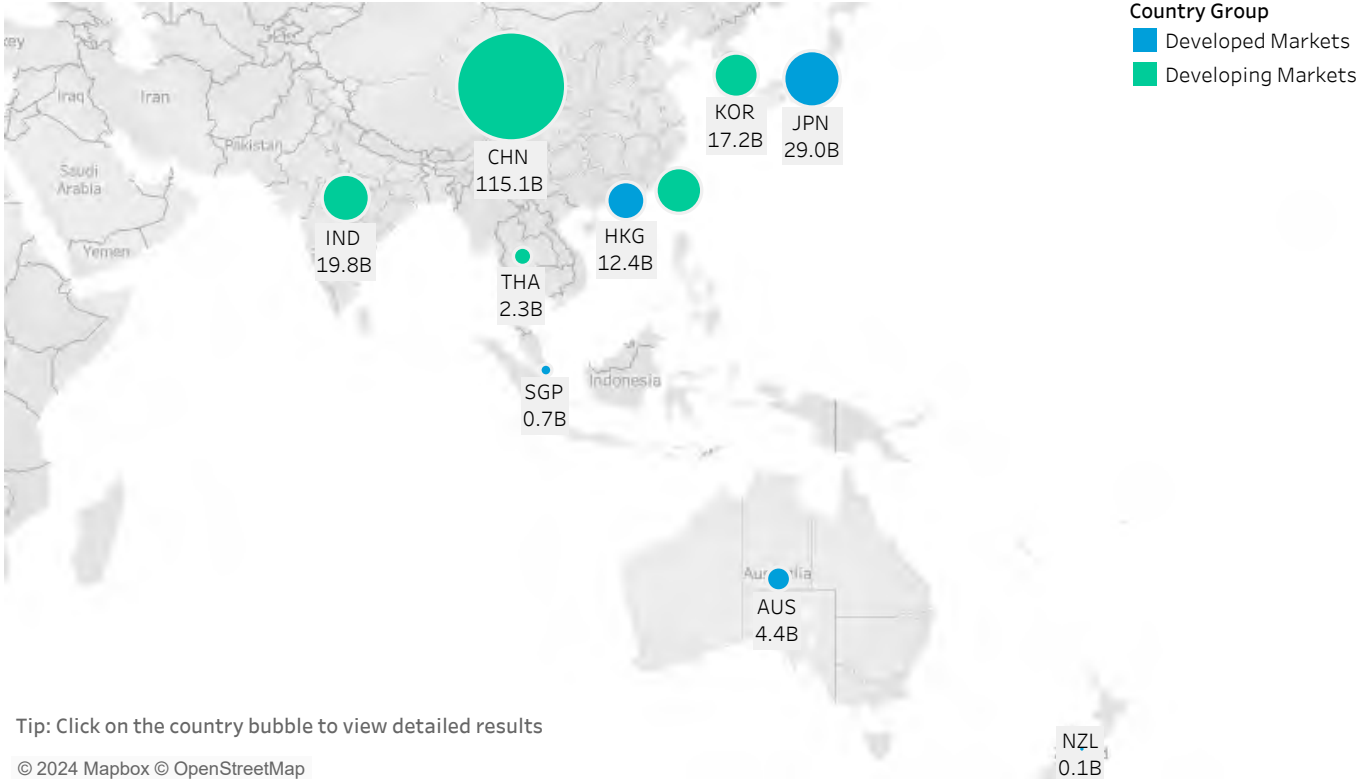


# June 2024 APAC Market Structure Monthly

## Average Daily Turnover (Notional USD)



## Country Breakdowns

Hong Kong

China

Japan

Australia

South Korea

Taiwan

India

Thailand

New Zealand

Singapore

# Jun 2024

## AP Market Structure Monthly

### MICROSTRUCTURE OBSERVATIONS

- 6 out of 10 countries in our universe saw lower month-over-month (MoM) average daily turnover (ADT) in June 2024. Out of the developed countries, Hong Kong had the largest decrease in ADT at -22%, followed by Japan and Australia at -12% and -3% respectively.
- On the contrary, India saw +33% increase in ADT from US\$15B to US\$20B, the highest recorded YTD. Aggregate block turnover increased +85% MoM to US\$14B, this was primarily driven by notable increase in >300% ADV segment from US\$489M in May to US\$5.1B in June.
- Intraday spreads and volatility remained consistent MoM in June 2024.

### AP MARKET STRUCTURE NEWS

#### **India Stocks Trading Below 250 INR Updated Tick Size from 0.05 to 0.01, Effective from 10 June 2024**

From 10 June 2024, tick size for India stocks below 250 INR updated from 0.05 to 0.01 INR. According to National Stock Exchange of India (NSE), the tick size for the stocks were determined based on the latest closing price available for securities on May 31, 2024.

<https://nsearchives.nseindia.com/content/circulars/CMTR62174.pdf>

#### **Korea Short Sale Ban Extended Until 30 March 2025**

On 13 June 2024, Korea regulator Financial Services Commission (FSC) announced the finalized version of short sale reform measures, which include plans to establish a completely electronic short sale processing system by March 2025, to limit the length of stock repayment period for both institutional investors and retail investors to a maximum of 12 months. The FSC first banned short selling in domestic stocks back in November 2023, in attempt to avoid disruptions to fair pricing function in capital markets after it uncovered large-scale illegal short sale activities by global investment banks. The latest measures strengthen the severity of penalties on illegal short sale activities when the amount of unfairly gained profits is KRW 5 Billion (USD 3.6 Million) or more.

<https://www.fsc.go.kr/eng/pr010101/82465?srchCtqry=&curPage=&srchKey=&srchText=&srchBginDt=&srchEndDt=>

#### **Stock Exchange of Thailand to Introduce Uptick Rule to Short Selling from 1 July 2024**

On 21 June 2024, The Stock Exchange of Thailand (SET) announced additional regulatory amendments on short selling and program trading to reinforce market supervision and to boost investor confidence. According to SET, the revised regulations comprise the qualifications of securities eligible for short selling,

the pricing mechanism for short selling transactions, the registration of high frequency trading investors, and information disclosures regarding investors involved in inappropriate trading practices. The supervisory measures were implemented on July 1, 2024.

<https://www.set.or.th/en/market/news-and-alert/newsdetails?id=89735400&symbol=SET>

### **HKEX to Expand the Eligibility of ETFs under Stock Connect from 22 July 2024**

On 14 June 2024, HKEX announced that the expansion of eligible exchange-traded funds (ETFs) under Stock Connect will take effect on 22 July 2024. This follows the announcement of the new [eligibility criteria](#) by HKEX, Shanghai Stock Exchange and Shenzhen Stock Exchange on 19 April 2024.

[https://www.hkex.com.hk/News/News-Release/2024/2406142news?sc\\_lang=en](https://www.hkex.com.hk/News/News-Release/2024/2406142news?sc_lang=en)

### **Indonesia Stock Exchange Partners with Nasdaq to Upgrade Market Infrastructure**

On 11 June 2024, Nasdaq and the Indonesia Stock Exchange (IDX) announced an expansion of their technology partnership which will see IDX upgrade its core trading platform to Nasdaq's most advanced matching engine. According to IDX, the deal also includes an extension of Nasdaq's market surveillance partnership with IDX, and an agreement to enhance IDX's Index business to help foster a deeper and sophisticated global capital markets ecosystem.

<https://www.idx.co.id/en/news/press-release/2161>

To learn more, contact your sales representative or call our desk at:

**APAC** +852.2846.3592 | **CAN** +1.416.874.0800 | **EMEA** +44.20.7670.4066 | **US**  
+1.646.682.6199

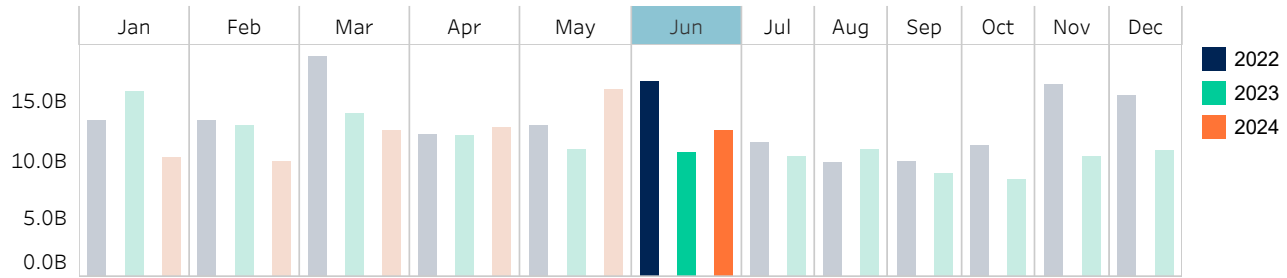
[info@virtu.com](mailto:info@virtu.com) | [www.virtu.com](http://www.virtu.com)

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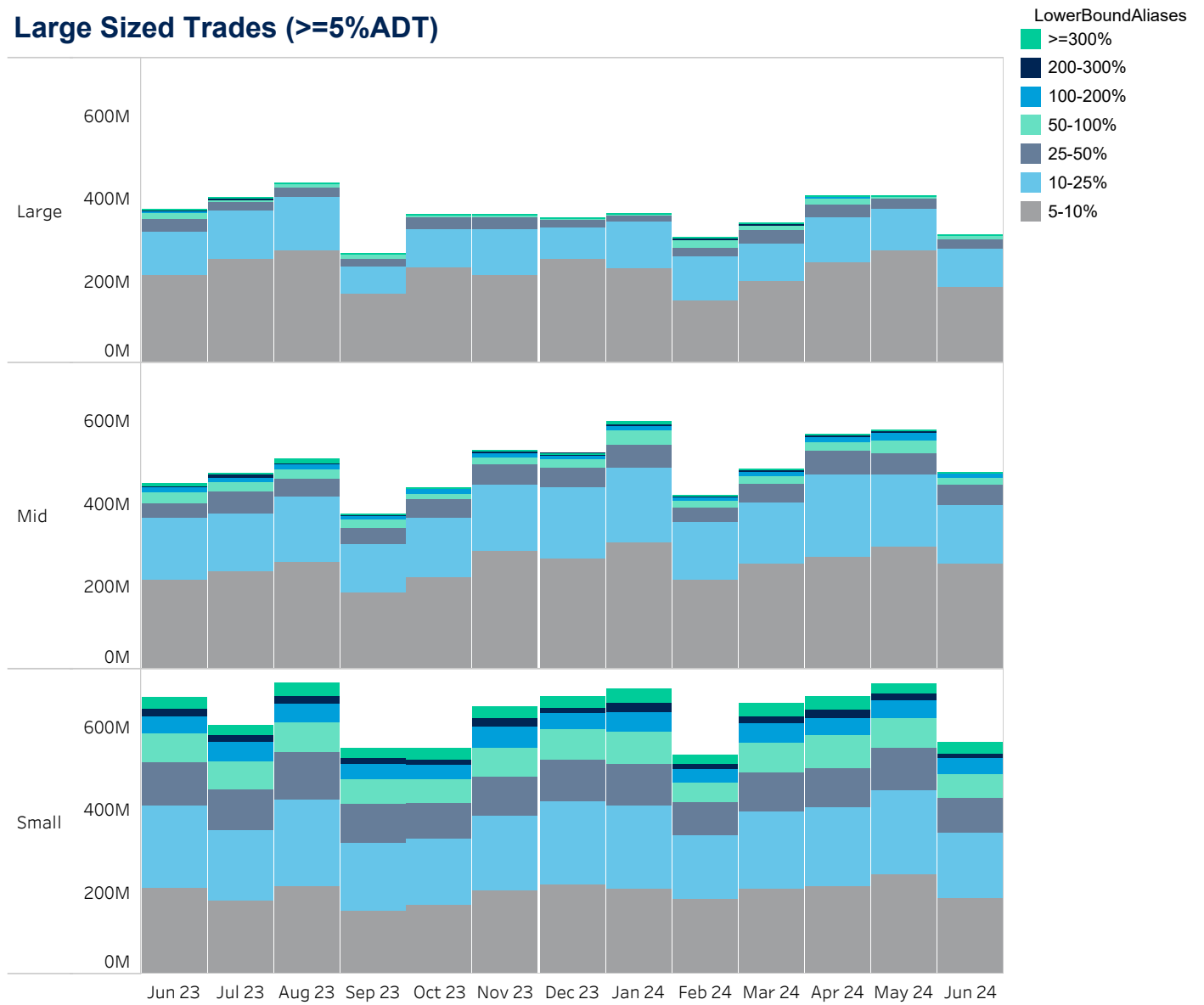
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# Hong Kong

## Average Daily Turnover (Notional USD)



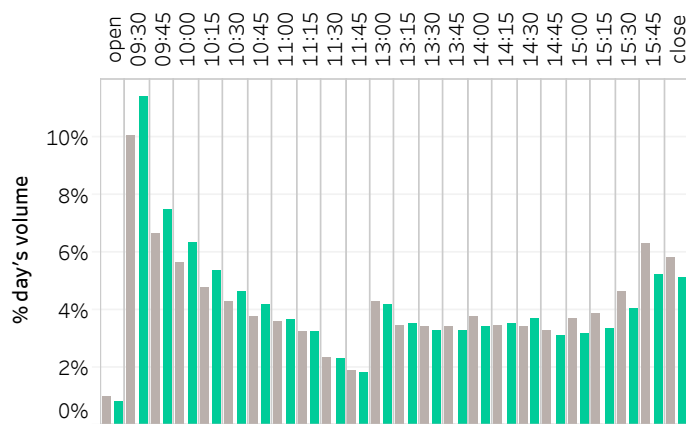
## Large Sized Trades (>=5%ADT)



