue and other income less transaction-related expenses		19,080	16,260
Operating expenses			
Staff costs and related expenses		(2,967)	(2,703)
Information technology and computer maintenance expenses		(635)	(580)
Premises expenses		(119)	(127)
Product marketing and promotion expenses		(81)	(68)
Professional fees		(151)	(119)
HKEX Foundation charitable donations		(112)	-
Other operating expenses	5	(374)	(400)
		(4,439)	(3,997)
EBITDA		14,641	12,263
Depreciation and amortisation		(1,197)	(1,044)
Operating profit		13,444	11,219
Costs relating to proposed combination with LSEG		-	(123)
Finance costs	6	(181)	(177)
Share of profits less losses of joint ventures		69	32
Profit before taxation		13,332	10,951
Taxation	7	(1,845)	(1,561)
Profit for the year		11,487	9,390
Profit/(loss) attributable to:			
Shareholders of HKEX		11,505	9,391
Non-controlling interests		(18)	(1)
Profit for the year		11,487	9,390
Basic earnings per share	8(a)	\$9.11	\$7.49
Diluted earnings per share	8(b)	\$9.09	\$7.47

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME FOR THE YEAR ENDED 31 DECEMBER 2020

	2020 \$m	2019 \$m
Profit for the year	11,487	9,390
Other comprehensive income		
Items that may be reclassified subsequently to profit or loss:		
Currency translation differences of foreign subsidiaries	(29)	(96)
Cash flow hedges	(6)	6
Changes in fair value of financial assets measured at fair value through other comprehensive income, net of tax	28	3
Other comprehensive income	(7)	(87)
Total comprehensive income	11,480	9,303
Total comprehensive income attributable to:		
Shareholders of HKEX	11,490	9,303
Non-controlling interests	(10)	-
Total comprehensive income	11,480	9,303

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

AT 31 DECEMBER 2020

	Note	At 31 Dec 2020			At 31 Dec 2019		
		Current \$m	Non-current \$m	Total \$m	Current \$m	Non-current \$m	Total \$m
Assets							
Cash and cash equivalents	10	157,996	-	157,996	128,152	-	128,152
Financial assets measured at fair value through profit or loss	10	100,081	516	100,597	56,729	672	57,401
Financial assets measured at fair value through other comprehensive income	10	7,942	-	7,942	4,569	-	4,569
Financial assets measured at amortised cost	10	62,589	99	62,688	39,954	718	40,672
Accounts receivable, prepayments and deposits	11	47,059	21	47,080	25,791	21	25,812
Tax recoverable		26	-	26	-	-	-
Interests in joint ventures		-	164	164	-	95	95
Goodwill and other intangible assets		-	18,737	18,737	-	18,378	18,378
Fixed assets		-	1,657	1,657	-	1,589	1,589
Right-of-use assets		-	2,193	2,193	-	2,366	2,366
Deferred tax assets		-	26	26	-	17	17
Total assets		375,693	23,413	399,106	255,195	23,856	279,051
Liabilities and equity							
Liabilities							
Financial liabilities at fair value through profit or loss		92,884	-	92,884	48,008	-	48,008
Margin deposits, Mainland security and settlement deposits, and cash collateral from CPs		187,008	-	187,008	142,536	-	142,536
Accounts payable, accruals and other liabilities	12	42,974	-	42,974	22,447	-	22,447
Deferred revenue		1,049	371	1,420	1,033	403	1,436
Taxation payable		1,174	-	1,174	1,760	-	1,760
Other financial liabilities		48	-	48	59	-	59
CPs' contributions to Clearing House Funds		20,439	-	20,439	14,394	-	14,394
Lease liabilities		304	2,054	2,358	272	2,234	2,506
Borrowings	13	340	83	423	338	80	418
Provisions		114	98	212	90	104	194
Deferred tax liabilities		-	930	930	-	792	792
Total liabilities		346,334	3,536	349,870	230,937	3,613	234,550
Equity							
Share capital				31,891			30,449
Shares held for Share Award Scheme				(485)			(770)
Employee share-based compensation reserve				232			250
Hedging and revaluation reserves				25			3
Exchange reserve				(218)			(181)
Designated reserves				628			587
Reserve relating to written put options to non-controlling interests				(369)			(369)
Retained earnings	14			17,214			14,204
Equity attributable to shareholders of HKEX				48,918			44,173
Non-controlling interests				318			328
Total equity				49,236			44,501
Total liabilities and equity				399,106			279,051
Net current assets				29,359			24,258

