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Research Paper No. 63: Half-yearly Review of the Global and Local Securities Markets (Featuring VIX Exchange-traded Products, MSCI A-share Inclusion and After-Hours Futures Trading)

27 July 2018

Executive Summary

1. During the first half of 2018, in the US, the Dow fell 1.8% while the S&P 500 (S&P) and Nasdaq rose 1.7% and 8.8% respectively. Robust corporate earnings and solid economic fundamentals supported market sentiment. Tech stocks outperformed on strong growth outlook. However, risks related to trade protectionism, concerns over tighter monetary policy, as well as geopolitical conflicts in Syria and other parts of the Middle East limited gains.
2. In Europe, the FTSE and DAX dropped 0.7% and 4.7% respectively whilst the CAC rose 0.2%. The French market outperformed on optimism about supportive government policies. Easing concerns about monetary tightening by the European Central Bank (ECB) and a weaker Euro paced gains. However, growing trade tensions with the US as well as political uncertainties in Spain and Italy weighed on the markets.
3. In Asia, the Nikkei 225 Index dropped 2.0%. The Japanese economy unexpectedly contracted in the first quarter of 2018. Heightened global trade tensions and the Bank of Japan's reduced purchases of long-dated bonds also paced losses. The performance of other major regional markets was mixed, ranging from a decline of 15.9% in the Philippines to a gain of 2.0% in Australia.
4. On the Mainland, the Shanghai Composite Index (SHCOMP) and the Shenzhen Composite Index (SZCOMP) dropped 13.9% and 15.4% respectively. Market volatility rose amid concerns over trade conflicts with the US, regulatory tightening and deleveraging. Measures to curb asset market speculation as well as downbeat trade, retail sales and manufacturing data also raised concerns about the risk of a slowdown in economic growth.
5. In Hong Kong, the Hang Seng Index (HSI) and the Hang Seng China Enterprises Index (HSCEI) fell 3.2% and 5.4% respectively. There were concerns that global trade tensions and higher overseas market volatility might have a contagion effect on the Hong Kong market. Investor sentiment was also affected by concerns that rising interest rates and a stronger US dollar could reduce interbank liquidity in Hong Kong, thereby affecting market performance.
6. Some of the major risks and uncertainties facing the Hong Kong market include:
   - trade tensions, worries about an acceleration in rate hikes and the diminishing impact of fiscal stimulus in the US;
   - outflows from emerging markets as the US dollar strengthens;
   - hikes in Hong Kong's benchmark interest rate to catch up with the US; and
   - a weaker renminbi as well as tightening measures and deleveraging in Mainland financial markets.
7. The average daily trading in Hong Kong's stock market rose 44% to $126.6 billion[1]. Trading in futures products and options products rose 60% and 32% respectively.

[1] Unless otherwise stated, the values given are in Hong Kong dollars.

Performance of stock markets during the first half of 2018

8. Most major markets hit record or recent highs, supported by abundant market liquidity amid gradual tightening or tapering by major central banks. However, the markets were volatile as investor sentiment was affected by worries about further rate hikes in the US and uncertainties over trade conflicts between the US and the Mainland. Geopolitical tensions in Syria and Iran weighed on the markets. In the Mainland market, a weaker renminbi, as well as deleveraging, debt growth and default risks paced losses. The Hong Kong market dropped on worries that rising interest rates and a stronger US dollar might tighten liquidity conditions.

The US

9. During the first half of 2018, the performance of the US market was mixed. The Dow fell 1.8% while the S&P and Nasdaq in the US rose 1.7% and 8.8% respectively. These indices once reached record highs during the period. The Chicago Board Options Exchange (CBOE) Volatility Index (VIX), an indicator of investor risk aversion, rose to 16.1 after hitting a trough of 9.1 in late 2017.

10. Factors contributing to positive sentiment included:

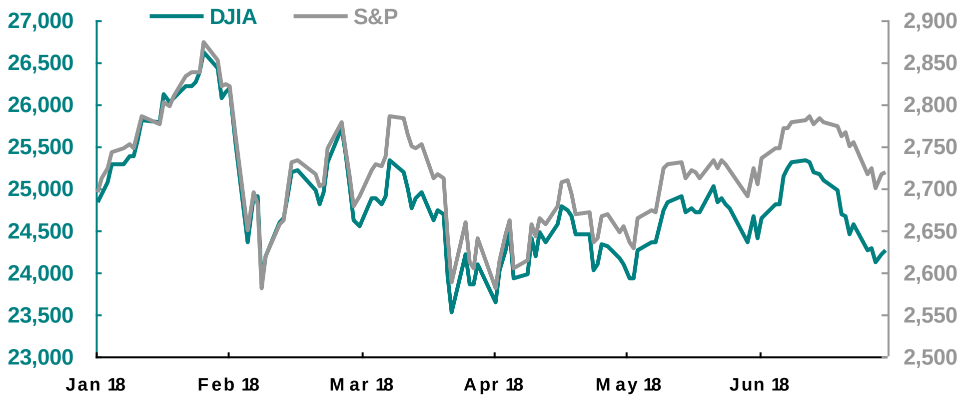
- **Strong corporate earnings** – Corporate earnings in the US continued to exceed expectations, supported by fiscal stimulus including tax cuts and increased spending. Earnings of S&P stocks grew 14% and 20% in Q4 2017 and Q1 2018 respectively. Analysts have predicted an earnings growth rate of over 20% for 2018, led by the energy, materials and technology sectors.
- **Solid economic fundamentals –** Macroeconomic data was largely positive. The labour market strengthened and the unemployment rate fell to an 18-year low. Consumer confidence, retail sales, housing data, as well as manufacturing and services activities continued to show growth. The Fed revised its GDP growth forecast for 2018 upwards to 2.8%, compared with 2.3% in 2017.
- **Higher oil prices** – Energy stocks outperformed as oil prices once rose to a four-year high amid production cuts by the Organization of the Petroleum Exporting Countries (OPEC), potential US sanctions against Iran and declining output in Venezuela. During the first half of 2018, crude oil futures rose 23% and S&P Energy Index rose 5%.
- **Tech stocks outperformed** – The Nasdaq outperformed as resilient corporate earnings and the growth outlook for tech stocks outweighed concerns over possible trade and investment restrictions, as well as increased regulatory scrutiny in the sector. The S&P Information Technology Index rose 10% while FAANG[2] stocks rose between 7 and 104% during the period.

