December 2018

EQUITY DERIVATIVES MONTHLY UPDATE



Market Development Division

Information for institutional and corporate investors' reference only

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HKEX Pulse



Futures and Options Information Application

Apple Store



Xiaomi



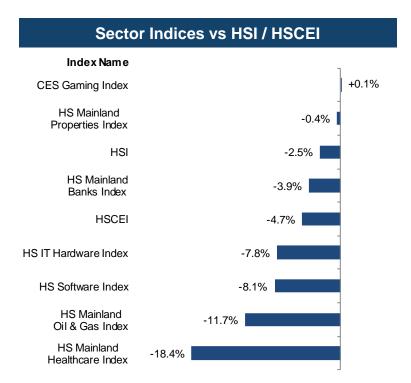


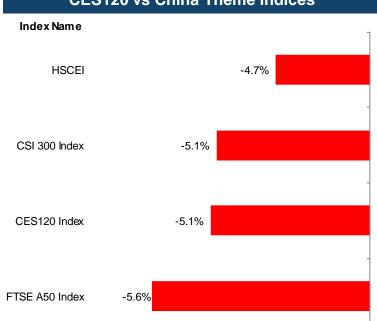






Equity Indices Monthly Performance in December 2018





CES120 vs China Theme Indices

Equity Index Futures Access Codes

% Change

% Change

Vendor	CES Gaming	HS Mainland Banks	HS Mainland Properties	HS Mainland Oil & Gas	HS Mainland Healthcare	HS Software	HS IT Hardware	CES 120	HSI	HSCEI
Bloomberg	CCSA	BMWA	PPTA	OGIA	HCEA	HISA	IHWA	CESA	HIA	HCA
Reuters	0#HGTI:	0#HMBI:	0#HMPI:	0#HMOI:	0#HMHI:	0#HSSI:	0#HITI:	0#HCHH:	0#HSI:	0#HCEI:
WIND	GTIF	MBIF	MPIF	MOIF	MCIF	SSIF	ITIF	CHHF	HSIF	HHIF
ET Net	GTI	MBI	MPI	MOI	MCI	SSI	ITI	CHH	HSI	ННІ



Data Source: Bloomberg As at 31 December 2018 Information for reference only

Hang Seng Index (HSI) Futures & Options

HSI Products (2018 vs 2017)	ADV	OI*	HSI Futures (YoY)	HSI Options (YoY)
HSI Futures	234,424 (+84%)	133,924 (-7%)	280,000 240,000 200,000 160,000 120,000 200,000 200,000 200,000 200,000 200,000 100,000 200,00000000	(No. of Contracts) 60,000 45,000 45,000 (No. of Contracts) ADV (L-Axis) Open Interest (R-Axis) - 300,000
Mini-HSI Futures	100,262 (+116%)	12,587 (+28%)		30,000 - 200,000 - 100,000
HSI Options	51,693 (+26%)	279,856 (-19%)	0 +	0
Mini-HSI Options	10,005 (+51%)	18,777 (+106%)	Av erage Daily Volume Open Interest (No. of Contracts) ADV (L-Axis) 200,000 Open Interest (R-Axis) 200,000	Av erage Daily Volume Open Interest (No. of Contracts) (No. of Contracts) 75,000 ADV (L-Axis) 600,000
HSI Volatility Index Futures	0.0 (-99%)	0 (-)	300,000 - 250,000 - 200,000 - 150,000 -	60,000 - 45,000 - 30,000 -
HSI Dividend Point Index Futures	52 (-29%)	1,850 (-80%)	100,000 - 50,000 50,000 - 50,	15,000 - 200,000 0 - - 200,000



2018

2018

HSI Futures & Options

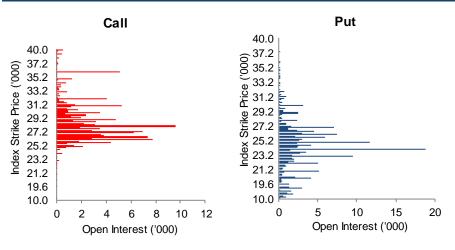
Hang Seng Index		
Index Description	Includes the largest and most liquid stocks listed in Hong Kong	
Index Level	25,845.70 (As at 31 Dec 2018)	
Index Volatility (30-Day Historical)	17.7	
Index Avg. Day High-Low Range	225.43 (Dec 2018)	
HSCEI Correlation (2018)	0.958	

