

APAC Market Structure Monthly – October 2018

September Highlights

- MSCI Asia index is down over 15% YTD with a marginal increase in equities volume and a 23% increase in futures volume MoM
- Average Impact Cost is observed to be lower in Japan as spreads narrowed after lot size standardization

Key Market Structure Updates

Hong Kong: HKEX consults on trading suspension if a company's financial statements have disclaimer of opinion

Hong Kong Exchange consultation launched on 28th September, proposes a trading suspension where financial statements of company are published and the auditor has issued, or has indicated that it will issue, a disclaimer of opinion or an adverse opinion on the issuer's financial statements. Trading in the securities may resume once the issuer has addressed these issues. The rule change which aims to improve quality of Hong Kong market could potentially increase tension between companies and auditors.

HKEX will launch 4 new Total Return Index Futures on Hang Seng indices beginning 5th November 2018

China: CSRC issues rules on Shanghai-London Connect; SSE launches consultation on listing rules for CDRs

- Eligibility to list CDR on SSE: Min market cap of RMB 20Bn, 3-years LSE listing and 1-year premium listing, Min listing of 50Mn CDRs with min market value >= RMB 500Mn

Investors can convert their London listed DRs for underlying A-share after 120 days. Huatai plans to do the first listing which may be as early as 3rd December 2019

Japan: GPIF invests \$10Bn into two new ESG themed ETFs

On 25th September GPIF announced that it had chosen S&P Global Ex-Japan LargeMidCap Carbon Efficient Index and the S&P/JPX Carbon Efficient index for investment. Both the indexes are passively run strategies that GPIF now focuses since active fund managers failed to provide any alpha. GPIF is also keen to see further development in ESG-based investment in fixed income.

New research shows how BoJ's ETF buying introduced distortions in buying pattern

BoJ doubled its pace of ETF purchase in 2014 and has since created a bias against value based investing into market behavior according to UK-based research firm. To evidence the pressure created by BoJ's activity, of the top 100 best performing stocks in the weeks where BoJ buys, 56 feature in worst performing stock the following weeks when BoJ is inactive.

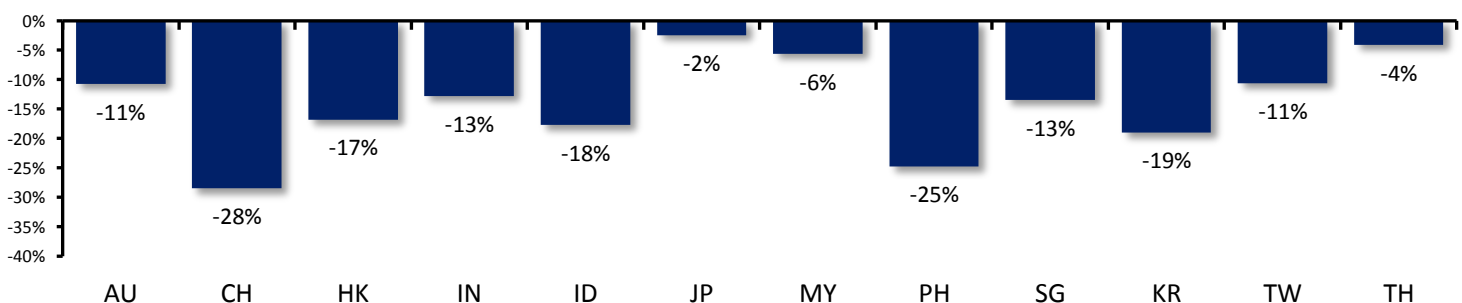
Korea: KRX limits the maximum shares traded in a single order to 1% of total outstanding

Effective last month KRX introduced rule changes whereby investors are allowed to buy a maximum of 1% of a firm's total shares per order (versus 5% today). The rule changes follow the case of Samsun Securities where a fat finger error led to distribution of KRW 112 trillion of stock to its employees as dividend.

Australia: ASIC updates short selling guidance

ASIC has issued a new legislative instrument (the Short Selling Instrument) that provides various relief and modifications to the laws in relation to short selling. The changes allow ETF market makers to do naked short selling for ETF market making activity; permits naked short selling in event of IPO sell down; permits short position calculation at global end calendar time versus 7pm Sydney time and short selling relief for conditional and deferred settlement trading following an IPO.

2018YTD Index Return



Race to Index Inclusion

A number of key announcements were made by two largest index providers in the last month – [FTSE's decision](#) of A-shares inclusion and [MSCI's consultation](#) to increase A-shares weight in EM index. While China's benchmark index is down over 22% this year, the decisions from index providers show continued investor interest in the market. The table below highlights key index event checkpoints and flow estimates.

31-Aug-2018

MSCI A-shares inclusion Phase I & II complete

- A-shares added to MSCI EM benchmark in two phases; Index weight 0.72%; Inclusion Factor 5%

31-May-2019

MSCI A-shares upweight, ChiNext inclusion

- Per ongoing [MSCI consultation](#) A-shares will be upweighted to 1.92% with 12.5% Inclusion factor
- ChiNext stocks proposed to be included in MSCI EM with a 20% inclusion factor. Indicative list [here](#)

21-Jun-2019

FTSE A-shares inclusion (FTSE Secondary Emerging, 1/5th)

- FTSE [announced](#) A-shares inclusion to FTSE Secondary Emerging in three phases (Jun 2019, Sep 2019, Mar 2020)
- First phase inclusion will bring A-shares weight in FTSE GEIS to 1.23%; Inclusion factor 5%

30-Aug-2019

MSCI A-shares upweight

- Per ongoing MSCI consultation proposal, A-shares will be upweighted to 2.92% with 20% Inclusion factor

20-Sep-2019

FTSE A-shares upweight (3/5th Inclusion Factor)

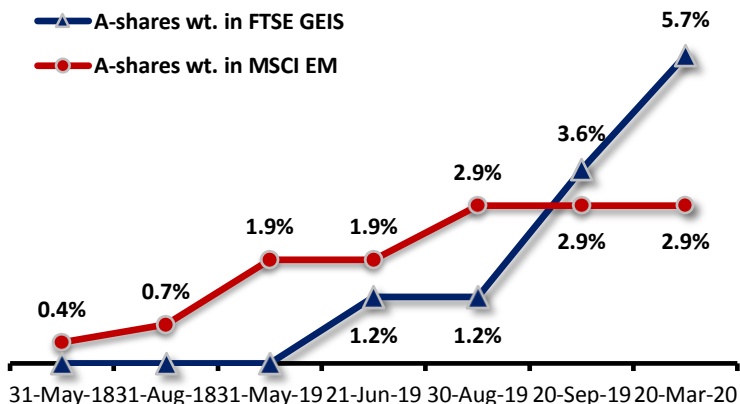
- Second phase of FTSE's A-share inclusion will see a further increase in A-share weight in FTSE GEIS to 3.59% with 15% inclusion factor

20-Mar-2020

FTSE A-shares upweight (Full Inclusion Factor)

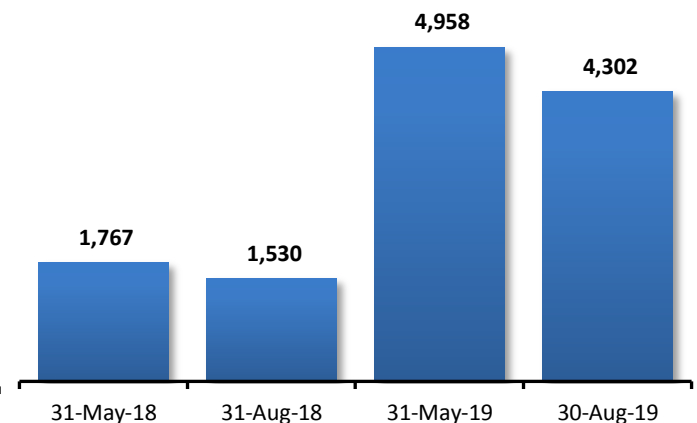
- Final phase of FTSE's A-share inclusion will bring A-shares weight in FTSE GEIS to 5.7% with 25% inclusion factor

A-shares weight in MSCI EM and FTSE GEIS



Source: MSCI, FTSE, BofAML

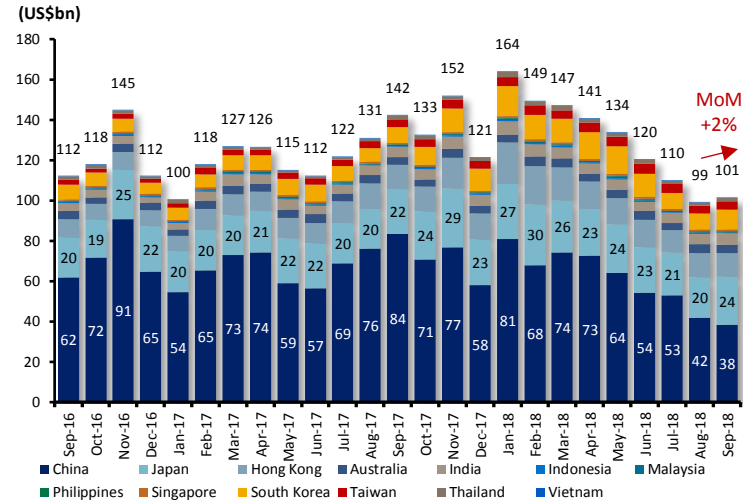
MSCI Passive Flow Estimate (\$ Mn)



Source: MSCI, BofAML

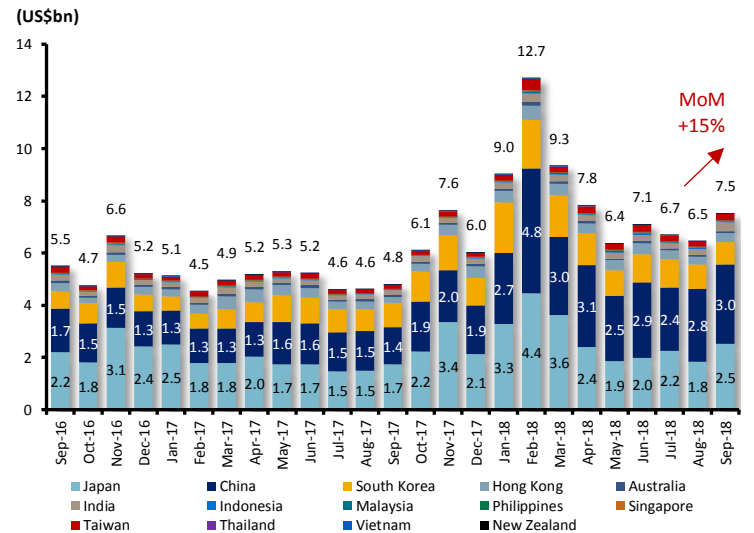
APAC Primary Equity Monthly Turnover (ADTV)

Venue	Sep-18 ADTV (US\$ bn)	Sep-18 Market Share	Pre-3M ADTV (US\$ bn)	Pre-3M Market Share	YTD ADTV YoY (%)
China	38.3	37.7%	49.6	45.2%	-10.5%
Japan	23.9	23.5%	21.4	19.5%	16.6%
Hong Kong	11.6	11.5%	12.3	11.2%	40.6%
South Korea	9.9	9.8%	9.1	8.3%	59.0%
India	5.7	5.7%	4.9	4.5%	17.1%
Australia	4.2	4.1%	4.1	3.7%	5.3%
Taiwan	4.0	4.0%	4.6	4.2%	44.0%
Thailand	1.7	1.7%	1.6	1.4%	42.8%
Singapore	0.7	0.7%	0.8	0.8%	12.0%
Malaysia	0.5	0.5%	0.6	0.5%	21.6%
Indonesia	0.5	0.5%	0.6	0.5%	11.2%
Vietnam	0.2	0.2%	0.2	0.1%	45.4%
Philippines	0.1	0.1%	0.1	0.1%	-18.3%
Total(US\$ bn)	101.4	100.0%	109.8	100.0%	6.6%



APAC ETF Monthly Turnover (ADTV)

Venue	Sep-18 ADTV (US\$ bn)	Sep-18 Market Share	Pre-3M ADTV (US\$ bn)	Pre-3M Market Share	YTD ADTV YoY (%)
China	3.0	40.4%	2.7	40.2%	111.7%
Japan	2.5	33.5%	2.0	30.0%	48.5%
South Korea	0.9	11.5%	1.0	15.2%	59.7%
Hong Kong	0.4	4.7%	0.4	5.3%	13.7%
India	0.3	4.4%	0.2	3.2%	27.3%
Taiwan	0.2	3.20%	0.2	3.42%	48.4%
Australia	0.1	0.9%	0.1	1.2%	-4.3%
Malaysia	0.0	0.4%	0.03	0.4%	102.8%
Indonesia	0.0	0.4%	0.04	0.6%	64.1%
Singapore	0.01	0.2%	0.02	0.3%	82.6%
Philippines	0.01	0.1%	0.01	0.1%	23.9%
Vietnam	0.01	0.1%	0.00	0.07%	260.7%
New Zealand	0.004	0.1%	0.002	0.0%	-9.5%
Thailand	0.001	0.0%	0.0005	0.0%	200.5%
Total(US\$ bn)	7.5	100.0%	6.7	100.0%	64.8%