[2] FAANG is an acronym for the five major tech companies' stocks: Facebook, Apple, Amazon, Netflix and Google, Alphabet's subsidiary.

11. However, investor sentiment was affected by:

- **Trade protectionism** – Uncertainties over trade relationships between the US and its global trading partners weighed on investor sentiment. The US announced import tariffs on metals from the European Union, Canada and Mexico, as well as US$50 billion worth of Mainland goods. Furthermore, the US threatened to impose additional tariffs on EU automobiles and US$200 billion worth of Mainland goods, as well as restrictions on Mainland investments in US technology firms. The EU and the Mainland have pledged to retaliate. Market participants warned of the serious impact that an extended period of trade tensions could have on investor sentiment, including a destruction of up to US$1 trillion in the value of the US stock market.
- **Concerns over monetary tightening** – Strong US employment data and rising oil prices prompted fears of inflation. Wages recorded the fastest growth since 2009. The Fed twice raised interest rates by 25 bps, as widely expected, and in June revised its projection to two more rate increases in 2018. There were worries that rising interest rates and a stronger US dollar might drag down corporate earnings and economic growth.
- **Geopolitical concerns** – While the June summit between the US and North Korea concluded with a joint agreement, tensions between the two countries remained. In addition, political developments in Syria and potential sanctions against Iran further added to market volatility.

Performance of the Dow and S&P during the first half of 2018



Source: Bloomberg

VIX Exchange-traded products (ETPs) and the US market correction

<u>Background</u>

1. VIX is a measure of the stock market's expectation of volatility implied by S&P index options, calculated and published by the CBOE. It is an indicator of investor risk aversion.
2. The low US market volatility in the past few years has boosted the growth of short VIX ETPs, which take short positions on VIX and profit from low and declining volatility.
3. However, as volatility surged in early February 2018, there were concerns that VIX ETPs, particularly those with short or leveraged features, might have exacerbated VIX movements and the equity market decline.

<u>VIX ETPs and market decline</u>

4. After the Global Financial Crisis in 2008, VIX fell to low levels amid abundant liquidity and bullish sentiment in the US stock market. It hit a record low of 9 in late 2017.

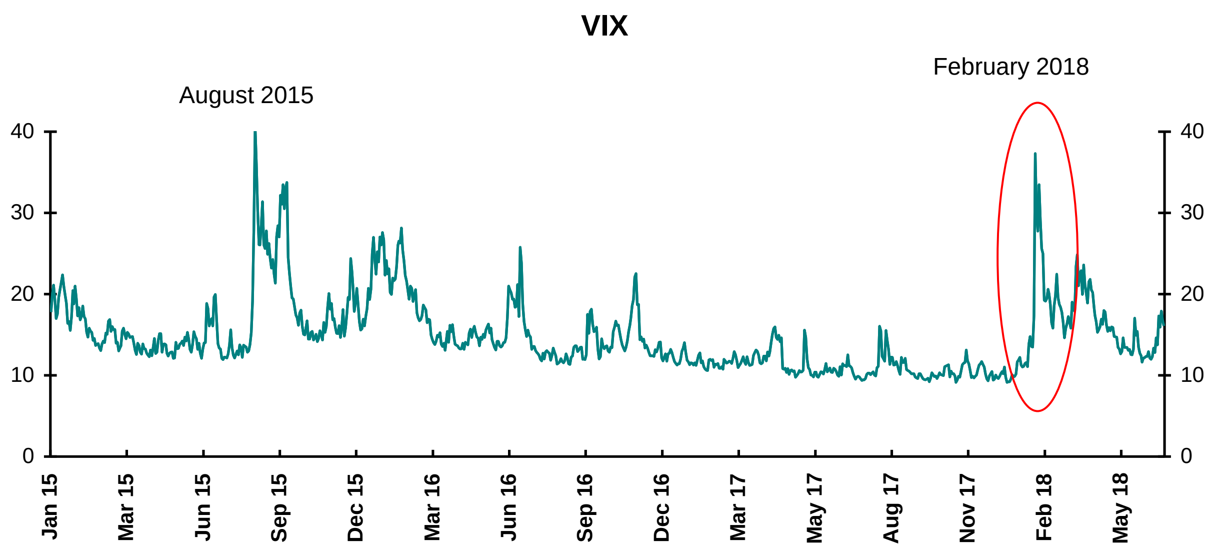
5. However, in early February 2018, the US stock market became very volatile and VIX rose substantially. On 5 February 2018, the VIX surged from 17 to 37. The last time a higher VIX was recorded was during the flash crash in August 2015, when US equity and related futures markets experienced unusual price volatility.

