HKEX INVESTOR PRESENTATION
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Where this document refers to Bond Connect, please note that currently, access to northbound trading is only available to foreign investors that are able to trade onshore bonds on the China Foreign Exchange Trade System & National Interbank Funding Centre.

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Agenda

1. HKEX Group Financial and Market Update
2. HKEX Strategic Plan 2019-2021
3. China Connectivity Update
4. Appendix
   Financial supplement
Q1 2019 – Key Highlights

Revenue and PAT growth
Revenue of $4.3bn (+3% YoY) and PAT of $2.6bn (+2% YoY)

Macro-driven softness in Cash and Derivatives Markets
Futures Exchange’s ADV -3% YoY, Cash Market headline ADT -31% YoY, LME chargeable ADV -3% YoY; However, volumes went up QoQ from improved sentiment

World leader in number of IPOs
As of April, 50 IPOs; Second in IPO funds raised ($33bn)

Record quarterly Stock Connect revenue
Revenue of $232mn (+35% YoY) in Q1 boosted by the proposed further inclusion of China A-shares in global indexes; Reached consensus with mainland exchanges to include WVR companies in Southbound Connect

Growth in Bond Connect
ADT reached RMB5.9bn (+119% YoY), foreign holdings in China’s interbank bond market more than doubled to RMB1.8 trillion as of March; Inclusion of Chinese RMB-denominated bonds in Bloomberg Barclays Global Aggregate Indices from April 2019

Solid contribution from Commodities
Both revenue and EBITDA improved despite a moderate drop in trading volumes; Qianhai Mercantile Exchange, a foundation for HKEX’s commodities business in China, achieved stable volumes since the launch in October 2018
Stable Volumes Across All Asset Classes

Securities ADT (HK$ billion)

Total Funds Raised (HK$ billion)

Derivatives ADV (’000 contracts)

Commodities ADV (’000 lots)

Source: HKEX & LME data

(1) 2019 YTD as of 30 Apr 2019.

(2) Excluding Admin Trades, Commodities Apr YTD 2019 is 611,628 lots.
Hong Kong is Consistently the World’s Largest IPO Market

Ranked No. 1 in 6 of the Past 10 Years

Global Ranking in 2019(1)

Source: HKEX, Dealogic data
(1) As of 30 Apr 2019
(2) # of IPOs for HKEX includes 6 transfers from GEM
### Solid Financial Performance

<table>
<thead>
<tr>
<th>Revenue and Other Income</th>
<th>Operating Expenses (1)</th>
<th>EBITDA</th>
<th>Profit Attributable to HKEX Shareholders</th>
<th>Basic Earnings Per Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>($ million)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Q1 2018</strong></td>
<td><strong>Q1 2019</strong></td>
<td><strong>Q1 2018</strong></td>
<td><strong>Q1 2019</strong></td>
<td><strong>Q1 2018</strong></td>
</tr>
<tr>
<td>$146.1bn</td>
<td>$101.1bn</td>
<td>$146.1bn</td>
<td>$101.1bn</td>
<td>$2.07</td>
</tr>
<tr>
<td>+ 3%</td>
<td>+ 4%</td>
<td>+ 4%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Excl. HKFRS 16 impact**

- ADT
  - $4,150
  - $4,288
  - -31%

- $935
  - $970

**Operating Expenses (1)**

- + 4% (Excl. HKFRS 16 impact)

**EBITDA**

- $3,215
  - $3,318
  - 77% Margin

**Profit Attributable to HKEX Shareholders**

- $2,562
  - $2,608

**Basic Earnings Per Share**

- $2.07
  - $2.09

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(1) Excludes depreciation and amortisation, finance costs, and share of profits less losses of joint ventures

(2) As a result of adopting HKFRS 16: Leases, operating lease rentals are no longer recognised under opex. Instead, they are recognised as right-of-use (RoU) assets and lease liabilities in the consolidated statement of financial position, and they are subsequently charged to P&L under finance costs and depreciation & amortisation.
Investment Income Offsets the Impact of Lower Trading and Clearing Fees

Segmental revenue ($ million)

Q1 2018 | Cash Equity | Equity and Financial Derivatives | Commodities | Post-Trade | Technology | Corporate Items | Q1 2019
---|---|---|---|---|---|---|---
4,150 | -215 | -81 | 5 | -12 | 25 | 416 | 4,288

-19% | -9% | +1% | -1% | +17% | +416% | +3%

% Change year-on-year

- Trading fees & tariffs ↓ from ↓ ADT of equity products
- Listing fees ↑ due to ↑ listed cos and ↑ forfeitures
- Trading fees & tariffs ↓ from ↓ ADT of DWs, CBBCs & warrants, and derivatives ADV
- Listing fees ↓ due to ↓ newly listed DWs and CBBCs
- Trading fees ↓ from ↓ LME chargeable ADV
- New OTC fees
- Clearing fees ↓ from ↓ HK ADT and ↓ SI
- Interest income ↑ due to ↑ interest rates offset by ↑ Margin Fund size
- Network fees ↑ due to new EPs, additional fees arising from the newly introduced throttle monthly usage fees, and China Connect EPs migrating to new China Connect Central Gateway
- Net investment income of Corporate Funds from external portfolio and interest income