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1. Basis of Preparation and Accounting Policies

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

The financial information relating to the years ended 31 December 2020 and 2019 included in this preliminary announcement of annual results 2020 does not constitute the Company's statutory annual consolidated financial statements for those years but is derived from those financial statements. Further information relating to these statutory financial statements required to be disclosed in accordance with section 436 of the Companies Ordinance is as follows:

The Company has delivered the financial statements for the year ended 31 December 2019 to the Registrar of Companies as required by section 662(3) of, and Part 3 of Schedule 6 to, the Companies Ordinance and will deliver the financial statements for the year ended 31 December 2020 in due course.

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

(a) Adoption of new/revised HKFRSs

In 2020, the Group has adopted the following amendments to HKFRSs which are pertinent to the Group's operations and effective for accounting periods beginning on or after 1 January 2020:

Amendments to HKAS 1 and HKAS 8	Presentation of Financial Statements and Accounting Policies, Changes in Accounting Estimates and Errors: Definition of Material
Amendments to HKFRS 3	Business Combination: Definition of a Business

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

(b) New/revised HKFRSs issued before 31 December 2020 but not yet effective and not early adopted

The Group has not applied the following amendments to HKFRSs which were issued before 31 December 2020 and are pertinent to its operations but not yet effective:

Amendments to HKAS 1	Presentation of Financial Statements: Classification of Liabilities as Current or Non-Current ³
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 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 June 2020

² Effective for accounting periods beginning on or after 1 January 2022

³ Effective for accounting periods beginning on or after 1 January 2023

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

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

Change in presentation of consolidated income statement

In prior years, certain licence fees, bank charges and other costs that directly vary with trading and clearing transactions (transaction-related expenses) were included under other operating expenses. From 2020 onwards, transaction-related expenses are presented under a separate line below Revenue and other income, to more appropriately reflect the nature of such direct costs. The comparative figures have been restated to conform with the revised presentation.

HKEX Foundation Limited (HKEX Foundation) was established to deepen HKEX's connectivity and long-standing commitment to our communities. From July 2020 onwards, the donation income from the Stock Code Balloting Charity Scheme were received by HKEX Foundation, and the amounts previously paid by the issuers directly to the Hong Kong Community Chest were paid by HKEX Foundation. To facilitate readers' understanding of the HKEX Foundation's activities, HKEX Foundation donation income and HKEX Foundation charitable donations are presented as separate lines under Revenue and other income and Operating expenses respectively. No restatement of prior year comparative figures was made as the amounts were immaterial to the overall consolidated financial statements.

2. Operating Segments

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

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

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

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

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

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

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

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

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

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

An analysis by operating segment of the Group's EBITDA, profit before taxation and other selected financial information (including analysis of revenue by timing of revenue recognition) for the year, is set out as follows:

