



Tiny Ticks, Big Impact?

Reassessing Tick Size in the Thai Stock Market

Research and Data Department 2025



Tick Size เป็น Market Structure สำคัญ

Tick size

Minimum price change for a stock traded on an exchange.

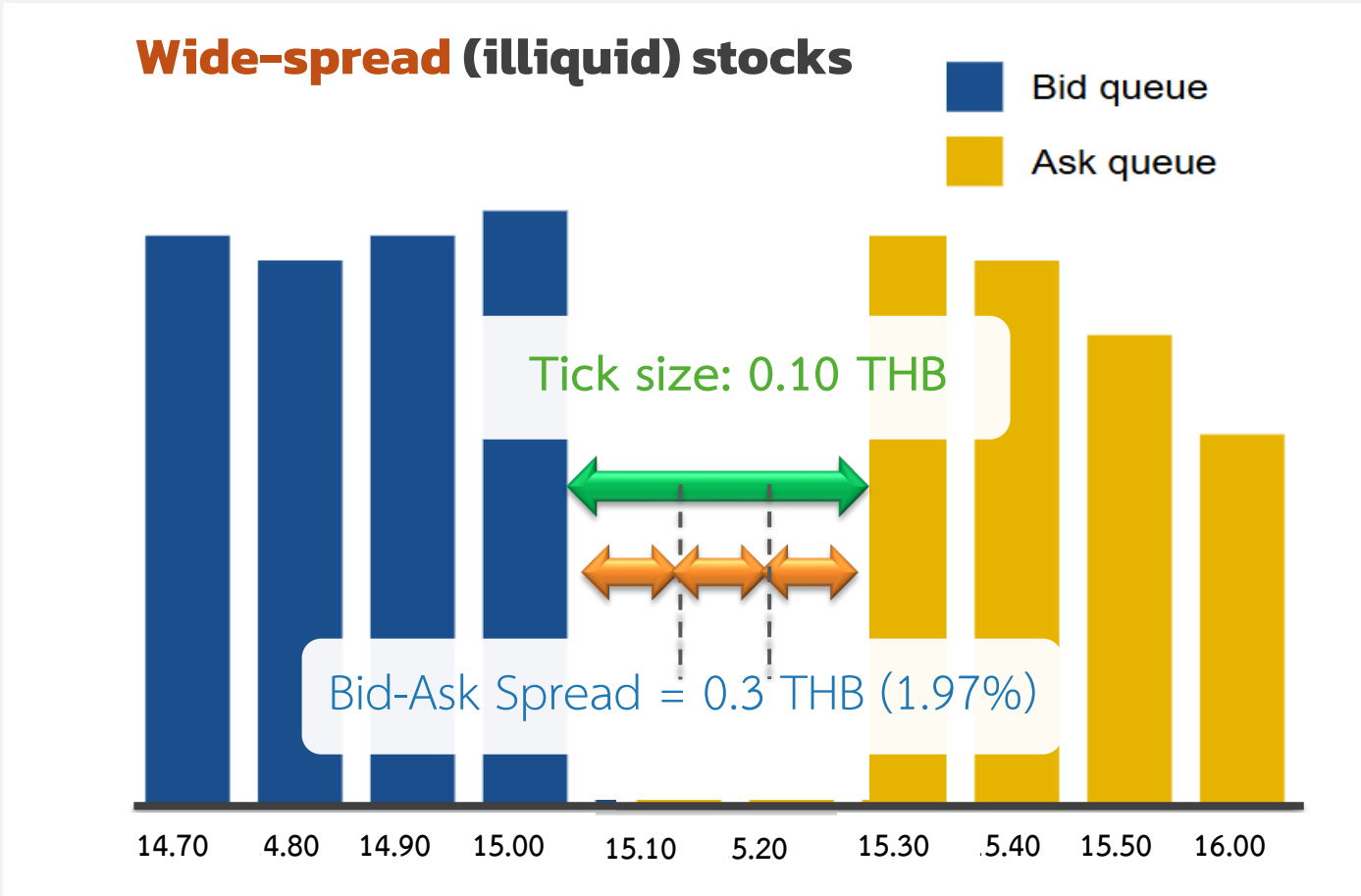
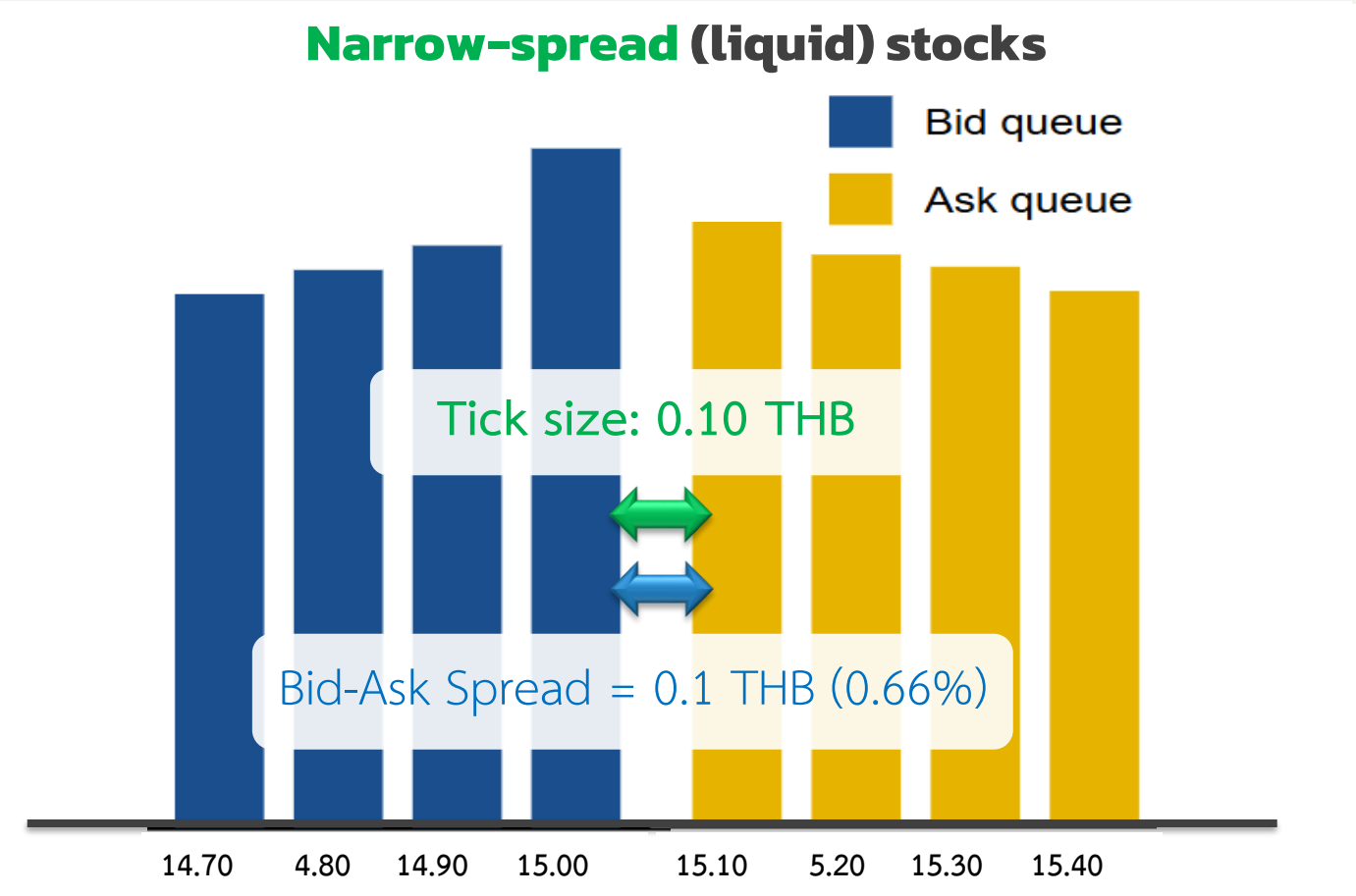