(1) Headline ADT down 31% (Q1 2019: $101.1bn; Q1 2018: $146.1bn); ADT of cash equity down 34% (Q1 2019: $74.3bn; Q1 2018: $113.3bn); ADT of DWs, CBBCs and warrants included under equity and financial derivatives down 18% (Q1 2019: $26.8bn; Q1 2018: $32.8bn)
### Lower EBITDA in Some Operating Segments, Reflecting Lower Volumes

**EBITDA**

<table>
<thead>
<tr>
<th>Cash Equity</th>
<th>Equity &amp; Financial Derivatives</th>
<th>Commodities</th>
<th>Post-Trade</th>
<th>Technology</th>
<th>Group Total (incl. Corp. Items)</th>
</tr>
</thead>
<tbody>
<tr>
<td>($ million)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% EBITDA Margin</td>
<td>% Share of Group EBITDA (before Corporate Items)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>%</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Q1 2018</td>
<td>Q1 2019</td>
<td>Q1 2018</td>
<td>Q1 2019</td>
<td>Q1 2018</td>
<td>Q1 2019</td>
</tr>
<tr>
<td>999</td>
<td>767</td>
<td>802</td>
<td>710</td>
<td>1,293</td>
<td>1,267</td>
</tr>
<tr>
<td>30%</td>
<td>25%</td>
<td>24%</td>
<td>23%</td>
<td>5%</td>
<td>6%</td>
</tr>
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<td>Q1 2018</td>
<td>Q1 2019</td>
<td>Q1 2018</td>
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<tr>
<td>88%</td>
<td>84%</td>
<td>85%</td>
<td>82%</td>
<td>87%</td>
<td>86%</td>
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<tr>
<td>Q1 2018</td>
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<td>Q1 2018</td>
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<tr>
<td>51%</td>
<td>54%</td>
<td>174</td>
<td>189</td>
<td>38%</td>
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<tr>
<td>Q1 2018</td>
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<td>Q1 2018</td>
<td>Q1 2019</td>
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</tr>
<tr>
<td>75%</td>
<td>71%</td>
<td>110</td>
<td>121</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>Q1 2018</td>
<td>Q1 2019</td>
<td>Q1 2018</td>
<td>Q1 2019</td>
<td>Q1 2018</td>
<td>Q1 2019</td>
</tr>
<tr>
<td>77%</td>
<td>77%</td>
<td>3,215</td>
<td>3,318</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Trading fees & tariffs**
- from ADT of equity products
- Listing fees due to listed companies and forfeitures
- Opex due to staff costs, partly offset by premises expenses (1)

**Trading fees & tariffs**
- from ADT of DWs, CBBCs & warrants, and derivatives ADV
- Listing fees due to newly listed DWs and CBBCs
- Opex due to staff costs, partly offset by premises expenses (1)

**Trading fees from LME chargeable ADV**
- New OTC fees
- Opex due to staff costs, partly offset by premises expenses (1), and QME opex

**Clearing fees from HK ADT and SI**
- Interest income due to interest rates
- Opex due to staff costs, partly offset by premises expenses (1)

**Network fees due to new EPs, additional fees arising from the newly introduced throttle monthly usage fees, and China Connect EPs migrating to new China Connect Central Gateway**
- Opex due to IT costs consumed by Participants, and inclusion of iLab opex (2)

**Stable**

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(1) As a result of adopting HKFRS 16: Leases, operating lease rentals are no longer recognised under opex. Instead, they are recognised as right-of-use (RoU) assets and lease liabilities in the consolidated statement of financial position, and they are subsequently charged to P&L under finance costs and depreciation & amortisation.

(2) iLab opex was previously included under Corporate Items in Q1 2018, and it is now included under Technology segment as a result of the Group’s reorganisation in Q1 2019.
Q1 2019 Performance above Historical Trend Line

Quarterly performance

($ million)

- Profit attributable to Shareholders
- Revenue and Other Income
- Operating Expenses (1)
- EBITDA

Steady derivatives volume, higher net investment income and Northbound Stock Connect trading offset some macro-driven softness in cash equity trading and clearing fees from reduced volume

(1) Excludes depreciation and amortisation, finance costs, and share of profits less losses of joint ventures
(2) Dotted trend lines are illustrative and do not constitute a forward forecast
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Our Journey So Far

1980s
- Merger of four stock exchanges
- Launched flagship product suite: HSI Futures
- Growing international investors participation but Hong Kong market wasn’t globally significant

1990s
- H-Share listings
- Electronification of trading
- Structured products expansion

2000s
- Demutualisation
- Technology consolidation
- Major Chinese SOE and private enterprise IPOs

2010s
- China Connectivity
- FICC Expansion
- Listing Reforms

2019–
- **Largest** Listed Exchange Group in Asia Pacific
- #1 in IPO Funds Raised Globally in 2018
- **Pioneer** in China Connectivity
- **Multi-asset Class**: Equities, FIC, Commodities

WHERE ARE WE TODAY?
Our 2019-2021 Strategic Vision

The Global Markets Leader in the Asian Time Zone – Connecting China, Connecting the World

Facilitating China's internationalisation and investment diversification
Leveraging new technology for modernisation and growth
Bringing global liquidity to China and Asia Pacific underlying