6. Amid sharp movements of the VIX, prices of VIX ETPs fluctuated, adding volatility to the broad market and further upward pressure on VIX.

   - Prices of short-VIX ETPs fell. Issuers had to unwind the short positions and hedge their exposures in the VIX futures market. This drove VIX even higher. On 5 February 2018, the price of VIX futures rose over 106% to an intraday high of US$33.4 from US$16.2 in about three hours.

   - Leveraged-VIX ETPs also had to buy more VIX futures for rebalancing portfolios, driving the VIX higher.

   - Funds facing limits on portfolio volatility had to unwind their positions in the stock market amid high market volatility, resulting in high selling pressure and even higher volatility. This led to a vicious cycle. Some funds had to suspend trading or were liquidated.



Performance of major stock markets

		End of June 2018	% change			PE Ratios
		Index Level	Year-to-date	2017	2016	End-June 2018
Hong Kong and the Mainland						
Hong Kong	-HSI	28,955.1	-3.2%	+36.0%	+0.4%	11.58
	-HSCEI	11,073.0	-5.4%	+24.6%	-2.8%	8.45
Mainland	-Shanghai Comp	2,847.4	-13.9%	+6.6%	-12.3%	13.78
	-Shenzhen Comp	1,607.6	-15.4%	-3.5%	-14.7%	26.29
Asia						
Japan	-Nikkei 225	22,304.5	-2.0%	+19.1%	+0.4%	17.08
Australia	-AOI	6,289.7	+2.0%	+7.8%	+7.0%	20.36
Taiwan	-TWSE	10,836.9	+1.8%	+15.0%	+11.0%	14.69
Korea	-KOSPI	2,326.1	-5.7%	+21.8%	+3.3%	11.13
Singapore	-STI	3,268.7	-3.9%	+18.1%	-0.1%	10.47
Thailand	-SET	1,595.6	-9.0%	+13.7%	+19.8%	16.08
Malaysia	-KLCI	1,691.5	-5.9%	+9.4%	-3.0%	17.44
Indonesia	-JCI	5,799.2	-8.8%	+20.0%	+15.3%	19.97
India	-Nifty	10,714.3	+1.7%	+28.6%	+3.0%	21.99
Philippines	-PCOMP	7,193.7	-15.9%	+25.1%	-1.6%	18.37
Vietnam	-VN	960.8	-2.4%	+48.0%	+14.8%	17.99
US						
US	-Dow	24,271.4	-1.8%	+25.1%	+13.4%	18.10
	-Nasdaq	7,510.3	+8.8%	+28.2%	+7.5%	25.43
	-S&P	2,718.4	+1.7%	+19.4%	+9.5%	20.72
Europe						
UK	-FTSE	7,636.9	-0.7%	+7.6%	+14.4%	13.66
Germany	-DAX	12,306.0	-4.7%	+12.5%	+6.9%	13.70
France	-CAC	5,323.5	+0.2%	+9.3%	+4.9%	16.77
PIIGS and Hungary						
Portugal	-PSI20	5,528.5	+2.6%	+15.2%	-11.9%	26.73
Italy	-FTSEMIB	21,626.3	-1.0%	+13.6%	-10.2%	11.93
Ireland	-ISEQ	6,982.8	-0.8%	+8.0%	-4.0%	21.78
Greece	-ASE	757.6	-5.6%	+24.7%	+1.9%	24.03
Spain	-IBEX	9,622.7	-4.2%	+7.4%	-2.0%	13.72
Hungary	-BUX	36,127.7	-8.3%	+23.0%	+33.8%	10.34
Middle East and North Africa						
Egypt	-EGX30	16,348.6	+8.9%	+21.7%	+76.2%	16.71
Dubai	-DFMGI	2,821.0	-16.3%	-4.6%	+12.1%	9.08
Other BRIC markets						
Brazil	-IBOV	72,762.5	-4.8%	+26.9%	+38.9%	18.25
Russia	-MICEX	2,295.9	+8.8%	-5.5%	+26.8%	N.A.

Source: Bloomberg

Europe

12. The performance of major European markets was mixed. During the first half of 2018, the FTSE, and DAX dropped 0.7% and 4.7% respectively whilst the CAC rose 0.2%. The FTSE and DAX once rose to their record highs, whilst the CAC hit a 10-year high.

13. Positive factors that supported the markets included:

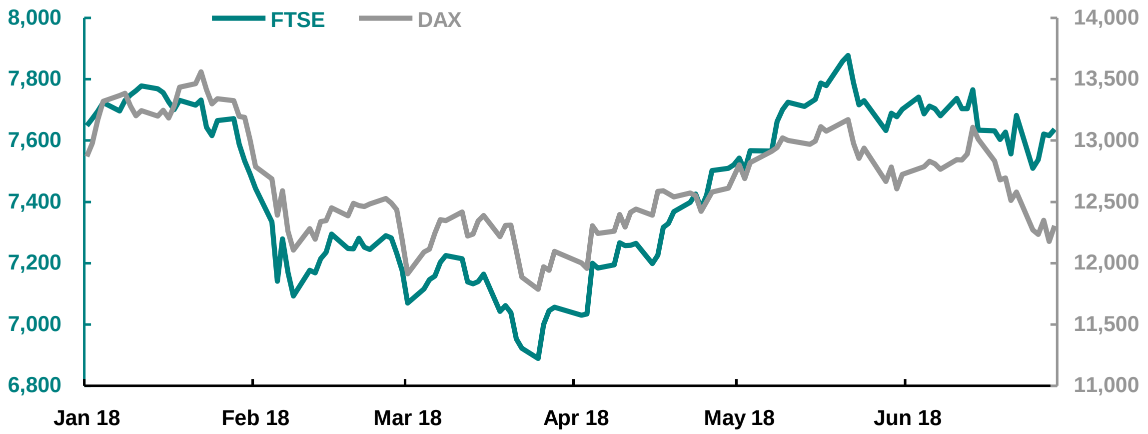
 - **Optimism about reform policies** – The French market outperformed in a positive environment. Investor sentiment was bullish amid a benign political environment after the President's party won a parliamentary majority in the 2017 election. Optimism grew over the government's pro-business policies to deregulate the labour market and reform tax policy.