APAC Index Futures Monthly Turnover (ADTV)

Venue	Sep-18 ADTV (US\$ bn)	Sep-18 Market Share	Pre-3M ADTV (US\$ bn)	Pre-3M Market Share	YTD ADTV YoY (%)
Hang Seng	40.7	31.7%	38.1	33.8%	134.0%
OSE Nikkei 225	16.1	12.5%	12.1	10.8%	35.1%
KOSPI200	14.7	11.4%	14.7	13.1%	38.2%
OSE TPX	14.4	11.2%	9.6	8.5%	26.4%
TAIEX	12.3	9.6%	11.6	10.3%	59.4%
H-Shares	8.5	6.6%	8.2	7.3%	48.6%
ASX SPI 200	6.9	5.4%	5.1	4.5%	26.9%
CSI 300	3.7	2.9%	3.3	3.0%	70.2%
SGX FTSE A50	3.3	2.6%	3.0	2.7%	59.9%
SGX MSCI TW	2.5	1.9%	2.4	2.1%	26.7%
NSE Nifty 50	1.9	1.5%	1.3	1.2%	33.6%
SGX Nifty 50	1.6	1.3%	1.2	1.1%	29.8%
SET50	1.0	0.8%	1.0	0.9%	107.8%
SGX MSCI SG	0.6	0.5%	0.7	0.6%	23.3%
FTSE KLCI	0.2	0.1%	0.2	0.2%	50.7%
Total(US\$ bn)	128.4	100.0%	112.7	100.0%	62.0%

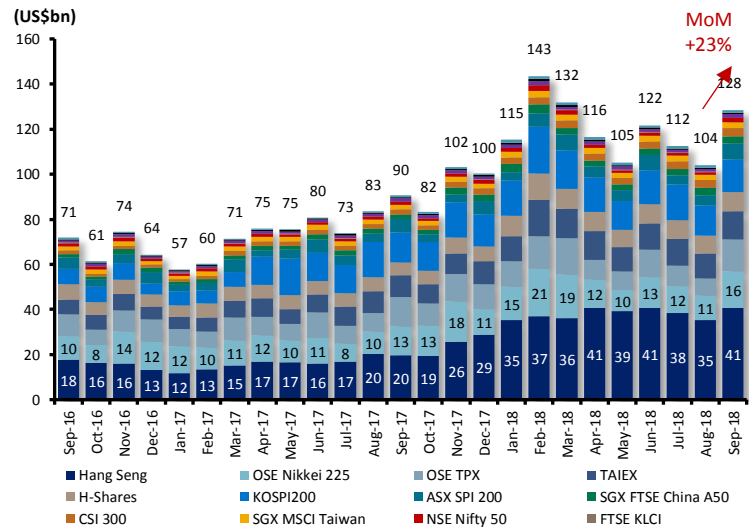
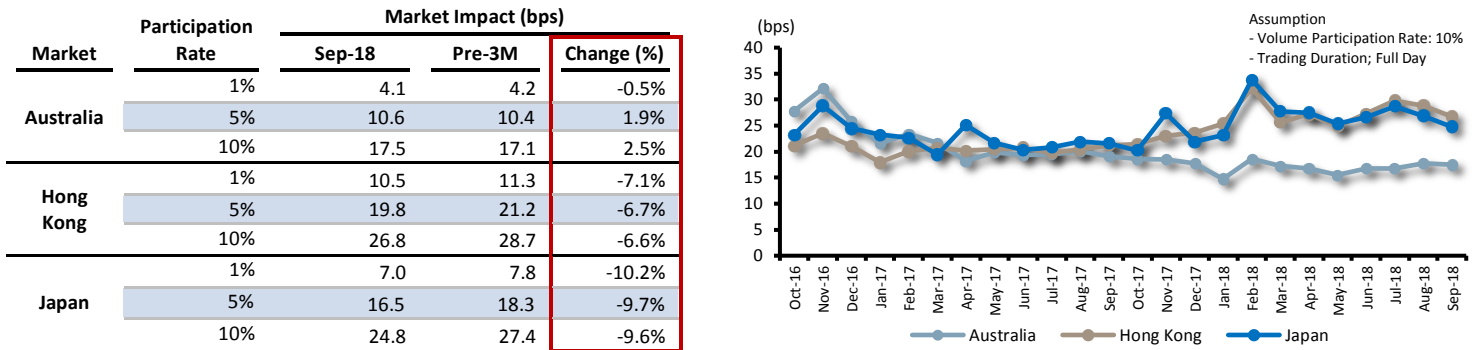


Fig 6: BofAML APAC Market Impact Tracker



Source: Asia Algorithmic Quantitative Strategies Group

Fig 7: APAC Market Micro Structure – Sep 2018

	AU	CN	HK	IN	ID	JP	MY	PH	SG	KR	TW	TH
ADTV (US\$ bn)	4.2	38.3	11.6	5.7	0.5	23.9	0.5	0.1	0.7	9.9	4.0	1.7
Spread (bps)	17.3	13.2	14.1	3.0	138.0	6.8	23.7	16.3	30.6	19.2	40.0	48.2
Quote Size (Shares)	8,620	34,425	56,798	296	22,752	2,592	56,901	7,433	160,885	1,092	9,143	416,166
Quote Size (% ADV)	1.5%	0.6%	1.4%	0.0%	25.0%	0.3%	5.3%	1.5%	8.5%	1.8%	7.4%	15.2%
Quote Time (mins)	5.2	1.4	4.5	0.1	82.4	0.9	19.2	4.0	41.0	7.2	19.7	41.2
Volatility (%)	1.4%	1.7%	1.5%	1.8%	2.9%	1.2%	1.4%	1.7%	1.2%	1.9%	1.4%	1.5%
MOO (%)	2.2%	0.6%	1.2%	0.2%	0.2%	3.8%	0.3%	0.4%	1.9%	1.5%	2.6%	2.9%
MOC (%)	25.1%	1.1%	9.1%	0.0%	2.6%	14.8%	9.1%	22.8%	11.9%	5.8%	6.3%	9.5%
ETF ADTV (% Total)	1.7%	7.9%	3.0%	5.7%	6.4%	10.5%	5.9%	9.6%	2.1%	8.7%	5.9%	0.04%

Fig 8: Spread Change vs Pre-3M

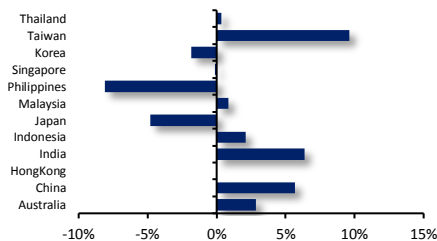


Fig 9: Quote Size Change vs Pre-3M

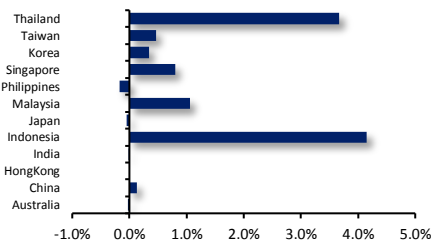


Fig 10: Volatility Change vs Pre-3M

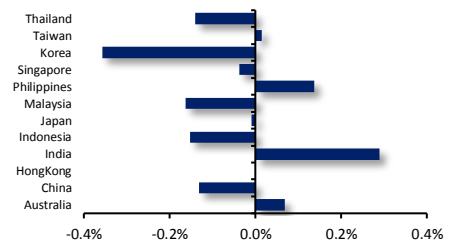


Fig 11: MOO% Change vs Pre-3M

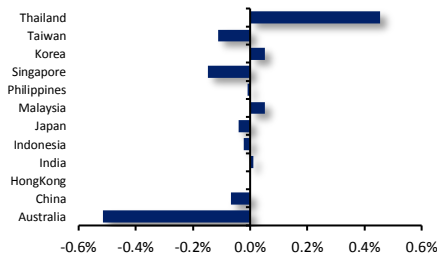


Fig 12: MOC% Change vs Pre-3M

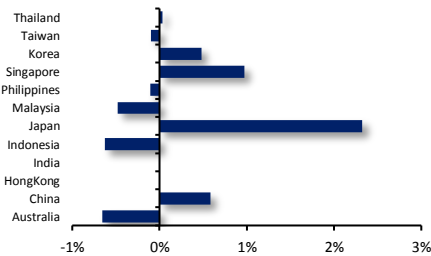
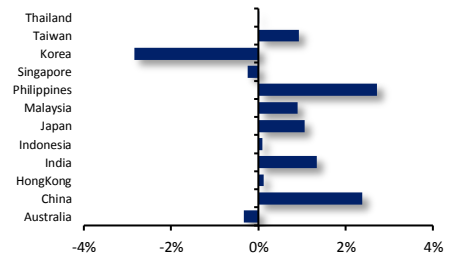
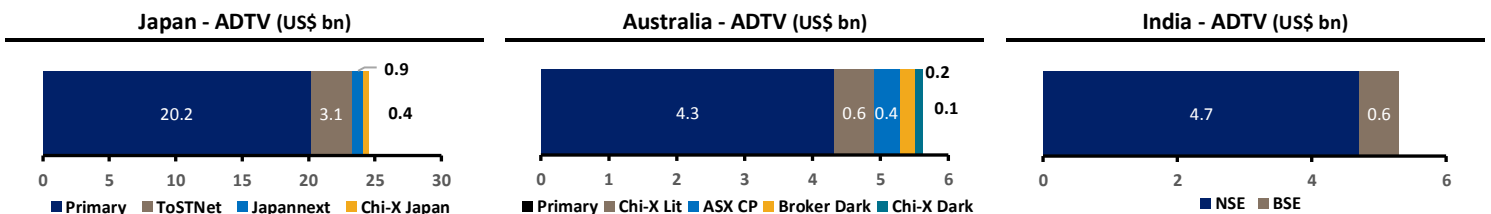


Fig 13: ETF% Change vs Pre-3M



Source: Asia Algorithmic Quantitative Strategies Group

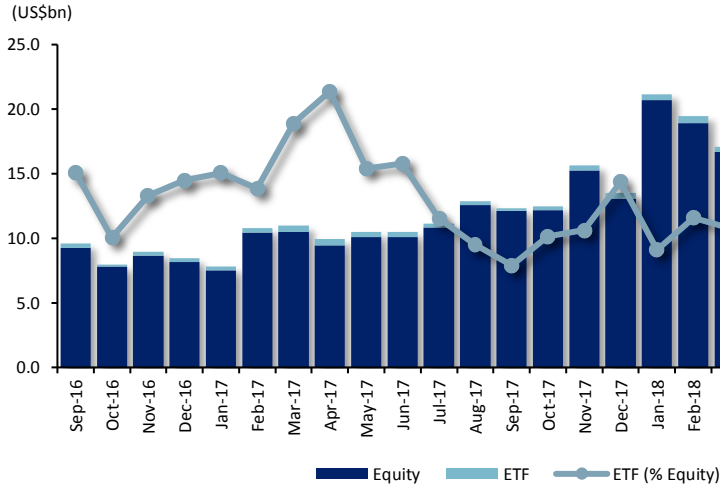
Fig 14: APAC Market Fragmentation – Sep 2018



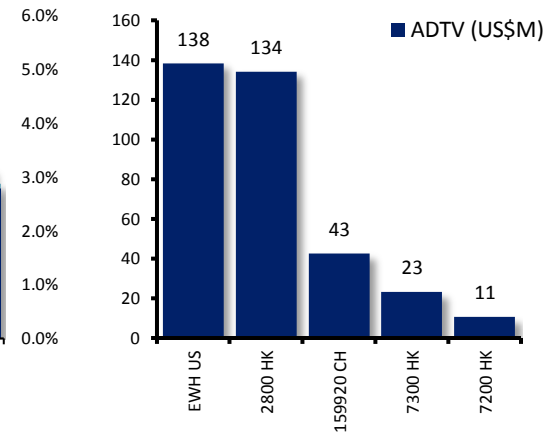
Source: Asia Algorithmic Quantitative Strategies Group