	2020						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	3,460	2,079	1,171	5,667	62	1	12,440
Over time	1,531	1,162	278	575	844	5	4,395
Revenue	4,991	3,241	1,449	6,242	906	6	16,835
Net investment income	-	-	-	1,386	-	842	2,228
HKEX Foundation donation income	-	-	-	-	-	106	106
Sundry income	-	-	5	9	4	3	21
Revenue and other income	4,991	3,241	1,454	7,637	910	957	19,190
Less: Transaction-related expenses	-	(85)	-	(25)	-	-	(110)
Revenue and other income less transaction-related expenses	4,991	3,156	1,454	7,612	910	957	19,080
Operating expenses	(595)	(607)	(692)	(860)	(304)	(1,381)	(4,439)
Reportable segment EBITDA	4,396	2,549	762	6,752	606	(424)	14,641
Depreciation and amortisation	(133)	(114)	(340)	(322)	(38)	(250)	(1,197)
Finance costs	(13)	(13)	(8)	(84)	(2)	(61)	(181)
Share of profits less losses of joint ventures	68	1	-	-	-	-	69
Reportable segment profit before taxation	4,318	2,423	414	6,346	566	(735)	13,332
	2019						
	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	2,151	2,092	1,126	4,318	66	11	9,764
Over time	1,495	896	270	403	727	10	3,801
Revenue	3,646	2,988	1,396	4,721	793	21	13,565
Net investment income	-	-	-	1,496	-	1,233	2,729
Sundry income	-	-	3	9	3	2	17
Revenue and other income	3,646	2,988	1,399	6,226	796	1,256	16,311
Less: Transaction-related expenses	-	(41)	-	(10)	-	-	(51)
Revenue and other income less transaction-related expenses	3,646	2,947	1,399	6,216	796	1,256	16,260
Operating expenses	(603)	(510)	(668)	(814)	(245)	(1,157)	(3,997)
Reportable segment EBITDA	3,043	2,437	731	5,402	551	99	12,263
Depreciation and amortisation	(128)	(94)	(327)	(237)	(39)	(219)	(1,044)
Costs relating to proposed combination with LSEG	-	-	-	-	-	(123)	(123)
Finance costs	(15)	(12)	(8)	(82)	(1)	(59)	(177)
Share of profits less losses of joint ventures	38	(6)	-	-	-	-	32
Reportable segment profit before taxation	2,938	2,325	396	5,083	511	(302)	10,951

(a) Geographical information

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

	Revenue		Non-current assets	
	2020 \$m	2019 \$m	At 31 Dec 2020 \$m	At 31 Dec 2019 \$m
Hong Kong (place of domicile)	14,641	11,543	5,374	5,037
United Kingdom	2,124	1,991	17,096	17,126
Mainland China	70	31	302	286
	16,835	13,565	22,772	22,449

(b) Information about major customers

In 2020 and 2019, the revenue from the Group's largest customer amounted to less than 10 per cent of the Group's total revenue.

3. Other Revenue

	2020 \$m	2019 \$m
Network, terminal user, data line and software sub-license fees	610	575
Hosting services fees	230	188
Commodities stock levies and warehouse listing fees	67	63
Participants' subscription and application fees	112	94
Accommodation income (note (a))	160	79
Sales of Trading Rights	24	22
LME financial over-the-counter booking fees	49	45
BayConnect sales and service revenue	66	30
Brokerage on IPO direct allotments	26	23
Miscellaneous revenue	61	90
	1,405	1,209

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

4. Net Investment Income

	2020 \$m	2019 \$m
Gross interest income from financial assets measured at amortised cost	2,066	3,096
Gross interest income from financial assets measured at fair value through other comprehensive income	56	97
Interest rebates to Participants	(349)	(1,248)
Net interest income	1,773	1,945
Net gains on financial assets mandatorily measured at fair value through profit or loss and financial liabilities at fair value through profit or loss	487	789
Others	(32)	(5)
Net investment income	2,228	2,729

5. Other Operating Expenses

	2020 \$m	2019 \$m
Bank charges	14	14
Communication expenses	13	15
Contribution to Financial Reporting Council	-	8
Custodian and fund management related fees	28	22
Financial data subscription fees	49	39
Insurance	10	14
Non-executive directors' fees	21	20
Office demolition and relocation expenses	9	12
Provision for impairment losses of receivables	12	9
Repairs and maintenance expenses	69	67
Security expenses	23	23
Travel expenses	19	49
UK regulatory fees	18	18
Other miscellaneous expenses	89	90
	374	400

(a) In prior years, transaction-related expenses that directly vary with trading and clearing transactions were included under other operating expenses. From 2020 onwards, they are presented under a separate line below Revenue and other income. Comparative figures have been restated to conform with current year's presentation (note 1(b)).