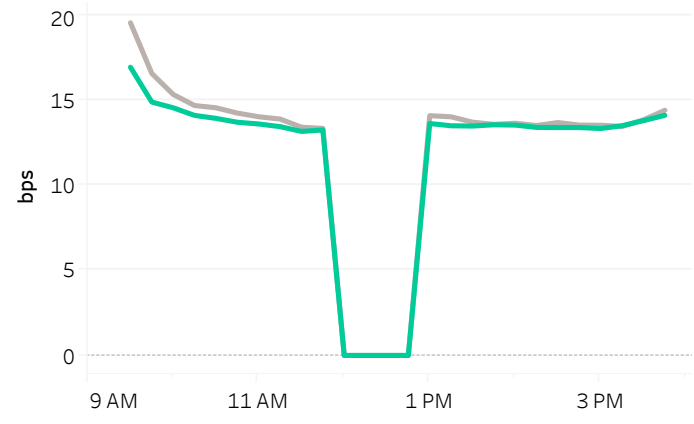
Source data: Virtu Financial

# Hong Kong

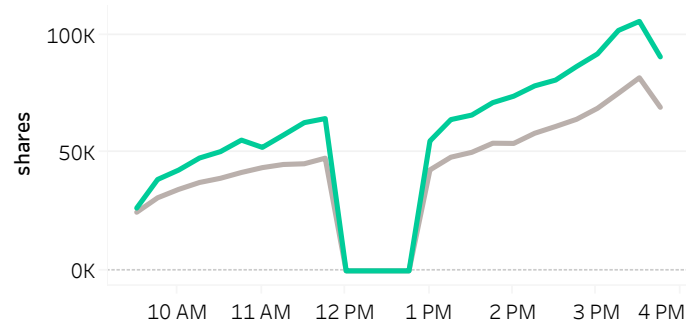
## Volume Curve



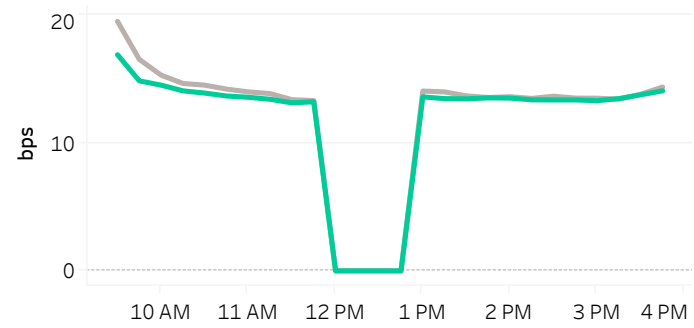
## Intraday Spread (bps)



## Intraday Quotesize (Shares)



## Intraday Volatility (bps)



Rolling 12 Months Avg June 2024

## Spread Bps

	2023							2024					
	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FirstHalfHo..	19.6	18.3	18.7	18.1	18.4	17.1	17.0	16.7	16.8	16.2	16.3	16.0	16.6
MidDay	14.6	13.5	14.0	14.4	14.7	13.4	14.2	14.4	13.6	13.5	13.7	13.5	14.0
LastHalfHo..	14.9	13.8	13.9	14.8	15.0	14.3	15.2	15.1	14.3	13.8	13.9	13.9	14.1

## One Minute Volatility Bps

FirstHalfHo..	24.1	23.6	25.8	23.8	24.3	24.3	24.1	25.7	26.8	26.1	26.5	26.0	24.9
MidDay	16.2	15.4	15.8	15.6	16.0	15.2	15.9	16.5	16.1	15.8	15.2	15.3	15.4
LastHalfHo..	17.2	15.7	16.1	16.5	16.6	16.9	17.6	17.3	16.4	15.9	15.3	15.9	15.8

## Quotesize (shares)

FirstHalfHo..	26,818	25,478	27,693	28,391	27,601	23,593	24,188	25,581	23,164	28,948	34,226	31,313	32,177
MidDay	41,143	42,053	45,912	52,298	46,953	46,472	52,781	52,997	41,722	57,521	64,130	61,681	64,411
LastHalfHo..	64,333	69,285	74,613	78,499	77,442	72,387	70,619	79,360	72,944	95,535	97,872	98,721	97,430

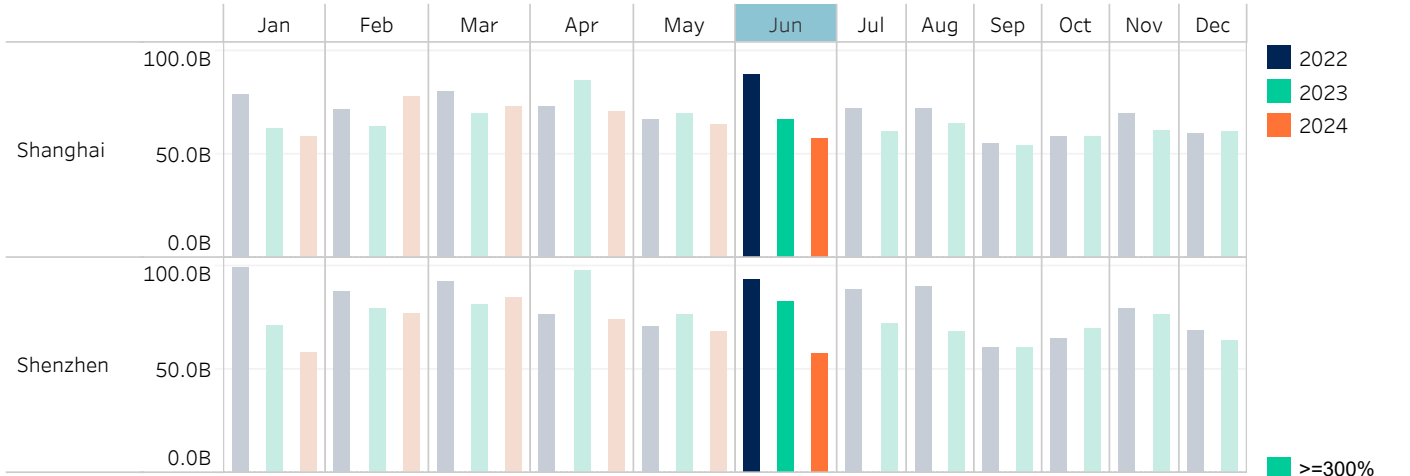
Median used for all metrics

One minute volatility is calculated using the difference between the high and low price within a one minute time bin, divided by that bin's VWAP

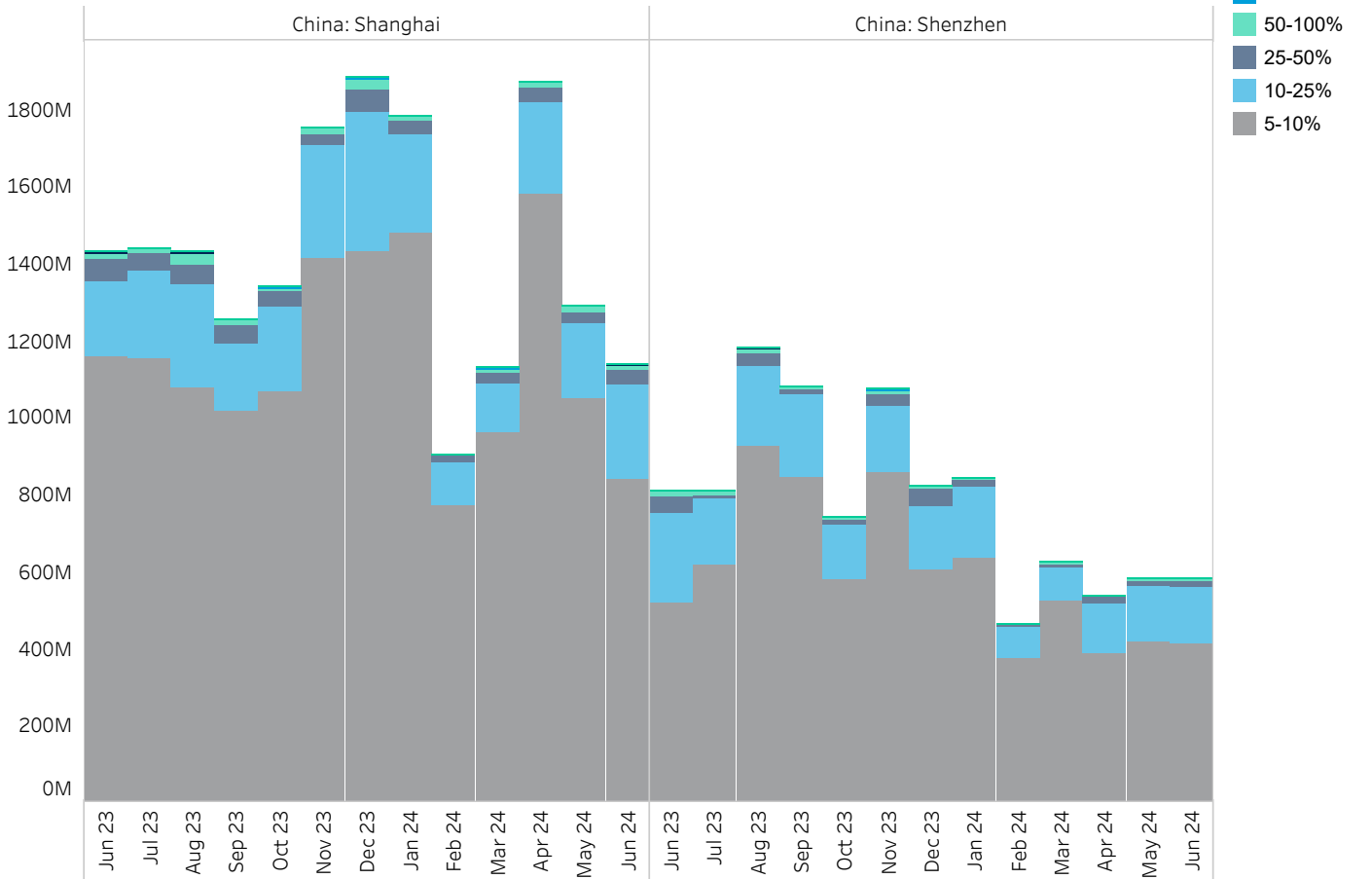
Source data: Virtu Financial

# China

## Average Daily Turnover (Notional USD)



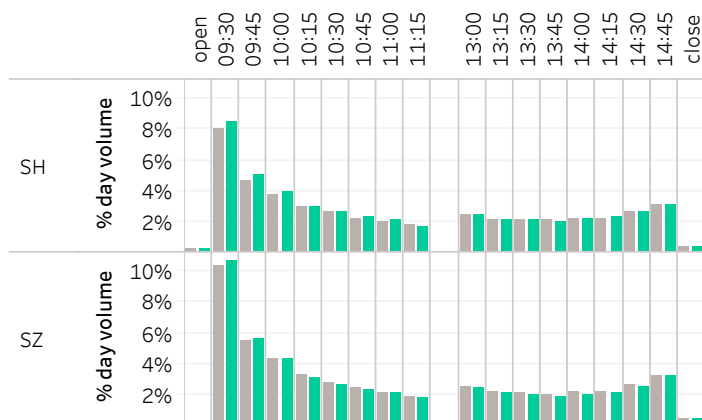
## Large Sized Trades (>=5%ADT)



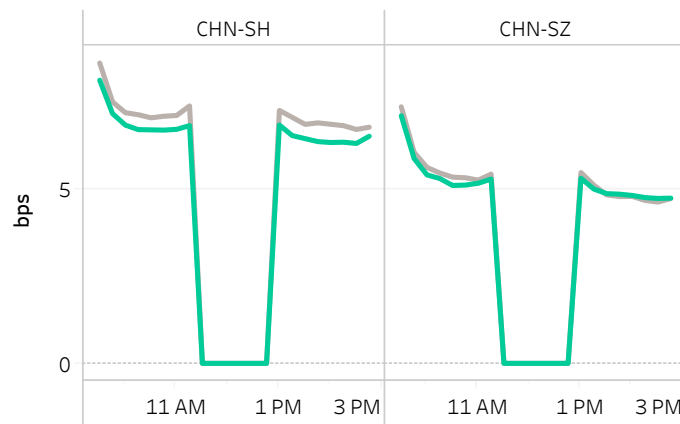
Source data: Virtu Financial

# China

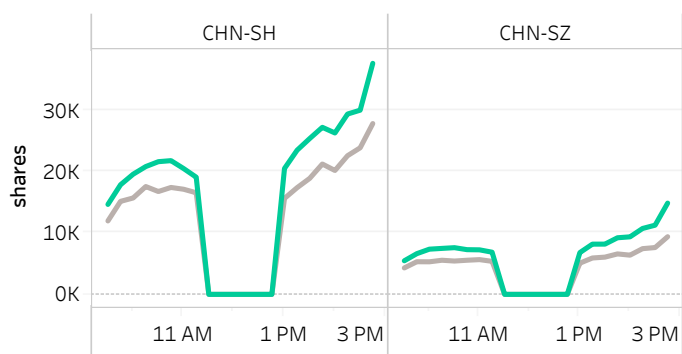
## Volume Curve



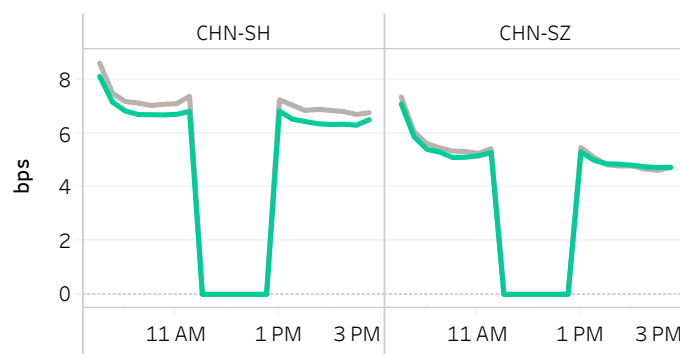
## Intraday Spread (bps)



## Intraday Quotesize (Shares)



## Intraday Volatility (bps)



Rolling 12 Months Avg June 2024

## Spread Bps

	CHN-SH						CHN-SZ					
	Jan	Feb	Mar	Apr	May	Jun	Jan	Feb	Mar	Apr	May	Jun
FirstHalfHour	8.7	8.9	8.0	8.2	7.7	7.9	7.1	7.4	6.5	6.8	6.6	6.8
MidDay	8.0	7.8	7.1	7.0	6.7	7.0	5.9	6.0	5.4	5.5	5.2	5.4
LastHalfHour	8.2	7.8	7.0	6.7	6.4	6.8	5.8	5.6	5.1	5.0	4.8	5.1

## One Minute Volatility Bps

FirstHalfHour	27.6	32.4	25.6	29.1	25.2	25.8	30.2	34.1	28.0	30.2	26.0	27.0
MidDay	17.3	18.8	15.3	14.6	13.3	14.0	15.7	18.9	14.6	14.0	11.9	12.5
LastHalfHour	18.1	17.8	14.5	13.9	12.7	14.1	15.7	15.8	12.6	11.7	10.5	12.0

## Quotesize (shares)

FirstHalfHour	13,651	14,145	16,705	14,795	16,130	13,737	4,495	4,979	6,105	5,677	5,977	5,165
MidDay	16,308	16,111	19,611	19,057	21,688	18,327	5,280	5,654	6,860	6,807	7,527	6,395
LastHalfHour	20,444	24,112	29,770	29,522	33,861	26,132	7,099	8,454	10,445	11,277	12,303	9,755