HSI vs VHSI Price Level	HSI & Top 5 Constituents
('000)	
	HSI Index — Tencent
27 -	HSBC AIA 105 ACCB China Mobile
27	En and and
26 - 25	95
	85 -
21	
24 19 Oct-18 Nov-18 Dec-18	75 Oct-18 Nov-18 Dec-18

Hang Seng Index Futures			
Contract Multiplier	HK\$50		
Notional Value (1 Contract)	HK\$1.29Mn (As at 31 Dec 2018)		

Transaction Cost*		
Stamp Duty	N/A	
Trading Fee	HK\$10 / contract	
SFC Levy	HK\$0.54 / contract	
Commission Rate	Negotiable	
Margin as of 2 January 2019	HK\$76,650	





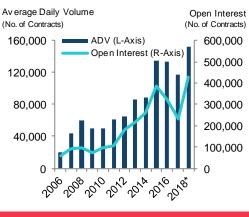


Data Source: HKEX, Bloomberg * All calculations are in HKD and exclude commission fees As at 31 December 2018

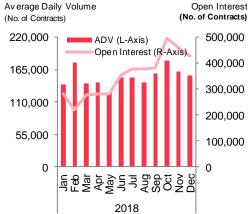
Hang Seng China Enterprises Index (HSCEI) Futures & Options

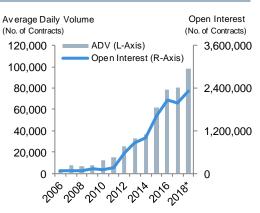
HSCEI Products (2018 vs 2017)	ADV	OI*	
HSCEI Futures	152,241 (+30%)	428,692 (+84%)	
Mini HSCEI Futures	22,568 (+52%)	5,292 (+3%)	
HSCEI Options	98,610 (+23%)	2,309,038 (+16%)	
Mini HSCEI Options	2,372 (+55%)	5,132 (0%)	
HSCEI Dividend Point Index Futures	1,680 (-12%)	125,077 (+72%)	

HSCEI Futures (YoY)



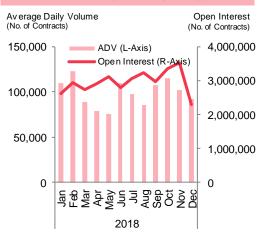
HSCEI Futures (MoM)





HSCEI Options (YoY)

HSCEI Options (MoM)





HSCEI Futures & Options

HSCEI		HSI vs HSCEI	HSCEI & Top 5 Constituents
Index Description	Comprises the largest and most liquid H shares		¹¹⁰] — HSCEI — Ping An
Index Level	10,124.75 (As at 31 Dec 2018)	100 -	105 - BOC CCB
Index Volatility (30-Day Historical)	20.1	98 -	
Index Avg. Day High-Low Range	104.13 (Dec 2018)	96 -	
Correlation with HSI, CES120 (2018)	0.958, 0.895	94 -	95
Correlation with CSI300, FTSE A50 (2018)	0.791, 0.779	92 -	90 - 00
		90 -	85

28-Nov

11-Dec

HSCEI Futures	
Contract Multiplier	HK\$50
Notional Value (1 Contract)	HK\$0.51Mn (As at 31 Dec 2018)

