



HKEX DERIVATIVES: TRADING IN THE TIME OF CORONAVIRUS

INTERACTIVE BROKERS WEBINAR

6 MAY 2020



Tae Yoo
Managing Director
Global Client Development
Markets Division

DISCLAIMER

The information contained in this document is for general informational purposes only and does not constitute an offer, solicitation, invitation or recommendation to buy or sell any futures contracts or other products or to provide any investment advice or service of any kind. This document is not directed at, and is not intended for distribution to or use by, any person or entity in any jurisdiction or country where such distribution or use would be contrary to law or regulation or which would subject Hong Kong Exchanges and Clearing Limited (“**HKEX**”), Hong Kong Futures Exchange Limited (“**HKFE**”) (together, the “**Entities**”, each an “**Entity**”), or any of their affiliates, or any of the companies that they operate, to any registration requirement within such jurisdiction or country.

No section or clause in this document may be regarded as creating any obligation on the part of any of the Entities. Rights and obligations with regard to the trading, clearing and settlement of any futures contracts effected on HKFE shall depend solely on the applicable rules of HKFE and the relevant clearing house, as well as the applicable laws, rules and regulations of Hong Kong.

Although the information contained in this document is obtained or compiled from sources believed to be reliable, neither of the Entities guarantees the accuracy, validity, timeliness or completeness of the information or data for any particular purpose, and the Entities and the companies that they operate shall not accept any responsibility for, or be liable for, errors, omissions or other inaccuracies in the information or for the consequences thereof. The information set out in this document is provided on an “as is” and “as available” basis and may be amended or changed. It is not a substitute for professional advice which takes account of your specific circumstances and nothing in this document constitutes legal advice. Neither of the Entities shall be responsible or liable for any loss or damage, directly or indirectly, arising from the use of or reliance upon any information provided in this document.

Hong Kong Exchanges and Clearing Limited (“**HKEX**”) is not affiliated with Interactive Brokers LLC, or any other FINRA broker-dealer.

HKEX Pulse



Futures and Options Information Application

Apple Store



Google Play



Xiaomi



360



Agenda

1

HKEX Group Business Continuity Management Update

2

What happened during Covid-19 pandemic?

3

Equity Index Futures & Options

4

Equity Futures and Options

5

MSCI AC Asia ex Japan NTR Index (AxJ) Futures

HKEX Group Business Continuity Management Update

Maintaining Robust Markets in Turbulent Times: [\(Click Here\)](#)

HKEX Chief Executive, Charles Li

- The COVID-19 outbreak has caused worldwide economic and social disruption, and at times like these it is critical that global financial markets operators rise to the challenge and provide stable and transparent access to liquidity for issuers, market participants and investors. HKEX's goal, at this time when our community needs us the most, is to ensure that trading, clearing and risk management systems remain fully functional amid heightened volumes and volatility, providing efficiency, reliability, and transparency.

Business Continuity Management : COVID-19 Preparedness [\(Click Here\)](#)

- HKEX has an established and comprehensive business continuity management (BCM) framework that seeks to ensure service resiliency, availability and stability across our platforms, during and around unforeseen events, crisis, or out-of-the-ordinary operating environments.
- In any company, organisation or infrastructure provider, BCM and response procedures consider various scenarios, seeking to minimise, and where possible, negate any impact on business services. HKEX's framework has modelled and anticipated a broad range of scenarios, including pandemics.
- With the outbreak of COVID-19 in late 2019 and early 2020, initially in China, then regionally and globally, the Group has enacted its BCM pandemic plan to address potential risks.
- The Group places the utmost importance on managing the health and safety of its staff and the wider community.
- The Group continues to monitor the evolving situation, including Government guidance and measures initiated, as part of the Preparedness and Response Plan. We also continue to liaise with industry bodies, regulators and experienced business continuity professionals.



What happened during Covid-19 pandemic?: Global Equity Indices

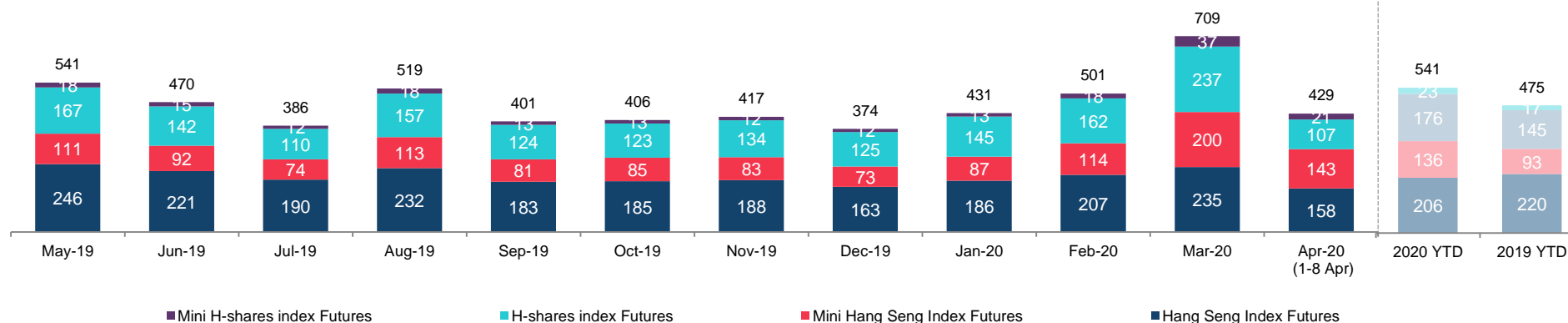
| Indices | | 8 Apr closing | Δ% 1W | Δ% 1M | Δ% YTD | 20D volatility | 52W High | 52W Low |
|----------------|---------------------------|---------------|--------|--------|---------|----------------|----------|----------|
| Hong Kong | HSI | 23,970 | +3.8% | -8.3% | -15.4% | 46.31 | 30,157 | 21,696 |
| | HSCEI | 9,682 | +2.9% | -7.4% | -13.7% | 48.86 | 11,849 | 8,560 |
| | HSI - Finance | 32,517 | +1.8% | -8.9% | -17.2% | 41.52 | 41,998 | 30,638 |
| | HSI - Utilities | 51,582 | +9.7% | -8.4% | -9.5% | 54.82 | 62,861 | 43,267 |
| | HSI - Properties | 33,066 | +4.3% | -8.0% | -17.4% | 53.00 | 45,822 | 28,712 |
| | HSI - Commerce & Industry | 14,236 | +5.8% | -7.6% | -13.0% | 55.76 | 17,444 | 12,189 |
| Mainland China | CSI 300 | 3,780 | +2.9% | -8.7% | -7.4% | 31.27 | 4,207 | 2,965 |
| | SSE 50 | 2,744 | +2.3% | -7.5% | -10.4% | 29.64 | 3,091 | 2,263 |
| | Shanghai Composite | 2,815 | +3.0% | -7.2% | -7.4% | 26.96 | 3,271 | 2,464 |
| | SZSE 100 | 4,534 | +3.4% | -10.3% | -2.0% | 37.81 | 5,131 | 2,936 |
| | CES 120 | 6,435 | +2.2% | -6.8% | -10.5% | 35.72 | 7,312 | 5,524 |
| USA | S&P 500 | 2,750 | +11.3% | -7.5% | -14.6% | 89.62 | 3,386 | 2,237 |
| | Nasdaq 100 | 8,091 | +9.9% | -5.7% | -9.6% | 87.25 | 9,817 | 6,193 |
| | DJIA | 23,434 | +11.9% | -9.4% | -17.7% | 97.05 | 29,551 | 18,592 |
| | CBOE VIX | 43.35 | -24.0% | +3.4% | +192.5% | 197.34 | 82.69 | 11.54 |
| Asia | Nikkei 225 (Japan) | 19,353.2 | +7.1% | -6.7% | -18.2% | 62.3 | 24,083.5 | 16,552.8 |
| | KOSPI (Korea) | 1,807.1 | +7.2% | -11.4% | -17.8% | 72.3 | 2,267.3 | 1,457.6 |
| | TAIEX (Taiwan) | 10,137.5 | +4.9% | -10.5% | -15.9% | 52.2 | 12,179.8 | 8,681.3 |
| | STI (Singapore) | 2,539 | +4.1% | -14.2% | -21.2% | 62.47 | 3,407 | 2,233 |
| Europe | DAX (Germany) | 10,333 | +8.3% | -10.5% | -22.0% | 62.44 | 13,789 | 8,442 |
| | FTSE 100 (UK) | 5,678 | +4.1% | -12.1% | -25.2% | 57.01 | 7,687 | 4,994 |
| | CAC 40 (France) | 4,443 | +5.6% | -13.6% | -25.7% | 63.30 | 6,111 | 3,755 |
| | FTSE MIB (Italy) | 17,381 | +5.1% | -16.4% | -26.1% | 56.07 | 25,478 | 14,894 |