Hong Kong

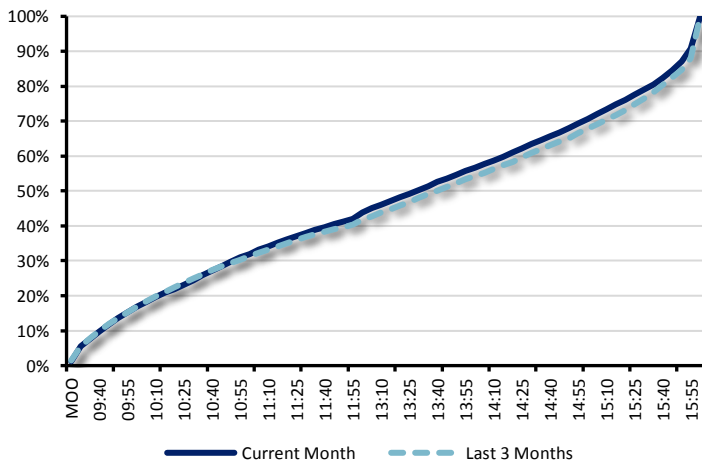
Monthly Equity Turnover & ETF Volume Trend



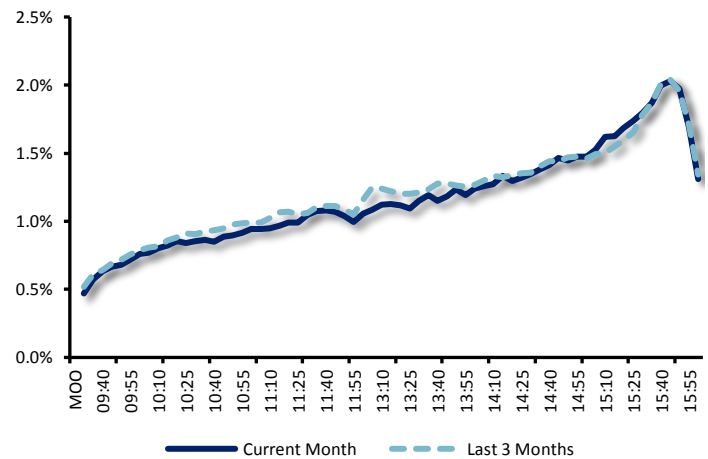
Top 5 Most Traded ETFs



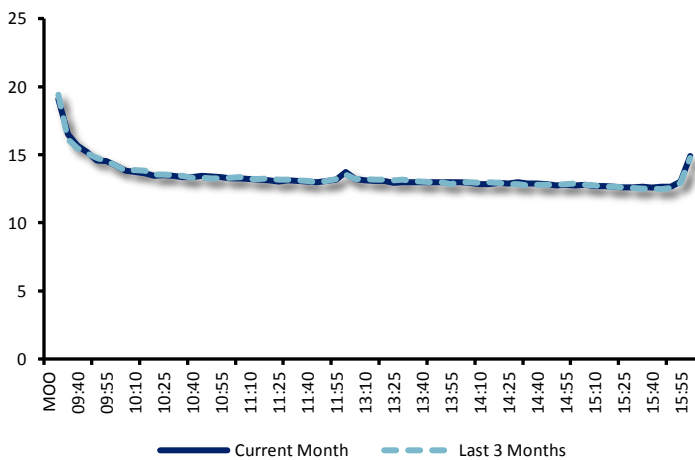
Intraday Volume Profile



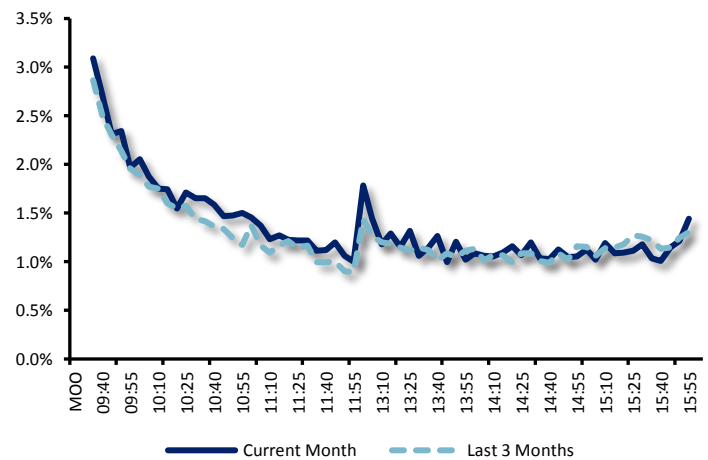
Intraday Queue Time(% of Total)



Intraday Spread (bps)

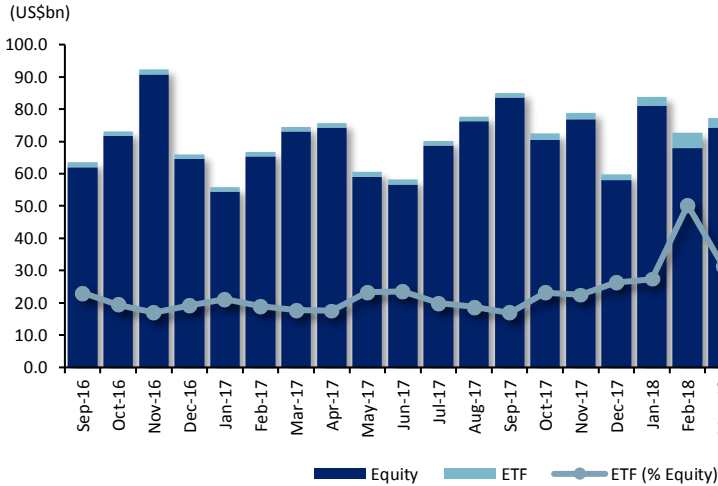


Intraday Volatility

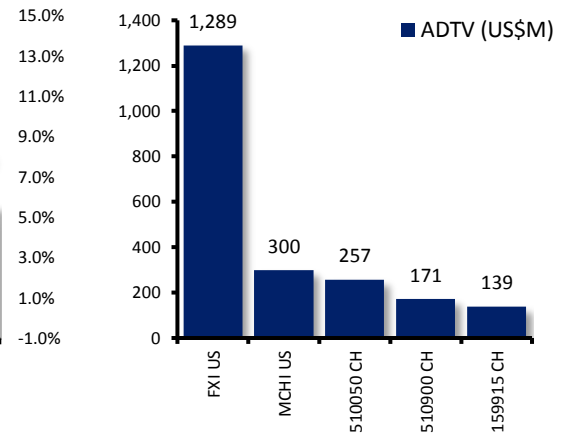


China

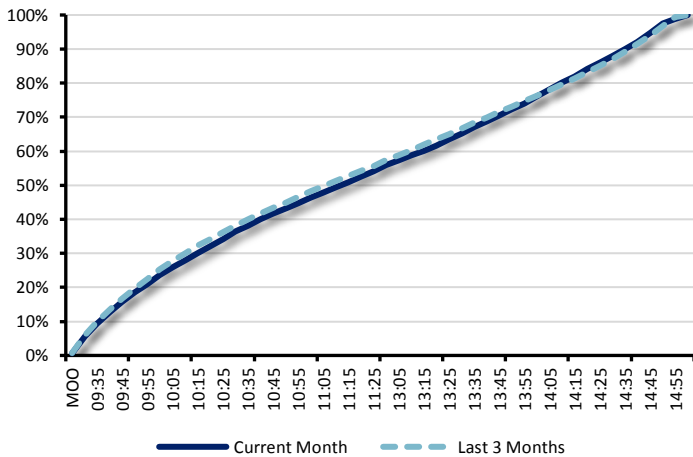
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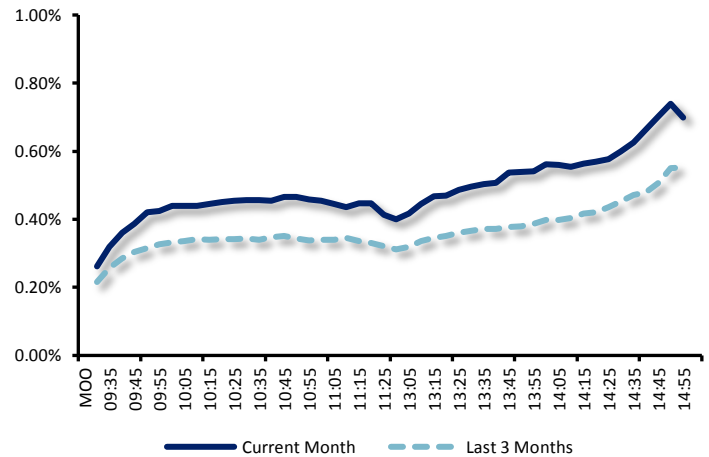
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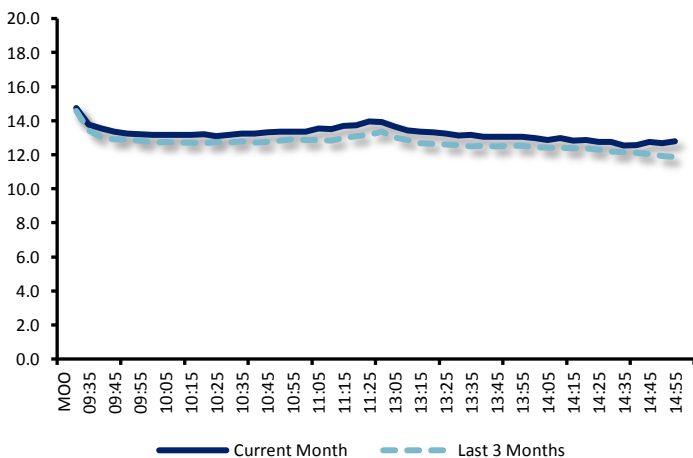
Intraday Volume Profile



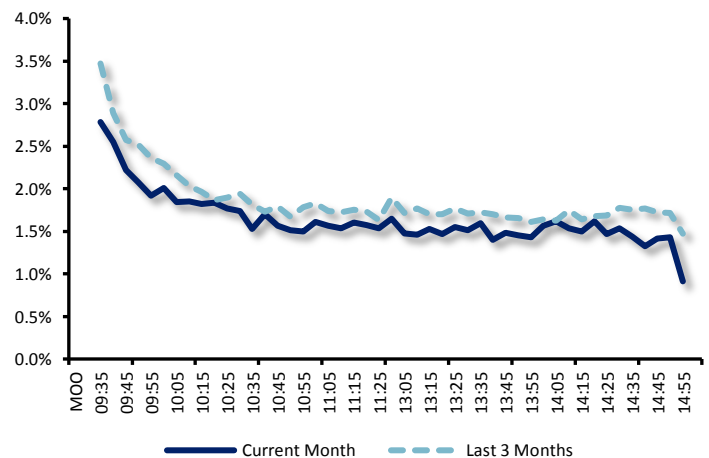
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Intraday Spread (bps)

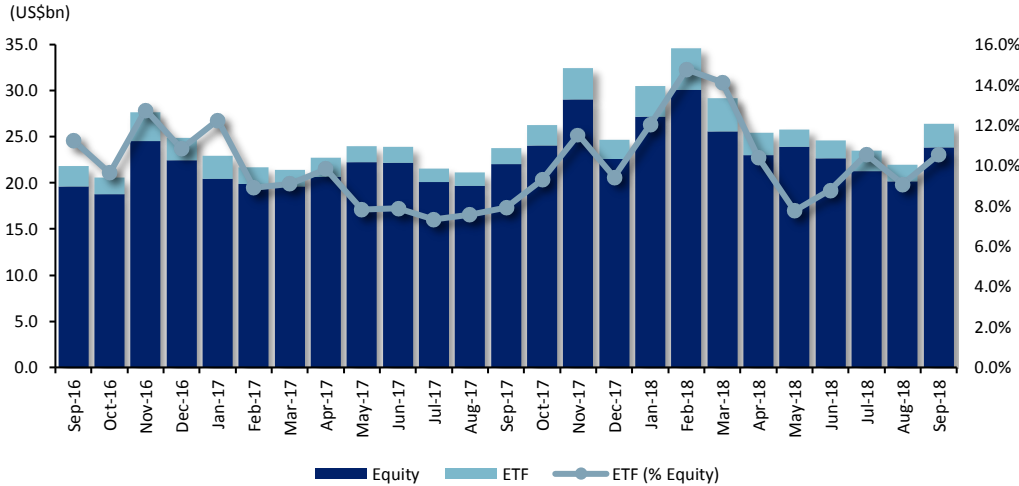


Intraday Volatility

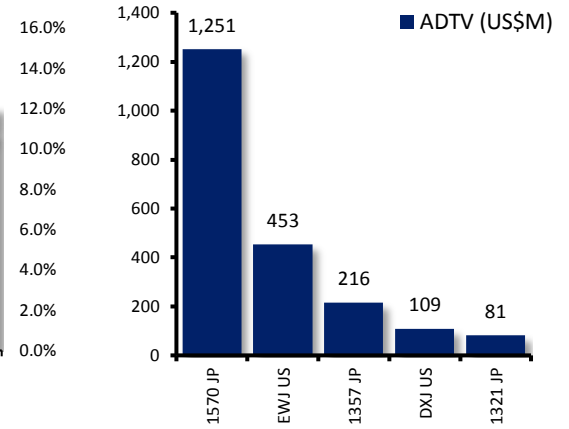


Japan

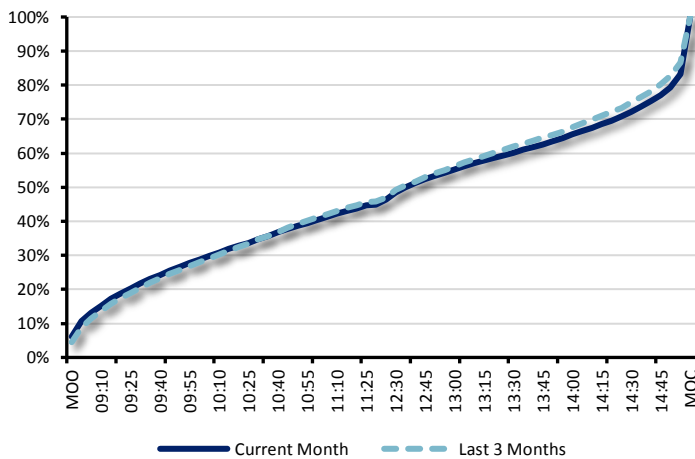
Monthly Equity Turnover & ETF Volume Trend