N/A

HK\$3.5 / contract

Negotiable

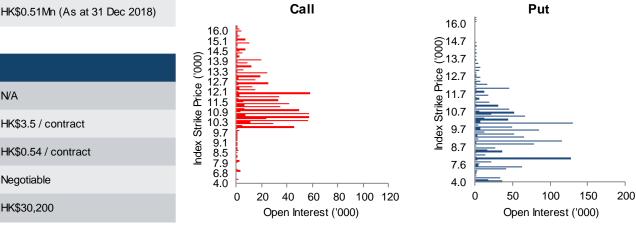
HK\$30,200

Distribution of HSCEI Index Options OI in Month-end

Oct-18

Nov-18

Dec-18



24-Dec



Transaction Cost*

Commission Rate

Margin as of 2 January 2019

Stamp Duty

Trading Fee

SFC Levy

Data Source: HKEX, Bloomberg * All calculations are in HKD and exclude commission fees As at 31 December 2018

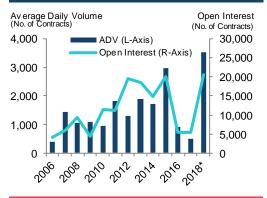
Equity Futures & Options

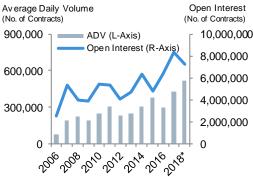
Single Stock Futures & Options

Single Stock Derivatives ADV (2018 vs 2017)	ADV	OI*	No. of Single Stock Derivatives	
Stock Futures	3,508 (+613%)	20,476 (+269%)	Single Stock Futures	78
Stock Options	517,395 (+21%)	7,213,486 (-13%)	Single Stock Options	96

Stock Futures (YoY)

Stock Options (YoY)





Stock Futures

Products

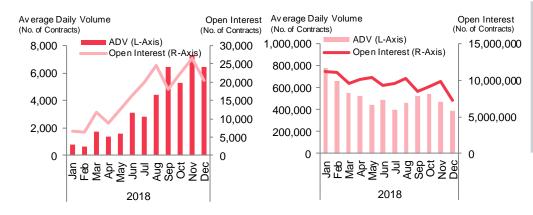
3 A-shares ETFs futures contracts

Latest and Future Developments

Total 78 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

Information for reference only

Data Source: HKEX

Hang Seng Mainland Banks Index Futures Performance

Hang Seng Mainland Banks I	ndex (HSMBI)	5-Min Avg. Bid-Ask Spreads (31 December 2018)		
Index Description	10 largest and most representative HKEX-listed mainland banks stocks	PSBC 1658.HK		
Index Level	2,863.20 (As at 31 December 2018)	CEB Bank 6818.HK 0.35		
Index Volatility (30-Day Historical)	21.8	ABC 1288.HK 0.32% Bank of China 3988.HK 0.30%		
Index Avg. Day High-Low Range	27.37 (December 2018)	CITIC Bank 998.HK		
HSI Correlation (2018)	0.887	Minsheng Bank 1988.HK Bankcomm 3328.HK		
HSCEI Correlation (2018)	0.957	ICBC 1398.HK 0.19%		
		CM Bank 3968.HK 0.19%		
		CCB 939.HK 0.17%		
Hang Seng Mainland Banks I	ndex Futures	HSMBI Futures 0.07%		
Contract Multiplier	HK\$50	1 HSMBI Futures have relatively tighter Bid-Ask Spreads		
Notional Value (1 Contract)	HK\$0.14Mn (As at 31 December 2018)			
Avg. Quote Size	HK\$0.72Mn (5 Contracts)	Index & Constituents 3-Month Performance (Rebased to 100)		
Avg. Bid-Ask Trading Spread	2.3 index points (December 2018)	110 — HSMBI — CCB (939.HK)		
Liquidity Providers	CSC, Flow , IBG, IMC, Optiver, Tibra, Yue Kun	ICBC (1398.HK) — BOC (3988.HK) 105 - ABC (1288.HK)		
Transaction Cost*				
Stamp Duty	NA	95		
Trading Fee	HK\$2 / contract	90		
SFC Levy	HK\$0.54 / contract			
Margin as of 2 January 2019	HK\$7,070	85		
2 Futures contracts have re	latively lower transaction costs	3 HSMBI Futures can be used for hedging		



Data Source: HKEX, HSIL, Bloomberg * All calculations are in HKD and exclude commission fees As at 31 December 2018