- **Easing concerns about rate hikes –** In its latest policy meeting, the ECB announced plans to end its bond purchase programme at the end of this year, but signaled that interest rates would remain low at least until mid-2019. The dovish comments provided support to the markets.
- **A weaker Euro** – Amid political uncertainties in Italy, the Euro almost hit an 11-month low at one point, recording an overall depreciation of 2.7% in the first half of 2018. This boosted the US dollar-denominated earnings of multinational European companies and exporters.

14. However, investor sentiment was affected by:

- **Growing trade tensions with the US** – Trade tensions and concerns over their economic effects weighed on markets after the US announced tariffs on steel and aluminium imports from the EU and other countries. Moreover, there was news that the US might raise tariffs on car imports from Germany and other EU countries. The EU responded that countermeasures would be imposed.
- **Political uncertainties** – Whilst the UK and the EU largely reached a post-Brexit transition agreement, further negotiations were needed in areas such as trade and labour issues. In addition, political uncertainties lingered about Catalan independence in Spain. Despite the formation of a coalition government in Italy, concerns remained over the new government proposals to increase public spending.

Performance of FTSE and DAX during the first half of 2018



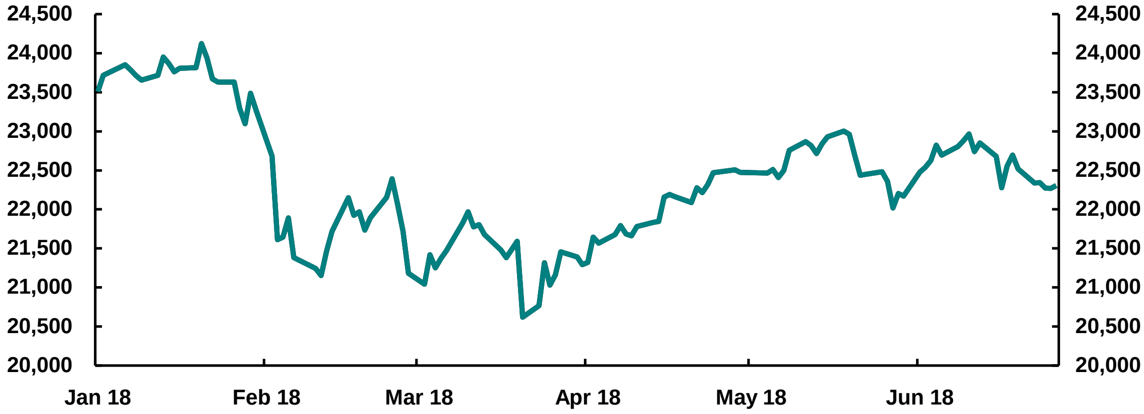
Source: Bloomberg

Asia

15. In Japan, the Nikkei 225 dropped 2.0% during the first half of 2018. The market once rose to a 26-year high but later declined. After recording positive GDP growth for eight consecutive quarters, the economy unexpectedly contracted in Q1 2018. Heightened global trade tensions also raised concerns that exports and economic growth might be affected. Reduced purchases of long-dated bonds by the Bank of Japan also paced losses.

16. The performance of other major Asian markets varied, ranging from a 15.9% decline in the Philippines to a 2% increase in Australia. S&P GSCI, a composite commodity sector index, gained 10%, benefiting regional economies relying on commodity exports. However, there were concerns that emerging markets might experience a slowdown or reversal of capital inflows amid a stronger US dollar. Some of their currencies were under pressure amid political uncertainties, leading to concerns about contagion effects on regional markets. Geopolitical tensions in North Korea once weighed on sentiment, but the summit between the US and North Korea in June helped boost investor confidence.

Performance of the Nikkei during the first half of 2018



Source: Bloomberg

The Mainland

17. In the Mainland, the SHCOMP and the SZCOMP fell 13.9% and 15.4% respectively. The Mainland market became more volatile. The average daily turnover in the Mainland market was RMB438.9 billion, 4.3% lower than the average in 2017.