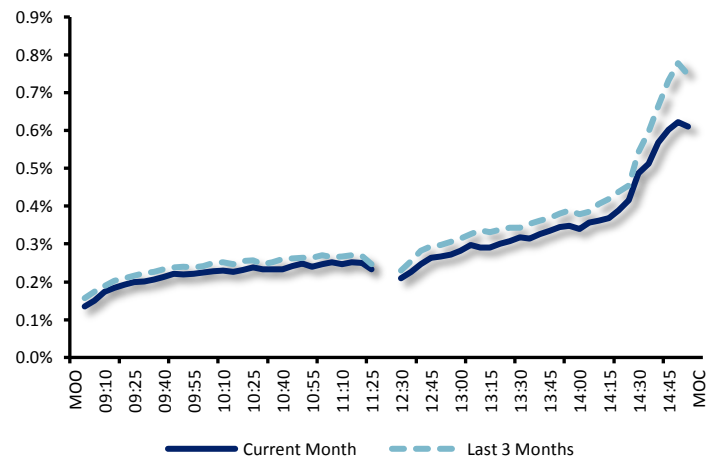
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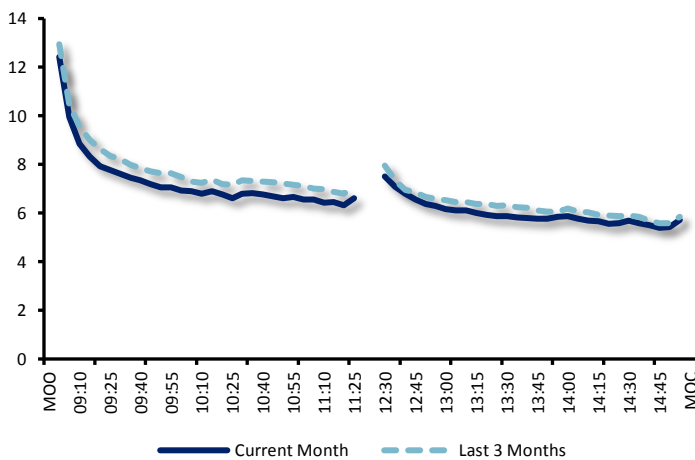
Intraday Volume Profile



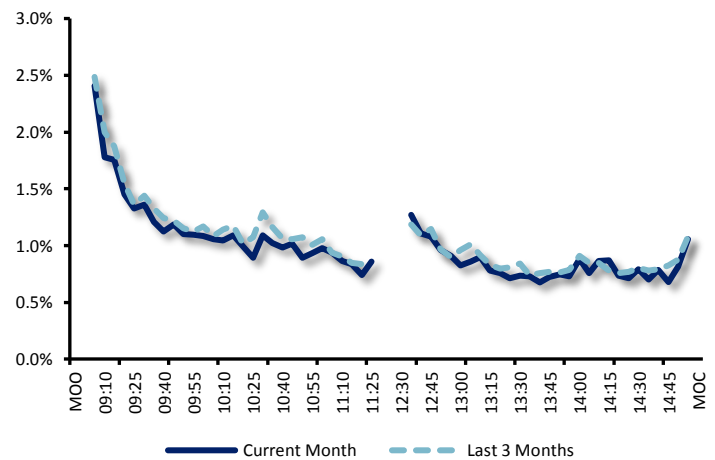
Intraday Queue Time(% of Total)



Intraday Spread (bps)

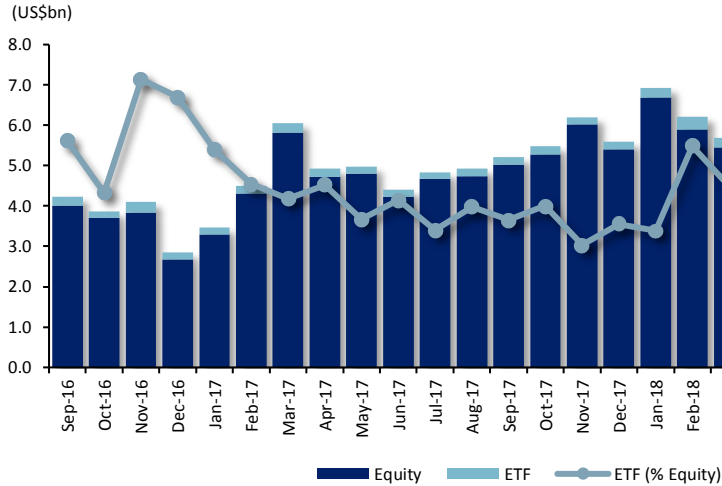


Intraday Volatility

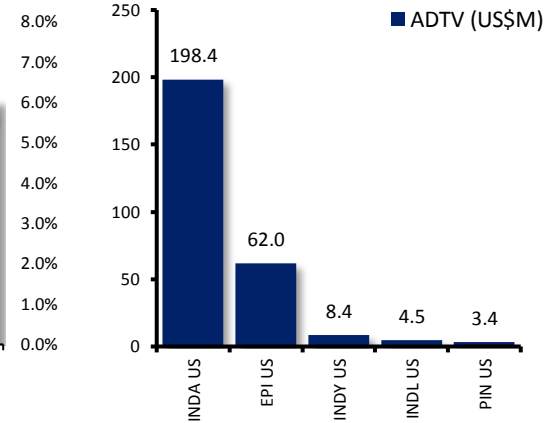


India

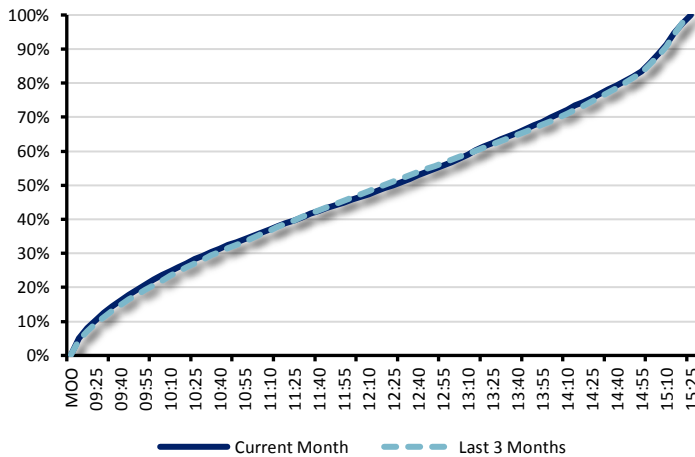
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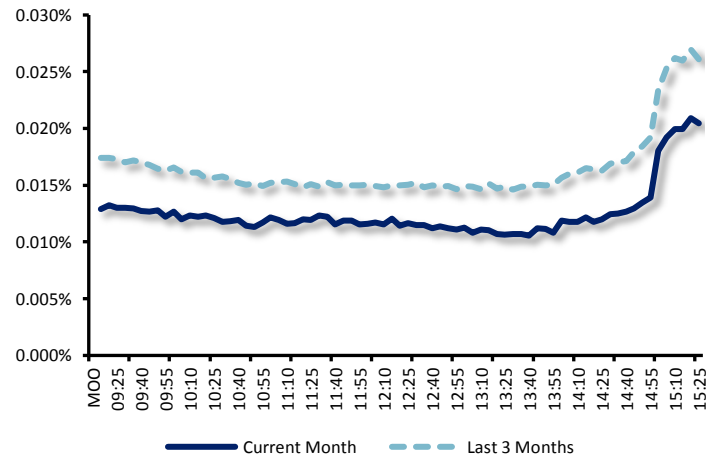
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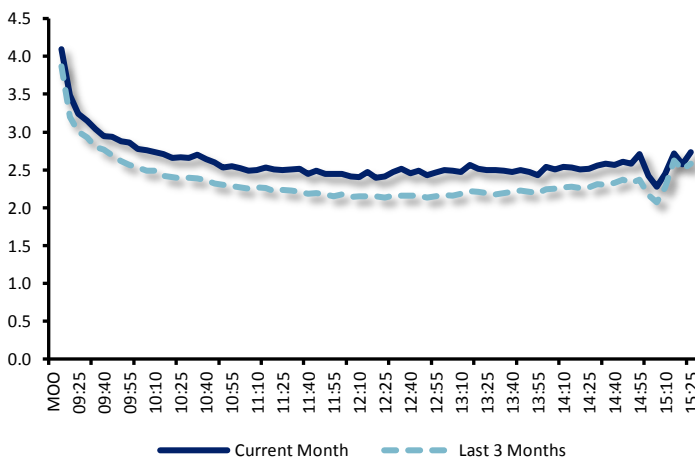
Intraday Volume Profile



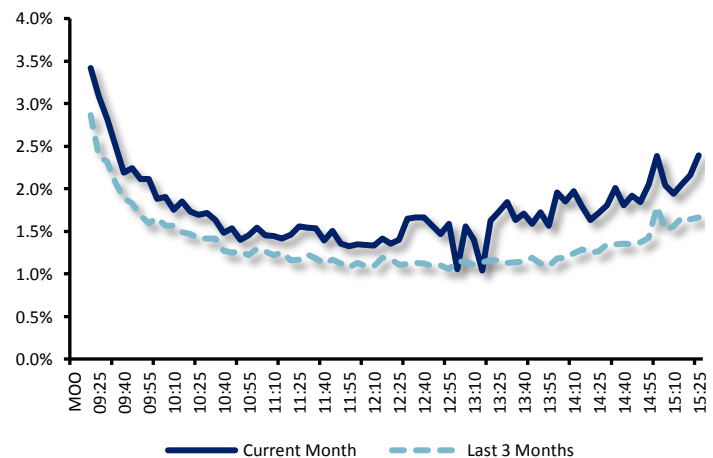
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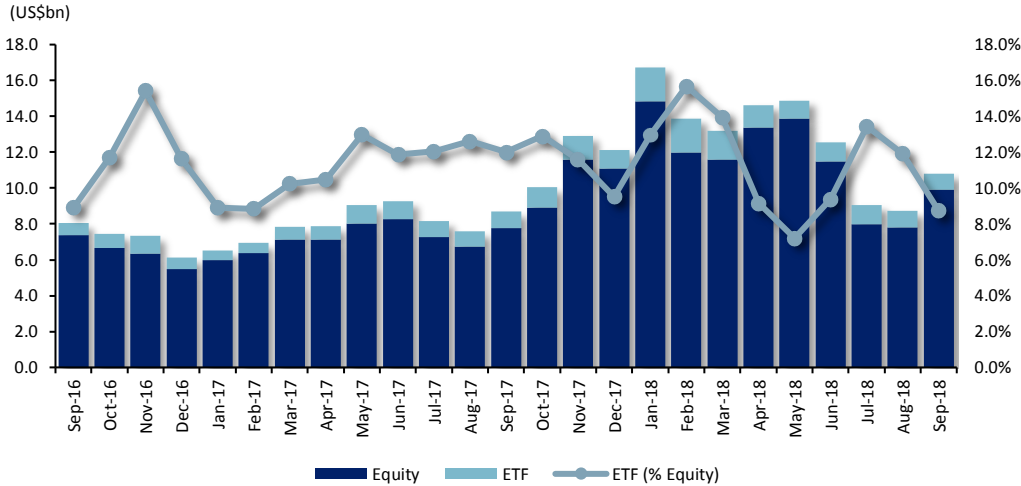