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	1,710.41 (As at 31 December 2018)	
Index Volatility (30-Day Historical)	23.1	
Index Avg. Day High-Low Range	22.56 (December 2018)	
HSI Correlation (2018)	0.67	
HSCEI Correlation (2018)	0.691	

Hang Seng Mainland Oil & Gas Index Futures				
Contract Multiplier	HK\$50			
Notional Value (1 Contract)HK\$86K (As at 31 December 2018)				
Avg. Quote Size HK\$0.43Mn (5 Contracts)				
Avg. Bid-Ask Trading Spread 2.4 index points (December 2018)				
Liquidity Providers	Flow, IBG, IMC, Optiver, Tibra, Yue Kun			

N/A

HK\$2 / contract

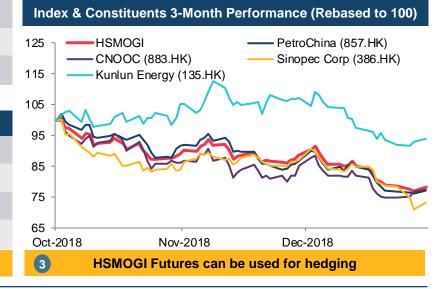
HK\$5,450

Futures contracts have relatively lower transaction costs

HK\$0.54 / contract

5-Min Avg. Bid-Ask Spreads (31 December 2018) BG Blue Sky 6828.HK 1.51% China Oilfield 2883.HK 0.55% Kunlun Energy 135.HK 0.42% PetroChina 857.HK 0.22% Sinopec Corp 386.HK 0.19% CNOOC 883.HK 0.13%

1 HSMOGI Futures have relatively tighter Bid-Ask Spreads



X

Transaction Cost*

Margin as of 2 January 2019

Stamp Duty

Trading Fee

SFC Levy

2

Data Source: HKEX, HSIL, Bloomberg * All calculations are in HKD and exclude commission fees As at 31 December 2018

Hang Seng Mainland Properties Index Futures Performance

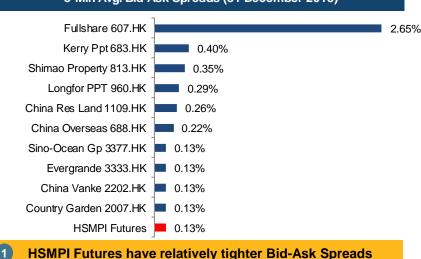
Hang Seng Mainland Properties Index (HSMPI)		5-Min Avg. Bid-Ask Spreads (31 December 2018)		
Index Description	10 largest and most representative HKEX-listed mainland properties stocks	Fullshare 607.HK		2.
Index Level	6,093.37 (As at 31 December 2018)	Kerry Ppt 683.HK	0.40%	
Index Volatility (30-Day Historical)	37.3	Shimao Property 813.HK	0.35%	
index volatinty (50-Day historical)	01.0	Longfor PPT 960.HK	0.29%	
Index Avg. Day High-Low Range	95.67 (December 2018)	China Res Land 1109.HK	0.26%	
		China Overseas 688.HK	0.22%	
HSI Correlation (2018)	0.758	Sino-Ocean Gp 3377.HK	0.13%	
HSCEI Correlation (2018)	0.745	Evergrande 3333.HK	0.13%	
		China Vanke 2202.HK	0.13%	

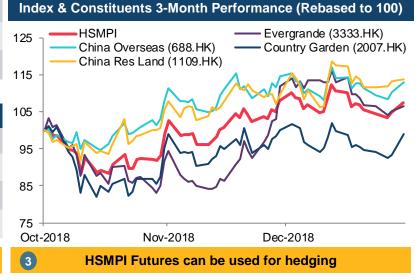
Hang Seng Mainland Properties Index Futures

Contract Multiplier	HK\$50
Notional Value (1 Contract)	HK\$0.30Mn (As at 31 December 2018)
Avg. Quote Size	HK\$1.5Mn (5 Contracts)
Avg. Bid-Ask Trading Spread	6.3 index points (December 2018)
Liquidity Providers	Flow, IMC, Optiver