6. Finance Costs

	2020 \$m	2019 \$m
Interest on borrowings	5	7
Interest on lease liabilities	89	89
Banking facility commitment fees	53	52
Negative interest on Euro and Japanese Yen deposits	34	29
	181	177

7. Taxation

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

	2020 \$m	2019 \$m
Current tax - Hong Kong Profits Tax		
- Provision for the year	1,537	1,314
- Over provision in respect of prior years	(2)	-
	1,535	1,314
Current tax - Overseas Tax		
- Provision for the year	177	200
- Under/(over) provision in respect of prior years	1	(1)
	178	199
Total current tax (note (a))	1,713	1,513
Deferred tax		
- Provision for temporary differences	71	48
- Impact of changes in UK Corporate Tax rate (note (b))	61	-
Total deferred tax	132	48
Taxation charge	1,845	1,561

(a) Hong Kong Profits Tax has been provided at the rate of 16.5 per cent (2019: 16.5 per cent) on the estimated assessable profit for the year. Taxation on overseas profits has been calculated on the estimated assessable profit at the rates of taxation prevailing in the countries in which the Group operates, with the average corporation tax rate applicable to the subsidiaries in the UK being 19 per cent (2019: 19 per cent).

- (b) Through the enactment of the Finance Act 2020, the UK Corporate Tax rate would remain at 19 per cent from 1 April 2020 instead of reducing to 17 per cent, the previously enacted rate. As a result, a one-off deferred tax charge of \$61 million was recognised during the year ended 31 December 2020.

8. Earnings Per Share

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

(a) Basic earnings per share

	2020	2019
Profit attributable to shareholders (\$m)	11,505	9,391
Weighted average number of shares in issue less shares held for Share Award Scheme (in '000)	1,262,746	1,253,730
Basic earnings per share (\$)	9.11	7.49

(b) Diluted earnings per share

	2020	2019
Profit attributable to shareholders (\$m)	11,505	9,391
Weighted average number of shares in issue less shares held for Share Award Scheme (in '000)	1,262,746	1,253,730
Effect of Awarded Shares (in '000)	3,057	2,971
Weighted average number of shares for the purpose of calculating diluted earnings per share (in '000)	1,265,803	1,256,701
Diluted earnings per share (\$)	9.09	7.47

9. Dividends

	2020 \$m	2019 \$m
First interim dividend paid:		
\$3.71 (2019: \$3.72) per share	4,704	4,680
Less: Dividend for shares held by Share Award Scheme (note (a))	(12)	(12)
	4,692	4,668
Second interim dividend declared (note (b)):		
\$4.46 (2019: \$2.99) per share based on issued share capital at 31 Dec	5,655	3,771
Less: Dividend for shares held by Share Award Scheme at 31 Dec (note (a))	(9)	(10)
	5,646	3,761
	10,338	8,429

- (a) The results and net assets of the Share Award Scheme are included in HKEX's financial statements. Therefore, dividends for shares held by the Share Award Scheme were deducted from the total dividends.
- (b) The second interim dividend declared after 31 December was not recognised as a liability at 31 December as it had not been approved by the Board.

10. Financial Assets

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

Cash for A shares includes:

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

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

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

Metals derivatives contracts represent the fair value of the 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.

Financial assets held by the Group which are funded by share capital and funds generated from operations are classified as Corporate Funds (ie, other than financial assets of Cash for A shares, Margin Funds, Clearing House Funds and metals derivatives contracts).

The financial assets are invested into the cash and cash equivalents, financial assets measured at fair value through profit or loss, financial assets measured at fair value through other comprehensive income, and financial assets measured at amortised cost, details of which are as follows:

	At 31 Dec 2020 \$m	At 31 Dec 2019 \$m
Cash and cash equivalents	157,996	128,152
Financial assets measured at fair value through profit or loss	100,597	57,401
Financial assets measured at fair value through other comprehensive income	7,942	4,569
Financial assets measured at amortised cost	62,688	40,672
	329,223	230,794

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

	At 31 Dec 2020 \$m	At 31 Dec 2019 \$m
<u>Cash for A shares</u>		
Cash and cash equivalents	6,212	1,460
<u>Margin Funds¹</u>		
Cash and cash equivalents	122,184	100,095
Financial assets measured at fair value through other comprehensive income	5,538	4,569
Financial assets measured at amortised cost	47,407	32,348
	175,129	137,012
<u>Clearing House Funds</u>		
Cash and cash equivalents	18,847	15,176
Financial assets measured at fair value through other comprehensive income	2,404	-
	21,251	15,176
<u>Metals derivatives contracts</u>		
Financial assets measured at fair value through profit or loss	92,884	48,008
<u>Corporate Funds</u> (note (a))		
Cash and cash equivalents	10,753	11,421
Financial assets measured at fair value through profit or loss	7,713	9,393
Financial assets measured at amortised cost	15,281	8,324
	33,747	29,138
	329,223	230,794

1 Excludes Settlement Reserve Fund and Settlement Guarantee Fund paid to ChinaClear and margin receivable from CPs of \$11,879 million (31 December 2019: \$5,524 million), which are included in accounts receivable, prepayments and other deposits. If such amounts are included, total Margin Funds would be \$187,008 million (31 December 2019: \$142,536 million).