What happened during Covid-19 pandemic?: HKEX Equity Derivatives

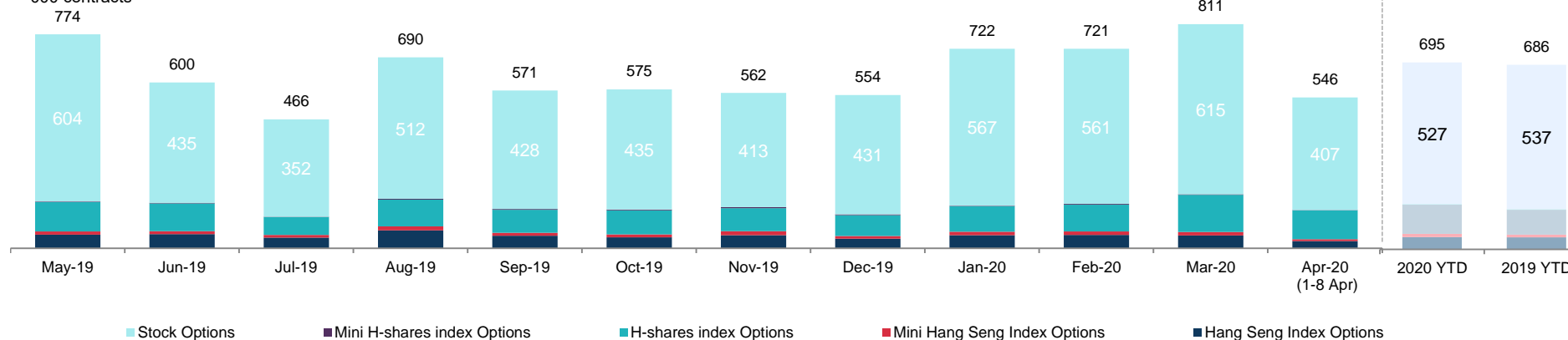
Futures Average Daily Volume

'000 contracts



Options Average Daily Volume

'000 contracts



Equity Index Futures & Options

Hang Seng Index (HSI) and Hang Seng China Enterprise Index (HSCEI) Products

| HSI Products (2020 vs 2019) | ADV | OI* |
|--|----------------|----------------|
| HSI Futures | 210,477 (+1%) | 117,709 (-3%) |
| Mini-HSI Futures | 135,776 (+51%) | 10,373 (-2%) |
| HSI Options | 54,632 (+8%) | 289,561 (+38%) |
| Mini-HSI Options | 16,421 (+21%) | 19,401 (+8%) |
| HSI Volatility Index Futures | 3 (+200%) | 1 (-80%) |
| HSI Dividend Point Index Futures | 141 (+152%) | 7,630 (+302%) |

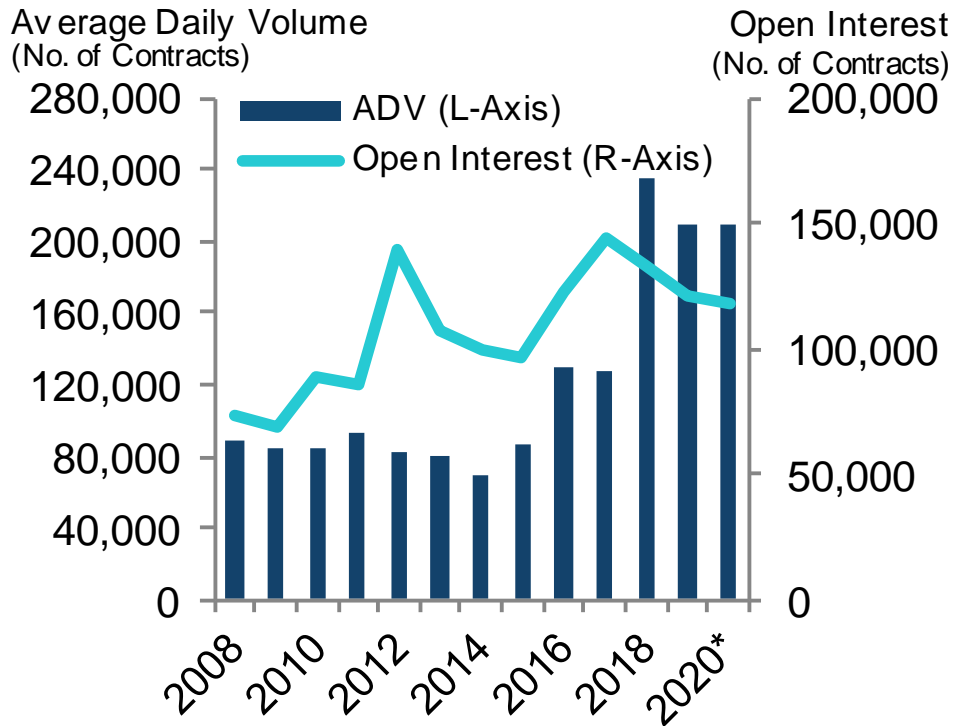
| HSCEI Products (2020 vs 2019) | ADV | OI* |
|--|----------------|------------------|
| HSCEI Futures | 182,562 (+32%) | 344,099 (+6%) |
| Mini HSCEI Futures | 23,051 (+54%) | 5,937 (+41%) |
| HSCEI Options | 106,636 (+22%) | 2,697,572 (+29%) |
| Mini HSCEI Options | 2,626 (+11%) | 17,184 (+34%) |
| HSCEI Dividend Point Index Futures | 3,723 (+72%) | 106,017 (-9%) |



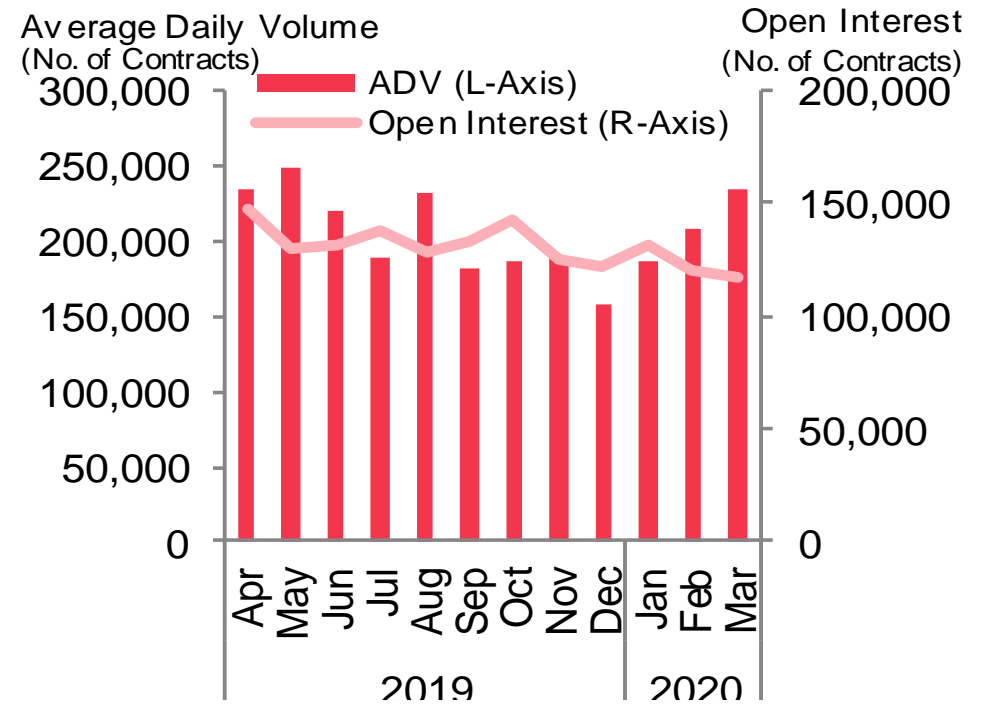
Equity Index Futures & Options

Hang Seng Index (HSI) Futures

HSI Futures (YoY)