Transaction Cost* Stamp Duty N/A **Trading Fee** HK\$2 / contract SFC Levy HK\$0.54 / contract Margin as of 2 January 2019 HK\$21,330

2 Futures contracts have relatively lower transaction costs







Data Source: HKEX, HSIL, Bloomberg * All calculations are in HKD and exclude commission fees As at 31 December 2018

Hang Seng IT Hardware Index Futures Performance

Hang Seng IT Hardware Index (HSITHI)				
Index Description	10 largest and most representative HKEX-listed IT hardw are stocks			
Index Level	2,562.24 (As at 31 December 2018)			
Index Volatility (30-Day Historical)	26.5			
Index Avg. Day High-Low Range	34.82 (December 2018)			
HSI Correlation (2018)	0.738			
HSC된 Correlation (2018)	0.687			

HK\$50

Flow

N/A

HK\$2 / contract

HK\$8,640

Futures contracts have relatively lower transaction costs

HK\$0.54 / contract

HK\$0.13Mn (As at 31 December 2018)

5.3 index points (December 2018)

HK\$0.64Mn (5 Contracts)

Hang Seng IT Hardware Index Futures

Contract Multiplier

Avg. Quote Size

Liquidity Providers

Transaction Cost*

Margin as of 2 January 2019

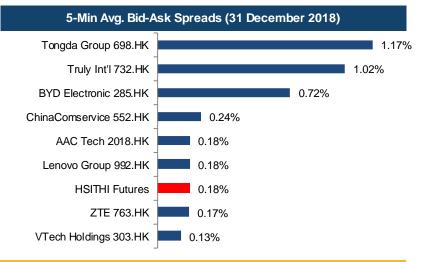
Stamp Duty Trading Fee

SFC Levy

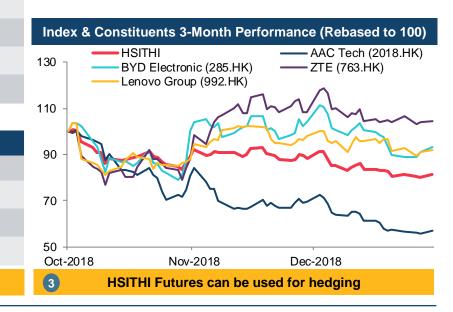
2

Notional Value (1 Contract)

Avg. Bid-Ask Trading Spread



1 HSITHI Futures have relatively tighter Bid-Ask Spreads



Data Source: HKEX, HSIL, Bloomberg * All calculations are in HKD and exclude commission fees As at 31 December 2018

CES120 Index Futures Performance

CES120 Index		5-Min Avg. Bid-Ask Spreads (31 December 2018)
Index Description	80 A-Shares and 40 HK-listed Mainland China H-shares, P-chips, and red chips	
Index Level	5,659.03 (As at 31 December 2018)	ChinaAMC CSI300 ETF (3188.HK) 0.32
Index Volatility (30-Day Historical)	18.4	
Index Avg. Day High-Low Range	53.42 (December 2018)	X iShares A50 ETF (2823.HK) 0.19%
CSI300 Correlation (2018)	0.938	
FTSE A50 Correlation (2018)	0.942	CSOP FTSE A50 ETF (2822.HK) 0.17%
CES120 Index Futures		CES120 Futures 0.11%
Contract Multiplier	HK\$50	CES120 Futures have relatively tighter Bid-Ask Spreads
Notional Value (1 Contract)	HK\$0.28Mn (As at 31 December 2018)	
Average Quote Size	HK\$1.41Mn (5 Contracts)	CES120 & Top Constituents' 3-Month Performance (Rebased to 100)
Average Bid-Ask Trading Spread	9.1 index points (December 2018)	120 CES120 Index — Tencent CCB
Liquidity Providers	Flow, IMC, Tibra	Ping An China Mobile
Fransaction Cost*		100
Stamp Duty	N/A	90 -
Frading Fee	HK\$5 / contract	80 - V V V
SFC Levy	HK\$0.54 / contract	
largin as of 2 January 2019	HK\$14,830	70 Oct-2018 Nov-2018 Dec-2018
2 Futures contracts have re	latively lower transaction costs	3 CES120 Futures can be used to hedge A-share positions
Data Source: HKEX, HSIL, Blo		formation for reference only