China Anchored
Technology Empowered
Globally Connected

China Liquidity
Direct Access
Southbound
Global Liquidity
Direct Access
Northbound
China Markets

New Horizons
Market Structure
Technology

Equity
FIC
Commodities
International

Post-trade Infrastructure
Strategic Plan 2019-2021

**Key Initiatives**

**China Anchored**

1. **Expand Northbound capital inflows** by broadening the availability of onshore products and underlying, and through delivering more risk management tools offshore
2. **Expand Southbound capital allocation** to facilitate Mainland investors’ investment diversification by offering more global underlying
3. **Expand post-trade infrastructure** to position Hong Kong as the trusted and secure cross-border trading, settlement, clearing and custody centre, particularly in FICC, and address the capital efficiency needs of both Northbound and Southbound capital

**Globally Connected**

1. **Enhance our product ecosystem across asset classes**, providing global liquidity with more comprehensive access to Hong Kong-listed or traded Asia Pacific underlying in addition to our existing offering, and onshore Chinese products through the Connect programmes
2. **Improve our market microstructure** to make our markets more globally competitive, cost effective and accessible, in order to enhance overall market liquidity
3. **Expand our international footprint further** to broaden and deepen our global operations beyond LME

**Technology Empowered**

1. **Modernise our core systems** to enhance product and service offerings and improve market and operational efficiency
2. **Leverage new technology**, including artificial intelligence, Blockchain, cloud infrastructure, and data analytics, in an agile manner to optimise processes, strengthen client engagement, and engage different parts of our value chain to deliver cost-effective outcomes
3. **Expand our horizons** by leveraging our regulatory and market trust and partnering with China’s technology leaders to explore and pioneer in completely new frontiers, particularly with respect to data as a new asset class for the financial markets
The key strategies for growing our equities business are:

**Clients**
- Improve ease of access
- Expand client base through Stock Connect enhancements and remote participantship
- Expand our international footprint

**Products**
- Grow breadth of underlying through Listing Rule enhancements & working with ETP issuers
- Coordinated approach on building product ecosystem to promote liquidity
- Market microstructure improvements

**Market Microstructure**
- Listing: IPO settlement cycle, listing requirements, corporate action enhancement
- Trading: lower frictional costs e.g. tick size reduction, block trade enhancement
- Post-trade: improve capital efficiency e.g. cross-margining, widen collateral scope
Growth in Our Core Equites Business

Historical Growth Initiatives

Key Drivers

IPOs

Stock Connect
- Increased relevance of the HK market to global investors

Focused Client Marketing
- Increased awareness of HK market
- Targeted client support
- Improved incentives package
- Singapore office presence

Comprehensive Product Ecosystem
- Product cross-selling
- Cross-product arbitrage

Cash Market ADT (HK$ bn)

+ new listing regime
+ Stock Connect
+ new clients
+ new products

Continuous work on optimizing market structure for our customers and developing new growth initiatives will support and drive ADT going forward

Source: HKEX
(1) 2019 YTD as of 30 Apr 2019.
# Overview of Our Product Offering

<table>
<thead>
<tr>
<th></th>
<th>CASH</th>
<th>DERIVATIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stocks</td>
<td>Structured Products</td>
</tr>
<tr>
<td># of Products</td>
<td>2,315</td>
<td>9,610</td>
</tr>
<tr>
<td>ADT / ADV</td>
<td>HK$79.1 bn</td>
<td>HK$23.2 bn</td>
</tr>
<tr>
<td>Listing &amp; Trading Revenue</td>
<td>HK$2.8 bn</td>
<td>HK$1.4 bn</td>
</tr>
<tr>
<td>5-year Revenue Growth</td>
<td>+62%</td>
<td>+89%</td>
</tr>
<tr>
<td>Concentration of ADT / ADV in Top Products</td>
<td>Top 100: 74%</td>
<td>Top 10^4: 88%</td>
</tr>
<tr>
<td>Mainland Underlying Share of ADT / ADV</td>
<td>80%</td>
<td>50%</td>
</tr>
</tbody>
</table>

We have seen strong growth in cash and derivatives revenues in recent years, but our liquidity remains highly concentrated.

Source: HKEX, Bloomberg.

(1) As of 31 December 2018. Equities-related products in derivatives markets.
(2) Full year 2018. Equities-related products in derivatives markets.
(3) Excluding trading tariffs, Northbound trading revenue, and clearing.
(4) Based on underlying.
(5) Top 3 futures products include HSI Futures: 234,424, HSCEI Futures: 152,241, Mini-HSI Futures: 100,282.
(6) Top 3 options products include Stock Options: 517,395, HSCEI Index Options: 98,610, HSI Options: 51,693.
(7) Mainland underlying for derivatives markets refers to products of Mainland-related indices (e.g. HSCEI, CES120) and single-stock products with Mainland underlying.
The Importance of Product Ecosystem

The launch of A-share derivatives will further integrate our ecosystem of HK and onshore underlying

(1) HKEX signed a license agreement with MSCI to introduce futures contracts on the MSCI China A Index, subject to regulatory approval and market conditions
Driving Breadth and Depth of Liquidity in Our Market

Improving efficiency at each level of the trade cycle

- Improve Ease of Access
  - Streamline onboarding process
  - Review incentives packages
  - Enhance market making programmes
  - Remote participantship