Intraday Volatility

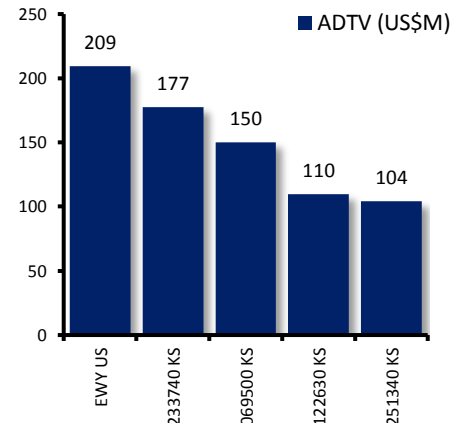


South Korea

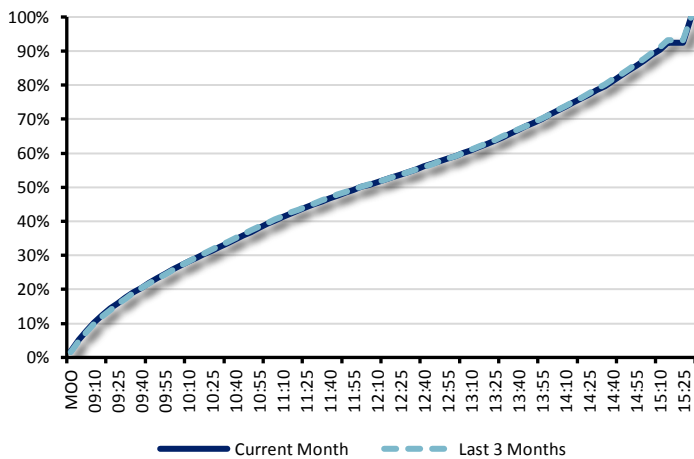
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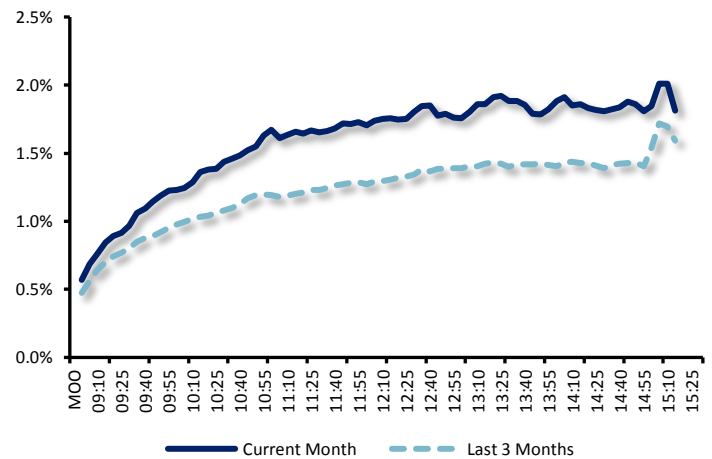
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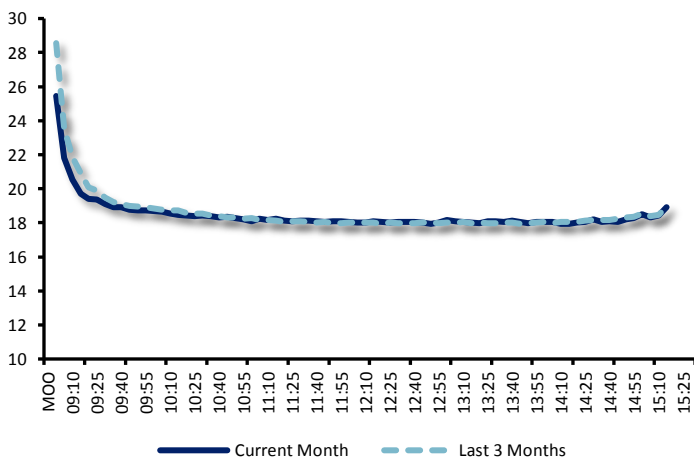
Intraday Volume Profile



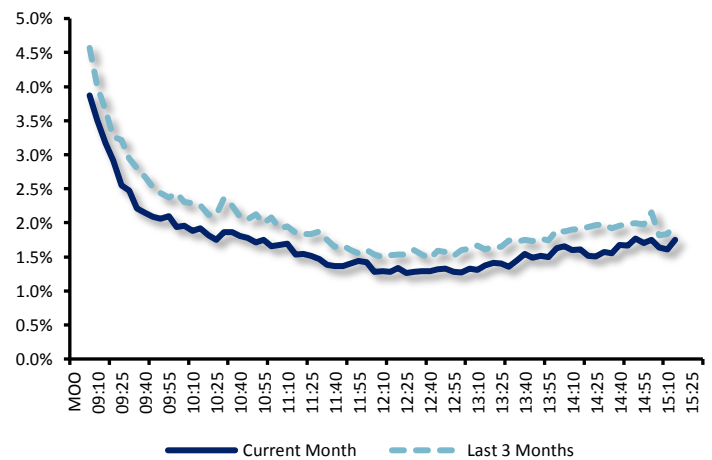
Intraday Queue Time(% of Total)



Intraday Spread (bps)

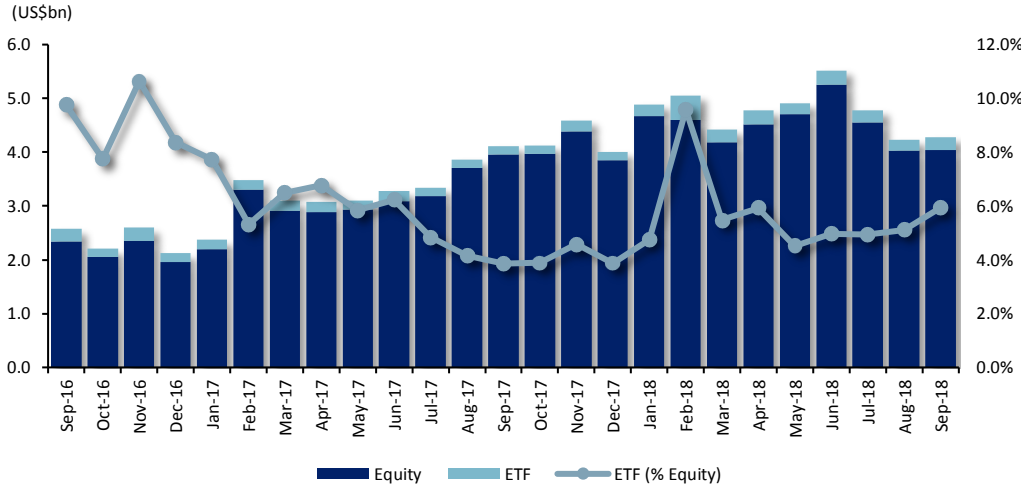


Intraday Volatility

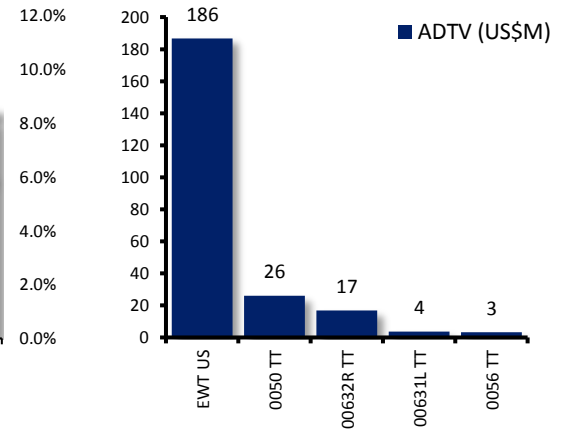


Taiwan

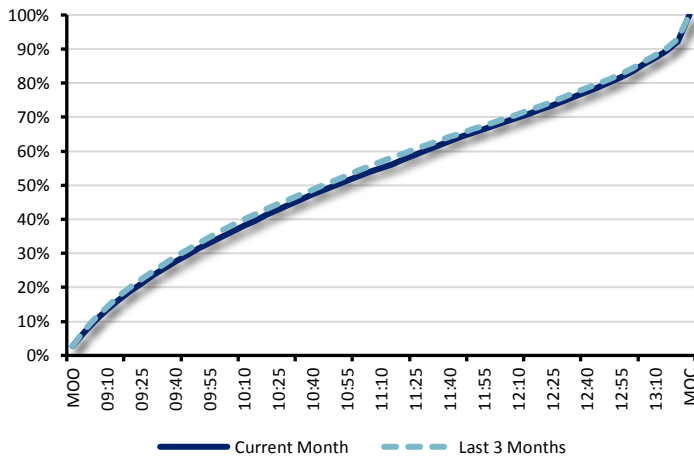
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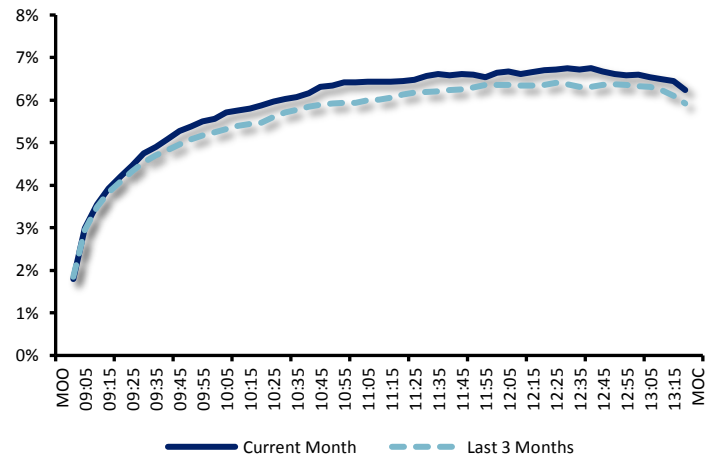
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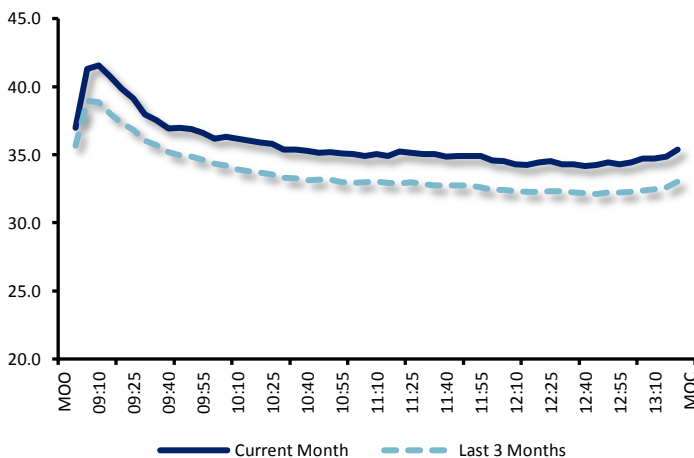
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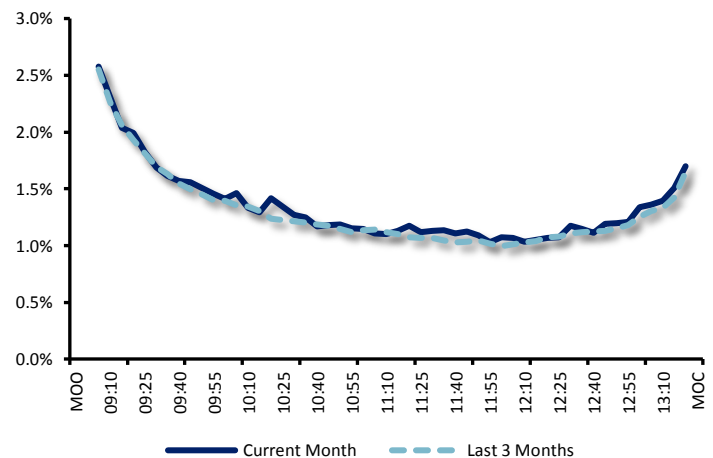
Intraday Queue Time(% of Total)



Intraday Spread (bps)