Data Source: HKEX, HSIL, Bloomberg * All calculations are in HKD and exclude commission fees As at 31 December 2018

Sector Index and Sector Index Futures Access Codes

Hong Kong and	International Ir	nformation Ver	dors					
Information Vendor	Mainland Banks Index	Mainland Banks Index Futures	Mainland Properties Index	Mainland Properties Index Futures	Mainland Oil & Gas Index	Mainland Oil & Gas Index Futures	IT Hardware Index	IT Hardware Index Futures
AASTOCKS		221420		221425		221415		221435
Activ Financial	=0200700.HK	MBI/16K.HF	=0200800.H K	MPI/16K.HF	=0201000.H K	MOI/16K.HF	=0201100.HK	ITI/16K.HF
AFE	837451	870809	837451	870810	837451	870808	837451	870812
Bloomberg	HSMBI Index	BMWA Index	MSMPI Index	PPTA Index	HSMOGI Index	OGIA Index	HSITHI Index	IHWA Index
DB Power		MBI		MPI		MOI		ITI
ET Net	MBN	MBI	MPR	MPI	MOG	MOI	ITW	ITI
Infocast	HSMBI	MBI	MSMPI	MPI	MOGI	MOI	ITHI	ITI
QuotePower	SEHK.HHSM BI	P11223	SEHK.HHSM PI	P11224	SEHK.HHS MOGI	P11222	SEHK.HHSIT HI	P11226
Telequote		MBImy		MPImy		MOlmy		ITImy
Mainland Inform	nation Vendors							
Information Vendor	Mainland Banks Index	Mainland Banks Index Futures	Mainland Properties Index	Mainland Properties Index Futures	Mainland Oil & Gas Index	Mainland Oil & Gas Index Futures	IT Hardware Index	IT Hardware Index Futures
East Money	HSMBI	MBI	HSMPI	MPI	HSMOGI	MOI	HSITHI	ITI
Hexin Flush Financial		MBIC		MPIC		MOIC		ITIC
Pobo Financial		MBI+Month +Year		MPI+Month+ Year		MOI+Month +Year		ITI+Month+ Year
Qianlong	999905	209	999902	209	999903	209	999906	209
Wind	HSMBI	MBIF+yym m+HK	HSMPI	MPIF+yymm +HK	HSMOGI	MOIF+yym m+HK	HSITHI	ITIF+yymm +HK



CES120 Index and CES120 Index Futures Access Codes

Hong Kong and International Information Vendors				
Information Vendor	CES 120 Index	CES 120 Index Futures		
Bloomberg Finance L.P.	CES120	CESA Index DES <go></go>		
Thomson Reuters	.HKCES120	0#HCHH:		
AAStocks.com Limited	110056	221360		
AFE Solutions Ltd.	837505	870800		
DB Power Online Limited	CES120	СНН		
ET Net Limited	CEC	СНН		
Infocast Limited	CE120	СНН		
Interactive Data Group	I:CES120	Fn:CHH\MYYDD		
Marketprizm Hong Kong Limited	CES120	CHHmy		
SIX Financial Information Ltd.	CES120	CHHmy		
Telequote Data International Limited	CES120	CHHmy		

Mainland Information Vendors				
Information Vendor	CES 120 Index	CES 120 Index Futures		
Hithink RoyalFlush Information Network Ltd	CES120	СННС		
Shangahai DZH Limited	CES120	CHH+Month Code+Year Code		
Shanghai Gildata Services Co Ltd	CES120	-		
Shanghai Wind Information Co., Ltd	CES120	CHHF+yymm+.HK		
Zheng Zhou Esunny Information Technology Co, Ltd.	-	СНН		
Shanghai Wenhua Financial Information Ltd	-	CHHmy		
Shanghai Qianlong Advanced Technology Co Ltd	CES120	Page 209		