Spread

The difference between bid and ask price.
(Investor.gov by US SEC)

$$\text{Spread} = f(\text{Tick size, Liquidity, Volatility})$$

Stocks with the same tick size could have different spreads.



ภาพรวมทิศทางของการปรับ Tick Size ในตลาดหุ้น

Tick Size Revision



Decimalization (2001)

To simplify pricing, improve price discovery, and reduce bid-ask spreads



Half-Penny Tick Rule Proposal (2024)

To narrow spreads, increase competition, and better price execution for retail investors



MiFID II Tick Size Regime (2018)

Standardized tick sizes across exchanges based on price and liquidity bands



Tick Size Reduction for Large-Cap Stocks (1998)



Reduction of Tick Sizes for TOPIX100 constituents (2014)



Reduction of Tick Sizes for TOPIX Mid 400 constituents (2023)



Phase 1 Tick Size Reduction (2005)



Phase 2 (2006)



Phase 3 (2024) expected period: mid-2025



Tick Size Reduction for Low-Priced Stocks (2010)

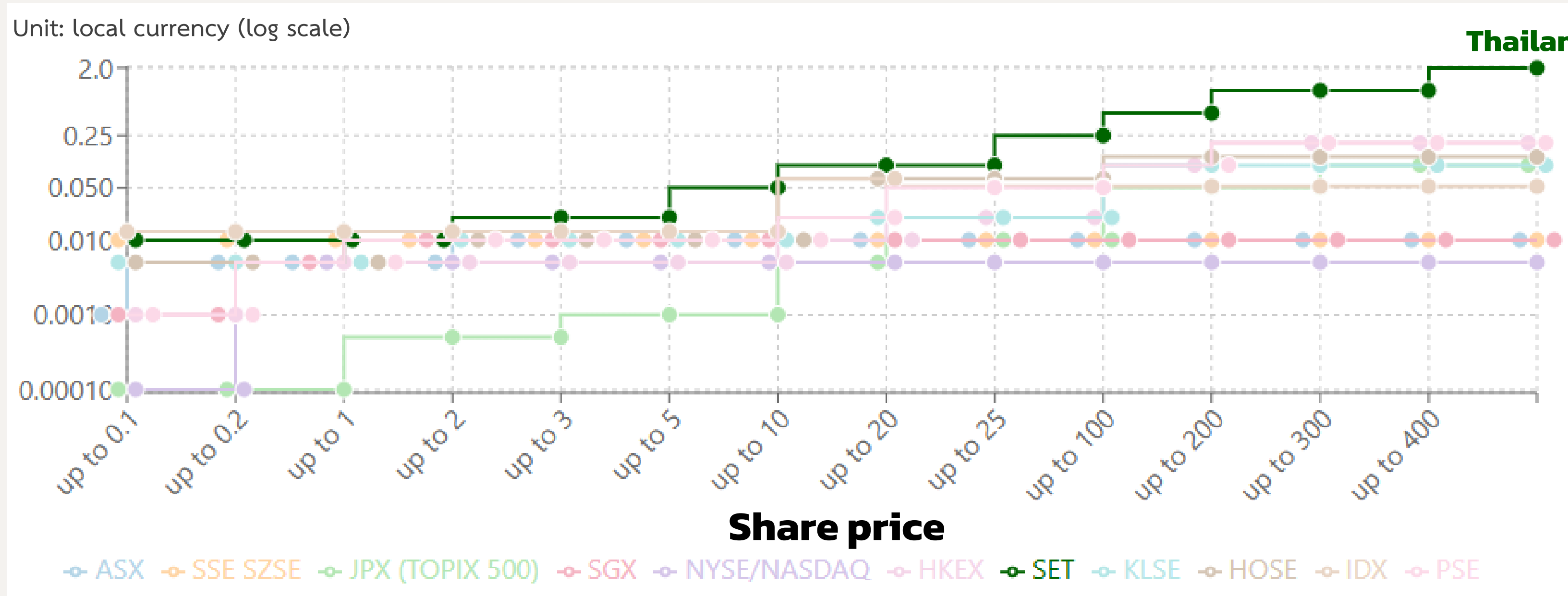


Tick Size Revision (2023)