HSI Futures (MoM)



Data Source: HKEX

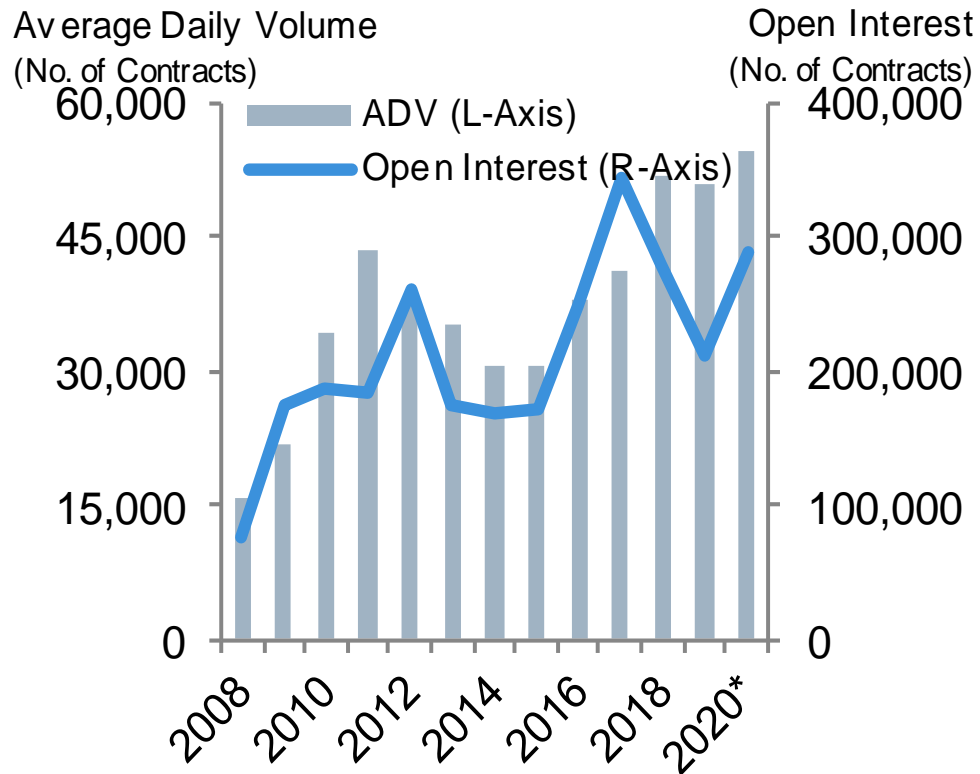
* OI compared to previous year-end
As at 31 March 2020

Information for reference only

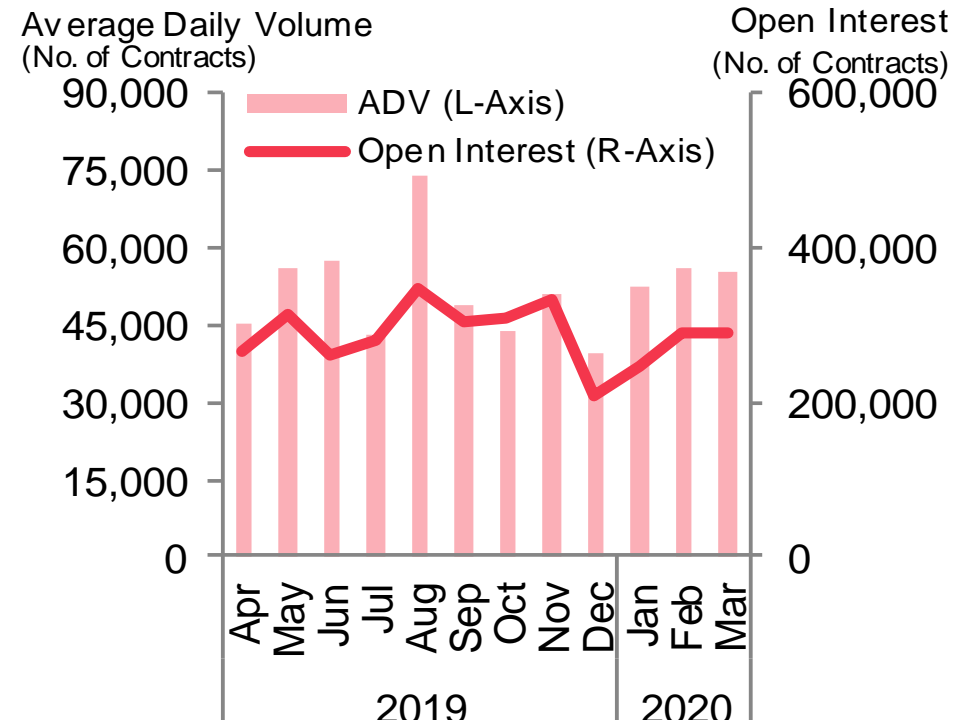
Equity Index Futures & Options

Hang Seng Index (HSI) Options

HSI Options (YoY)



HSI Options (MoM)



Data Source: HKEX

* OI compared to previous year-end
As at 31 March 2020

Information for reference only

Equity Index Futures & Options

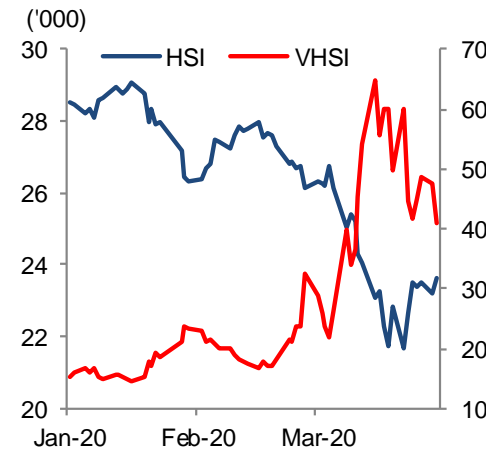
HSI vs Volatility Hang Send Index (VHSI), Top 5 Constituents and Index Options Open Interest

| Hang Seng Index | |
|--------------------------------------|---|
| Index Description | Includes the largest and most liquid stocks listed in Hong Kong |
| Index Level | 23,603.48 (As at 31 Mar 2020) |
| Index Volatility (30-Day Historical) | 20.5 |
| Index Avg. Day High-Low Range | 517.63 (Mar 2020) |
| HSCEI Correlation (2019) | 0.985 |

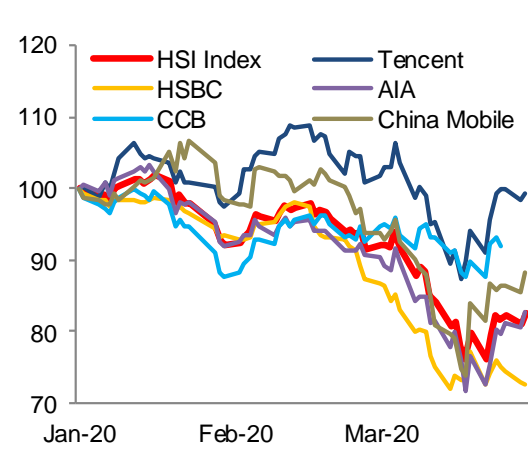
| Hang Seng Index Futures | |
|-----------------------------|--------------------------------|
| Contract Multiplier | HK\$50 |
| Notional Value (1 Contract) | HK\$1.18Mn (As at 31 Mar 2020) |

| Transaction Cost* | |
|--------------------------|---------------------|
| Stamp Duty | N/A |
| Trading Fee | HK\$10 / contract |
| SFC Levy | HK\$0.54 / contract |
| Commission Rate | Negotiable |
| Margin as of 27 Mar 2020 | HK\$116,200 |