- Reduce Frictional Trading Costs
  - Expand short selling eligibility
  - Review board lot and tick sizes
  - Block trading enhancements

- Improve Capital Efficiency
  - Position limit enhancements
  - Improved cross-margining capabilities
  - Broader non-cash collateral scope

- Enhance Risk Management & Market Integrity
  - Market-wide circuit breaker
  - Volatility Control Mechanism enhancements
  - Self-trade prevention

Attracting a broader client base and improving market efficiency will encourage more liquidity across the whole market
Three New Chapters to Attract Emerging & Innovative Companies

Changes to *Main Board Rules* implemented on 30 April 2018:

1. **BIOTECH Chapter**
   - Attract R&D focused Biotech companies
     - At least one Core Product beyond concept stage (e.g. completed FDA Phase I)
     - Market cap ≥HK$1.5bn
     - Primarily engaged in R&D to develop Core Product(s)
     - Meaningful third party investment from sophisticated investors

2. **WVR Chapter**
   - Attract innovative and high growth companies
     - Must be an innovative company with high growth
     - WVR shares for individuals only - must be directors and been responsible for growth of business
     - Market cap ≥HK$10bn and ≥HK$1bn of revenue
     - Meaningful third party investment from sophisticated investors
     - Need to meet additional disclosure requirements and safeguards

3. **SECONDARY LISTING Chapter**
   - Attract innovative and high growth companies
     - Allow Greater China companies to secondary list in Hong Kong
     - Market cap ≥HK$10bn and ≥HK$1bn of revenue
     - Primary listed on NYSE / NASDAQ / LSE for at least 2FYs with good compliance

9 New Chapters Listings raising HK$98bn. Another 5 IPO applications received under New Chapters as of 30 Apr 2019
2019-2021 Strategy – FICC Themes

**Fixed Income and Currency**

- Facilitate CNY access
- Enhance Bond Connect
- Expand suite of offshore rates / FX derivatives on onshore underlying
- Build post-trade infrastructure (custody, settlement, collateral management, FX)

**Commodities**

- Expand product suite
- Pricing evolution
- Mainland China warehouses
- Commodity Connect
Key Components of Our FIC Strategy

Expand Existing Platform
- Bond Connect enhancements
- Listed bonds and derivatives
- Southbound Bond Connect

Capture CNY Opportunities
- CNY accessibility – repository, tracking and monitoring
- IRS and repo + Derivatives Connect
- CNY trading platform

Invest in Post-Trade Infrastructure
- Custody, settlement and collateral management
- Trade repository and monitoring
- International linkages
LME Group Integration Process Complete…

Post-acquisition integration and LME Clear launch
Commercialisation of the platform
Strategic pathway, future platform development and revised fee structure

ADV ('000 lots)

<table>
<thead>
<tr>
<th>Year</th>
<th>ADV ('000 lots)</th>
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<tbody>
<tr>
<td>2010</td>
<td>475</td>
</tr>
<tr>
<td>2011</td>
<td>584</td>
</tr>
<tr>
<td>2012</td>
<td>634</td>
</tr>
<tr>
<td>2013</td>
<td>676</td>
</tr>
<tr>
<td>2014</td>
<td>700</td>
</tr>
<tr>
<td>2015</td>
<td>670</td>
</tr>
<tr>
<td>2016</td>
<td>619</td>
</tr>
<tr>
<td>2017</td>
<td>624</td>
</tr>
<tr>
<td>2018</td>
<td>730</td>
</tr>
</tbody>
</table>

Source: LME data
(1) Excluding Admin Trades, 2018: 629,556 lots.
...with Commodities Now a Core Part of the HKEX Strategic Plan

**GLOBALLY CONNECTED**
- Expand commodities product suite

**CHINA ANCHORED**
- Pricing evolution
- Commodity Connect
- Mainland China warehouses

**TECHNOLOGY EMPOWERED**
- New market data and trading platform

Business underpinned by culture, values and corporate social responsibility (“CSR”)
Our Technology Focus in the Coming Three Years

Modernise Core Infrastructure
- Orion Trading Platform rollout to LME (2020) and Derivatives (2022)
- Next Generation Post-Trade infrastructure

Leverage New Technologies
- Approach different segments of our value chain with DLT and Artificial Intelligence
- Digitise and automate client interactions and manual processes
- Grow our capabilities in data systems and analytics

Explore New Horizons
- Innovation Lab to evaluate and prototype FinTech applications
- Partner with China’s technology leaders to enter new business areas
Enhancing our IT resources – Strategic Investment

Brings expertise in advanced technology and reduces vendor dependence risk

**Enhanced Capabilities**
- 200 staff, with 80%+ R&D and Engineering
- Access to Kingdom Sci-Tech’s broad development team

**Reduced Implementation Risk**
- Tested delivery capability, with 200+ projects delivered
- Reduce vendor outsourcing and timing risk

**Long-Term Value**
- Depth of knowledge in Artificial Intelligence and DLT
- A self-sustaining business with positive cash-flow and earnings
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The Penetration Level of Equity Market through Stock Connect

**Stock Connect Coverage** (% of all Mainland & HK listed companies)

- **82%** of total market cap
- **66%** of total turnover
- **30%** of total number of companies