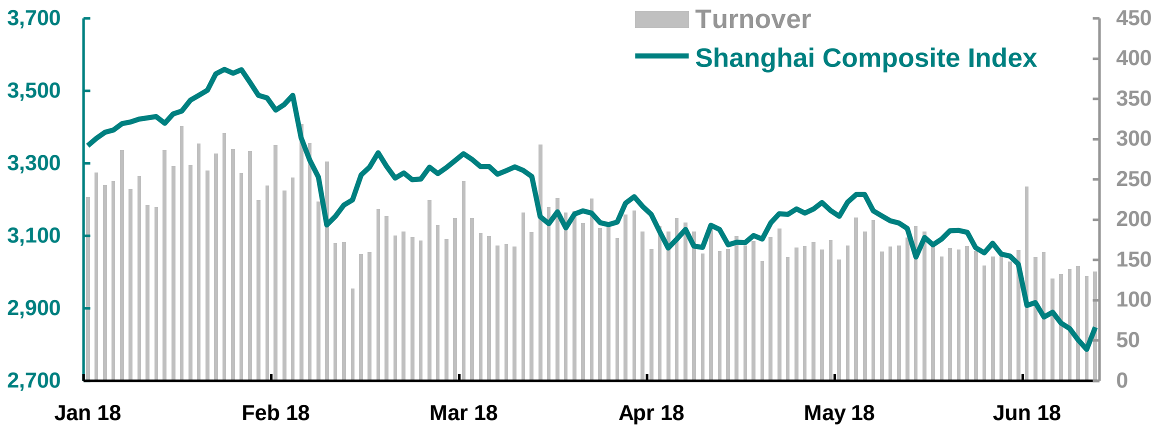
18. The market was overshadowed by:

- **Concerns about a trade war** – Trade tensions between the US and the Mainland escalated after the US threatened to impose tariffs on Mainland products and restrictions on Chinese telecom companies. In response, the Mainland threatened to impose retaliatory tariffs on imports from the US. The renminbi faced pressure to weaken and foreign exchange reserves declined amid trade war concerns and a stronger US dollar. Small-cap tech stocks paced losses on concerns that trade tensions with the US might affect the sector outlook.

- **Regulatory tightening and deleveraging –** Given the Mainland government's key policy objective to prevent financial risks, new rules regulating asset management businesses were introduced and tightening measures were put in place for vulnerable sectors including shadow banking. There was a pick-up in corporate debt defaults in both loans and bonds across a range of industries. While the adjustment was viewed as both healthy and necessary to reduce systemic risks, market liquidity shrank amid tighter financing conditions and higher interest rates.

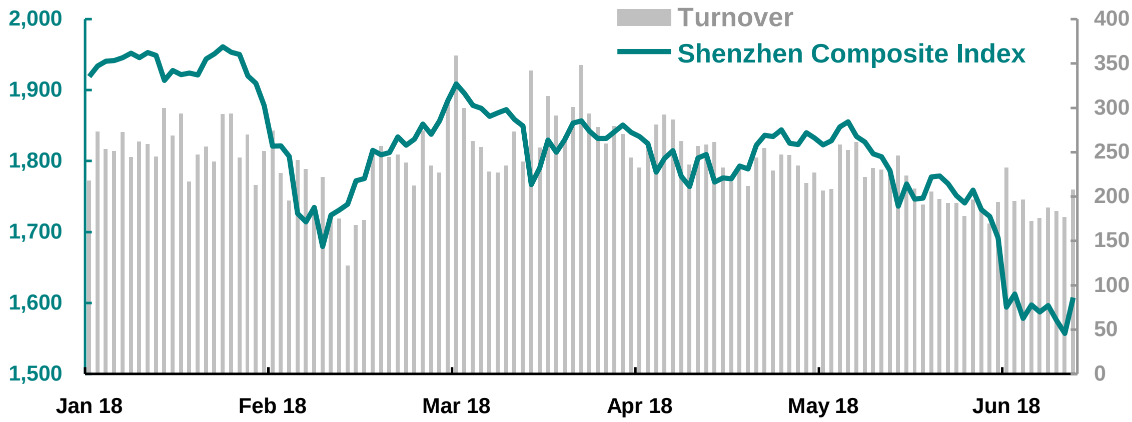
- **Measures to curb asset market speculation –** Commodities shares were volatile given the Mainland government's plan to cut coal prices and its intervention in other commodities. Measures to curb speculation in the property market also affected related stocks. As energy and properties were two key growth engines of the Mainland economy, there were worries that cooling in these two sectors might lead to an economic slowdown. Downbeat trade, retail sales and manufacturing data further weighed on the market.

SHCOMP and market turnover (RMB billion) during the first half of 2018



Source: Bloomberg

SZCOMP and market turnover (RMB billion) during the first half of 2018



Source: Bloomberg

Hong Kong

19. After registering a sharp gain in 2017, the Hong Kong market fell in the first half of 2018. The HSI once rose to a historical high and the HSCEI to a 2.5-year high in January, but recorded overall declines of 3.2% and 5.4% respectively during the first half of 2018. Trading was active, with an average daily turnover of $126.6 billion, 44% higher than the average in 2017.

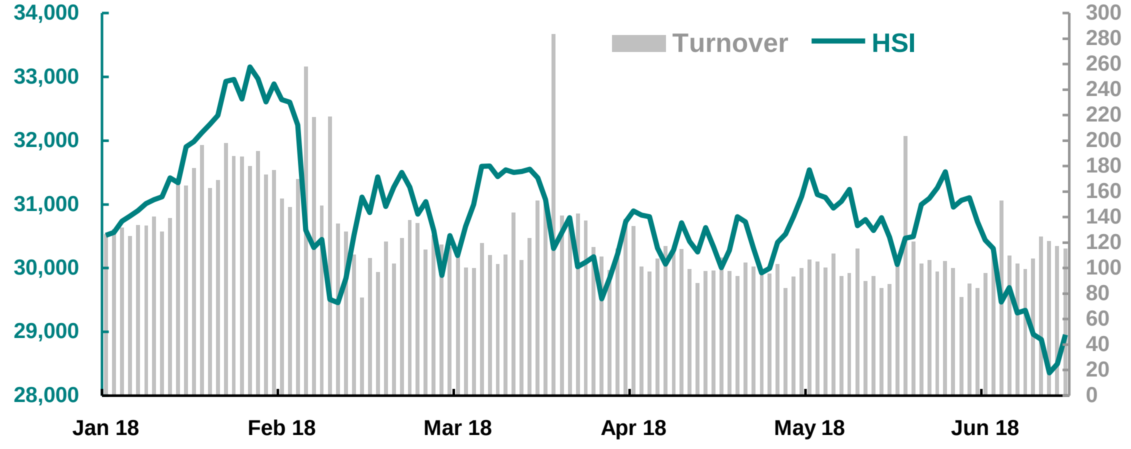
20. Uncertainties in overseas markets added volatility to the Hong Kong market.