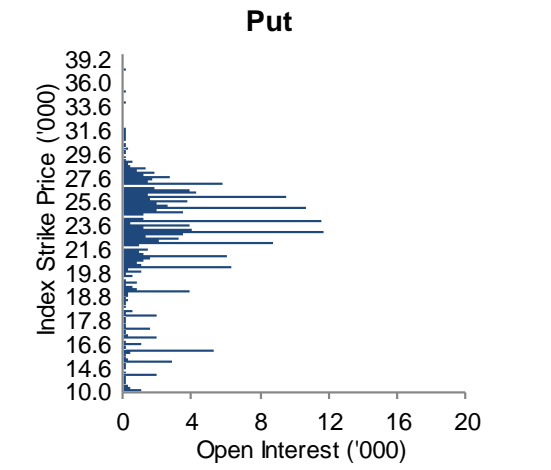
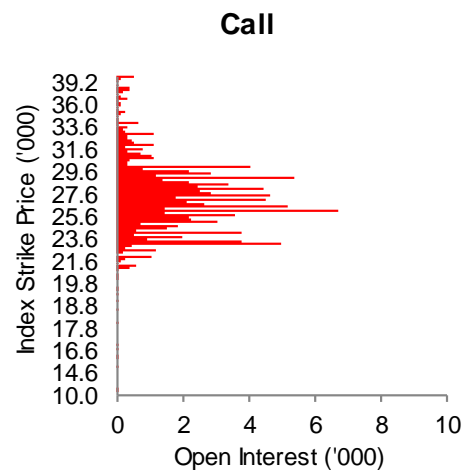
HSI vs VHSI Price Level



HSI & Top 5 Constituents



Distribution of HSI Index Options OI in Month-end



Data Source: HKEX, Bloomberg

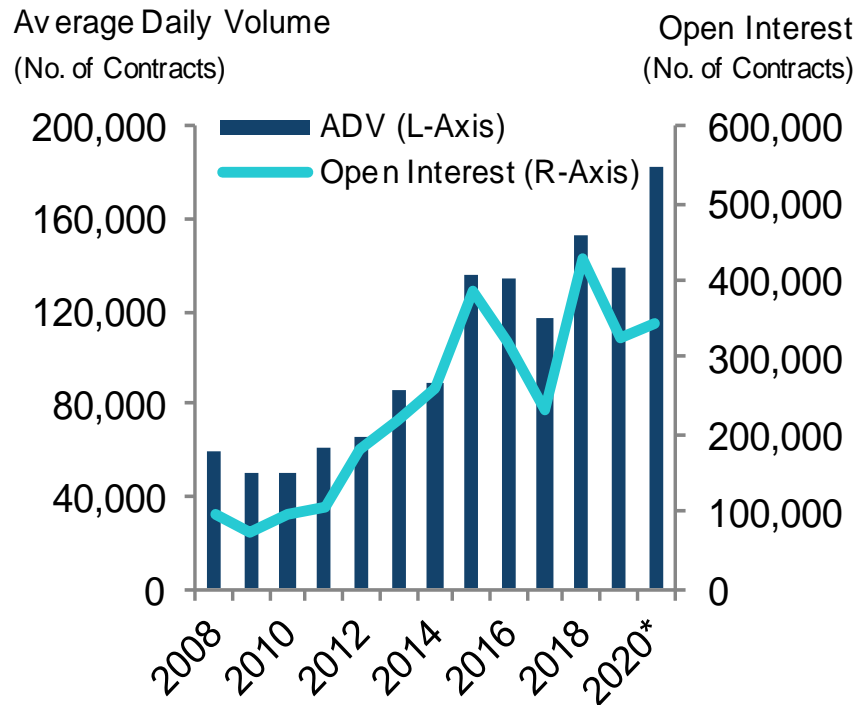
* All calculations are in HKD and exclude commission fees
As at 31 March 2020

Information for reference only

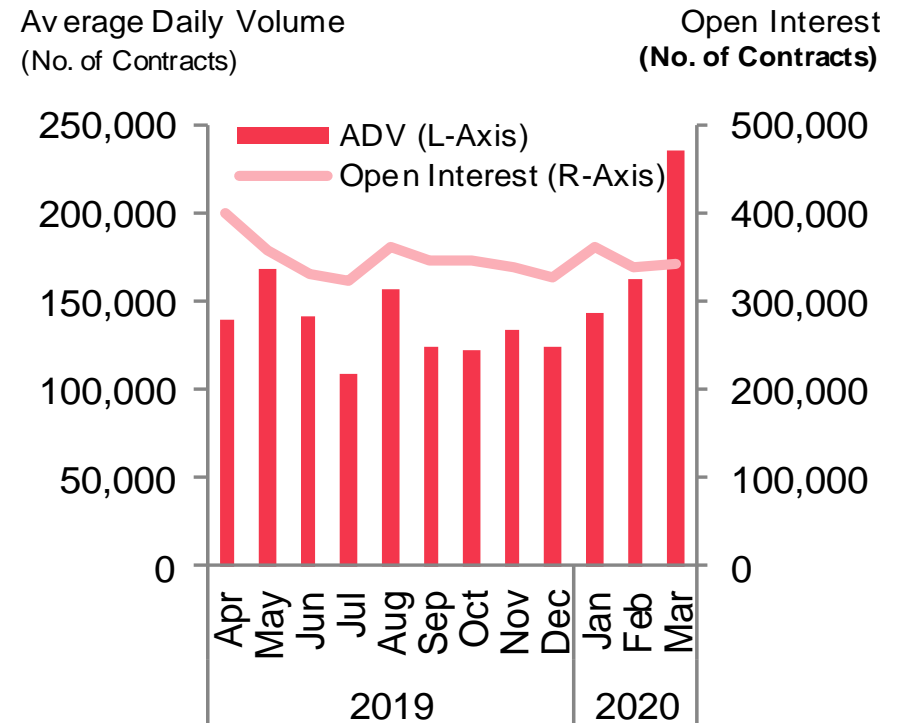
Equity Index Futures & Options

Hang Seng China Enterprises Index (HSCEI) Futures

HSCEI Futures (YoY)



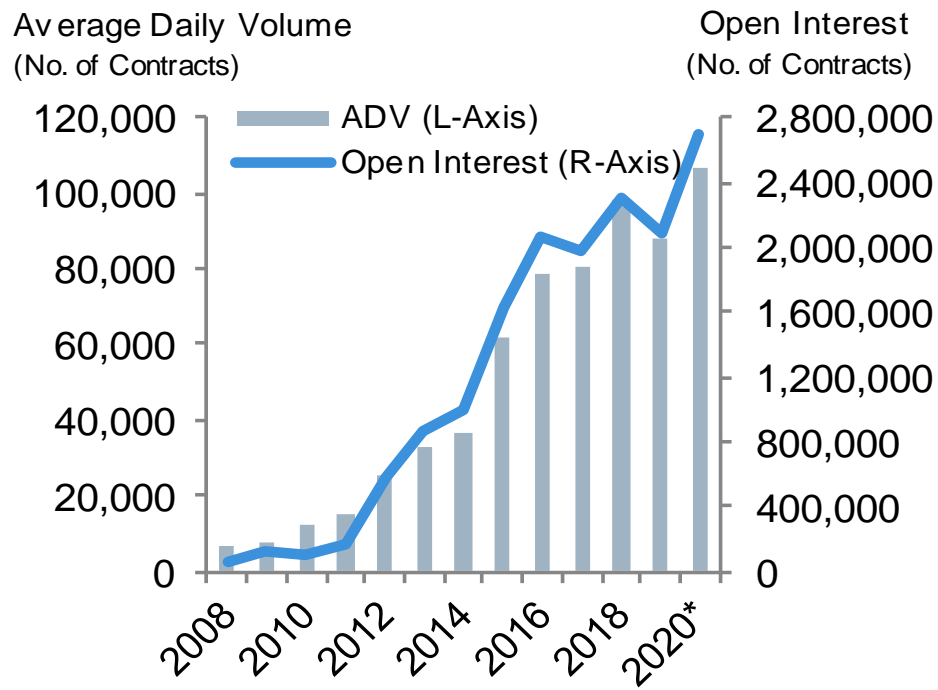
HSCEI Futures (MoM)