**% of domestic market included in Stock Connect**

<table>
<thead>
<tr>
<th></th>
<th>MUTUAL MARKET</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>By Market Cap</strong></td>
<td></td>
</tr>
<tr>
<td>SSE</td>
<td>84%</td>
</tr>
<tr>
<td>SZSE</td>
<td>73%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>88%</td>
</tr>
<tr>
<td><strong>By Turnover</strong></td>
<td></td>
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<tr>
<td>SSE</td>
<td>67%</td>
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<tr>
<td>SZSE</td>
<td>60%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>93%</td>
</tr>
<tr>
<td><strong>By Number</strong></td>
<td></td>
</tr>
<tr>
<td>SSE</td>
<td>40%</td>
</tr>
<tr>
<td>SZSE</td>
<td>34%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>580</td>
</tr>
</tbody>
</table>

Source: SSE, SZSE, HKEX.
Data as of 29 Mar 2019.
2018
- Major volatility in 2018 due to geopolitical risk and escalating US/China tensions.
- Despite weakening sentiment, cash market reached highest full-year ADT partly due to new listing reform and Stock Connect.
- Continue to enhance product portfolio by capitalizing on A shares inclusion in MSCI indices.

2019
- Market sentiment improved in Q1 partly driven by positive news on the trade negotiation between China and the US.
- Northbound trading volumes significantly improved after the inclusion of A-shares in MSCI. NB record high of RMB77.4bn on 6th May.
**Stock Connect – Trading Trends**

Stock Connect contributed $232m in income in Q1 2019, 35% higher than Q1 2018

### Stock Connect Average Daily Trading Volume (HKD bn)

<table>
<thead>
<tr>
<th>Quarter</th>
<th>1Q 15</th>
<th>2Q 15</th>
<th>3Q 15</th>
<th>4Q 15</th>
<th>1Q 16</th>
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<th>1Q 18</th>
<th>2Q 18</th>
<th>3Q 18</th>
<th>4Q 18</th>
<th>Jan-19</th>
<th>Feb-19</th>
<th>Mar-19</th>
<th>Apr-19</th>
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<tbody>
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</tr>
<tr>
<td>Southbound</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

- Northbound turnover has been significantly higher in Q1 2019, continuing on the strong performance in 2018 especially after the MSCI A-shares inclusion
- Southbound trading in Q1 2019 picked up versus 2H 2018 due to better market conditions

### Further index inclusions in 2019 are expected to stimulate Northbound turnover

Source: HKEX data as of 30 Apr 2019  
* NB record of RMB77.4bn on 6 May 2019  
(1) Northbound (NB) trading is conducted in RMB; The NB figures in the chart are converted to HKD based on the month-end exchange rate
## Roadmap of Major Index Inclusion of A-shares

### China A-shares Inclusion

<table>
<thead>
<tr>
<th>Time</th>
<th>MSCI</th>
<th>FTSE Russell</th>
</tr>
</thead>
<tbody>
<tr>
<td>TODAY(1)</td>
<td>0.72%</td>
<td>Nil</td>
</tr>
<tr>
<td>IF=5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>3.33%</td>
<td>n.a.</td>
</tr>
<tr>
<td>IF=20%</td>
<td>IF=15%</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>3.33%</td>
<td>5.33%</td>
</tr>
<tr>
<td>IF=20%</td>
<td>IF=25%</td>
<td></td>
</tr>
</tbody>
</table>

### Further inclusion – some determining factors

- Access to hedging and derivatives products
- Short settlement cycle of China A shares
- Trading holidays of Stock Connect
- Availability of Omnibus trading mechanism in Stock Connect
- Increase in the aggregate QFII and RQFII quota levels
- Increase in the breadth of Stock Connect coverage
- Availability of DVP via QFII and RQFII
- Availability of CNH

Source: HKEX, MSCI and FTSE Russell

(1) MSCI data as of 22 January 2019; FTSE Russell data as of 31 December 2018

(2) IF = Inclusion Factor. Roadmap – MSCI: 2018 (5%), May19 (10%), Aug19 (15%), Nov19 (20%); FTSE Russell: Jun19 (5%), Sep19 (15%), Mar20 (25%)
Stock Connect (Northbound)

### Average Daily Turnover

<table>
<thead>
<tr>
<th>Year</th>
<th>RMB(bn)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>4.7</td>
</tr>
<tr>
<td>2017</td>
<td>9.6</td>
</tr>
<tr>
<td>2018</td>
<td>20.5</td>
</tr>
<tr>
<td>Jan</td>
<td>21.7</td>
</tr>
<tr>
<td>Feb</td>
<td>40.1</td>
</tr>
<tr>
<td>Mar</td>
<td>55.0</td>
</tr>
<tr>
<td>Apr</td>
<td>62.0</td>
</tr>
<tr>
<td>May</td>
<td>34.7</td>
</tr>
<tr>
<td>31 May</td>
<td>31.7</td>
</tr>
</tbody>
</table>