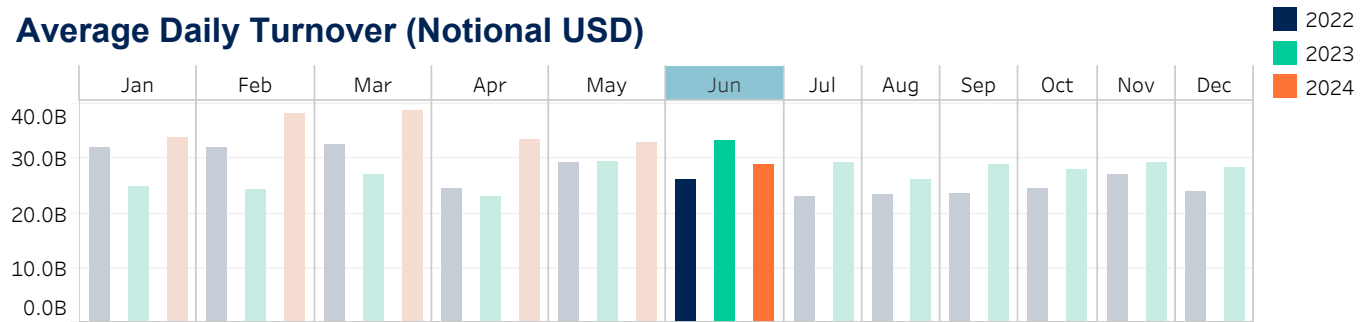
Median used for all metrics

One minute volatility is calculated using the difference between the high and low price within a one minute time bin, divided by that bin's VWAP

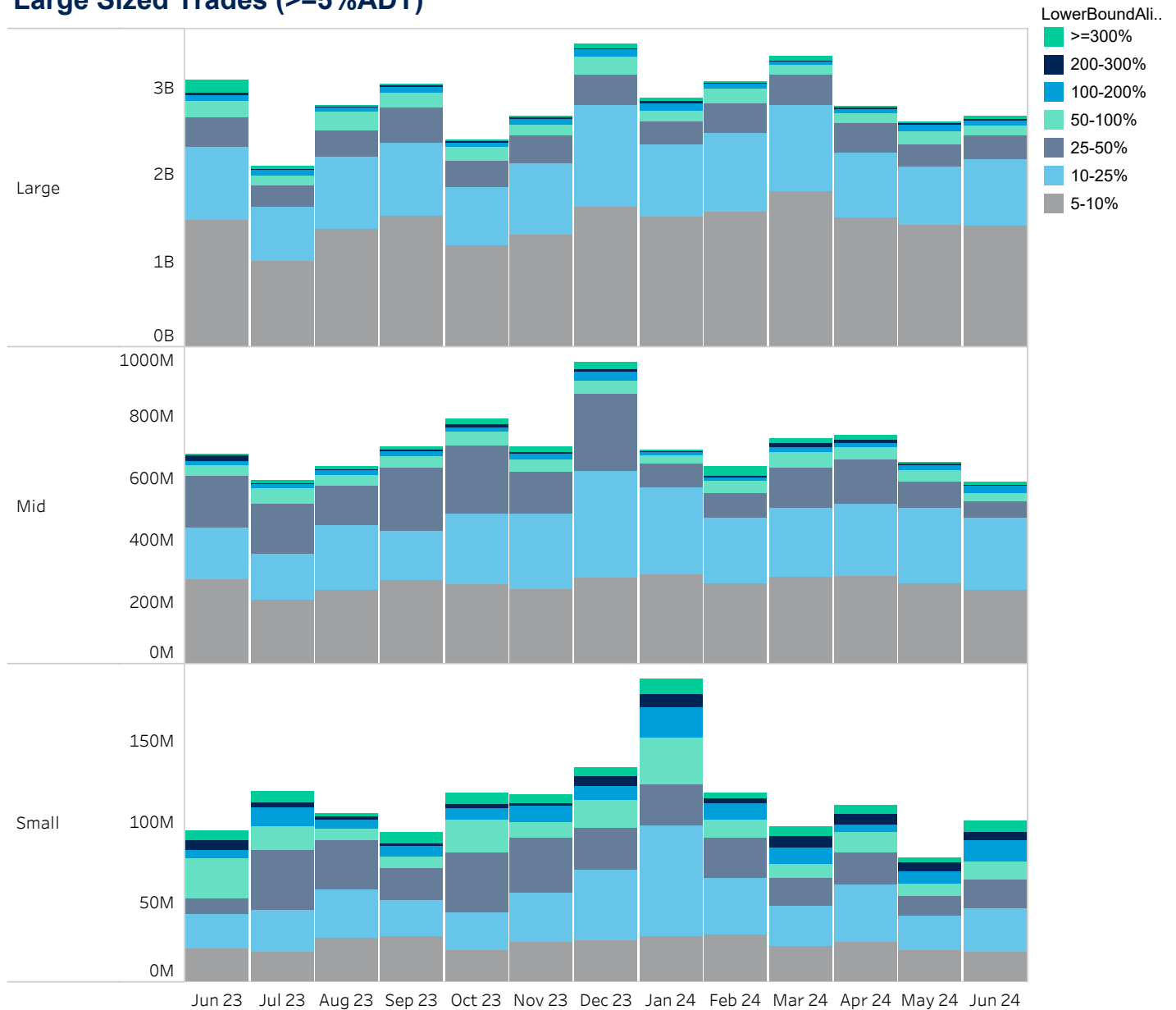
Source data: Virtu Financial

# Japan

## Average Daily Turnover (Notional USD)



## Large Sized Trades (>=5%ADT)

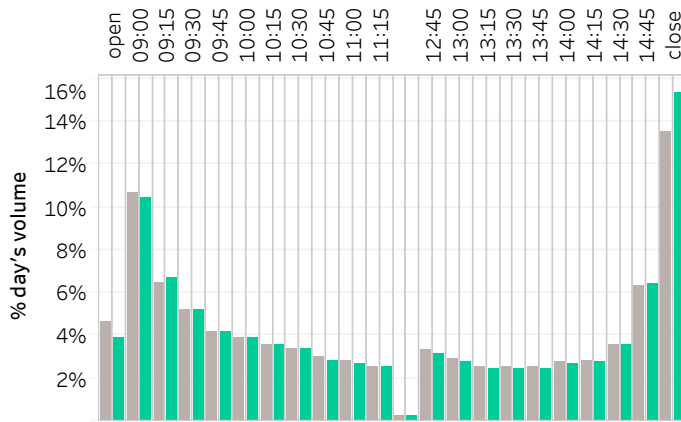


Source data: Virtu Financial

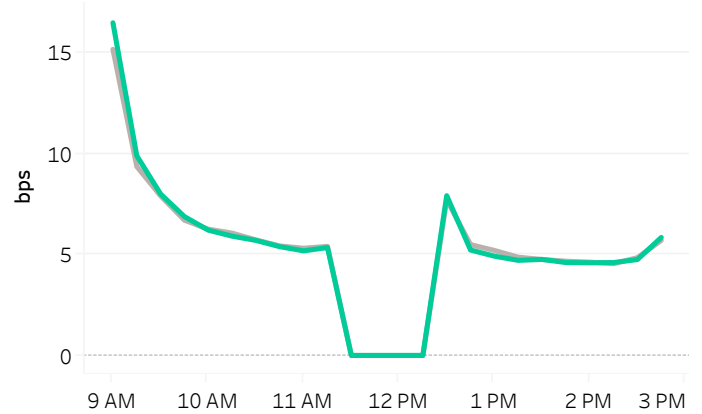


# Japan

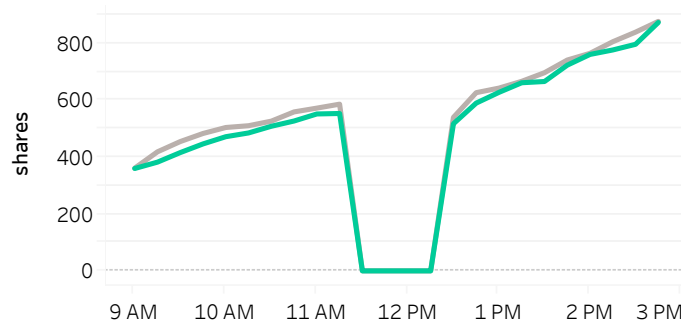
## Volume Curve



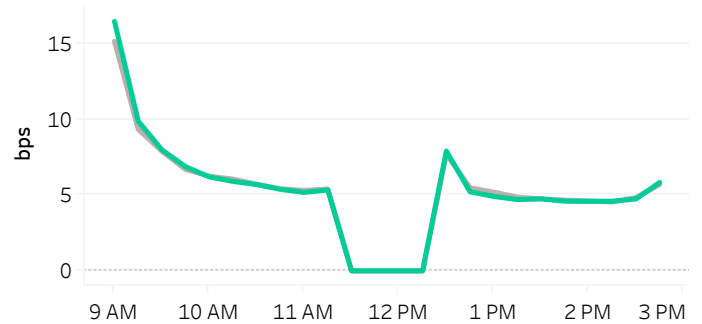
## Intraday Spread (bps)



## Intraday Quotesize (Shares)



## Intraday Volatility (bps)



Rolling 12 Months Avg June 2024

## Spread Bps

	2023							2024					
	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FirstHalfHo..	12.4	11.7	12.2	11.4	13.0	13.5	11.7	11.6	13.1	12.8	12.3	13.0	12.3
MidDay	5.7	5.2	5.4	5.2	5.8	6.0	5.3	5.3	6.0	5.6	5.7	5.5	5.1
LastHalfHo..	5.4	5.0	4.9	5.1	5.7	5.5	5.1	4.9	5.6	5.5	5.2	5.3	5.1

## One Minute Volatility Bps

FirstHalfHo..	14.8	14.2	14.8	14.1	16.0	16.8	14.7	14.9	17.1	16.7	16.6	17.4	15.8
MidDay	6.7	5.9	6.1	6.0	7.1	7.3	6.2	6.4	7.3	7.1	7.5	7.0	6.4
LastHalfHo..	7.1	6.6	6.4	6.8	7.9	7.5	7.0	6.8	7.6	7.7	7.7	7.6	7.0

## Quotesize (shares)

FirstHalfHo..	426.9	385.9	379.5	387.9	340.1	340.5	356.6	359.3	369.3	368.9	358.4	369.9	378.6
MidDay	582.1	568.6	575.3	579.5	493.7	525.7	550.6	555.1	548.6	534.4	499.1	549.5	568.5
LastHalfHo..	860.0	854.9	881.8	829.3	694.2	778.7	749.6	764.0	784.2	738.9	720.1	833.5	863.7

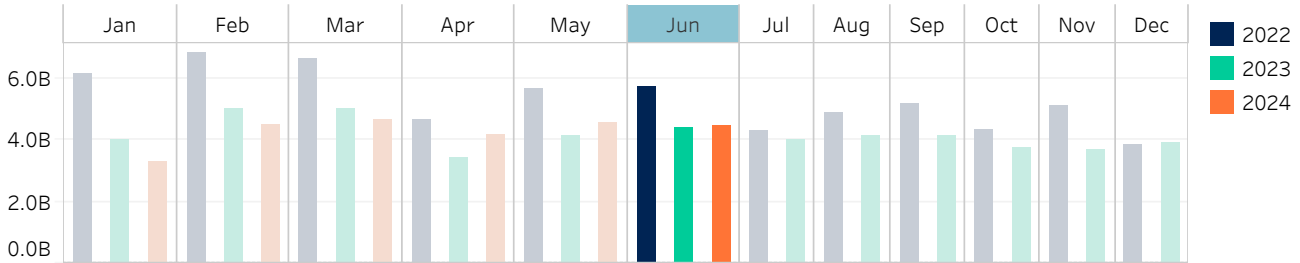
Median used for all metrics

One minute volatility is calculated using the difference between the high and low price within a one minute time bin, divided by that bin's VWAP

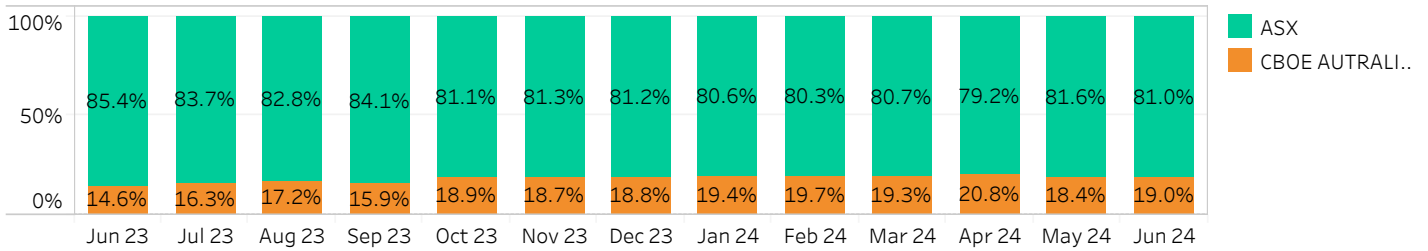
Source data: Virtu Financial

# Australia

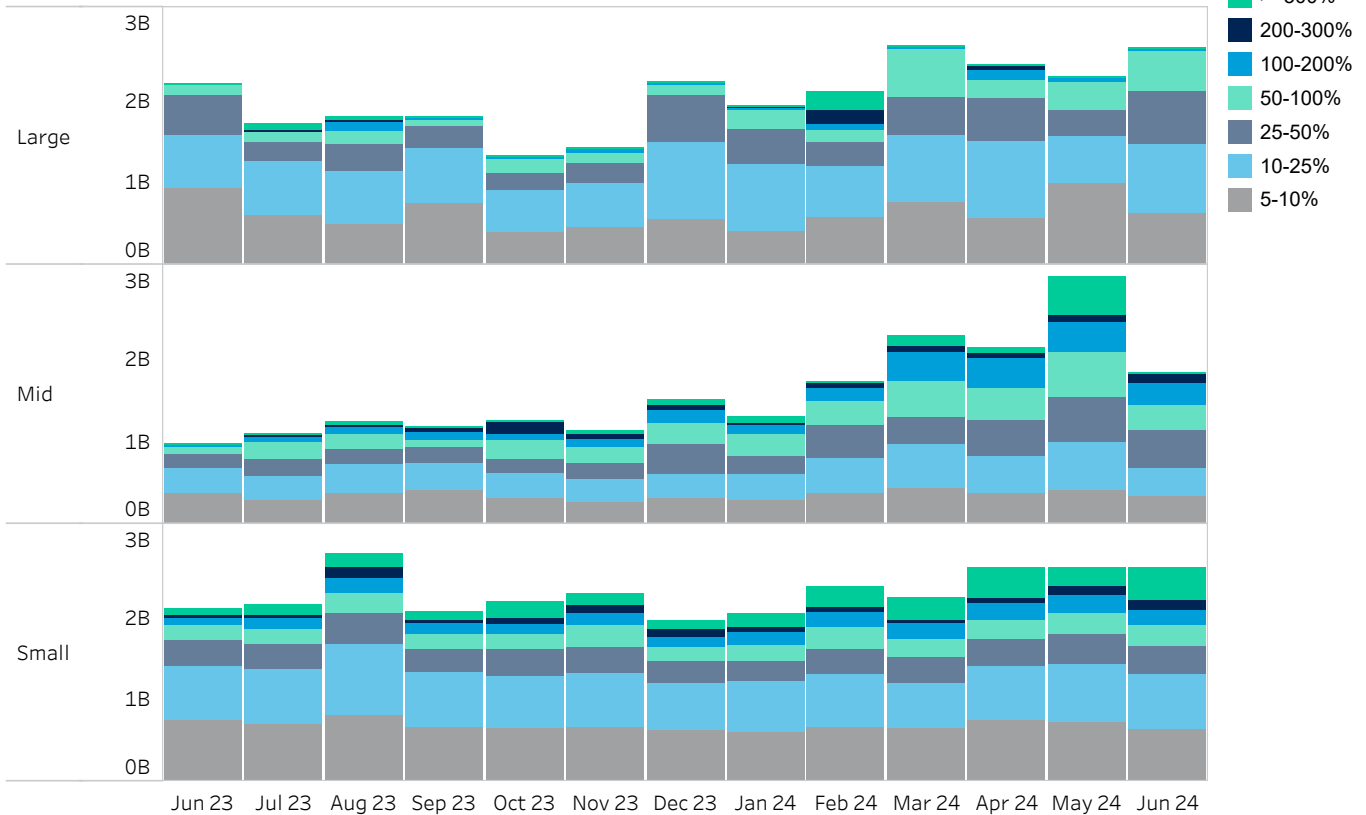
## Average Daily Turnover (Notional USD)