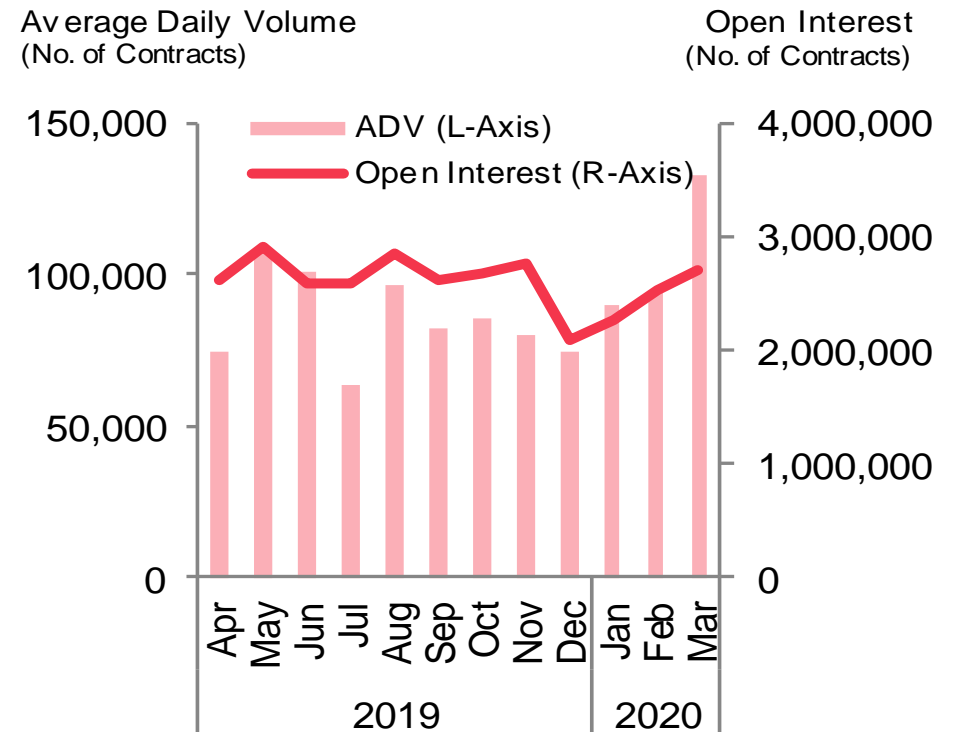
Equity Index Futures & Options

Hang Seng China Enterprises Index (HSCEI) Options

HSCEI Options (YoY)



HSCEI Options (MoM)



Data Source: HKEX

* OI compared to previous year-end

As at 31 March 2020

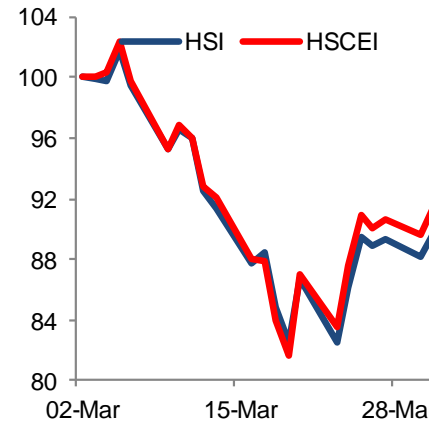
Information for reference only

Equity Index Futures & Options

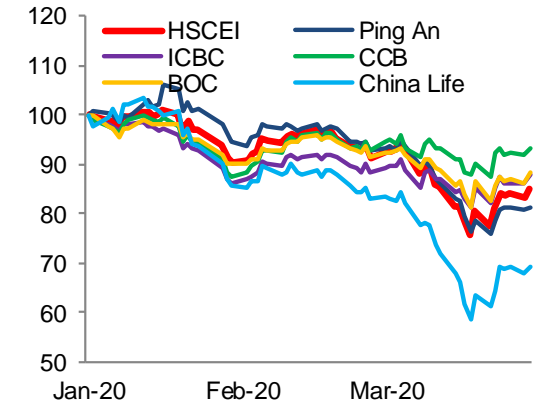
HSCEI vs Volatility Hang Send Index (VHSI), Top 5 Constituents and Index Options Open Interest

| HSCEI | |
|--|--|
| Index Description | Comprises the largest and most liquid H shares |
| Index Level | 9,594.77 (As at 31 Mar 2020) |
| Index Volatility (30-Day Historical) | 21.0 |
| Index Avg. Day High-Low Range | 230.71 (Mar 2020) |
| Correlation with HSI, CES120 (2019) | 0.985, 0.898 |
| Correlation with CSI300, FTSE A50 (2019) | 0.851, 0.886 |

HSI vs HSCEI

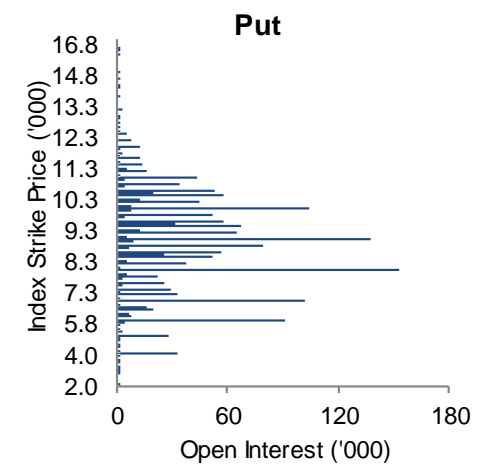
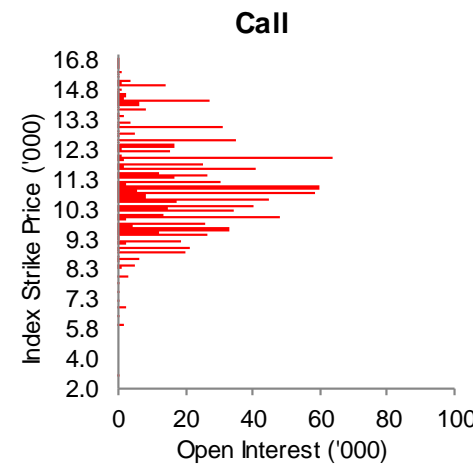


HSCEI & Top 5 Constituents



| HSCEI Futures | |
|-----------------------------|--------------------------------|
| Contract Multiplier | HK\$50 |
| Notional Value (1 Contract) | HK\$0.48Mn (As at 31 Mar 2020) |

Distribution of HSCEI Index Options OI in Month-end



| Transaction Cost* | |
|--------------------------|---------------------|
| Stamp Duty | N/A |
| Trading Fee | HK\$3.5 / contract |
| SFC Levy | HK\$0.54 / contract |
| Commission Rate | Negotiable |
| Margin as of 27 Mar 2020 | HK\$46,400 |