- **Trade tensions –** The US stance towards the Mainland, the EU and its other trading partners remained uncertain. The US government announced tariffs on Mainland goods and the Mainland pledged to retaliate. Also, the US planned to impose restrictions on Mainland investment in US technology firms. There were concerns that corporate earnings of related sectors as well as the global economic and stock market outlook might be affected. Investors were concerned that higher overseas market volatility might have a contagion effect on the Hong Kong market.

- **Interest rate hikes in the US –** The Fed's comments on the robust economy, tight labour market and rising inflation raised worries about a more aggressive pace of rate hikes. There were concerns that rising US interest rates and a stronger US dollar could lead to the normalisation of local interest rates and reduced interbank liquidity in Hong Kong, thereby affecting market performance.

- **Weakening of the Hong Kong dollar –** Due to interest rate arbitrage activities amid widening differentials between rates in the US and Hong Kong, there were signs of capital outflows from Hong Kong as reflected in a weaker Hong Kong dollar. The Hong Kong dollar once weakened to 7.85 and triggered the weak-side Convertibility Undertaking for the first time since the mechanism's implementation in 2005. During the first half of 2018, the Hong Kong Monetary Authority (HKMA) purchased a total of $70.3 billion worth of Hong Kong dollar from the market. There were concerns about the impact that continuous capital outflows might have on the stock market, as liquidity conditions tightened and caused sharp interest rate hikes in Hong Kong. The one-month Hong Kong Interbank Offered Rate once hit 2.125%, the highest level in nearly 10 years.

HSI and market turnover ($ billion) during the first half of 2018



Source: Bloomberg

MSCI A-share inclusion

1. On 31 May 2018, MSCI included 226 A shares (after excluding suspended stocks) in its Emerging Markets Index. These A shares comprised large-cap stocks eligible to be traded under Stock Connect which have not suspended trading for more than 50 days in the past 12 months. The shares account for about half of the total Mainland market cap and one-third of trading.

2. The rebalancing on that day was smooth and no irregularities were noted.
   - Share prices of most stocks moved modestly in general.
   - Northbound trading (Shanghai and Shenzhen) rose to a record high of RMB34.7 billion.

3. Market participants expected large inflows to the A-share market, including US$9 billion in August and about US$340 billion upon full inclusion. In anticipation of the increased trading flows, the SFC and the China Securities Regulatory Commission (CSRC) agreed to increase the daily quotas of Stock Connect to four times the previous levels.

4. The inclusion of A-shares in major international indices would prompt participation by international institutional investors in the Mainland market and hence improve its investor mix. As the MSCI continues to raise the inclusion factor and expand the number of A-shares in its indices, northbound inflows of funds will continue to accelerate. This would facilitate more balanced two-way flows between the Mainland and Hong Kong markets. In addition, the further opening up of the Mainland market through Stock Connect would enhance the role of Hong Kong as an important gateway connecting the Mainland and international markets.

Risks and uncertainties facing the Hong Kong market

21. The Hong Kong market was volatile in the first half of 2018 following substantial gains in 2017. The market is subject to downside risks in case of worsening investor sentiment, which could be triggered by a confluence of factors.

22. In the US, trade tensions with the Mainland and other trading partners are creating great uncertainties. Investors are also cautious given uncertainty about the pace and magnitude of future interest rate hikes by the Fed. Market analysts expect the impact of tax cuts and increased fiscal spending in the US to peak this year. In addition, there will be less scope for stimulus as unemployment trends down and inflation accelerates. Growth may therefore be slower in the future. Moreover, markets have accumulated substantial gains with low volatility, reflecting complacency on the part of investors who have expectations for a sustained rally, with little risk of correction or overheating. This will change, as markets will become more vulnerable as the Fed pulls back liquidity and raises rates.

23. In the recent past, regional markets have been supported by capital inflows from major markets resulting from the massive liquidity generated by quantitative easing. As major central banks scale down the pace of easing and as rate hikes in the US accelerate, the US dollar may strengthen and capital inflows to emerging markets may slow down or reverse. If this trend continues, it could adversely affect emerging market currencies and equity markets, with greater impact on markets with significant US dollar debt and reliance on commodity exports. Hong Kong could also be affected by higher volatility in their stock markets and currencies.

24. Currently, the benchmark interest rate in Hong Kong has remained very low despite the continuous rate hikes in the US. However, under the Linked Exchange Rate system, the interest rate in Hong Kong will eventually increase in tandem with the US. If it increases significantly, particularly when funds leave Hong Kong on a large scale within a short period of time, the impact on the stock market may be significant.