## Venue Market Share (Notional USD)



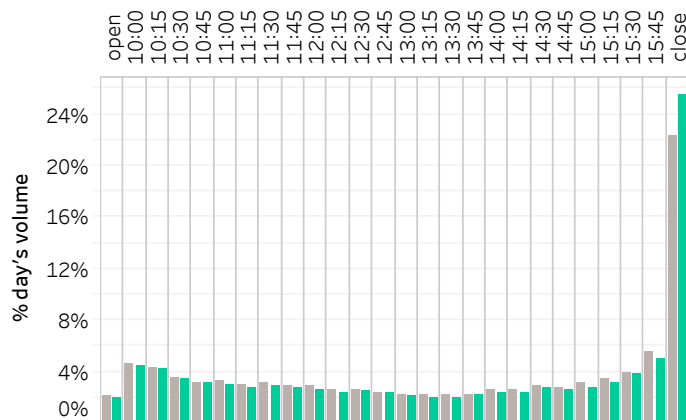
## Large Sized Trades (>=5%ADT)



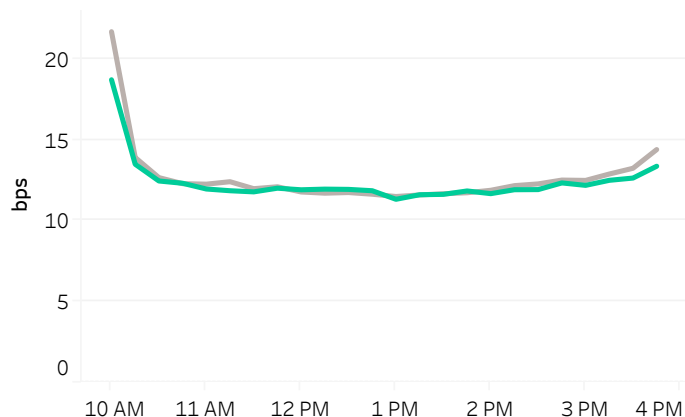
Source data: Virtu Financial

# Australia

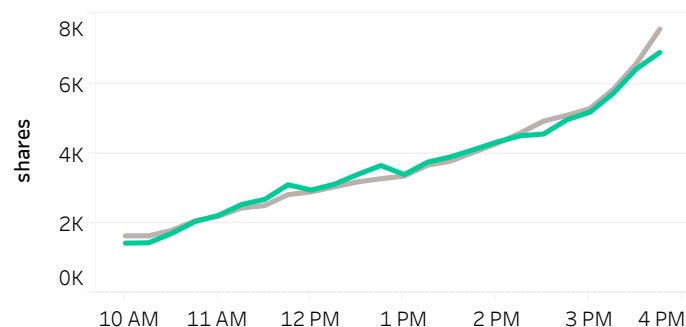
## Volume Curve



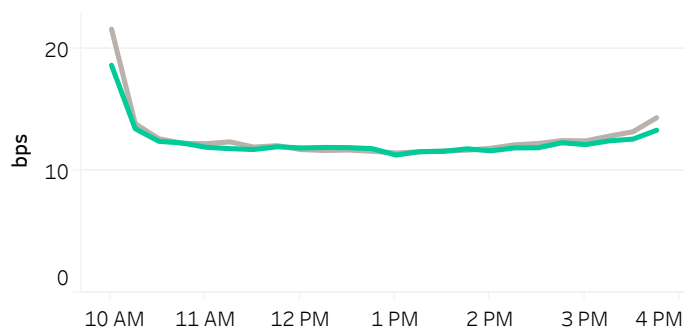
## Intraday Spread (bps)



## Intraday Quotesize (Shares)



## Intraday Volatility (bps)



Rolling 12 Months Avg (Grey line) June 2024 (Green line)

## Spread Bps

	2023							2024					
	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FirstHalfHo..	16.6	16.6	16.6	17.0	18.7	18.1	17.6	16.7	17.7	16.7	16.3	15.6	16.5
MidDay	11.8	11.3	11.1	12.3	13.1	13.1	12.6	12.0	12.5	11.9	11.7	11.9	12.3
LastHalfHo..	14.0	13.9	14.1	14.7	15.4	15.1	14.1	13.7	13.7	13.5	13.1	13.1	13.8

## One Minute Volatility Bps

FirstHalfHo..	18.7	18.0	18.9	17.9	19.4	18.7	18.3	16.7	19.2	18.2	18.4	18.0	18.4
MidDay	9.8	9.5	9.7	9.6	10.6	10.8	10.1	9.5	10.5	10.0	9.6	10.1	10.5
LastHalfHo..	12.5	11.9	12.4	12.7	13.5	13.3	12.5	11.7	12.6	12.2	11.7	12.0	12.5

## Quotesize (shares)

FirstHalfHo..	1,901	1,672	1,703	1,756	1,601	1,443	1,515	1,528	1,587	1,547	1,545	1,433	1,580
MidDay	3,860	3,520	3,310	3,720	3,289	3,147	3,258	3,388	3,303	3,261	2,984	3,555	3,928
LastHalfHo..	8,042	7,173	7,405	7,388	7,156	6,633	6,873	6,851	6,654	6,518	6,090	6,636	7,213

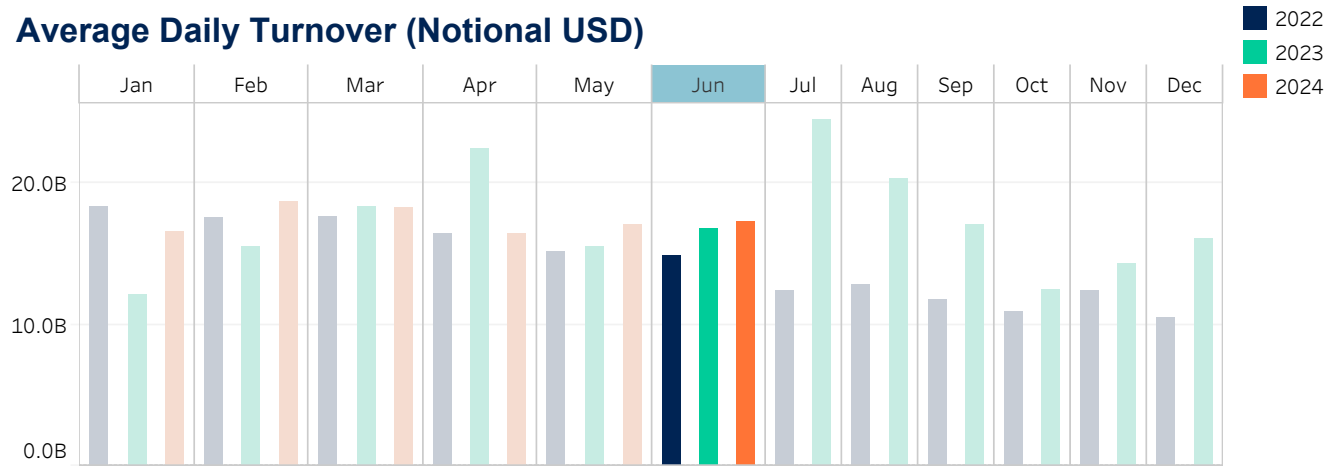
Median used for all metrics

One minute volatility is calculated using the difference between the high and low price within a one minute time bin, divided by that bin's VWAP

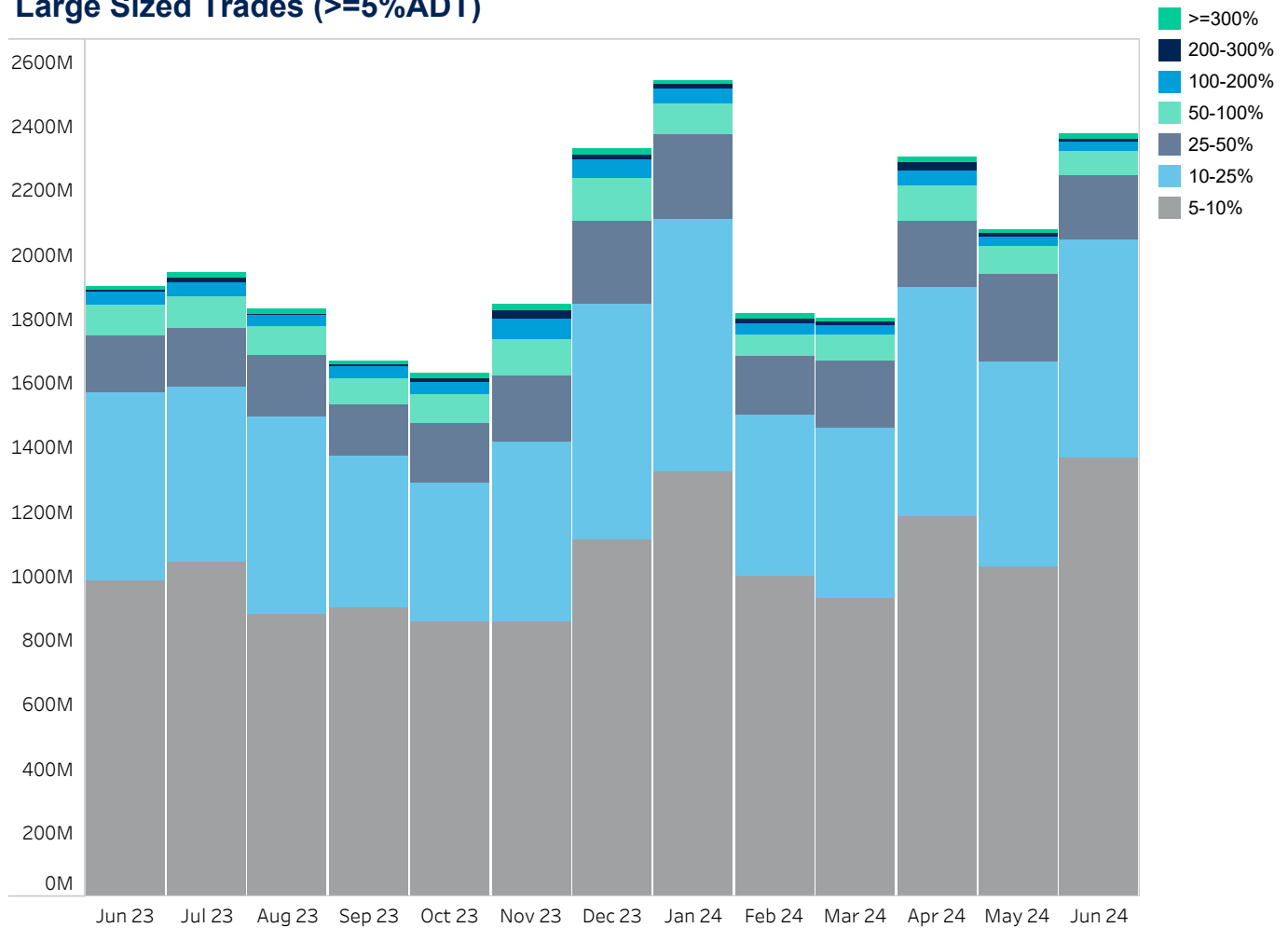
Source data: Virtu Financial

# South Korea

## Average Daily Turnover (Notional USD)



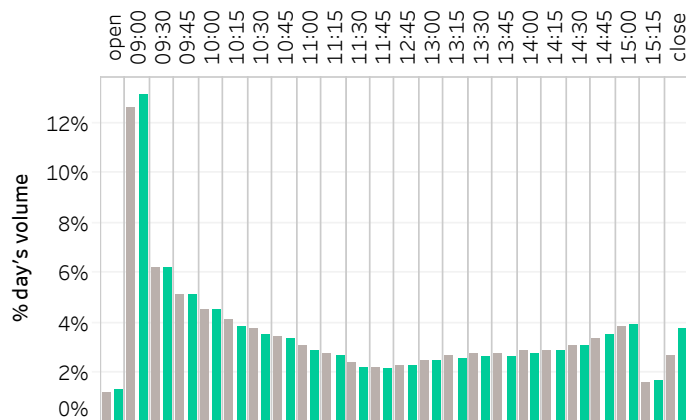
## Large Sized Trades (>=5%ADT)