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

	At 31 Dec 2020						At 31 Dec 2019					
	Cash for A shares	Margin Funds	Clearing	Metals	Corporate Funds	Total	Cash for A shares	Margin Funds	Clearing	Metals	Corporate Funds	Total
			House Funds	derivatives contracts					House Funds	derivatives contracts		
\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	
Within 12 months	6,212	175,129	21,251	92,884	33,132	328,608	1,460	137,012	15,176	48,008	27,748	229,404
Over 12 months	-	-	-	-	615	615	-	-	-	-	1,390	1,390
	6,212	175,129	21,251	92,884	33,747	329,223	1,460	137,012	15,176	48,008	29,138	230,794

- (a) At 31 December 2020, financial assets of Corporate Funds of \$1,241 million (31 December 2019: \$818 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.

11. Accounts Receivable, Prepayments and Deposits

The Group's accounts receivable, prepayments and deposits mainly represented the Group's CNS money obligations receivable, which accounted for 70 per cent (31 December 2019: 73 per cent) of the total accounts receivable, prepayments and deposits. CNS money obligations receivable mature within two days after the trade date. The majority of the remaining accounts receivable, prepayments and deposits were due within three months.

12. Accounts Payable, Accruals and Other Liabilities

The Group's accounts payable, accruals and other liabilities mainly represented the Group's CNS money obligations payable, which accounted for 91 per cent (31 December 2019: 89 per cent) of the total accounts payable, accruals and other liabilities. CNS money obligations payable mature within two days after the trade date. The majority of the remaining accounts payable, accruals and other liabilities would mature within three months.

13. Borrowings

	At 31 Dec 2020	At 31 Dec 2019
	\$m	\$m
Written put options to non-controlling interests	423	418
Analysed as:		
Non-current liabilities	83	80
Current liabilities	340	338
	423	418

At 31 December 2020, OTC Clear has issued 3,541 non-voting ordinary shares to certain third party shareholders at a total consideration of \$433 million. As part of the arrangement, put options were written by HKEX to the non-controlling interests to sell part or all of their non-voting ordinary shares in OTC Clear to HKEX at the initial subscription prices less accumulated dividends received by the non-controlling interests. The put options are exercisable by the non-controlling interests at any time following the date falling five years after the shares were issued if the non-controlling interests can demonstrate to HKEX that they have used reasonable endeavours for at least three months to find a suitable purchaser for their shares at a price equal to or more than their fair market values. The carrying amount of written put options represents the present value of the amount payable by HKEX to acquire the shares held by non-controlling interests at the date at which the written put options first become exercisable.

At 31 December 2020, \$340 million of the written put options were exercisable (31 December 2019: \$252 million) and the remaining \$83 million of the options will become exercisable in October 2023. During the year ended 31 December 2020, none of the written put options was exercised (2019: none).

The effective interest rate of the options before they are exercisable was 3.0 per cent (2019: 3.0 per cent) per annum.

14. Retained Earnings

	2020 \$m	2019 \$m
At 1 Jan	14,204	13,371
Profit attributable to shareholders	11,505	9,391
Transfer to Clearing House Funds reserves	(41)	(64)
Dividends:		
2019/2018 second interim dividend	(3,761)	(3,830)
2020/2019 first interim dividend	(4,692)	(4,668)
Unclaimed HKEX dividends forfeited	21	19
Vesting of shares of Share Award Scheme	(31)	(15)
Tax relating to Share Award Scheme	9	-
At 31 Dec	17,214	14,204

SCOPE OF WORK OF PRICEWATERHOUSECOOPERS HONG KONG

The financial figures in this announcement of the Group's results for the year ended 31 December 2020 have been agreed by the Group's external auditor, PricewaterhouseCoopers Hong Kong (PwC), to the amounts set out in the Group's draft consolidated financial statements for the year. The work performed by PwC in this respect did not constitute an assurance engagement in accordance with Hong Kong Standards on Auditing, Hong Kong Standards on Review Engagements or Hong Kong Standards on Assurance Engagements issued by the HKICPA, and consequently no assurance has been expressed by PwC on this announcement.