25. Hong Kong may also be affected by developments on the Mainland. In particular, there are lingering worries about stricter regulations in the financial and property sectors. A steeper-than-expected deleveraging could destabilise the Mainland economy. Worries about strong debt growth and bond defaults will also weigh on the market. A weakening renminbi (amid a stronger US dollar) and concerns about capital outflows may affect investor sentiment. The International Monetary Fund commented that credit growth remained too fast and Mainland authorities should slow it by reducing public investment, tightening borrowing from state-owned enterprises and curbing the rapid growth in household debt. Surprises to the Mainland growth outlook could have significant spillover to the Hong Kong market.

Major statistics for the Hong Kong securities market during the first half of 2018

Trading activity in the local stock market

26. Trading in the local stock market increased during the first half of 2018. The average daily turnover amounted to $126.6 billion, 44% higher than the $88.2 billion in 2017.

Average daily turnover ($ billion)

	H1 2018		2017		% change over 2017
HSI (ex H-shares & red chips)	29.2	(23%)	17.5	(20%)	66.9%
Mainland stocks	43.6	(34%)	30.5	(35%)	43.0%
H-shares	33.5	(26%)	22.7	(26%)	47.6%
Red chips	10.1	(8%)	7.8	(9%)	29.5%
Derivative warrants	18.3	(15%)	12.2	(14%)	50.0%
Callable bull/bear contracts	7.8	(6%)	4.8	(5%)	62.5%
Exchange-traded funds	5.0	(4%)	4.3	(5%)	16.3%
Others	22.7	(18%)	19.0	(21%)	19.5%
Market total	**126.6**	**(100%)**	**88.2**	**(100%)**	**43.5%**

Remark: Percentages in parenthesis denote market share.

Sources: Hong Kong Exchanges and Clearing Limited (HKEX) and SFC

Stock Connect

27. Trading through Shenzhen-Hong Kong Stock Connect commenced on 5 December 2016 following the launch of Shanghai-Hong Kong Stock Connect on 17 November 2014. The schemes allow investors in the Mainland and Hong Kong stock markets to trade eligible shares listed on the other market subject to daily quotas.

28. On 11 April 2018, the SFC and CSRC announced an increase of the daily quotas under both Shanghai-Hong Kong Stock Connect and Shenzhen-Hong Kong Stock Connect to four times the original levels. The new quotas, RMB52 billion for each of the northbound trading links and RMB42 billion for each of the southbound trading links, took effect on 1 May 2018. The expansion facilitates fund flows into the Mainland market amid the inclusion of A-shares into the MSCI Emerging Markets Index.

29. As at end-June 2018, the cumulative net buy was:
    - RMB507.7 billion via northbound trading; and
    - RMB703.9 billion via southbound trading.

30. During the first half of 2018:
    - average daily northbound trading (Shanghai and Shenzhen, including buy and sell trades) was RMB19.7 billion, or 2.2% of trading in the Mainland market (compared with an average of RMB9.6 billion, or 1.1% of market trading in 2017).
    - average daily southbound trading (Shanghai and Shenzhen, including buy and sell trades) was RMB13.4 billion, or 6.5% of trading in the Hong Kong market (compared with an average of RMB8.6 billion, or 5.6% of market trading in 2017).

Short-selling activity

31. Compared with 2017, short selling in Hong Kong was higher both in absolute terms and as a percentage of total market turnover. The average daily short selling amounted to $14.5 billion, or 11.5% of total market turnover in the first half of 2018. In 2017, the average daily short selling amounted to $9.0 billion, or 10.3% of total market turnover.

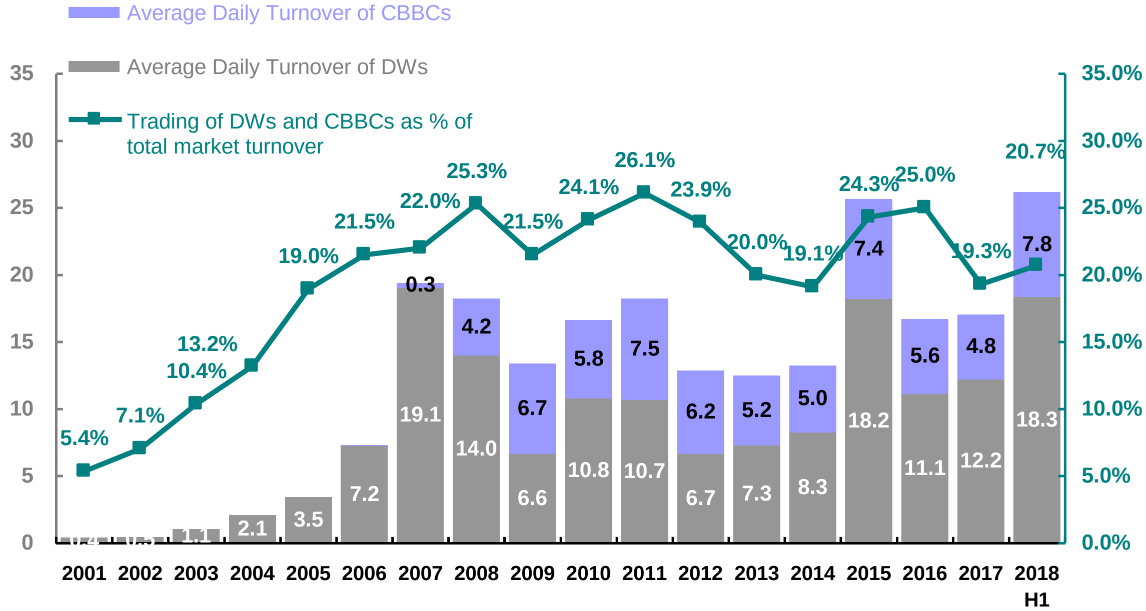
32. Based on data submitted to the SFC, as at 29 June 2018, aggregated short positions amounted to $447.4 billion (or 1.4% of the market cap of the reported stocks).