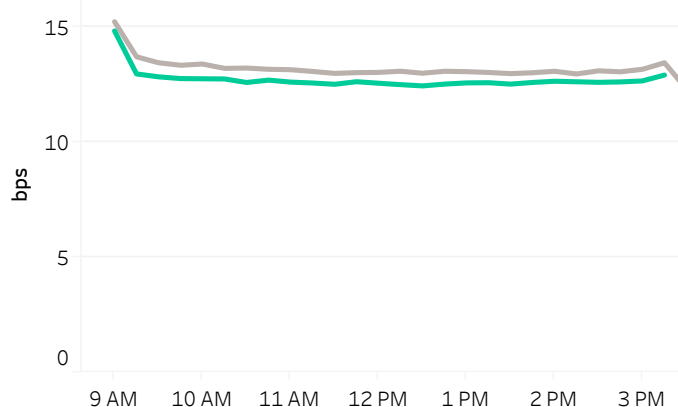
Source data: Virtu Financial

# Korea

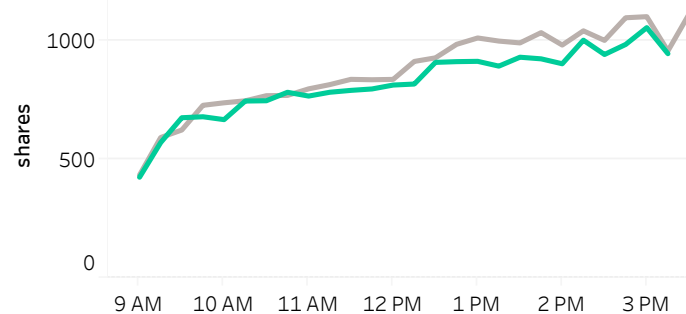
## Volume Curve



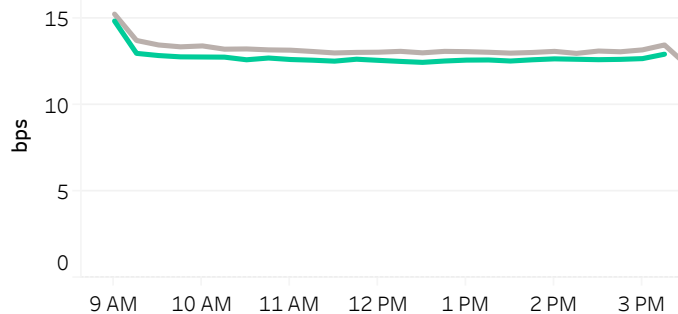
## Intraday Spread (bps)



## Intraday Quotesize (Shares)



## Intraday Volatility (bps)



Rolling 12 Months Avg June 2024

## Spread Bps

	2023							2024					
	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FirstHalfHo..	13.7	14.3	14.2	13.9	14.5	14.5	14.3	15.1	15.6	14.3	14.5	14.0	14.6
MidDay	12.9	13.2	12.8	12.5	12.8	13.1	12.8	13.6	13.6	12.4	12.7	12.7	13.1
LastHalfHo..	13.0	13.3	12.8	12.6	13.2	13.4	13.3	13.8	13.9	12.6	12.8	12.8	13.2

## One Minute Volatility Bps

FirstHalfHo..	21.5	27.1	26.7	23.3	27.5	25.1	22.2	25.7	31.4	27.9	27.8	25.5	28.2
MidDay	14.0	14.9	14.3	14.0	14.6	15.1	14.5	15.7	16.4	15.7	15.6	14.9	15.8
LastHalfHo..	14.8	16.2	15.2	15.3	16.1	14.9	16.3	17.1	17.6	16.5	17.1	16.0	17.1

## Quotesize (shares)

FirstHalfHo..	634.3	563.4	491.2	491.0	443.8	457.6	535.9	445.6	465.2	451.8	457.9	501.0	506.3
MidDay	1,249.0	1,023.8	875.5	922.8	808.1	760.3	895.4	806.7	749.1	773.4	713.4	826.0	731.0
LastHalfHo..	1,443.6	1,164.2	1,108.1	1,065.7	911.6	920.9	1,010.4	871.0	901.7	952.1	900.4	1,036.0	983.1

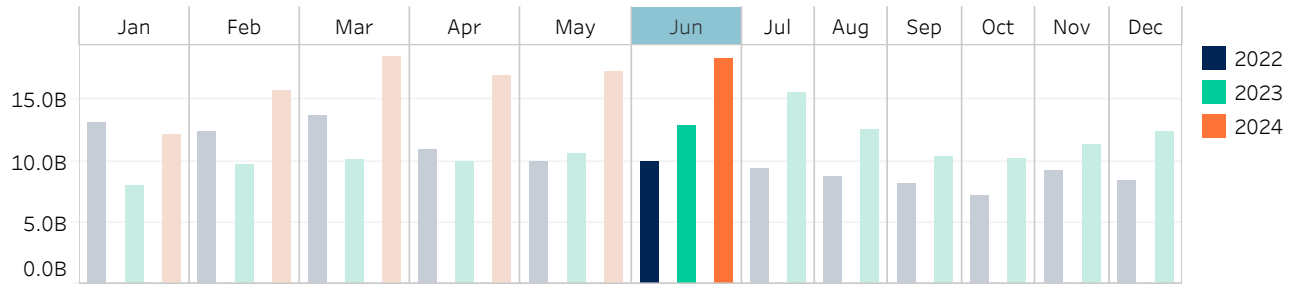
Median used for all metrics

One minute volatility is calculated using the difference between the high and low price within a one minute time bin, divided by that bin's VWAP

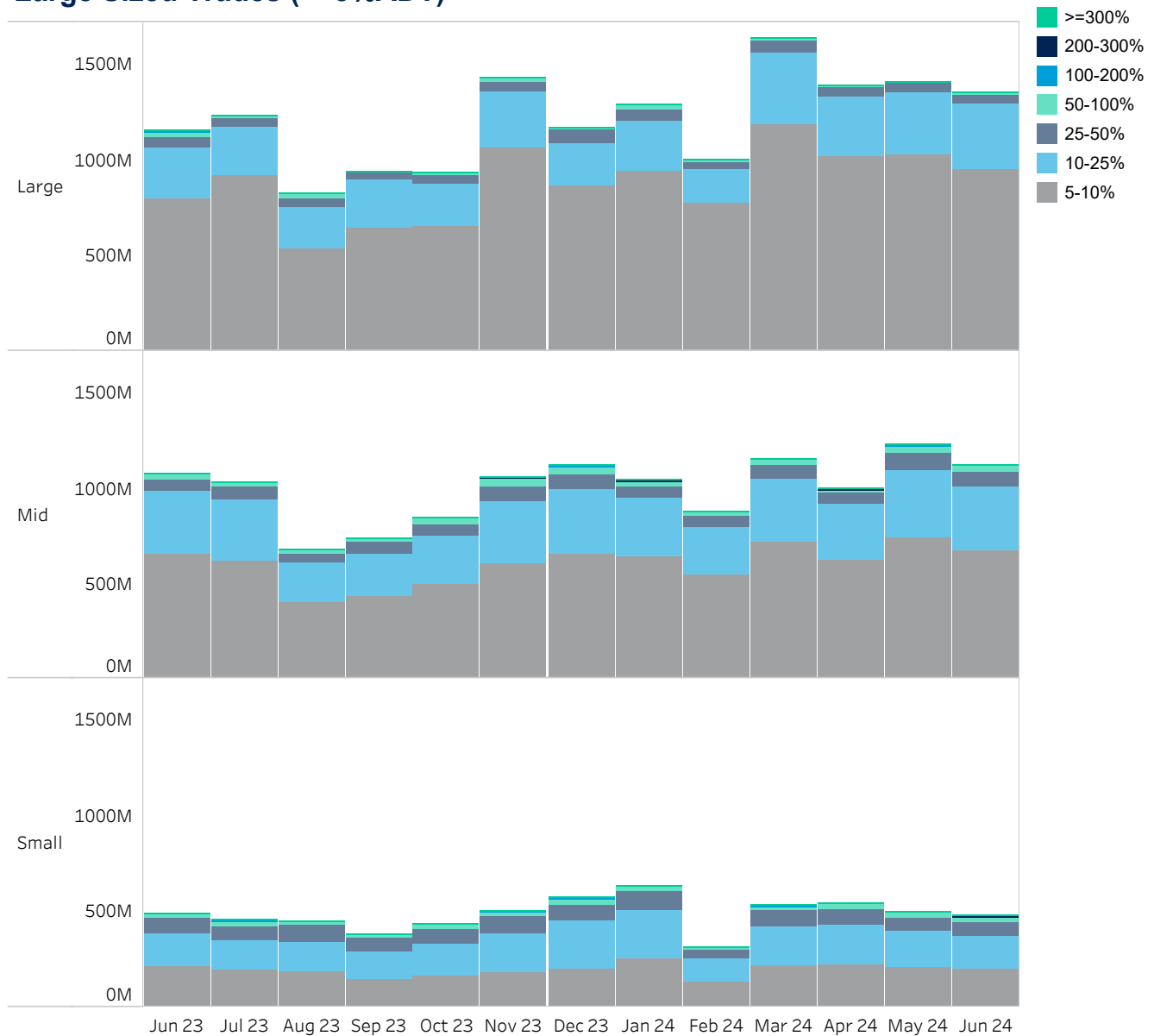
Source data: Virtu Financial

# Taiwan

## Average Daily Turnover (Notional USD)



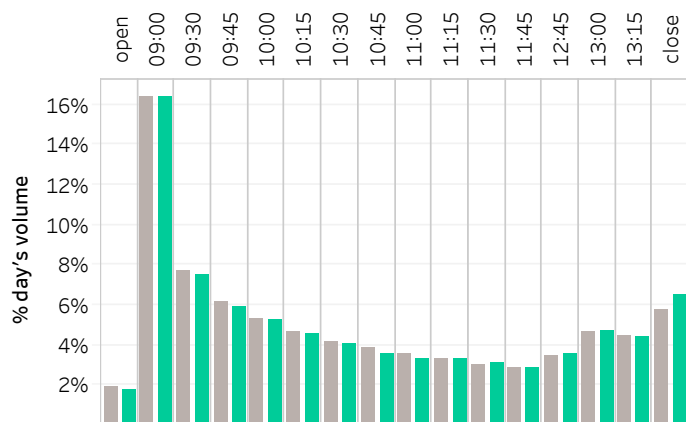
## Large Sized Trades (>=5%ADT)



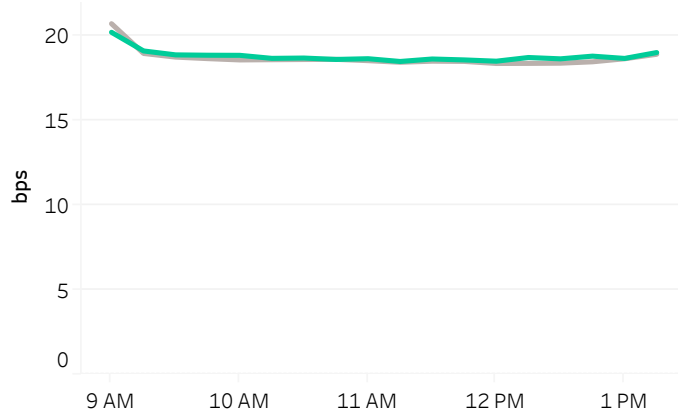
Source data: Virtu Financial

# Taiwan

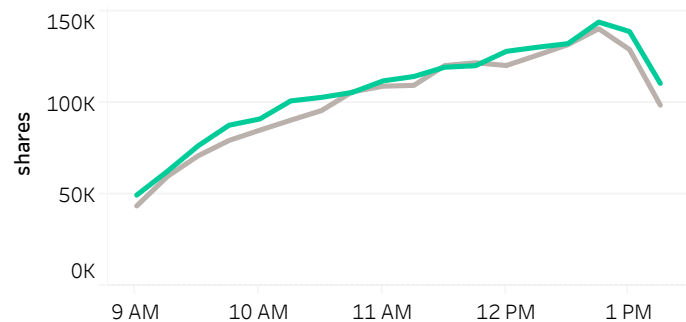
## Volume Curve



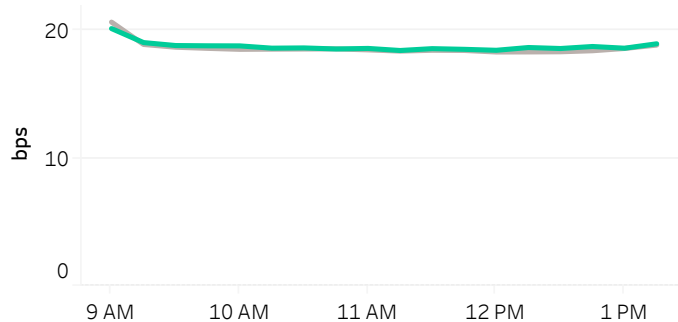
## Intraday Spread (bps)



## Intraday Quotesize (Shares)



## Intraday Volatility (bps)



Rolling 12 Months Avg (Grey line) June 2024 (Green line)

## Spread Bps

	2023							2024					
	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FirstHalfHo..	19.3	19.6	20.5	19.9	20.3	19.6	19.5	19.6	19.5	19.5	19.8	19.6	19.9
MidDay	17.8	18.0	18.8	18.8	19.0	18.2	18.6	18.6	18.3	18.3	18.4	18.8	19.1
LastHalfHo..	18.1	18.3	18.8	19.0	19.1	18.6	18.7	18.8	18.3	18.6	18.6	18.9	19.2

## One Minute Volatility Bps

FirstHalfHo..	31.2	34.5	37.1	32.6	33.3	29.9	30.6	32.8	31.3	32.7	32.9	34.8	34.3
MidDay	28.4	31.5	36.4	29.8	31.1	26.4	27.8	29.2	28.6	28.9	28.7	28.6	28.6
LastHalfHo..	28.9	32.6	34.4	29.9	31.5	27.6	28.1	30.3	28.7	30.4	29.5	30.3	29.5

## Quotesize (shares)

FirstHalfHo..	57,819	51,257	44,628	44,984	46,915	50,161	52,263	57,046	48,244	57,635	48,604	56,638	56,775
MidDay	139,513	105,466	95,368	103,352	109,280	111,917	104,185	124,365	117,027	110,699	96,467	113,228	104,741
LastHalfHo..	122,742	102,051	100,542	105,527	109,997	124,934	124,186	118,507	116,047	117,591	108,108	123,357	120,731

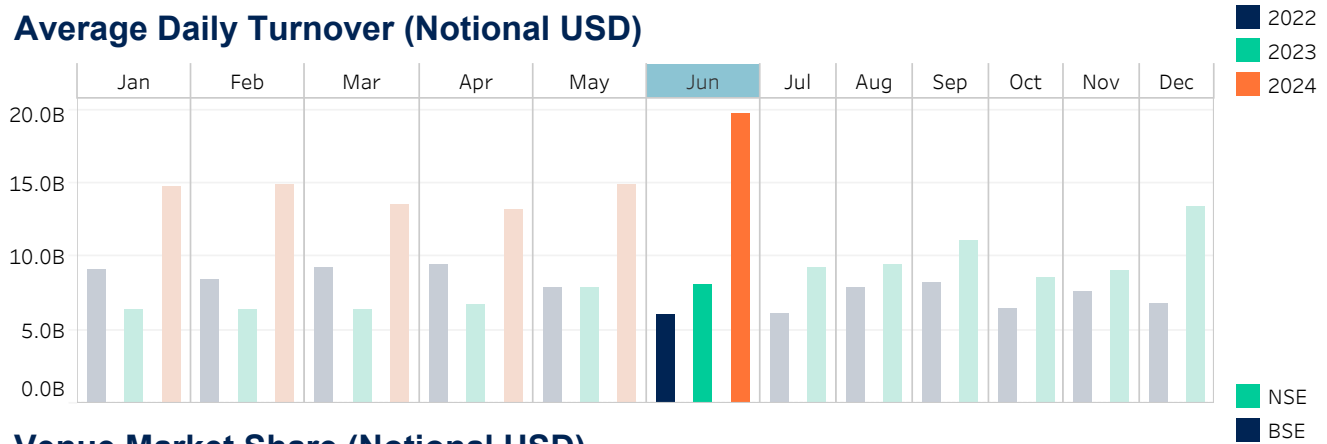
Median used for all metrics

One minute volatility is calculated using the difference between the high and low price within a one minute time bin, divided by that bin's VWAP