**MSCI rebalancing days**

- 2018: 785 days
- 2017: 951 days
- 2019: 1,033 days
- 2020: 1,050 days

### Portfolio Value

<table>
<thead>
<tr>
<th>Year</th>
<th>RMB(bn)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>2017</td>
</tr>
<tr>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>Jan</td>
<td>202</td>
</tr>
<tr>
<td>Feb</td>
<td>233</td>
</tr>
<tr>
<td>Mar</td>
<td>253</td>
</tr>
<tr>
<td>Apr</td>
<td>270</td>
</tr>
<tr>
<td>May</td>
<td>301</td>
</tr>
<tr>
<td>Jun</td>
<td>347</td>
</tr>
<tr>
<td>Jul</td>
<td>366</td>
</tr>
<tr>
<td>Aug</td>
<td>404</td>
</tr>
<tr>
<td>Sep</td>
<td>437</td>
</tr>
<tr>
<td>Oct</td>
<td>491</td>
</tr>
<tr>
<td>Nov</td>
<td>502</td>
</tr>
<tr>
<td>Dec</td>
<td>530</td>
</tr>
</tbody>
</table>

**MSCI rebalancing events**

- 2018: 601 days
- 2017: 576 days
- 2019: 566 days
- 2020: 592 days

Source: HKEX; data as of 30 Apr 2019
A-Shares Inclusion Drives Demand for Hedging Tools

HKEX signed a license agreement with MSCI to introduce futures contracts on the MSCI China A Index, subject to regulatory approval and market conditions.

- Complement Stock Connect access to Mainland China’s equity markets with an effective risk management tool
- HKEX/MSCI partnership directly responds to international trading communities’ need
- 388 index constituents as at Mar 2019 (increasing to 421 in Nov 2019) comprising large cap and mid cap A-shares accessible via Stock Connect
- Detailed product specifications to be announced following regulatory approval

MSCI

A-Shares weighting in MSCI EM Index

<table>
<thead>
<tr>
<th>TODAY</th>
<th>NOV 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.72%</td>
<td>3.33%</td>
</tr>
</tbody>
</table>

IF = Inclusion Factor. Roadmap – MSCI: 2018 (5%), May19 (10%), Aug19 (15%), Nov19 (20%)

The MSCI China A Index represents the A-share portion of the MSCI Emerging Markets Index upon the completion of MSCI’s inclusion process in 2019.
## Index Futures on China Underlying

### ADV (‘000 contracts)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hang Seng Index Futures (50)(^3)</td>
<td>858</td>
<td>948</td>
<td>808</td>
<td>806</td>
<td>1318</td>
<td>1278</td>
<td>2348</td>
<td>2258</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HSCEI Futures (50)(^3)</td>
<td>505</td>
<td>615</td>
<td>655</td>
<td>895</td>
<td>865</td>
<td>1355</td>
<td>1345</td>
<td>1175</td>
<td>1465</td>
<td></td>
</tr>
<tr>
<td>FTSE China A50 Index Futures (SGX) (50)(^3)</td>
<td>22</td>
<td>122</td>
<td>392</td>
<td>842</td>
<td>1592</td>
<td>2702</td>
<td>2602</td>
<td>3392</td>
<td>4522</td>
<td></td>
</tr>
<tr>
<td>CSI 300 Index Futures (CFFEX) (300)(^3)</td>
<td>2512</td>
<td>2072</td>
<td>4322</td>
<td>8122</td>
<td>8842</td>
<td>11362</td>
<td>1722</td>
<td>1722</td>
<td>3122</td>
<td>9322</td>
</tr>
</tbody>
</table>

### Weighting Composition

- **Mainland China**: 52%
- **Others**: 48%

### Notional Value

- **US$189k**
- **US$74k**
- **US$14k**
- **US$175k**

### Source:
HKEX, SGX, CFFEX, FIA. (Latest available data.)

1. As at 30 Apr 2019.
2. CSI 300 Index Futures was launched in Apr 2010.
3. Numbers in brackets represent the number of constituents within the underlying index.
Tapping into China’s Vast Bond Market

**Key Policy Drivers**
- Risk migration from banking sector to bond market
- Greater credit differentiation amid ongoing market reforms
- Funding needs for economic transition and infrastructure projects – e.g. Belt & Road; Panda bonds
- Enhanced bond issuance and disclosure standards

**Growing International Demand**
- Yield differential against developed markets
- Inclusion in emerging market bond indices
- Geographical and asset class diversification
- Growing convertibility of RMB / SDR inclusion
- More efficient access – Bond Connect

Sources: WIND, CBRC (Aug 2018), IMF, SIFMA
Bond Connect Has Significantly Grown Foreign Participation in China’s Bond Market

Bond Connect Mar 2019 YTD ADT: RMB 5.9bn

Foreign Participation in the CIBM

Foreign Holdings in Chinese Bonds (US$ bn) vs Foreign Ownership (%)

- Pilot scheme to access CIBM
- RQFII investment
- QFII investment
- long-only investment
- Bond Connect launch

Foreign Ownership (%)

- 2010: 0%
- 2011: 0.5%
- 2012: 1.0%
- 2013: 1.5%
- 2014: 2.0%
- 2015: 2.5%
- 2016: 2.2%
- 2017: 2.2%
- 2018: 2.2%
- 2019: 2.2%

Foreign Ownership %

- US$263bn
- 68%
- 64%
- 46%
- 41%
- 39%
- 38%
- 29%
- 13%
- 8%

Achievable target: ~2%
Average: 38.5%

Sources: ChinaBond + SCH, Bloomberg, BIS
(1) Foreign participation in the CIBM data as of 29 Mar 2019