Derivative warrants (DWs) and callable bull/bear contracts (CBBCs)

33. During the first half of 2018, trading in DWs increased both in absolute terms and as a percentage of total market turnover. The average daily turnover of DWs was $18.3 billion (14.5% of total market turnover), compared with $12.2 billion (13.8% of total market turnover) in 2017.

34. During the first half of 2018, trading in CBBCs increased both in absolute terms and as a percentage of total market turnover. The average daily turnover of CBBCs amounted to $7.8 billion (6.2% of total market turnover), compared with $4.8 billion (5.5% of total market turnover) in 2017.

Turnover of DWs and CBBCs ($ billion)



Sources: HKEX and SFC

Exchange-traded derivatives

35. During the first half of 2018, the average daily trading in exchange-traded derivatives rose by 41.8%.

- The average daily trading in futures products rose 59.5%. Amongst all futures products, HSI futures and HSCEI futures were the most actively traded contracts, accounting for about 44.3% and 29.3% of all futures trading respectively. The average daily trading volume of HSI and HSCEI futures rose 72.8% and 25.0% respectively from 2017.
- The average daily trading in options products rose by 31.9%. Stock options remained the most actively traded options products, with trading volume rising by 34.0% from 2017, followed by HSCEI options and HSI options.

Average daily trading volume of derivatives traded on HKEX by product type (contracts)

		H1 2018	2017	2016
Futures	HSI Futures	220,259	127,478	130,826
	Mini-HSI Futures	95,532	46,507	50,516
	HSCEI Futures	146,058	116,812	133,729
	Mini-HSCEI Futures	25,122	14,823	19,718
	Stock Futures	1,544	492	915
	RMB Currency Futures (USD/CNH)	5,835	3,025	2,181
	Other futures products	3,308	2,848	2,601
	Total futures	**497,658**	**311,985**	**340,486**
Options	HSI Options	52,614	41,009	37,869
	Mini-HSI Options	8,617	6,643	5,767
	HSCEI Options	97,425	80,073	78,849
	Mini-HSCEI Options	2,740	1,527	800
	Stock Options	574,249	428,499	297,903
	Other options products	95	83	69
	Total options	**735,740**	**557,834**	**421,257**
Total futures and options		**1,233,398**	**869,819**	**761,744**

Remarks: The average daily trading volume is based on the number of trading days after the product was launched.
Sources: HKEX and SFC

Substantial increase in equity index futures trading after the extension of the After-Hours Futures Trading session

1. The After-Hours Futures Trading (AHFT) session on HKEX, launched in April 2013, has been smooth and orderly so far.

2. The AHFT session allows investors to establish or hedge positions in response to market news and overseas market volatility after the close of the regular day session in Hong Kong, thereby providing information for price discovery on the next trading day.

3. AHFT trading reflects major overseas market movements. For example, in February 2018, amid sharp volatility in the US market, AHFT trading equity index futures reached a record high.

4. AHFT trading has been growing and reached 16% of daytime trading in the first half of 2018 (4% in 2013). A number of initiatives in the AHFT session supported this growth, namely the inclusion of:
   - mini HSI and HSCEI futures along with the extension of the block trade facility (January 2014);
   - the first currency futures (April 2014) and commodity futures (December 2014);
   - four additional currency futures (EUR/CNH Futures, JPY/CNH Futures, AUD/CNH Futures and CNH/USD Futures) (May 2016);
   - gold futures (July 2017) and iron ore futures (November 2017); and
   - equity index options (May 2018).

5. A major milestone was the extension of AHFT trading hours to 1:00am (from 11:45pm) starting from 6 November 2017. Trading volumes of equity index futures showed substantial increases afterwards.
   - As at end-June 2018, the average daily trading of HSI and HSCEI futures during AHFT was 45,404 contracts (14.9% % of day-time trading). This was 115% higher than the average of 21,153 contracts (9.7%) during September to October 2017 (before the extension of the AHFT session).
   - It should be noted that 11% of the AHFT trading took place after midnight, indicating that the extension of trading hours helped boost trading activities.

6. Looking forward, the AHFT will be further enriched in terms of content (e.g. more products) and trading hours (to be further extended to 3:00am, tentatively in late 2018). This will further enhance the role of Hong Kong as a risk management centre.

Average daily trading of HSI and HSCEI futures during the AHFT session

	HSI futures		HSCEI futures		Total	
	Contracts	As % of daytime	Contracts	As % of daytime	Contracts	As % of daytime
2013*	3,240	4.2%	3,396	4.0%	6,636	4.1%
2014	3,461	5.2%	5,169	6.2%	8,630	5.8%
2015	5,090	6.3%	8,998	7.1%	14,088	6.8%
2016	12,624	10.6%	12,484	10.2%	25,108	10.4%
2017	11,879	10.2%	9,322	8.6%	21,201	9.4%
2018 H1	34,667	18.5%	16,172	12.5%	50,839	16.1%

*Since the launch of the AHFT session on 8 April 2013.