Data Source: HKEX, Bloomberg

* All calculations are in HKD and exclude commission fees
As at 31 March 2020

Information for reference only



Equity Index Futures & Options

Weekly HSI & HSCEI Options

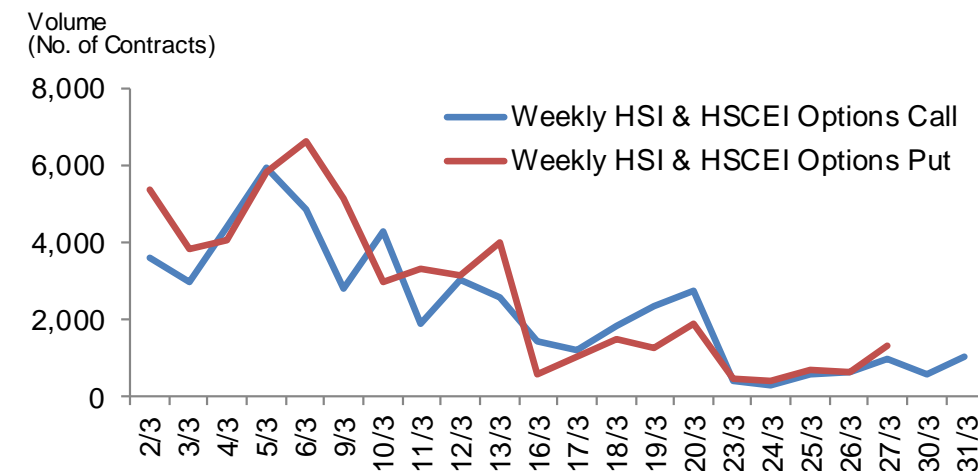
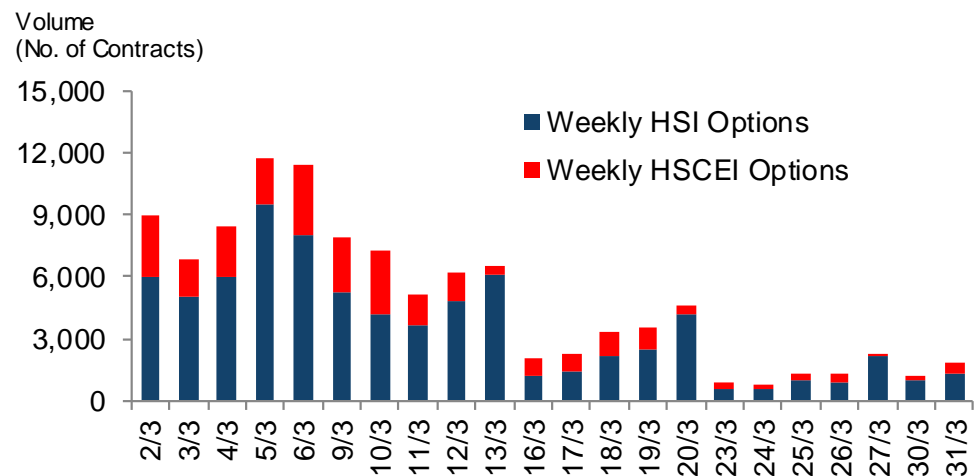
| Weekly HSI Options | |
|---------------------|---|
| Contract Multiplier | HK\$50 |
| Liquidity Providers | Akuna, Eclipse, I-Access, IMC, Maven, Optiver |

| Transaction Cost* | |
|-------------------|---------------------|
| Stamp Duty | N/A |
| Trading Fee | HK\$10 / contract |
| SFC Levy | HK\$0.54 / contract |
| Commission Rate | Negotiable |

| Weekly HSCEI Options | |
|----------------------|---|
| Contract Multiplier | HK\$50 |
| Liquidity Providers | Akuna, Eclipse, I-Access, IMC, Maven, Optiver |

| Transaction Cost* | |
|-------------------|---------------------|
| Stamp Duty | N/A |
| Trading Fee | HK\$3.5 / contract |
| SFC Levy | HK\$0.54 / contract |
| Commission Rate | Negotiable |

Weekly HSI & HSCEI Options Volume



An investment tool to manage short term event risk

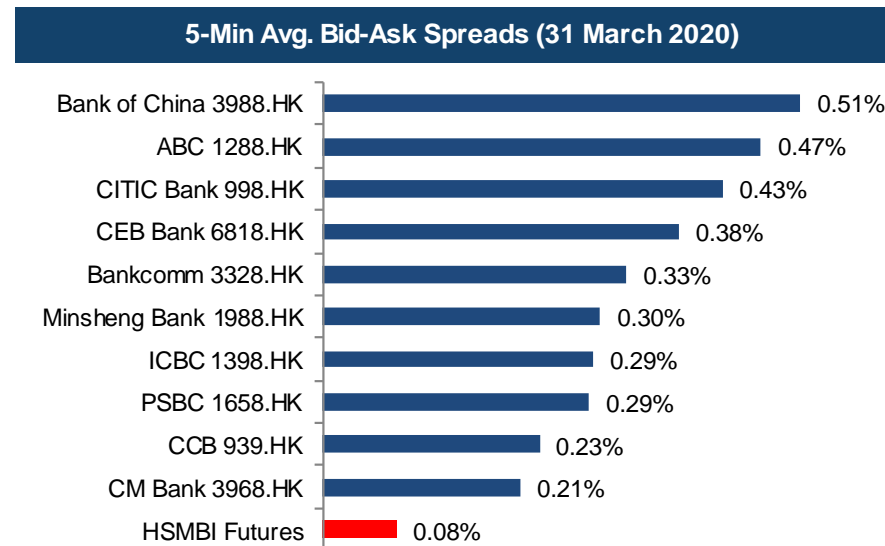


Hang Seng Mainland Banks Index Futures Performance

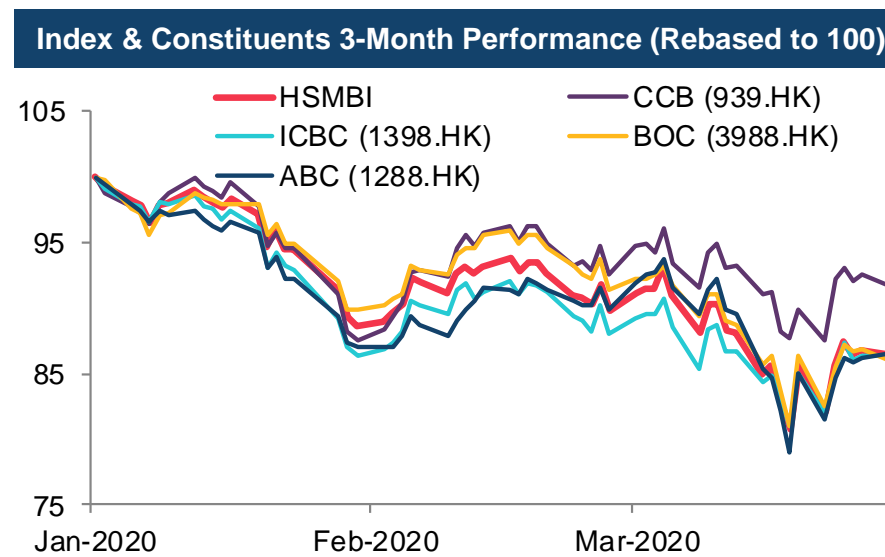
| Hang Seng Mainland Banks Index (HSMBI) | |
|--|--|
| Index Description | 10 largest and most representative HKEX-listed mainland banks stocks |
| Index Level | 2,772.56 (As at 31 March 2020) |
| Index Volatility (30-Day Historical) | 19.7 |
| Index Avg. Day High-Low Range | 55.54 (March 2020) |
| HSI Correlation (2019) | 0.957 |
| HSCEI Correlation (2019) | 0.972 |

| Hang Seng Mainland Banks Index Futures | |
|--|----------------------------------|
| Contract Multiplier | HK\$50 |
| Notional Value (1 Contract) | HK\$0.14Mn (As at 31 March 2020) |
| Avg. Quote Size | HK\$0.69Mn (5 Contracts) |
| Avg. Bid-Ask Trading Spread | 2.2 index points (March 2020) |
| Liquidity Providers | Flow , IMC, Yue Kun |

| Transaction Cost* | |
|--------------------------|---------------------|
| Stamp Duty | N/A |
| Trading Fee | HK\$2 / contract |
| SFC Levy | HK\$0.54 / contract |
| Margin as of 02 Mar 2020 | HK\$7,340 |