Growth Drivers

- Inclusion of Mainland bonds in global fixed income indices (6% of Bloomberg index weighting by 2020)
- Greater adoption of RMB globally and need to reinvest in RMB assets
- Improving access to the Mainland bond market

Number of Bond Connect participants has grown to 711

Foreign participation in the CIBM increased by 109% over the 21 months since launch of Bond Connect

DE, FR, AU, UK, IT, CA, US, RU, JP, China
Agenda

1. HKEX Group Financial and Market Update
2. HKEX Strategic Plan 2019-2021
3. China Connectivity Update
4. Appendix
   Financial supplement
## Financial Highlights – Income Statement

<table>
<thead>
<tr>
<th>($ million, unless stated otherwise)</th>
<th>Q1 2019</th>
<th>% of Revenue &amp; Other Income</th>
<th>Q1 2018</th>
<th>% of Revenue &amp; Other Income</th>
<th>Y-o-Y Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Results</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue and other income</td>
<td>4,288</td>
<td>100%</td>
<td>4,150</td>
<td>100%</td>
<td>3%</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>(970)</td>
<td>(23%)</td>
<td>(935)</td>
<td>(23%)</td>
<td>4%</td>
</tr>
<tr>
<td><strong>EBITDA</strong></td>
<td>3,318</td>
<td>77%</td>
<td>3,215</td>
<td>77%</td>
<td>3%</td>
</tr>
<tr>
<td>Depreciation and amortisation</td>
<td>(248)</td>
<td>(6%)</td>
<td>(180)</td>
<td>(4%)</td>
<td>38%</td>
</tr>
<tr>
<td><strong>Operating profit</strong></td>
<td>3,070</td>
<td>72%</td>
<td>3,035</td>
<td>73%</td>
<td>1%</td>
</tr>
<tr>
<td>Finance costs and share of profits less losses of joint ventures</td>
<td>(41)</td>
<td>(1%)</td>
<td>(25)</td>
<td>(1%)</td>
<td>64%</td>
</tr>
<tr>
<td><strong>Profit before taxation</strong></td>
<td>3,029</td>
<td>71%</td>
<td>3,010</td>
<td>73%</td>
<td>1%</td>
</tr>
<tr>
<td>Taxation</td>
<td>(422)</td>
<td>(10%)</td>
<td>(456)</td>
<td>(11%)</td>
<td>-7%</td>
</tr>
<tr>
<td>Loss attributable to non-controlling interests</td>
<td>1</td>
<td>0%</td>
<td>8</td>
<td>0%</td>
<td>-88%</td>
</tr>
<tr>
<td><strong>Profit attributable to HKEX shareholders</strong></td>
<td>2,608</td>
<td>61%</td>
<td>2,562</td>
<td>62%</td>
<td>2%</td>
</tr>
<tr>
<td>Basic earnings per share (HK$)</td>
<td>$2.09</td>
<td></td>
<td>$2.07</td>
<td></td>
<td>1%</td>
</tr>
<tr>
<td><strong>Headline ADT on the Stock Exchange</strong></td>
<td>$101.1 bn</td>
<td></td>
<td>$146.1 bn</td>
<td></td>
<td>-31%</td>
</tr>
<tr>
<td>Capex</td>
<td>$145 m</td>
<td></td>
<td>$153 m</td>
<td></td>
<td>-5%</td>
</tr>
</tbody>
</table>

(1) % does not add up due to roundings
## Performance by Operating Segment

<table>
<thead>
<tr>
<th>$ million</th>
<th>Cash Equity</th>
<th>Equity &amp; Financial Derivatives</th>
<th>Commodities</th>
<th>Post-Trade</th>
<th>Technology</th>
<th>Corporate Items</th>
<th>Group Q1 2019</th>
<th>Group Q1 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue and other income</td>
<td>915</td>
<td>862</td>
<td>349</td>
<td>1,475</td>
<td>171</td>
<td>516</td>
<td>4,288</td>
<td>4,150</td>
</tr>
<tr>
<td>% of Group Total</td>
<td>21%</td>
<td>20%</td>
<td>8%</td>
<td>35%</td>
<td>4%</td>
<td>12%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>(148)</td>
<td>(152)</td>
<td>(160)</td>
<td>(208)</td>
<td>(50)</td>
<td>(252)</td>
<td>(970)</td>
<td>(935)</td>
</tr>
<tr>
<td>EBITDA</td>
<td>767</td>
<td>710</td>
<td>189</td>
<td>1,267</td>
<td>121</td>
<td>264</td>
<td>3,318</td>
<td>3,215</td>
</tr>
<tr>
<td>% of Group Total (1)</td>
<td>23%</td>
<td>21%</td>
<td>6%</td>
<td>38%</td>
<td>4%</td>
<td>8%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>EBITDA margin</td>
<td>84%</td>
<td>82%</td>
<td>54%</td>
<td>86%</td>
<td>71%</td>
<td>51%</td>
<td>77%</td>
<td>77%</td>
</tr>
<tr>
<td>Depreciation and amortisation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(248)</td>
<td>(180)</td>
<td></td>
</tr>
<tr>
<td>Finance costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(44)</td>
<td>(27)</td>
<td></td>
</tr>
<tr>
<td>Share of profits less losses of joint ventures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Profit before taxation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3,029</td>
<td>3,010</td>
<td></td>
</tr>
</tbody>
</table>