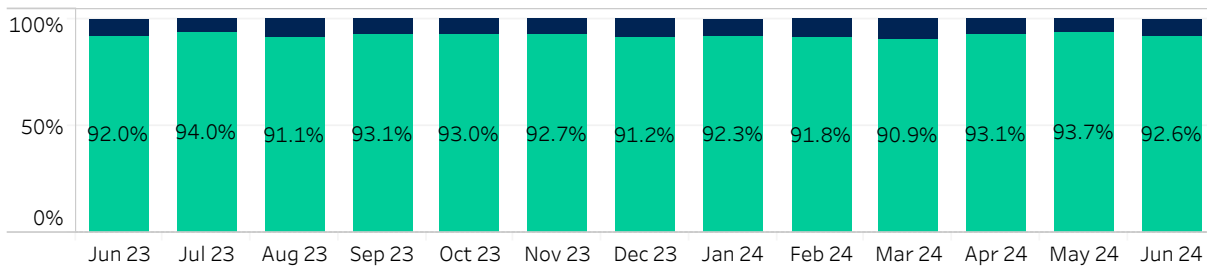
Source data: Virtu Financial

# India

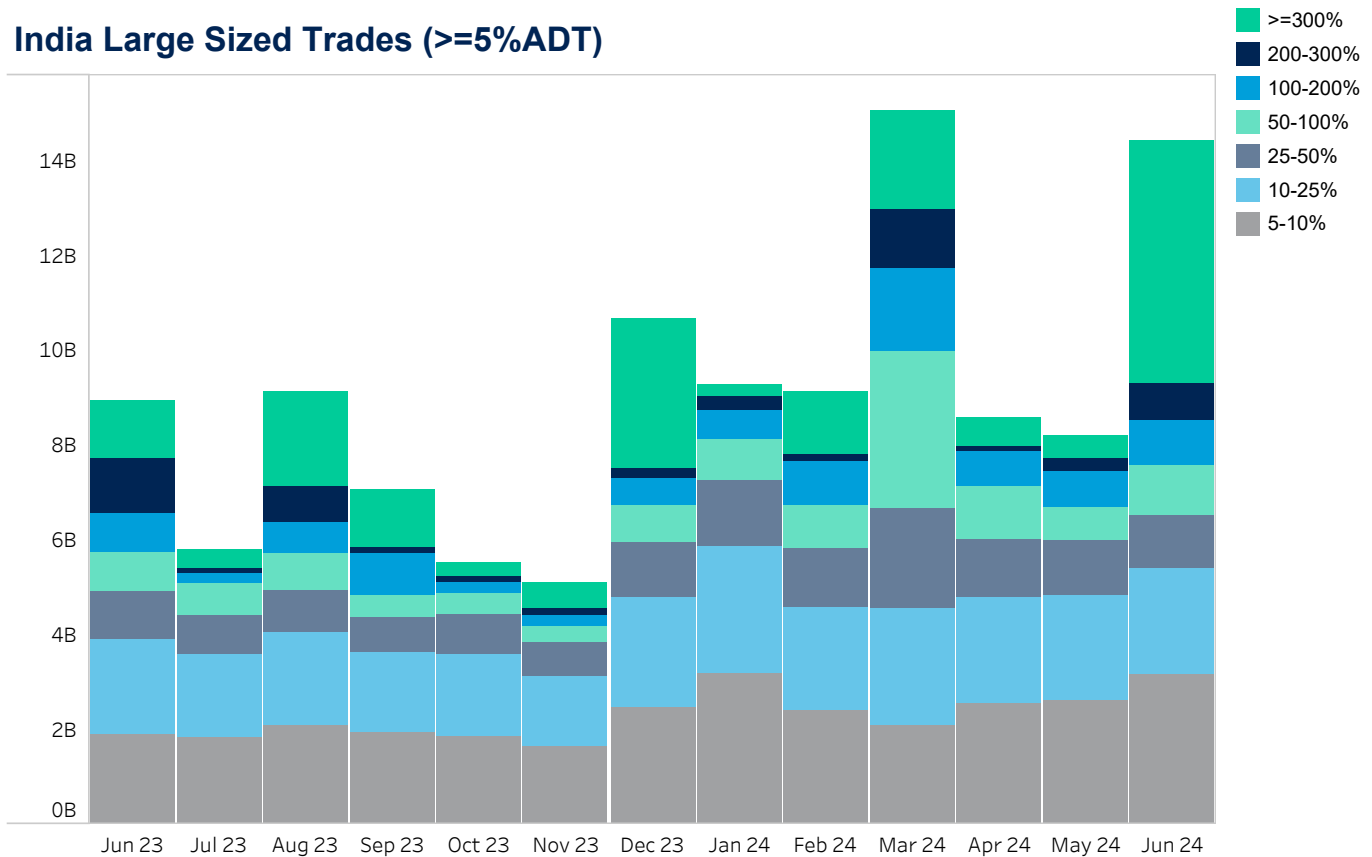
## Average Daily Turnover (Notional USD)



## Venue Market Share (Notional USD)



## India Large Sized Trades (>=5%ADT)

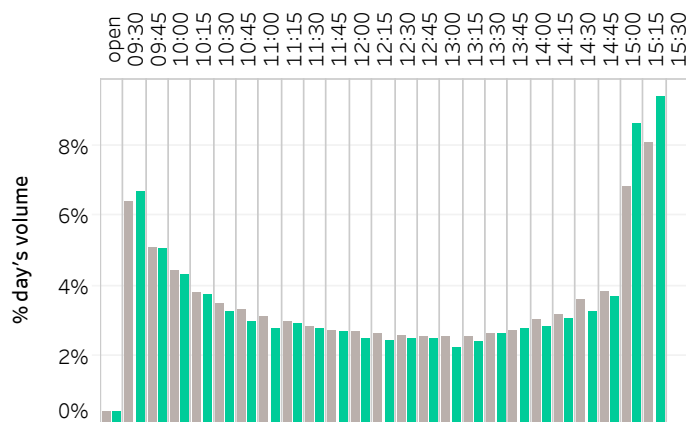


Source data: Virtu Financial

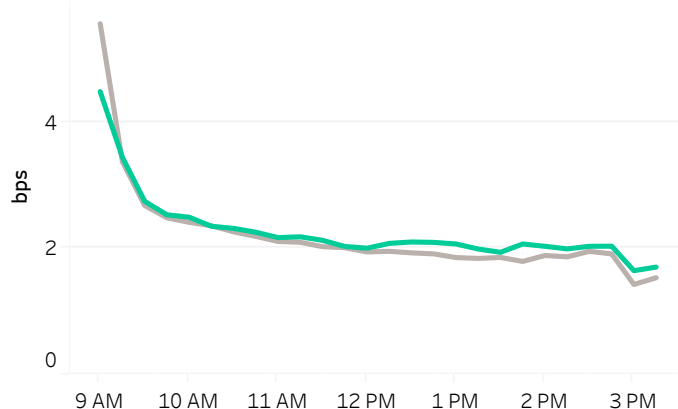


# India

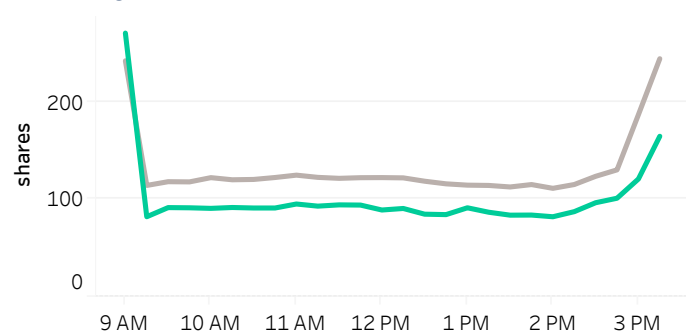
## Volume Curve



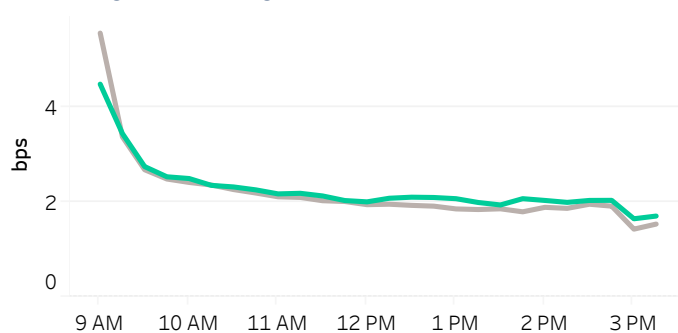
## Intraday Spread (bps)



## Intraday Quotesize (Shares)



## Intraday Volatility (bps)



Rolling 12 Months Avg June 2024

## Spread Bps

	2023							2024					
	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FirstHalfHo..	3.1	3.5	3.5	3.5	3.4	3.2	3.4	3.5	3.5	3.3	3.4	3.5	3.5
MidDay	1.9	1.9	1.9	2.0	1.8	2.0	1.9	1.9	2.0	1.9	2.0	2.1	2.0
LastHalfHo..	1.5	1.5	1.5	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.4	1.7	1.6

## One Minute Volatility Bps

FirstHalfHo..	15.2	17.6	16.2	16.3	17.3	14.7	17.9	19.6	19.6	19.5	19.6	20.1	22.5
MidDay	6.8	7.7	7.4	7.6	7.6	7.1	8.0	8.7	9.1	8.9	8.4	8.9	9.4
LastHalfHo..	9.1	9.9	9.6	9.6	9.5	8.7	10.5	10.8	11.2	12.1	10.6	11.6	11.6

## Quotesize (shares)

FirstHalfHo..	143.1	131.7	114.8	117.2	112.5	108.1	118.4	102.2	90.9	91.8	88.1	85.8	92.9
MidDay	151.7	124.1	118.6	120.7	108.5	116.7	118.3	99.1	90.4	91.0	94.1	90.6	93.3
LastHalfHo..	268.0	231.3	206.0	230.8	197.4	229.1	196.5	182.0	169.3	188.1	191.5	147.4	174.9

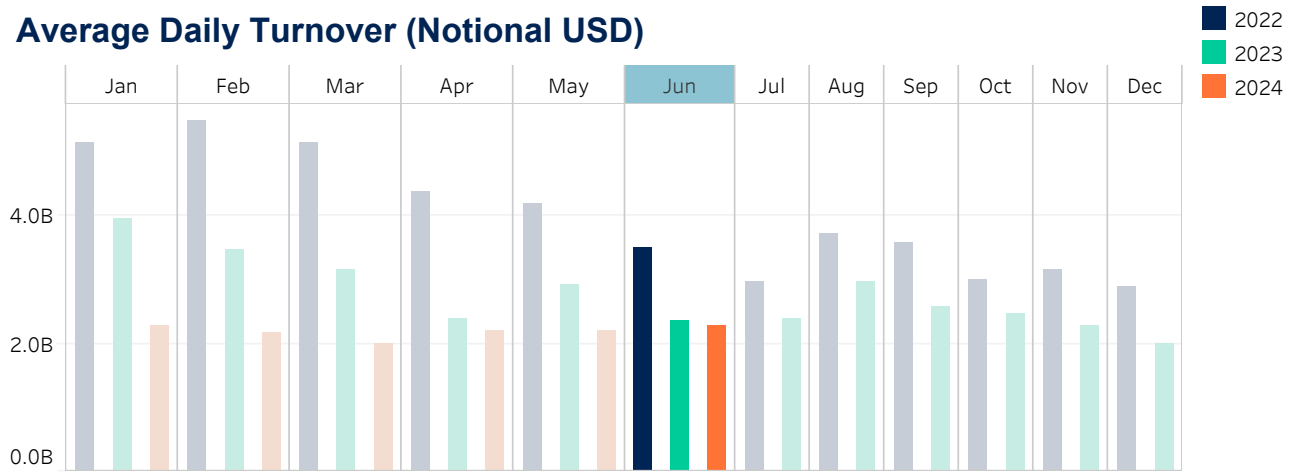
Median used for all metrics

One minute volatility is calculated using the difference between the high and low price within a one minute time bin, divided by that bin's VWAP