REVIEW OF 2020 CONSOLIDATED FINANCIAL STATEMENTS

The Audit Committee (AC) reviewed the 2020 Consolidated Financial Statements in conjunction with HKEX's external auditor. Based on this review and discussions with management, the AC was satisfied that the Consolidated Financial Statements were prepared in accordance with applicable accounting standards and fairly present the Group's financial position and results for the year ended 31 December 2020.

DISTRIBUTABLE RESERVES

As at 31 December 2020, HKEX's distributable reserves, calculated under Part 6 of the Companies Ordinance (Chapter 622 of the Laws of Hong Kong), amounted to \$8.1 billion (31 December 2019: \$7.0 billion).

DIVIDEND

The Board has declared a second interim dividend of \$4.46 per share for 2020 (2019 second interim dividend: \$2.99 per share), which will be payable in cash, to Shareholders whose names appear on HKEX's Register of Members on 12 March 2021. Dividend warrants are expected to be despatched to Shareholders on Tuesday, 23 March 2021.

Including the first interim dividend, the total dividends for 2020 amount to \$8.17 per share (2019: \$6.71 per share), which represents a payout ratio of 90 per cent of the profit attributable to Shareholders, excluding the financial results of HKEX Foundation, for the year ended 31 December 2020 (2019: 90 per cent of the profit attributable to Shareholders for the year ended 31 December 2019). Dividends for shares held in trust under the Share Award Scheme amount to \$21 million (2019: \$22 million).

CLOSURE OF HKEX'S REGISTER OF MEMBERS

For the purposes of determining Shareholders' eligibility to attend and vote at the 2021 AGM, and entitlement to the 2020 second interim dividend, HKEX's Register of Members will be closed as set out below:

- (i) For determining eligibility to attend and vote at the 2021 AGM:
 - Latest time to lodge transfer documents for registration with HKEX's registrar At 4:30 pm on 22 April 2021
 - Closure of HKEX's Register of Members 23 April 2021 to 28 April 2021
(both dates inclusive)
 - Record date 28 April 2021

- (ii) For determining entitlement to the 2020 second interim dividend:
 - Ex-dividend date 9 March 2021
 - Latest time to lodge transfer documents for registration with HKEX's registrar At 4:30 pm on 10 March 2021
 - Closure of HKEX's Register of Members 11 March 2021 to 12 March 2021
(both dates inclusive)
 - Record date 12 March 2021

During the above closure periods, no transfer of shares will be registered. To be eligible to attend and vote at the 2021 AGM, and to qualify for the 2020 second interim dividend, all properly completed transfer forms accompanied by the relevant share certificates must be lodged for registration with HKEX's registrar, Hong Kong Registrars Limited, at Shops 1712-1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wan Chai, Hong Kong no later than the aforementioned latest time.

ANNUAL GENERAL MEETING

The 2021 AGM will be held on Wednesday, 28 April 2021 at 4:30 pm at the HKEX Connect Hall on the 1st Floor, One and Two Exchange Square, Central, Hong Kong. The Notice of the 2021 AGM, which constitutes part of a circular to Shareholders, will be sent together with the 2020 Annual Report. The Notice, the circular which sets out details of the business to be conducted at the 2021 AGM, and the proxy form will be available under the Investor Relations section of the HKEX Group website. The results of the voting on the proposed resolutions will be published on the HKEX Group website shortly after the 2021 AGM is held.

In light of the uncertain development of the current Covid-19 situation, Shareholders are encouraged to appoint the chairman of the 2021 AGM as their proxy to vote on the resolutions, instead of attending the meeting in person. In accordance with the prevailing guidelines published by the Hong Kong Government and/or regulatory authorities, HKEX will implement additional precautionary measures at the 2021 AGM to ensure the safety of the Shareholders attending the meeting. Details of the measures will be set out in the circular to Shareholders, and any further updates will be announced as appropriate.