(1) % Share of Group EBITDA (including Corporate Items)
## Operating Expenses

Total opex excluding depreciation & amortisation – Q1 2019: $970m (Q1 2018: $935m)

<table>
<thead>
<tr>
<th></th>
<th>Q1 2018</th>
<th>Q1 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Staff costs</strong></td>
<td>599</td>
<td>669</td>
</tr>
<tr>
<td><strong>IT &amp; computer</strong></td>
<td>120</td>
<td>143</td>
</tr>
<tr>
<td><strong>Premises expenses</strong></td>
<td>100</td>
<td>31</td>
</tr>
<tr>
<td><strong>Legal &amp; professional fees</strong></td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td><strong>Other operating expenses (1)</strong></td>
<td>103</td>
<td>115</td>
</tr>
<tr>
<td><strong>Depreciation and amortisation</strong></td>
<td>180</td>
<td>248</td>
</tr>
</tbody>
</table>

### Notes:
1. Includes product marketing and promotion expenses
2. As a result of adopting HKFRS 16: Leases, operating lease rentals are no longer recognised under opex. Instead, they are recognised as right-of-use (RoU) assets and lease liabilities in the consolidated statement of financial position, and they are subsequently charged to P&L under finance costs and depreciation & amortisation.
### Drivers of Trading and Clearing Revenue

Relationship between headline ADT and overall trading and clearing income is not linear

<table>
<thead>
<tr>
<th></th>
<th>Cash Equity</th>
<th>Equity &amp; Financial Derivatives</th>
<th>Commodities</th>
<th>Post-Trade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>($ million)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 19%</td>
<td>- 9%</td>
<td>+ 1%</td>
<td>- 1%</td>
</tr>
<tr>
<td></td>
<td>ADT</td>
<td>ADT</td>
<td>LME chargeable ADV(2)</td>
<td>ADT</td>
</tr>
<tr>
<td></td>
<td>$113.3bn</td>
<td>$32.8bn</td>
<td>628k</td>
<td>$146.1bn</td>
</tr>
<tr>
<td></td>
<td>-34%</td>
<td>-18%</td>
<td>-3%</td>
<td>-31%</td>
</tr>
<tr>
<td></td>
<td>$74.3bn</td>
<td>$26.8bn</td>
<td>611k</td>
<td>$101.1bn</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HKFE ADV(1)</td>
<td>Stock Options ADV</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>675k</td>
<td>665k</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-3%</td>
<td>-21%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>658k</td>
<td>528k</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stock Exchange listing fees</td>
<td>Other revenue and sundry income</td>
<td>Depository, custody and nominee services fees</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Net investment income</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

![Graph showing trading fees and trading tariffs, Stock Exchange listing fees, Market data fees, Other revenue and sundry income, Clearing and settlement fees, Net investment income, and Depository, custody and nominee services fees](image)

(1) Excludes London Metal Mini Futures, Gold Futures and Iron Ore Futures
(2) Total LME ADV: 712k (Q1 2018: 727k)
Revenue diversification following acquisition of LME, growing Derivatives Market and Stock Connect trading

(1) Includes all products traded on Cash Market platform (ie, equity products, DWs, CBBCs and warrants)
Net investment income – higher returns across external and internal portfolios
Q1 2019: $882m (Q1 2018: $379m)

2018: Total $1,584m

<table>
<thead>
<tr>
<th>Corporate Funds</th>
<th>Margin Funds</th>
<th>Clearing House Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>($ million)</td>
<td>($ million)</td>
<td>($ million)</td>
</tr>
<tr>
<td>2017 2018</td>
<td>2017 2018</td>
<td>2017 2018</td>
</tr>
<tr>
<td>790 207</td>
<td>785 58</td>
<td>24</td>
</tr>
</tbody>
</table>

Average fund size

<table>
<thead>
<tr>
<th>Corporate Funds</th>
<th>Margin Funds</th>
<th>Clearing House Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>($ billion)</td>
<td>($ billion)</td>
<td>($ billion)</td>
</tr>
<tr>
<td>2017 2018</td>
<td>2017 2018</td>
<td>2017 2018</td>
</tr>
<tr>
<td>169.6 20.6</td>
<td>136.6 12.4</td>
<td>194.3 19.1</td>
</tr>
</tbody>
</table>

Net investment income by category of investments

<table>
<thead>
<tr>
<th>Cash &amp; bank deposits</th>
<th>Bonds</th>
<th>Equities</th>
<th>Collective investment schemes</th>
<th>FX</th>
</tr>
</thead>
<tbody>
<tr>
<td>($ million)</td>
<td></td>
<td></td>
<td>($ million)</td>
<td></td>
</tr>
<tr>
<td>912</td>
<td>36</td>
<td>14</td>
<td>632</td>
<td>5</td>
</tr>
</tbody>
</table>

Net investment income for Q1 2019 increased by 133% versus Q1 2018 mainly due to:

(1) Higher fair value gains of collective investment schemes

(2) Higher interest income from Corporate Funds and Margin Funds as a result of increased interest rates partly offset by reduced Margin Fund size