1 HSMBI Futures have relatively tighter Bid-Ask Spreads



3 HSMBI Futures can be used for hedging

2 Futures contracts have relatively lower transaction costs



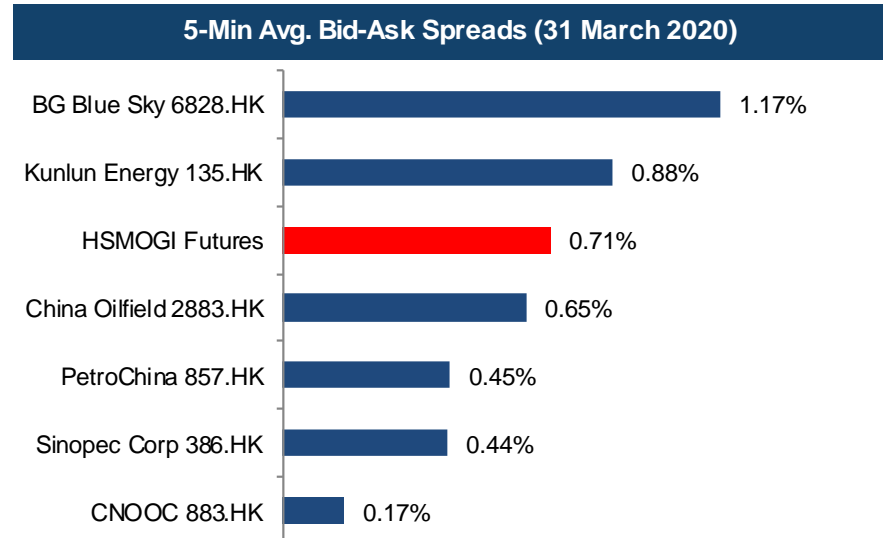
Hang Seng Mainland Oil & Gas Index Futures Performance

| Hang Seng Mainland Oil & Gas Index (HSMOGI) | |
|---|---|
| Index Description | 7 largest and most representative HKEX-listed mainland oil & gas stocks |
| Index Level | 1,111.50 (As at 31 March 2020) |
| Index Volatility (30-Day Historical) | 30.0 |
| Index Avg. Day High-Low Range | 32.94 (March 2020) |
| HSI Correlation (2019) | 0.866 |
| HSCFI Correlation (2019) | 0.875 |

| Hang Seng Mainland Oil & Gas Index Futures | |
|--|-------------------------------|
| Contract Multiplier | HK\$50 |
| Notional Value (1 Contract) | HK\$56K (As at 31 March 2020) |
| Avg. Quote Size | HK\$0.28Mn (5 Contracts) |
| Avg. Bid-Ask Trading Spread | 1.4 index points (March 2020) |
| Liquidity Providers | Flow , IMC, Yue Kun |

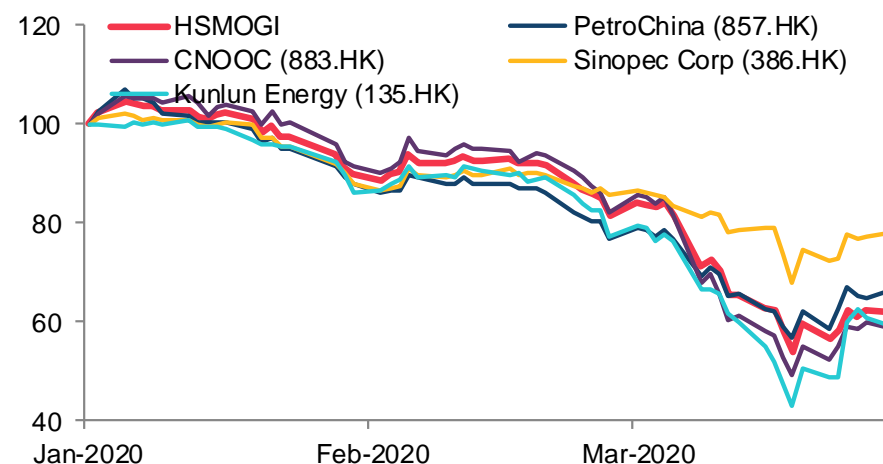
| Transaction Cost* | |
|--------------------------|---------------------|
| Stamp Duty | N/A |
| Trading Fee | HK\$2 / contract |
| SFC Levy | HK\$0.54 / contract |
| Margin as of 02 Mar 2020 | HK\$3,940 |

2 Futures contracts have relatively lower transaction costs



1 HSMOGI Futures have relatively tighter Bid-Ask Spreads

Index & Constituents 3-Month Performance (Rebased to 100)



3 HSMOGI Futures can be used for hedging

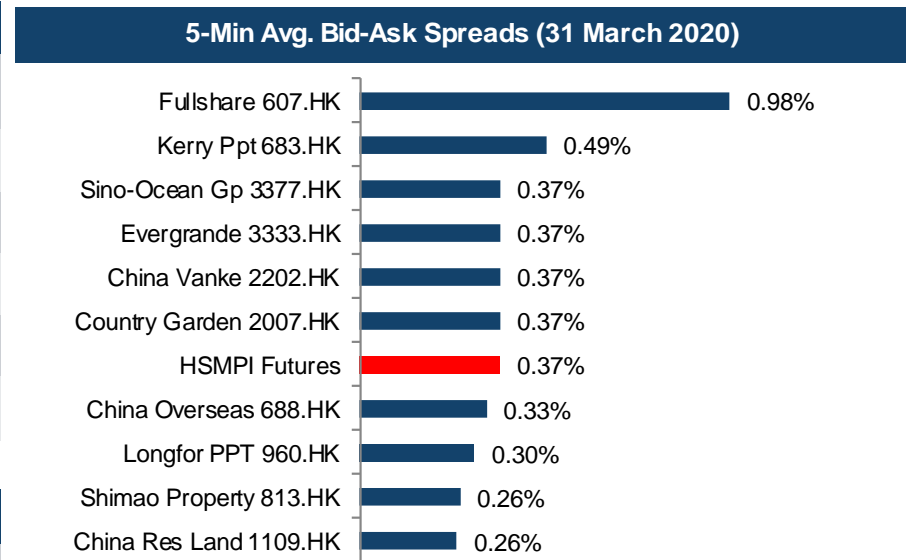


Hang Seng Mainland Properties Index Futures Performance

| Hang Seng Mainland Properties Index (HSMPI) | |
|---|---|
| Index Description | 10 largest and most representative HKEX-listed mainland properties stocks |
| Index Level | 6,340.59 (As at 31 March 2020) |
| Index Volatility (30-Day Historical) | 32.2 |
| Index Avg. Day High-Low Range | 206.56 (March 2020) |
| HSI Correlation (2019) | 0.906 |
| HSCEI Correlation (2019) | 0.922 |

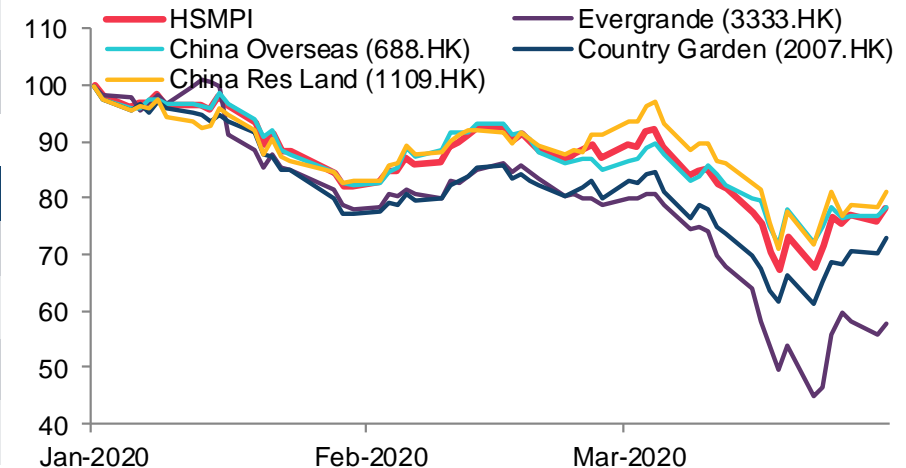
| Hang Seng Mainland Properties Index Futures | |
|---|----------------------------------|
| Contract Multiplier | HK\$50 |
| Notional Value (1 Contract) | HK\$0.32Mn (As at 31 March 2020) |
| Avg. Quote Size | HK\$1.6Mn (5 Contracts) |
| Avg. Bid-Ask Trading Spread | 0.0 index points (March 2020) |
| Liquidity Providers | Flow , IMC, Yue Kun |

| Transaction Cost* | |
|--------------------------|---------------------|
| Stamp Duty | N/A |
| Trading Fee | HK\$2 / contract |
| SFC Levy | HK\$0.54 / contract |
| Margin as of 02 Mar 2020 | HK\$23,920 |



1 HSMPI Futures have relatively tighter Bid-Ask Spreads

Index & Constituents 3-Month Performance (Rebased to 100)