ELECTION OF DIRECTORS

The service term of T C Chan, Fred Hu and John Williamson (Elected Directors) will expire at the conclusion of the 2021 AGM. Mr Chan and Mr Williamson, who will have served on the Board for 12 consecutive years as at the 2021 AGM, are not eligible for nomination under the Nomination Policy for re-election and will retire at the conclusion of the 2021 AGM. Dr Hu has decided not to offer himself for re-election at the 2021 AGM.

On 23 February 2021, the Nomination and Governance Committee (NGC) nominated Nicholas Allen, Anna Cheung and Zhang Yichen to the Board for it to recommend to Shareholders for election at the 2021 AGM. The nominations were made in accordance with the Nomination Policy and took into account the merits of the candidates including, among others, their market knowledge and experience, reputation for integrity, and the diversity aspects (including without limitation, gender, age, cultural and educational background, ethnicity, professional experience, skills, and knowledge), with due regard for the benefits of diversity, as set out in the Board Diversity Policy.

Given the background and past experience of the three candidates, in particular, Mr Allen's accounting expertise and vast experience in securities and regulatory matters, Ms Cheung's extensive business strategic and operational experience, and Mr Zhang's in-depth knowledge in the Mainland's capital markets, it is considered that their appointment would further enhance the Board's diversity and performance and benefit the future development of HKEX. The NGC was satisfied with the independence of Mr Allen, Ms Cheung and Mr Zhang with reference to the criteria laid down in the Main Board Listing Rules.

On 24 February 2021, the Board accepted the nomination by the NGC and recommended Mr Allen, Ms Cheung and Mr Zhang to stand for election at the 2021 AGM. Each of Mr Allen, Ms Cheung and Mr Zhang does not hold any cross-directorships or have any significant links with other Directors through involvement in other companies or bodies. Mr Allen, Ms Cheung and Mr Zhang do not have any service contracts with any member of the Group that are not determinable by the Group within one year without compensation (other than statutory compensation). Their particulars will be set out in the circular to Shareholders.

COMPLIANCE WITH CORPORATE GOVERNANCE CODE

Throughout the year 2020, HKEX complied with all code provisions and, where appropriate, adopted the recommended best practices set out in the Corporate Governance Code, with the exceptions of Code Provisions A.4.1 (re-election of non-executive directors) and A.4.2 (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. HKEX's Chief Executive 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 with HKEX under HKEX's Articles of Association.

HKEX has applied the principles of the Corporate Governance Code to its corporate governance structure and practices as described in the Corporate Governance Report contained in the 2020 Annual Report and on the HKEX Group website.

PURCHASE, SALE OR REDEMPTION OF HKEX'S LISTED SECURITIES

During 2020, neither the Company nor any of its subsidiaries purchased, sold, or redeemed any of 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 84,000 HKEX shares at a total consideration of \$31 million.

PUBLICATION OF 2020 FINAL RESULTS AND ANNUAL REPORT

This announcement is published on the HKEXnews website at www.hkexnews.hk and the HKEX Group website at www.hkexgroup.com/Investor-Relations/Regulatory-Disclosure/Announcements/2021. The 2020 Annual Report will be available on the HKEXnews and HKEX Group websites and despatched to Shareholders on or about Wednesday, 17 March 2021.

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

Hong Kong, 24 February 2021

As at the date of this announcement, HKEX's Board of Directors comprises 12 Independent Non-executive Directors, namely Mrs Laura May-Lung CHA (Chairman), Mr Apurv BAGRI, Mr CHAN Tze Ching, Ignatius, Mr CHEAH Cheng Hye, Mrs CHOW WOO Mo Fong, Susan, Ms FUNG Yuen Mei, Anita, Mr Rafael GIL-TIENDA, Dr HU Zuli, Fred, Mr HUNG Pi Cheng, Benjamin, Mr LEUNG Pak Hon, Hugo, Mr John Mackay McCulloch WILLIAMSON, and Mr YIU Kin Wah, Stephen, and one Executive Director, Mr TAI Chi Kin, Calvin, who is also the Interim Chief Executive of HKEX.