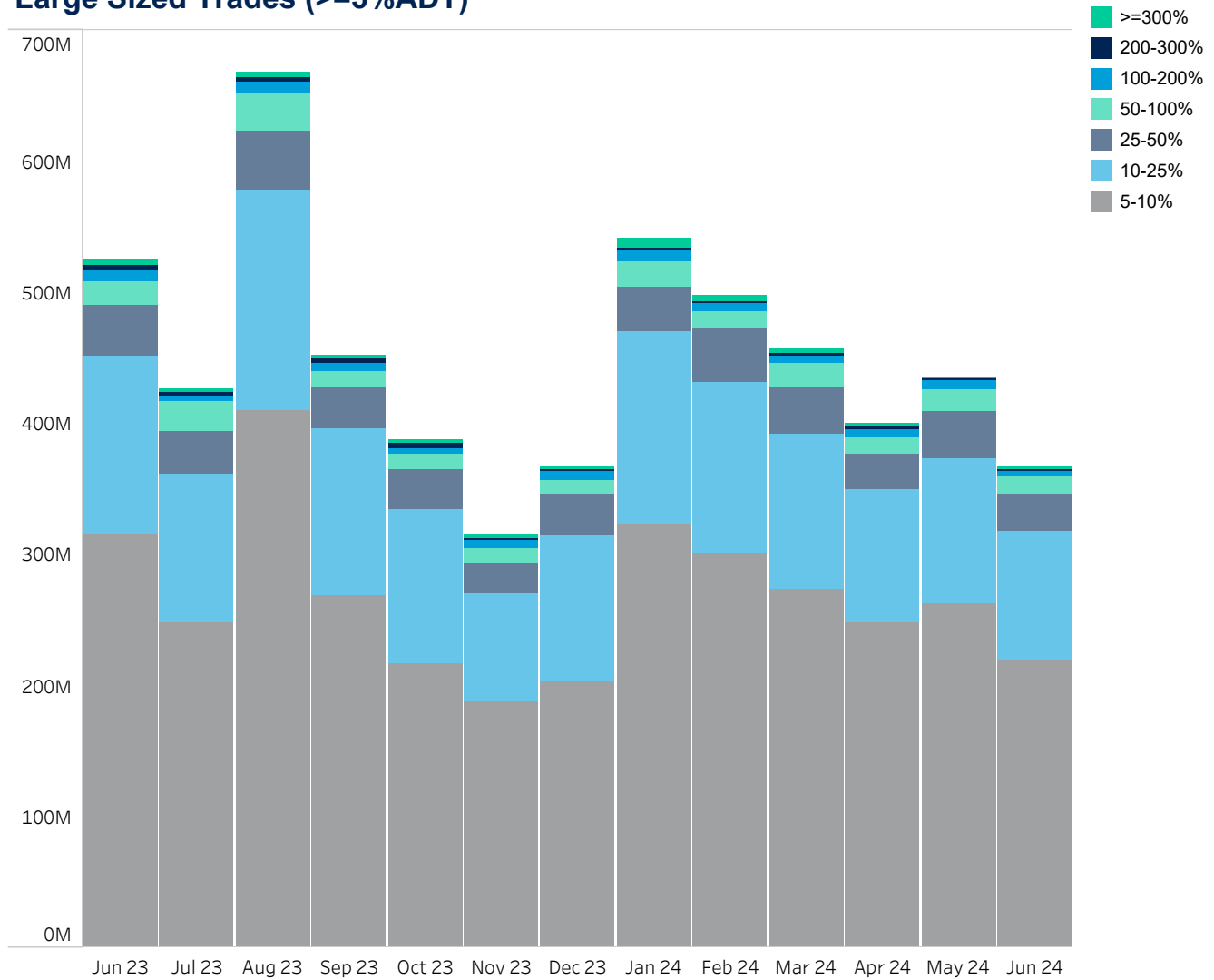
Source data: Virtu Financial

# Thailand

## Average Daily Turnover (Notional USD)



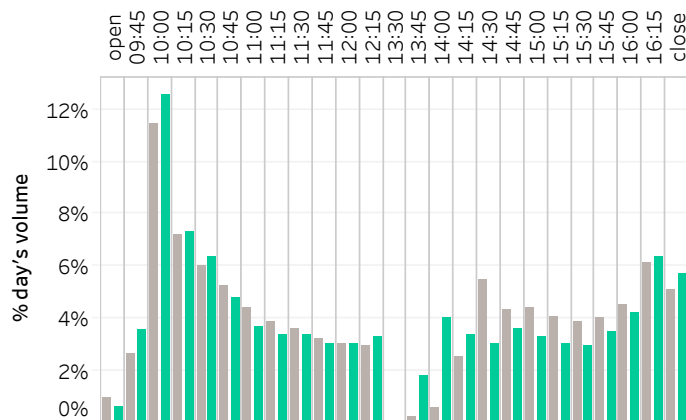
## Large Sized Trades (>=5%ADT)



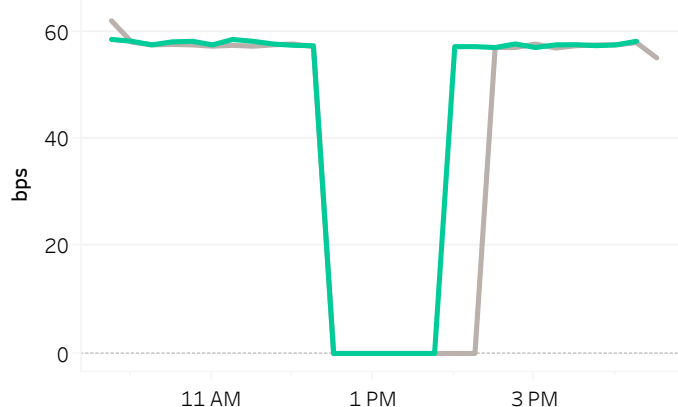
Source data: Virtu Financial

# Thailand

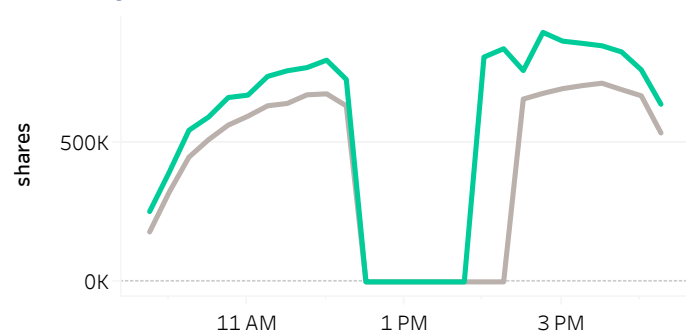
## Volume Curve



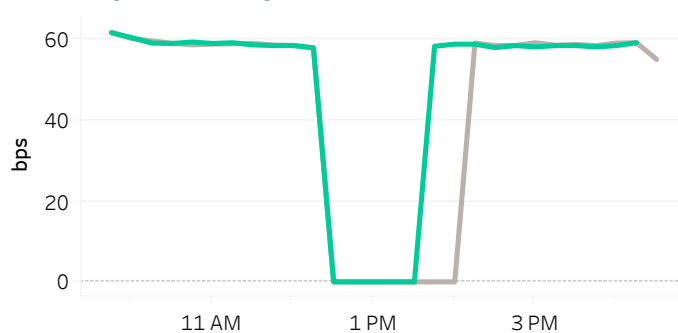
## Intraday Spread (bps)



## Intraday Quotesize (Shares)



## Intraday Volatility (bps)



Rolling 12 Months Avg June 2024

## Spread Bps

	2023							2024					
	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FirstHalfHo..	65.6	61.9	62.3	61.9	64.3	62.7	64.0	61.2	60.1	58.8	60.0	58.7	58.6
MidDay	59.3	56.7	56.3	58.7	59.3	58.3	59.2	57.6	57.0	56.2	58.0	57.6	57.3
LastHalfHo..	59.3	58.0	57.0	59.0	59.3	59.0	51.4	58.3	57.3	56.3	58.0	58.0	57.6

## One Minute Volatility Bps

FirstHalfHo..	63.5	60.4	61.7	61.2	64.3	63.5	63.8	61.2	62.3	60.4	60.8	61.5	61.5
MidDay	60.8	58.7	58.3	60.1	60.4	60.4	60.4	59.3	58.1	57.6	58.8	58.8	58.1
LastHalfHo..	60.8	59.0	58.7	59.0	60.8	60.4	51.4	59.3	58.1	57.6	59.0	59.0	58.3

## Quotesize (shares)

FirstHalfHo..	157,282	170,264	205,336	202,658	146,123	160,913	162,686	190,460	187,498	201,086	203,810	251,426	207,077
MidDay	510,989	542,854	699,283	749,767	485,941	528,048	602,762	686,060	674,355	709,700	770,373	786,167	647,182
LastHalfHo..	490,710	518,167	619,275	626,196	465,624	501,806	371,650	597,307	602,884	611,971	624,177	686,745	575,749

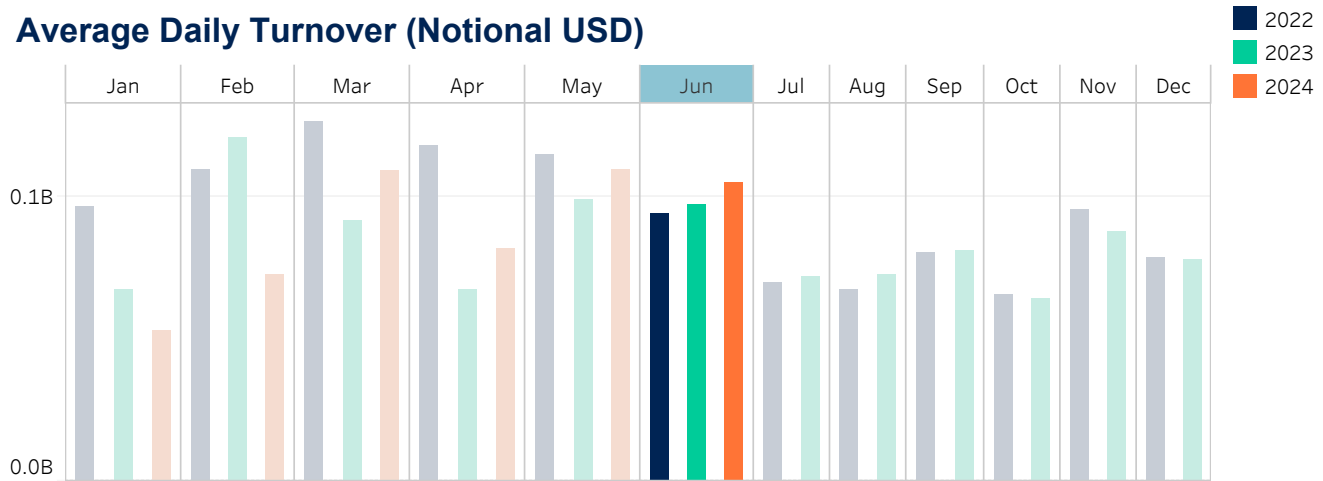
Median used for all metrics

One minute volatility is calculated using the difference between the high and low price within a one minute time bin, divided by that bin's VWAP

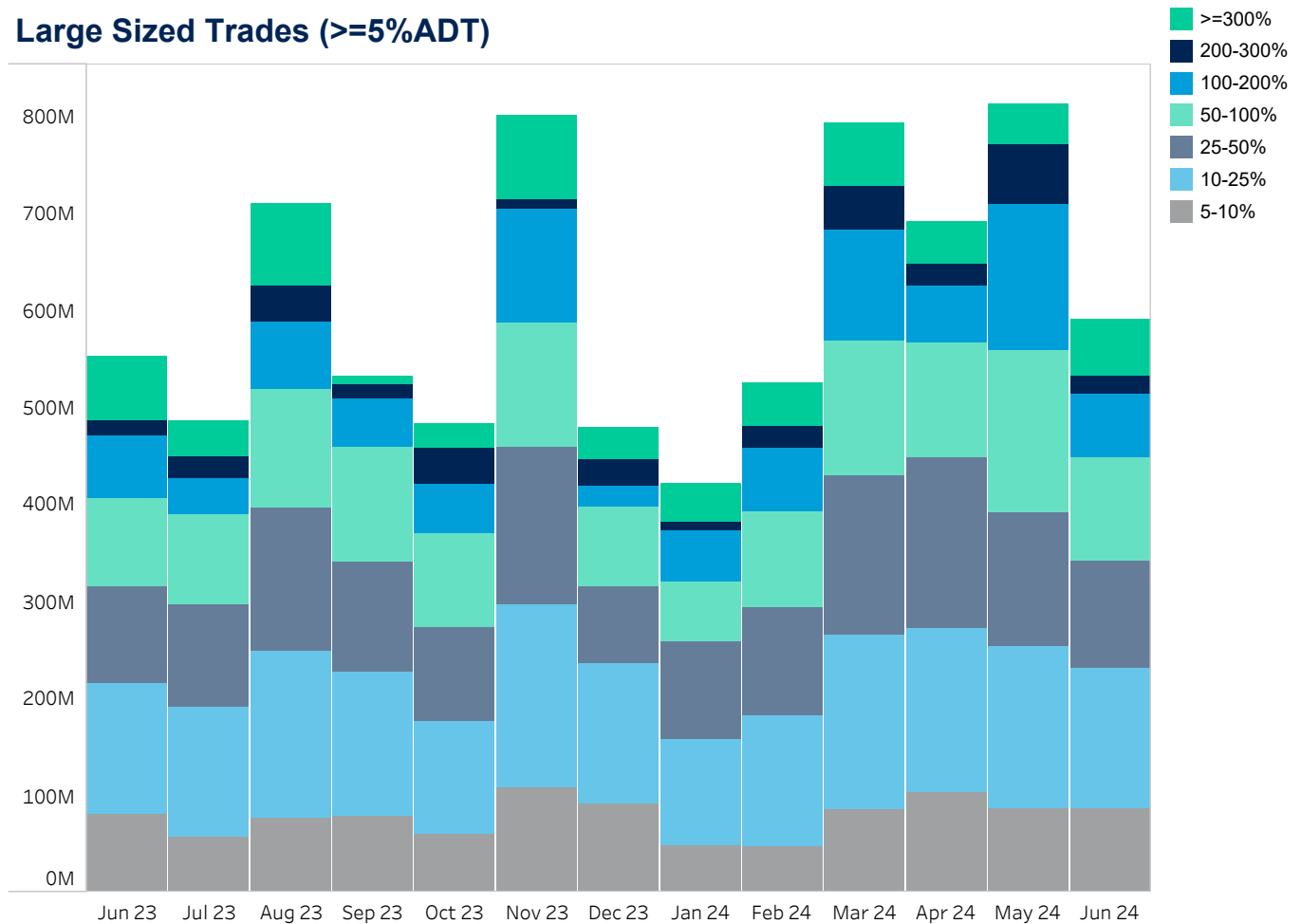
Source data: Virtu Financial

# New Zealand

## Average Daily Turnover (Notional USD)



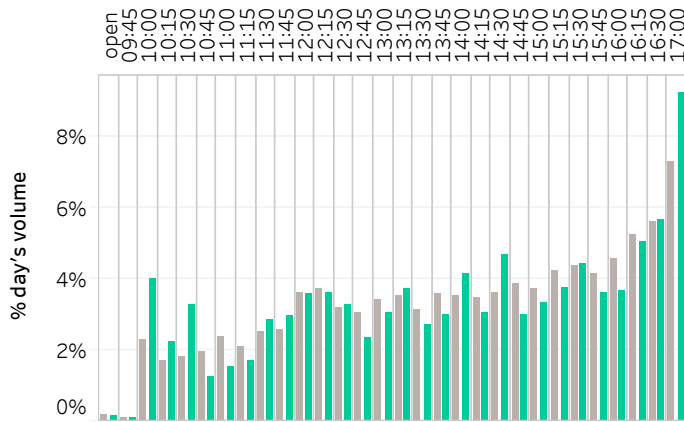
## Large Sized Trades (>=5%ADT)