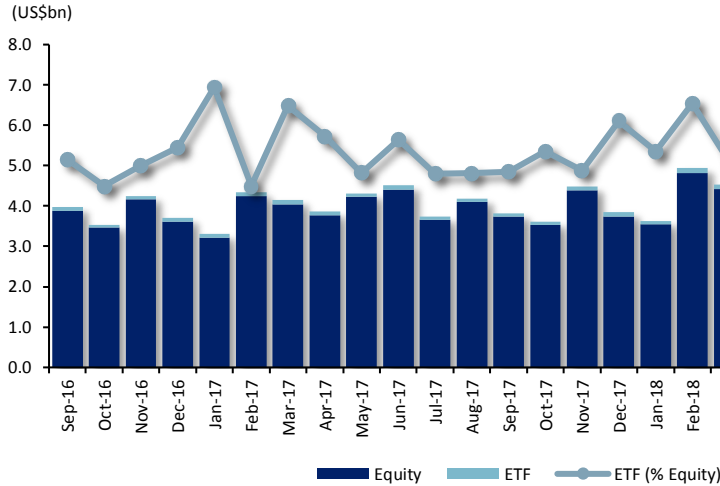


Intraday Volatility

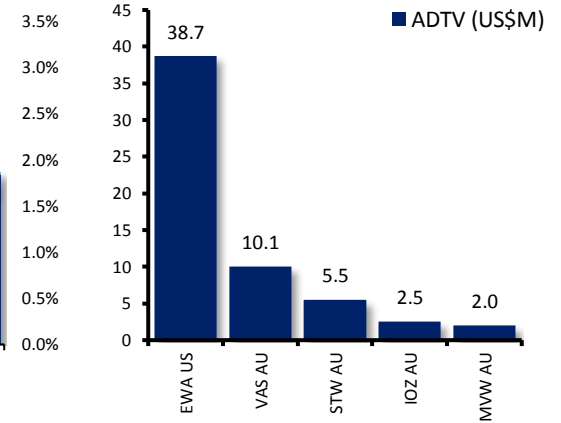


Australia

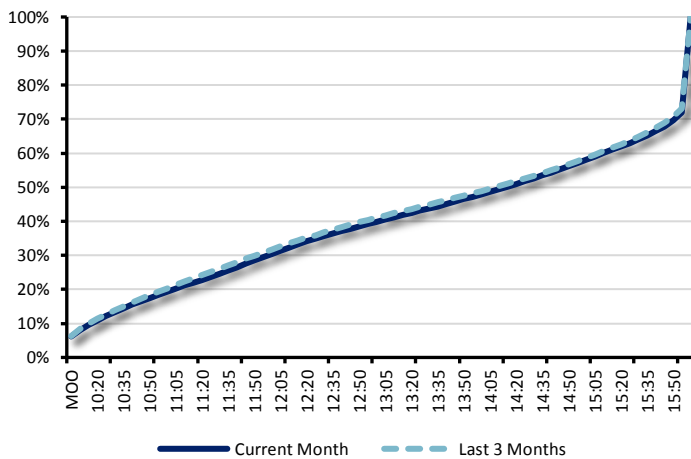
Monthly Equity Turnover & ETF Volume Trend



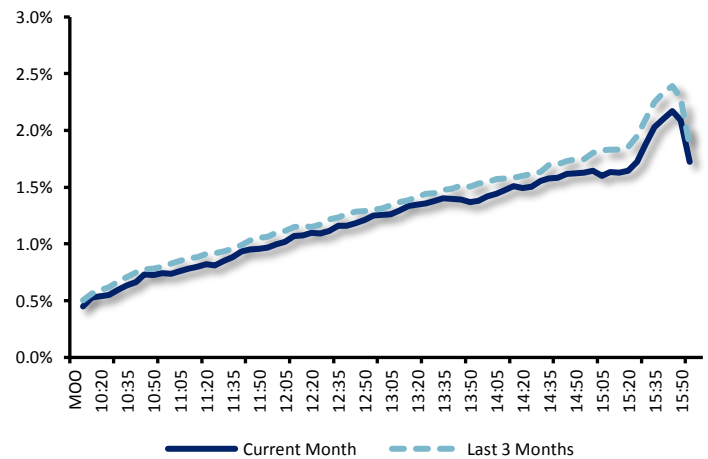
Top 5 Most Traded ETFs



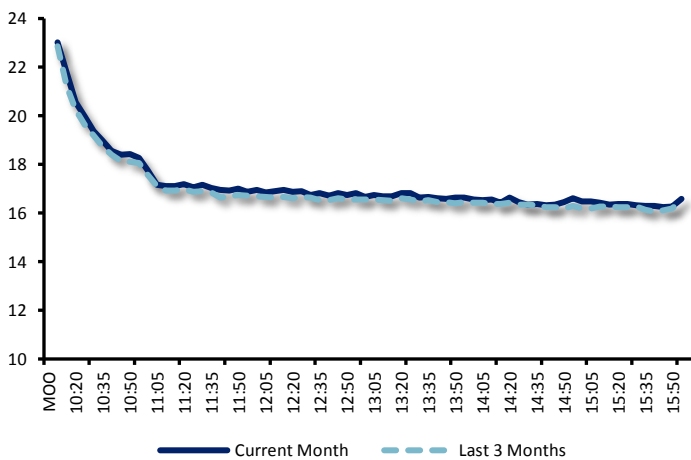
Intraday Volume Profile



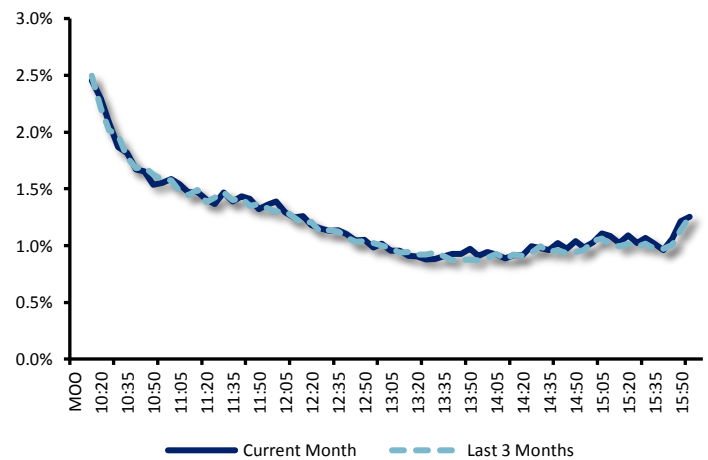
Intraday Queue Time(% of Total)



Intraday Spread (bps)

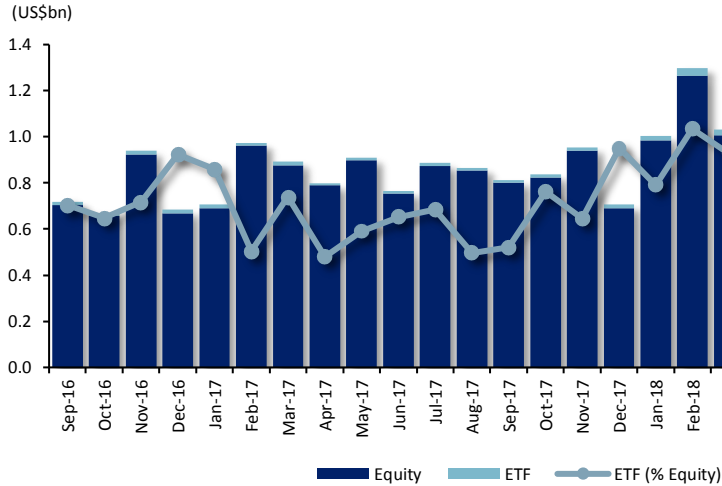


Intraday Volatility

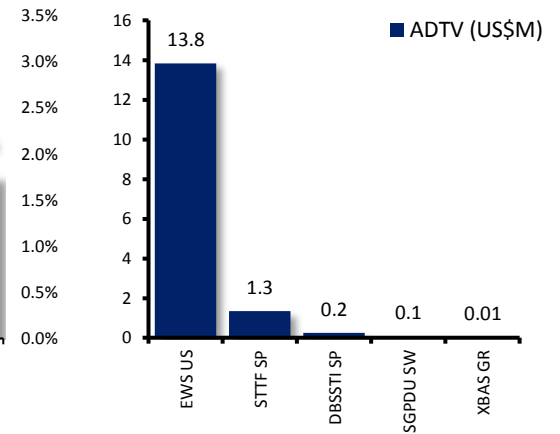


Singapore

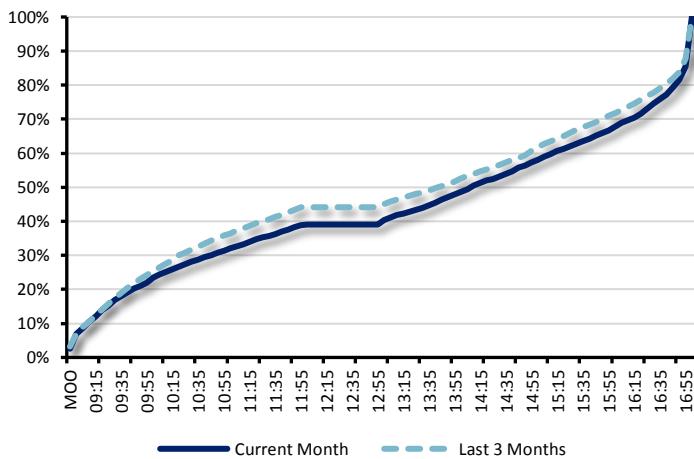
Monthly Equity Turnover & ETF Volume Trend



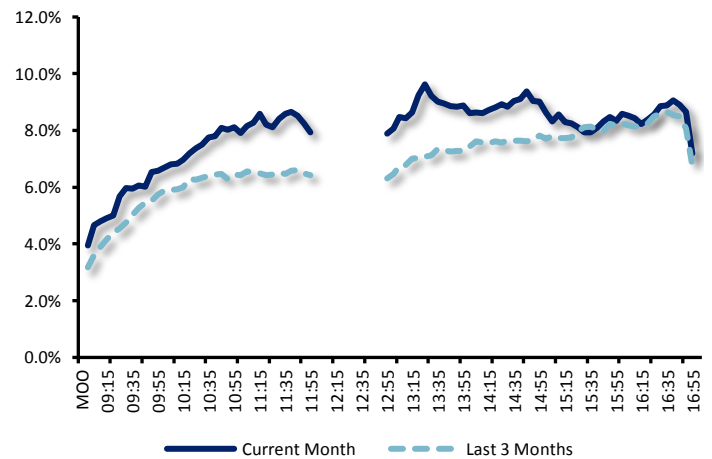
Top 5 Most Traded ETFs



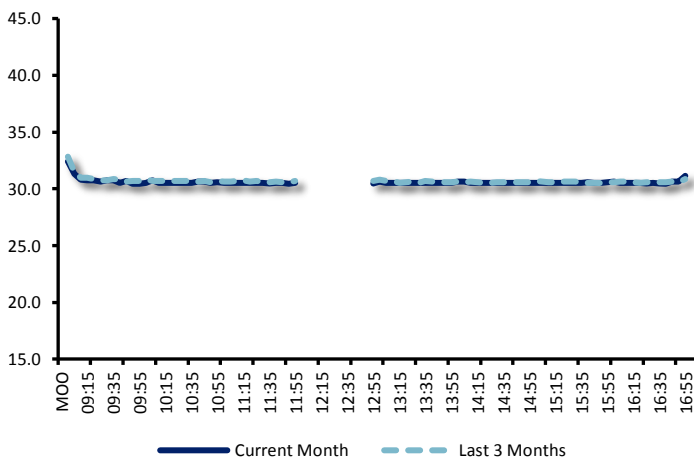
Intraday Volume Profile



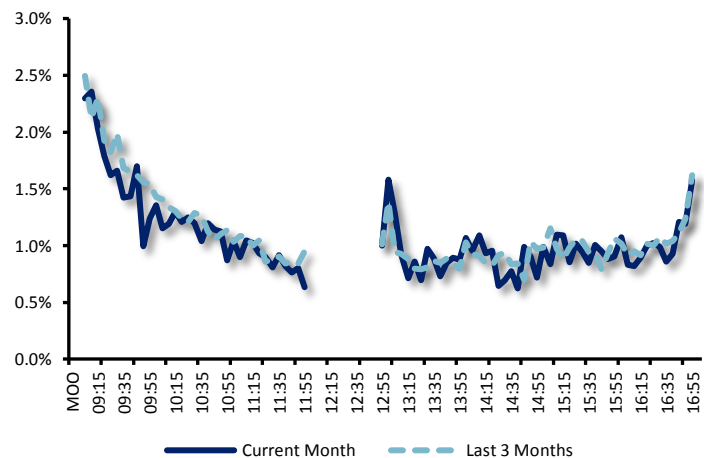
Intraday Queue Time(% of Total)



Intraday Spread (bps)