GLOSSARY

2021 AGM	HKEX's annual general meeting to be held on 28 April 2021
ADT	Average daily turnover value
ADV	Average daily volume (in number of contracts/lots)
Awarded Shares	Shares awarded under the Share Award Scheme
BayConnect	BayConnect Technology Company Limited
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 will be explored at a later stage
Cash Market	HKEX's securities related business excluding stock options
CBBCs	Callable Bull/Bear Contracts
CCASS	Central Clearing and Settlement System
ChinaClear	China Securities Depository and Clearing Corporation Limited
CNH	Offshore RMB traded outside Mainland China
CNS	Continuous Net Settlement
CNY	Onshore RMB traded in Mainland China
Corporate Governance Code	Refers to Appendix 14 to the Main Board Listing Rules
CPs	Clearing Participants
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
Elected Directors	Directors elected by the Shareholders at general meetings
EPs	Exchange Participants
ESG	Environmental, Social and Governance
ETF(s)	Exchange Traded Fund(s)
ETP(s)	Exchange Traded Product(s)
Euro	The official currency of the Eurozone
Exchange or SEHK or Stock Exchange	The Stock Exchange of Hong Kong Limited
FIC	Fixed income and currency
FINI	Fast Interface for New Issuance
Fintech	Financial technology
FSR	Federation of Share Registrars Limited
Futures Exchange or HKFE	Hong Kong Futures Exchange Limited
GEM Listing Rules	Rules Governing the Listing of Securities on GEM of The Stock Exchange of Hong Kong Limited
Government Appointed Directors	Directors appointed by the Financial Secretary of the Hong Kong Special Administrative Region of the People's Republic of China 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
HKCC	HKFE Clearing Corporation Limited
HKEX or the Company	Hong Kong Exchanges and Clearing Limited
HKEX Foundation	HKEX Foundation Limited
HKFRS(s)	Hong Kong Financial Reporting Standard(s)
HKICPA	Hong Kong Institute of Certified Public Accountants
HKSCC	Hong Kong Securities Clearing Company Limited
HONIA	Hong Kong Dollar Overnight Index Average
HSCEI	Hang Seng China Enterprises Index

HSI	Hang Seng Index
Innovation Lab	HKEX Innovation and Data Lab
INR	Indian Rupee
IPO(s)	Initial Public Offering(s)
Iron Ore Futures	TSI Iron Ore Fines 62 per cent Fe CFR China Futures
IT	Information Technology
JD.com	JD.com, Inc.
L&I Products	Leveraged and Inverse Products
Listing Committee	Listing Committee of the Main Board and GEM
Listing Rule(s)	Main Board Listing Rules and GEM Listing Rules
LME	The London Metal Exchange
LME Clear	LME Clear Limited
London Metal Mini Futures	London Aluminium/Zinc/Copper/Nickel/Tin/Lead Mini Futures
LSEG	London Stock Exchange Group plc
Main Board Listing Rules	Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited
MiFID II	Markets in Financial Instruments Directive II
MSCI	MSCI Inc.
NetEase	NetEase, Inc.
Nongfu Spring	Nongfu Spring Co., Ltd.
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
OTC	Over-the-counter
OTC Clear	OTC Clearing Hong Kong Limited
PFMI	"Principles for financial market infrastructures" published by the Committee on Payment and Settlement Systems (now known as the Committee on Payments and Market Infrastructures) and the International Organization of Securities Commissions
PRC	The People's Republic of China
QME	Qianhai Mercantile Exchange Co., Ltd.
RMB	Renminbi
SEOCH	The SEHK Options Clearing House Limited
SFC	Securities and Futures Commission
SFO	Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong)
Shanghai-Hong Kong Stock 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	The Employees' Share Award Scheme adopted by the Board on 14 September 2005 which was subsequently amended on 16 August 2006, 13 May 2010, 17 December 2013 and 17 June 2015
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
SPSA	Special Segregated Account
SSE	Shanghai Stock Exchange
STAGE	HKEX's Sustainable and Green Exchange
STAR Market	Sci-Tech Innovation Board of SSE
SZSE	Shenzhen Stock 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
WVR	Weighted Voting Rights
\$/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)