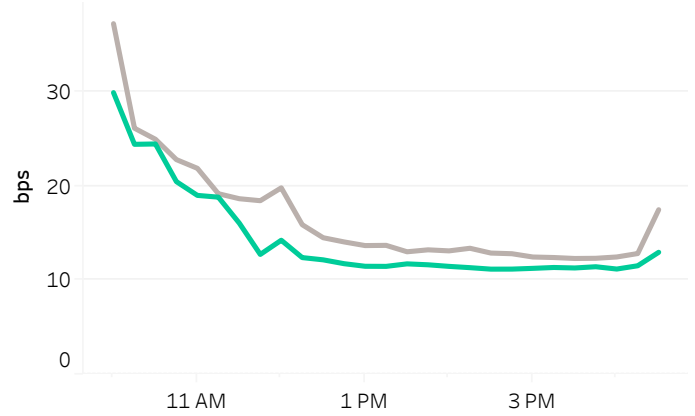
Source data: Virtu Financial

# New Zealand

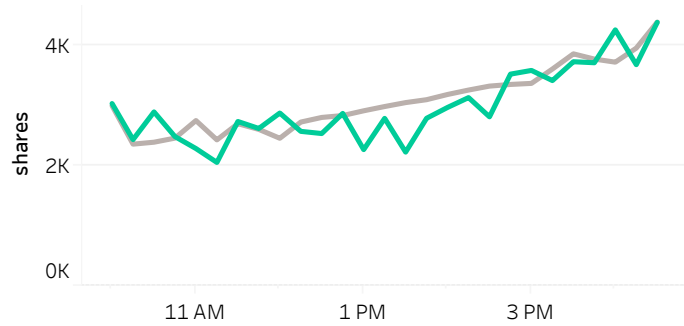
## Volume Curve



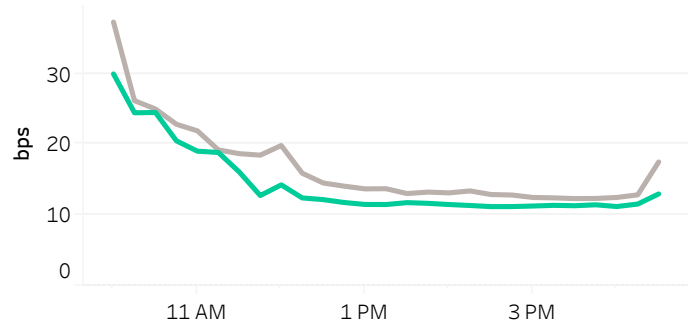
## Intraday Spread (bps)



## Intraday Quotesize (Shares)



## Intraday Volatility (bps)



■ Rolling 12 Months Avg ■ June 2024

## Spread Bps

	2023							2024					
	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FirstHalfHo..	23.1	27.3	26.0	30.3	28.2	28.9	35.4	37.0	35.1	31.2	34.3	26.1	30.5
MidDay	13.3	13.5	14.5	12.4	14.7	14.3	16.7	17.1	19.6	12.7	12.5	11.6	12.5
LastHalfHo..	17.7	17.9	18.0	16.3	19.7	18.1	18.6	22.2	22.5	17.1	15.6	13.0	15.8

## One Minute Volatility Bps

FirstHalfHo..	15.9	18.4	19.0	20.9	23.1	19.9	19.4	29.1	28.3	23.8	26.1	24.6	26.5
MidDay	13.3	12.8	13.7	12.5	15.0	14.6	16.4	17.2	19.2	12.3	12.1	11.7	13.0
LastHalfHo..	18.5	18.3	18.4	19.4	20.8	19.6	19.3	22.5	23.4	20.4	17.3	15.6	21.4

## Quotesize (shares)

FirstHalfHo..	2,658	2,980	2,981	2,681	3,043	2,397	2,093	2,584	3,199	2,413	2,650	2,904	2,527
LastHalfHo..	5,091	4,326	4,567	3,988	4,171	4,335	4,150	4,284	4,516	4,518	3,911	4,530	4,644
MidDay	3,372	3,016	3,363	3,098	3,456	2,624	2,939	2,784	3,414	2,746	2,757	2,885	2,903

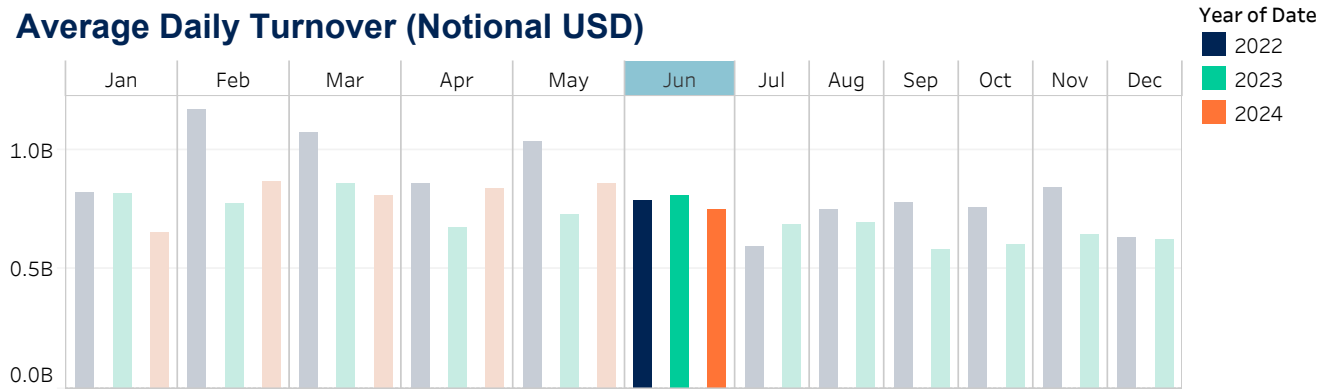
Median used for all metrics

One minute volatility is calculated using the difference between the high and low price within a one minute time bin, divided by that bin's VWAP

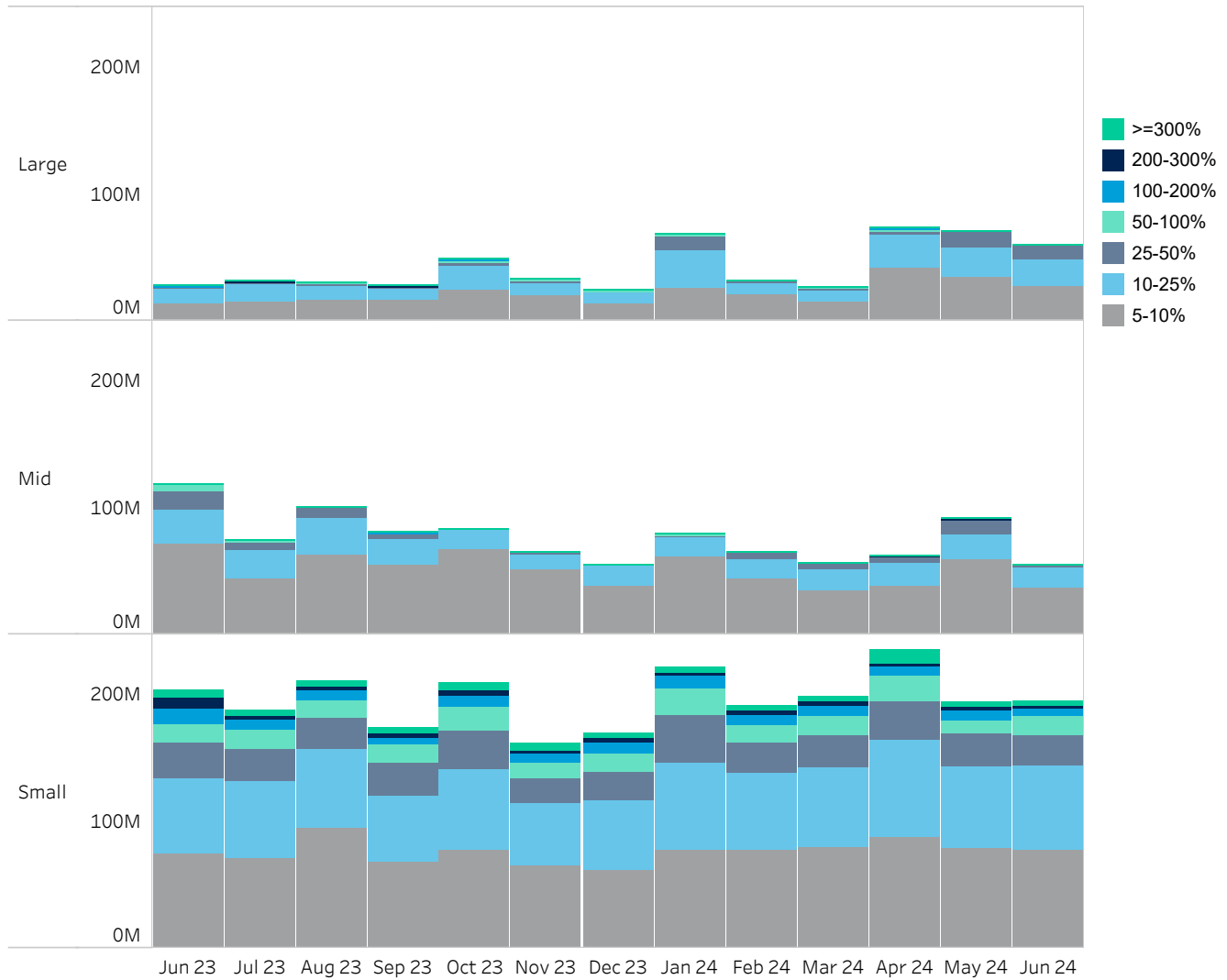
Source data: Virtu Financial

# Singapore

## Average Daily Turnover (Notional USD)



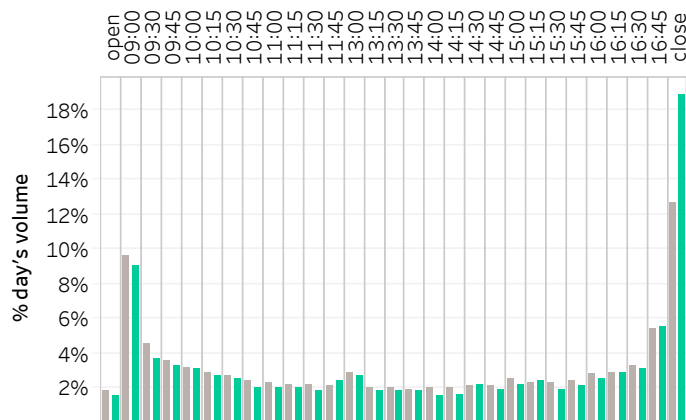
## Large Sized Trades (>=5%ADT)



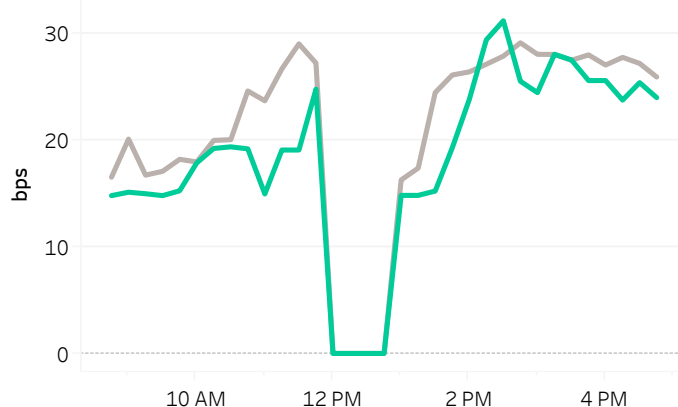
Source data: Virtu Financial

# Singapore

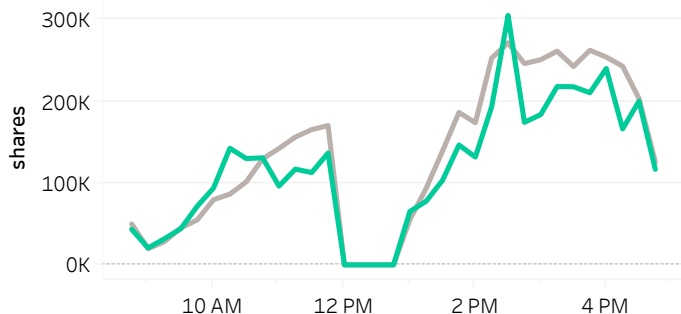
## Volume Curve



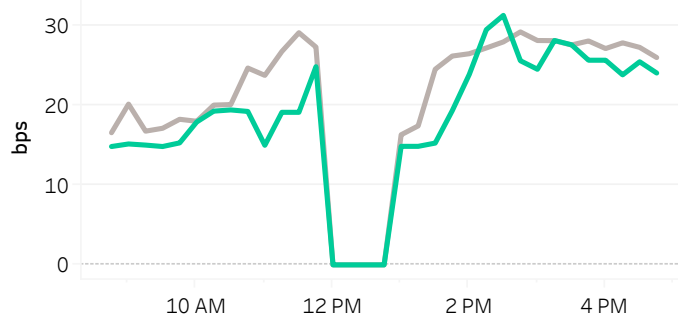
## Intraday Spread (bps)



## Intraday Quotesize (Shares)



## Intraday Volatility (bps)



Rolling 12 Months Avg June 2024

## Spread Bps

	2023							2024					
	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FirstHalfHo..	16.6	14.6	19.1	16.2	15.8	16.8	15.1	15.0	15.0	18.7	15.6	14.5	14.8
MidDay	24.5	17.5	27.1	26.7	28.5	26.5	28.9	26.8	18.1	30.0	36.7	19.2	24.7
LastHalfHo..	25.8	26.4	26.3	26.9	29.5	27.1	28.0	29.7	26.4	29.4	28.6	24.4	24.7

## One Minute Volatility Bps

FirstHalfHo..	41.7	41.7	51.4	31.3	50.6	52.8	40.9	41.6	42.5	39.9	52.1	37.7	39.0
MidDay	26.9	26.3	27.6	27.0	31.3	27.3	29.1	28.8	26.3	34.2	36.9	24.3	24.8
LastHalfHo..	27.4	27.1	28.0	27.4	32.6	27.9	29.4	32.6	30.4	30.1	34.1	29.7	30.0

## Quotesize (shares)

FirstHalfHo..	86,605	39,923	30,361	36,050	50,518	72,786	53,345	55,164	68,837	35,573	61,123	43,399	46,845
MidDay	112,054	126,638	232,427	176,852	239,708	89,777	193,459	181,018	116,322	187,792	374,365	110,102	148,668
LastHalfHo..	139,765	143,803	181,844	179,377	226,408	119,166	139,335	199,052	164,279	161,581	161,143	143,389	182,647

Median used for all metrics

One minute volatility is calculated using the difference between the high and low price within a one minute time bin, divided by that bin's VWAP

Source data: Virtu Financial

## Glossary

**Volume curve** - average of value traded during the month, per 15-minute time bin.

**Intraday volatility** - Median of difference between the high and low price within a one minute time bin, divided by that bin's VWAP

**Spread** - median of bid-ask spread of the index.

**Quotesize** - Median bid and ask size of all stocks in the index.

**Average daily turnover** - average daily value traded in the market.

## Indices used:

Australia: ASX 200

Japan: TOPIX

China: CSI 300

Hong Kong: Hang Seng Index

Taiwan: TWSE

India: NIFTY 50

Korea: MSCI Korea 25/50 Index

New Zealand: MSCI New Zealand IMI 25/50 Index

Singapore: MSCI Singapore Index

Thailand: MSCI Thailand IMI 25/50 Index

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