Intraday Volatility

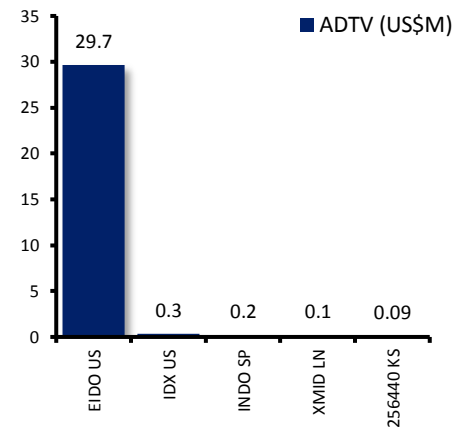


Indonesia

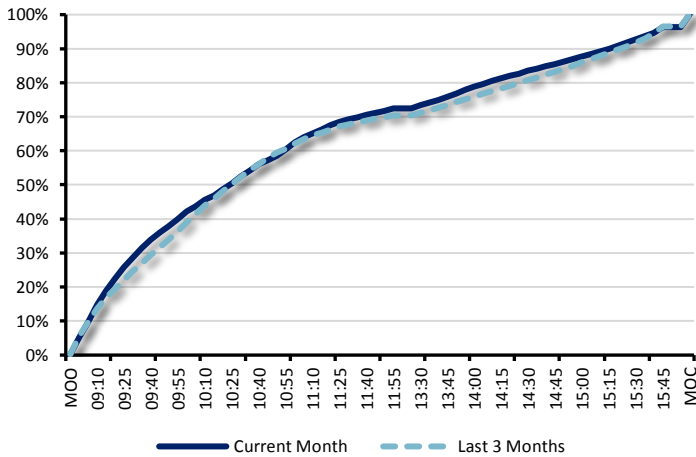
Monthly Equity Turnover & ETF Volume Trend



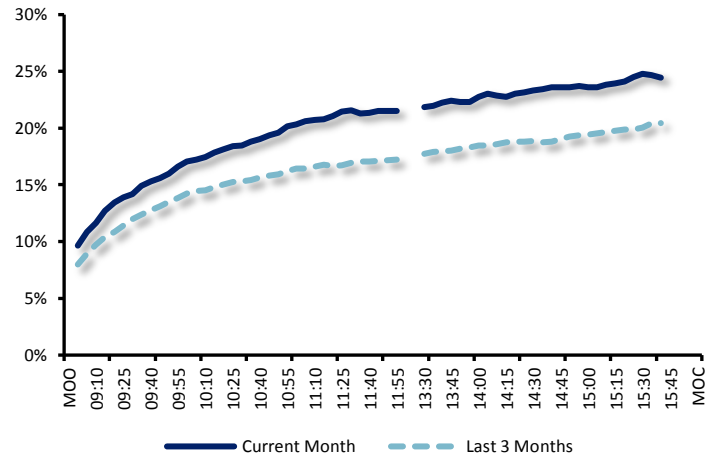
Top 5 Most Traded ETFs



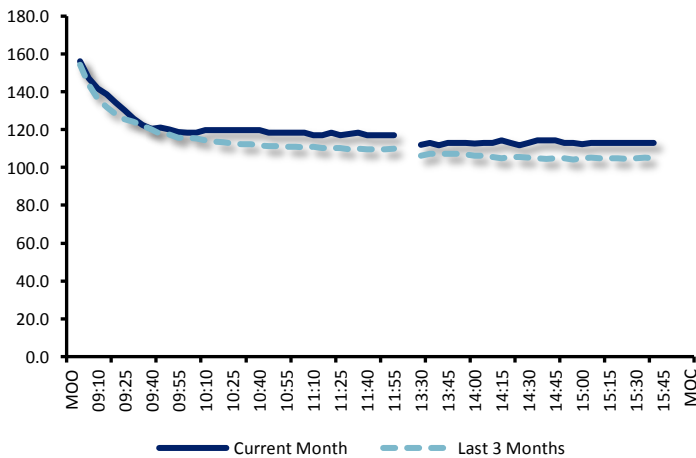
Intraday Volume Profile



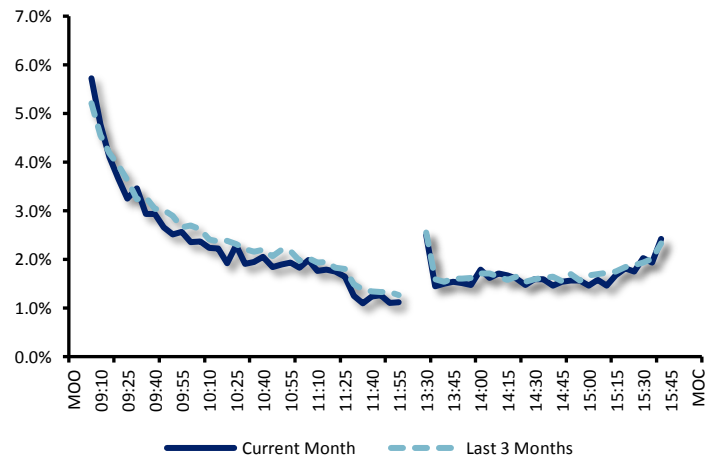
Intraday Queue Time(% of Total)



Intraday Spread (bps)

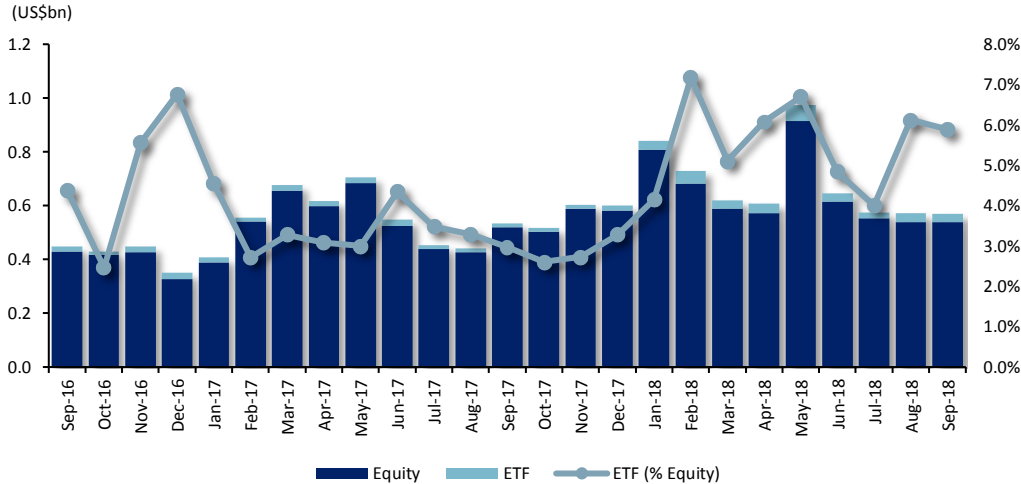


Intraday Volatility

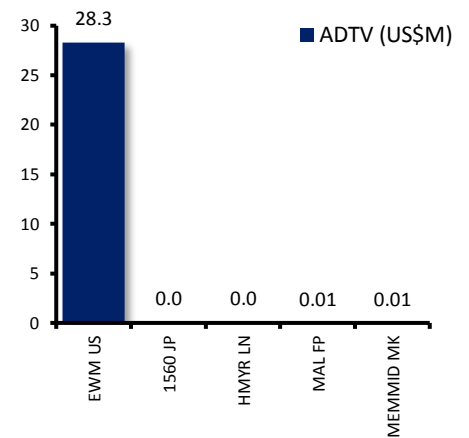


Malaysia

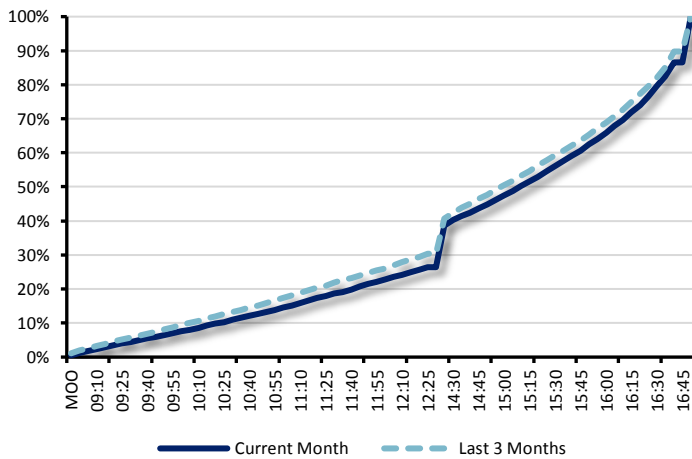
Monthly Equity Turnover & ETF Volume Trend



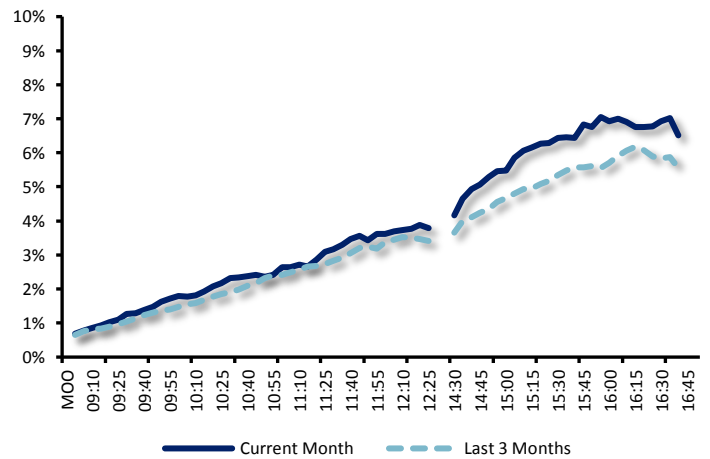
Top 5 Most Traded ETFs



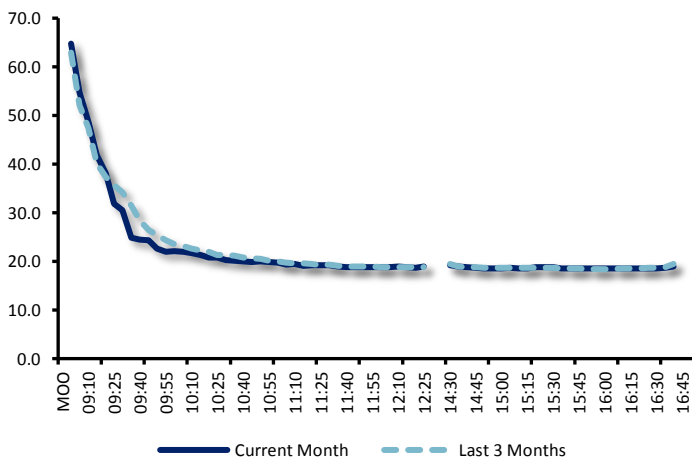
Intraday Volume Profile



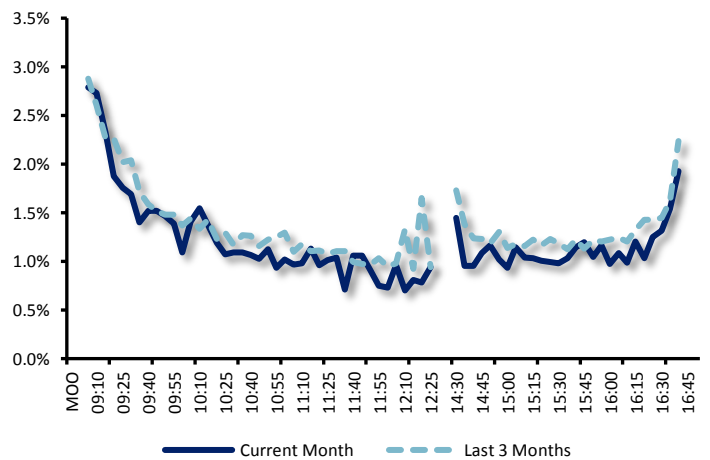
Intraday Queue Time(% of Total)



Intraday Spread (bps)