3 HSMPI Futures can be used for hedging

2 Futures contracts have relatively lower transaction costs

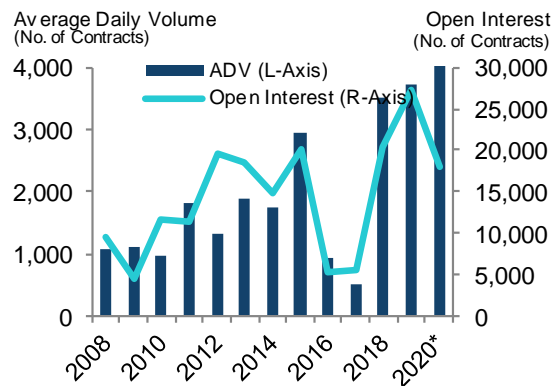


Equity Futures & Options

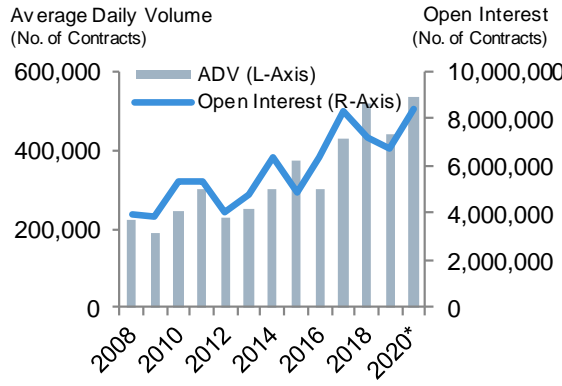
Single Stock Futures & Options

| Single Stock Derivatives ADV (2020 vs 2019) | ADV | OI* | No. of Single Stock Derivatives | |
|---|----------------|------------------|---------------------------------|----|
| Stock Futures | 5,022 (+35%) | 17,964 (-34%) | Single Stock Futures | 80 |
| Stock Options | 537,310 (+21%) | 8,420,294 (+26%) | Single Stock Options | 96 |

Stock Futures (YoY)



Stock Options (YoY)

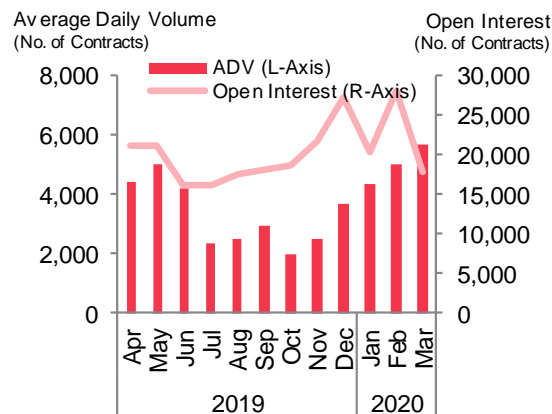


Latest and Future Developments

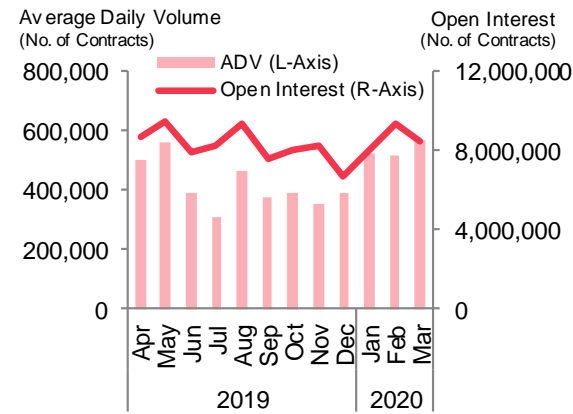
Stock Futures

- Products
 - 3 A-shares ETFs futures contracts
 - Total 80 stock futures contracts

Stock Futures (MoM)



Stock Options (MoM)



Stock Options

- Products
 - 3 A-shares ETFs options contracts
 - Total 96 stock options contracts
- Market Makers (MMs)
 - 3 types of market makers (PMM/ CQMM/ QRMM)
 - CQMM to provide 50 series continuous quotations



MSCI AC Asia ex Japan NTR Index (AxJ) Futures Performance

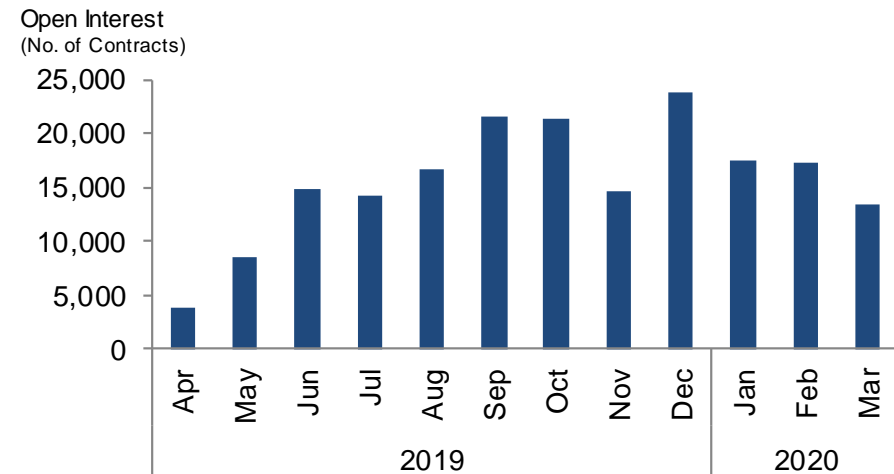
| MSCI AxJ | |
|--------------------------------------|--|
| Index Description | representation 2 DM countries (excl. Japan) and 9 EM countries in Asia |
| Index Level | 415.78 (As at 31 March 2020) |
| Index Volatility (30-Day Historical) | 18.8 |
| Index Avg. Day High-Low Range | 12.18 (March 2020) |
| HSI Correlation (2019) | 0.958 |
| HSCEI Correlation (2019) | 0.951 |

| MSCI AxJ Futures | |
|-----------------------------|-------------------------------|
| Contract Multiplier | US\$100 |
| Notional Value (1 Contract) | US\$42K (As at 31 March 2020) |
| Avg. Quote Size | US\$0.21Mn (5 Contracts) |
| Avg. Bid-Ask Trading Spread | 2.7 index points (March 2020) |
| Liquidity Providers | Flow and 11 banks |

| Transaction Cost* | |
|--------------------------|---------------------|
| Stamp Duty | N/A |
| Trading Fee | US\$0.5 / contract |
| SFC Levy | US\$0.07 / contract |
| Margin as of 26 Mar 2020 | US\$4,680 |

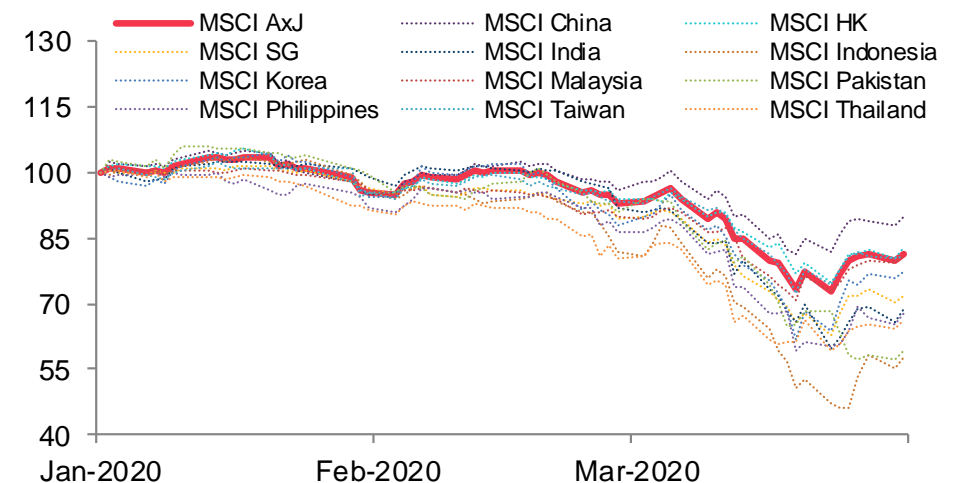
Futures contracts have relatively lower transaction costs

Open Interest (31 March 2020)



Open Interest continues to develop

MSCI AxJ Combines Developed and Emerging Markets (Rebased to 100)



MSCI AxJ is a well-established benchmark representing Asia regional (excluding Japan) equity market performance



Data Source: HKEX, Bloomberg

* All calculations are in US\$ and exclude commission fees
As at 31 March 2020

Information for reference only

Thank you!

www.hkex.com.hk