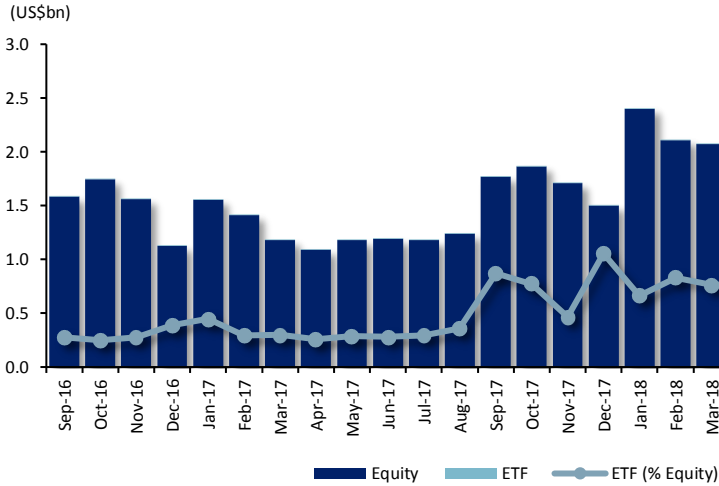


Intraday Volatility

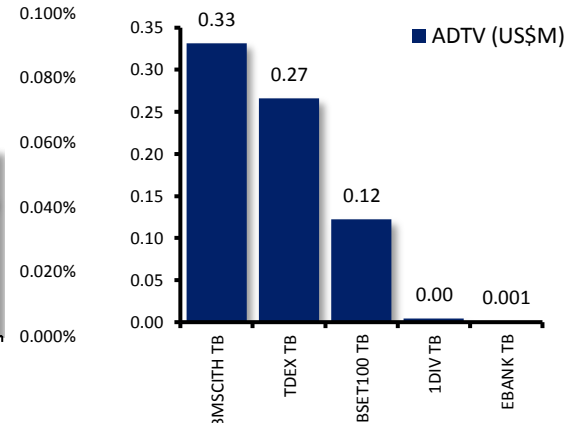


Thailand

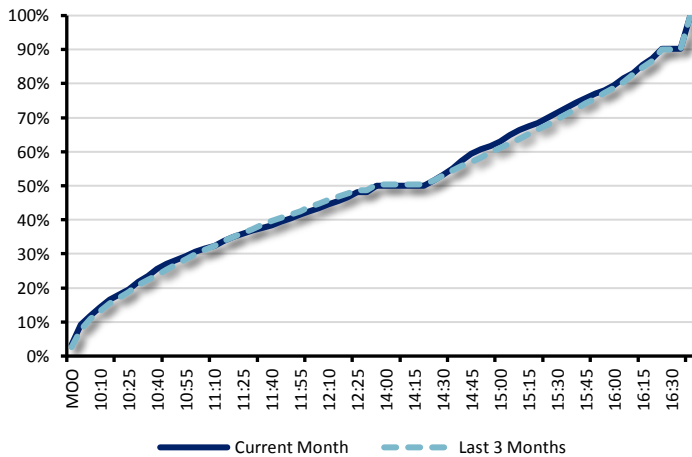
Monthly Equity Turnover Trend



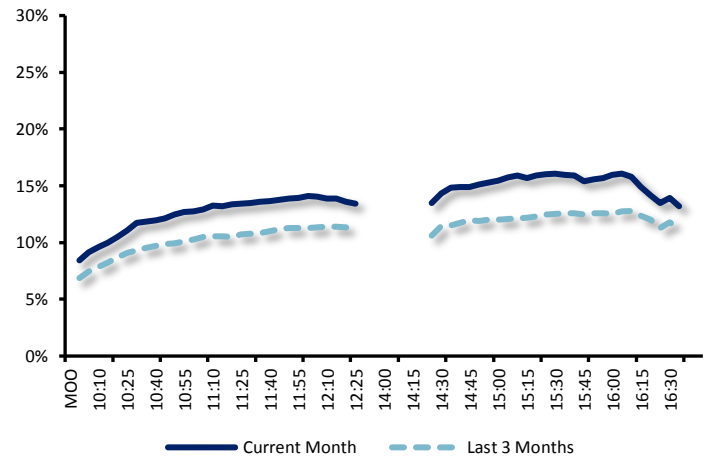
Top 5 Most Traded ETFs



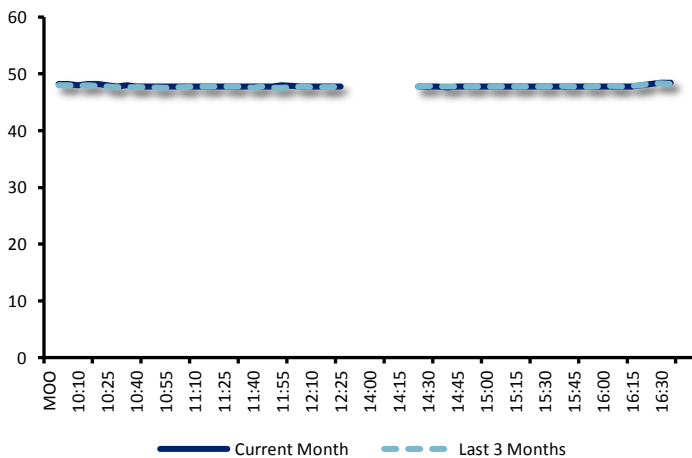
Intraday Volume Profile



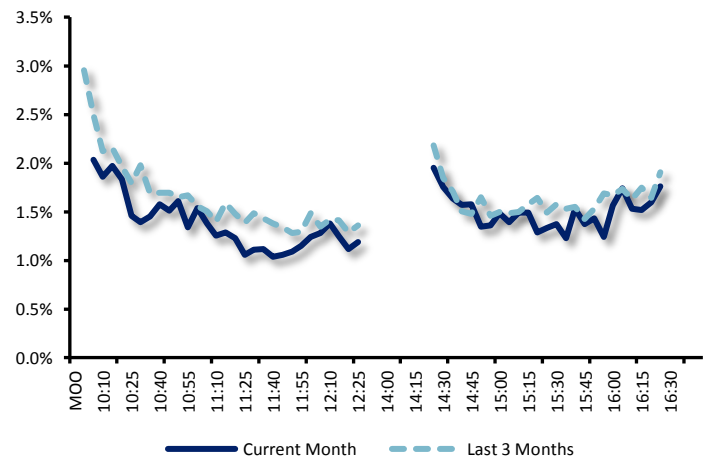
Intraday Queue Time(% of Total)



Intraday Spread (bps)

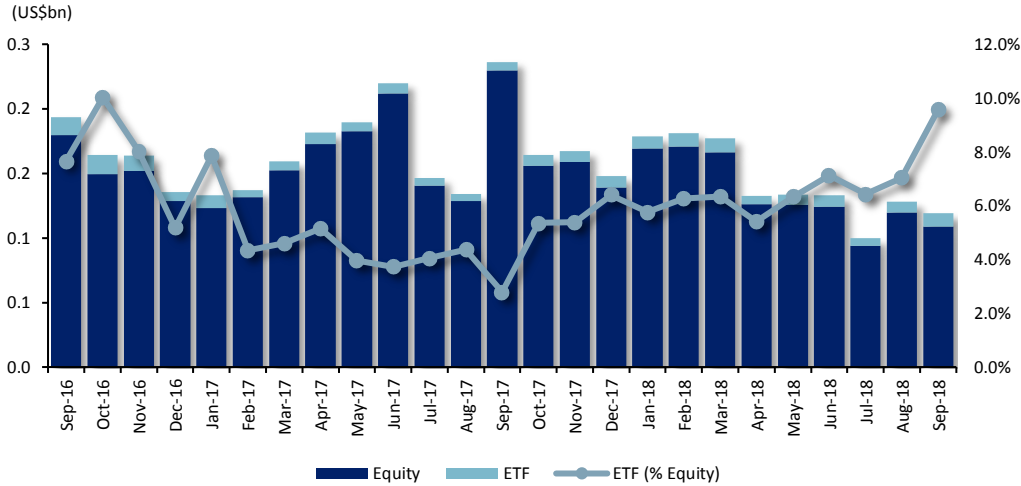


Intraday Volatility

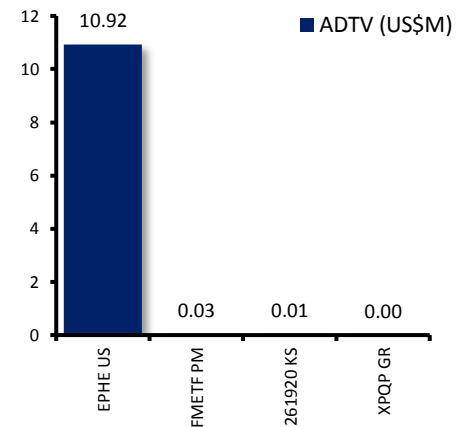


Philippines

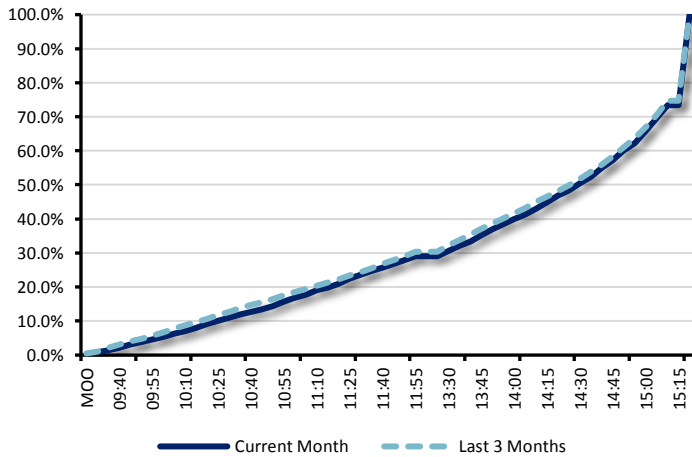
Monthly Equity Turnover & ETF Volume Trend



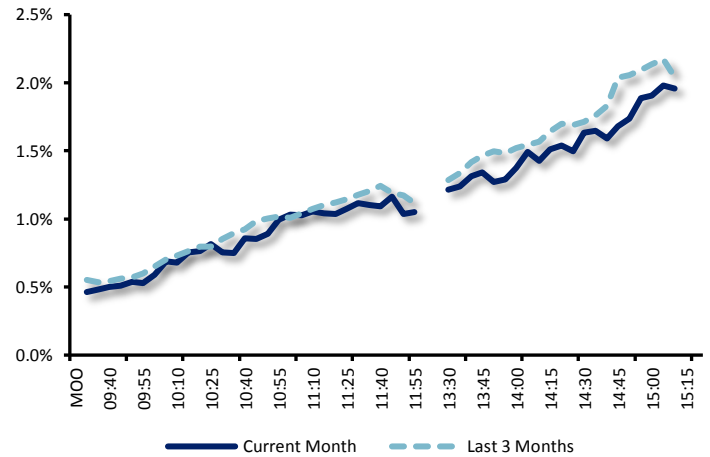
Top 5 Most Traded ETFs



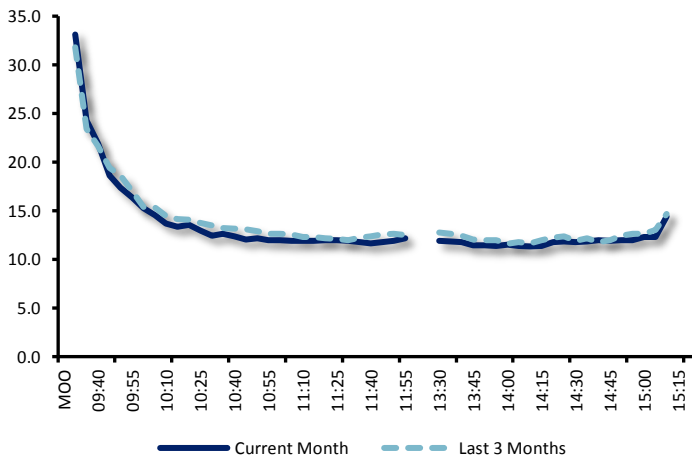
Intraday Volume Profile



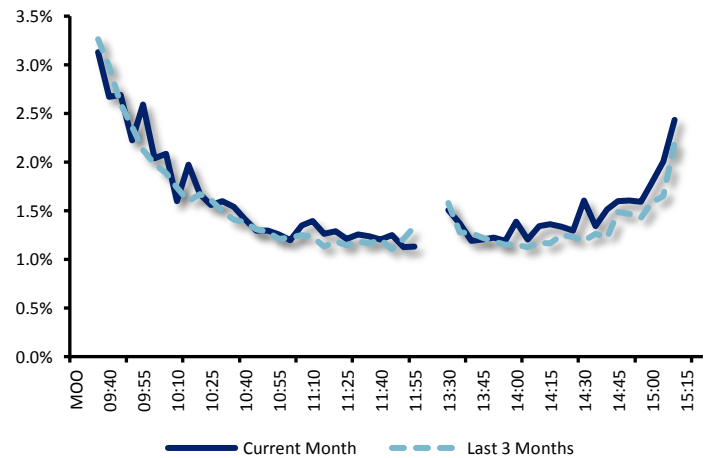
Intraday Queue Time(% of Total)



Intraday Spread (bps)



Intraday Volatility



Definition of APAC Market Micro Structure Metrics

Metric	Description
ADTV (US\$ bn)	Average Daily Turnover Value (in billion US\$)
Spread (bps)	Monthly median of daily values, each of which is daily median of spread(bps) values of all symbols
Quote Size (Shares)	Monthly median of daily values, each of which is daily median of quote size(shares) values of all symbols
Quote Size (% ADV)	Monthly median of daily values, each of which is daily median of quote size(% ADV) values of all symbols
Quote Time (mins)	Monthly median of daily values, each of which is daily median of quote time(minutes) values of all symbols
Volatility (%)	Monthly median of daily values, each of which is daily median of volatility(%) values of all symbols
MOO (%)	Monthly median of daily values, each of which is daily median of MOO(%) values of all symbols
MOC (%)	Monthly median of daily values, each of which is daily median of MOC(%) values of all symbols
ETF ADTV (% Total)	ETF Average Daily Turnover Value as % of Total Average Daily Turnover Value

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