Tick Size ของตลาดหุ้นไทยสูงกว่าตลาดหุ้นอื่น

Tick Size



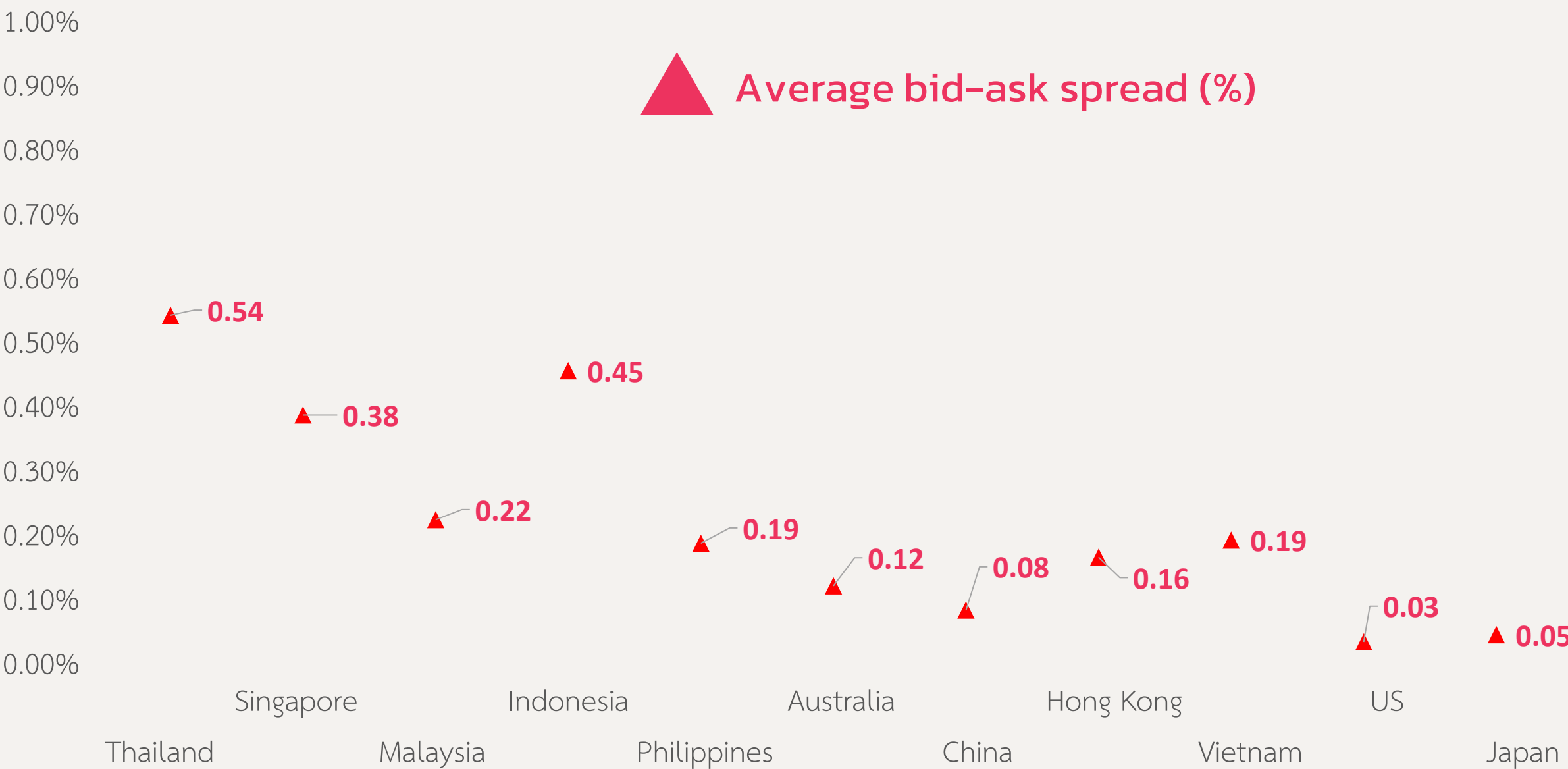
* If the proposed tick sizes were implemented.

**For low-value currencies, we converted them to THB.

Source: corresponding exchanges complied by RD SEC

ตลาดหุ้นไทยมี Spread สูงกว่าตลาดหุ้นอื่น ซึ่งอาจถูกจำกัดโดย Tick Size (“Tick Constrained”)

Spread & Boxplot of the tick-to-price ratio for each market



Market	Average bid-ask spread (%)	Average tick-to-price ratio (%)	Thailand tick-to-price ratio relative to other markets (times)
Thailand	0.54	0.54	
Singapore	0.38	0.33	1.70
Malaysia	0.22	0.21	2.62
Indonesia	0.45	0.17	3.28
Philippines	0.19	0.12	4.68
Australia	0.12	0.08	6.58
China	0.08	0.07	7.80
Hong Kong*	0.16	0.06	8.77
Vietnam	0.19	0.03	16.20
US**	0.03	0.007	83.57
Japan	0.05	0.004	133.48

Source: Bloomberg, WFE, HKEX complied by RD SEC
Bid-ask spread (%) as of YE2023 calculated from large cap stocks of each representative exchange; Australia (ASX), Vietnam (HOSE), US (NYSE/NASDAQ), Japan (JPX), China (SSE/SZSE).

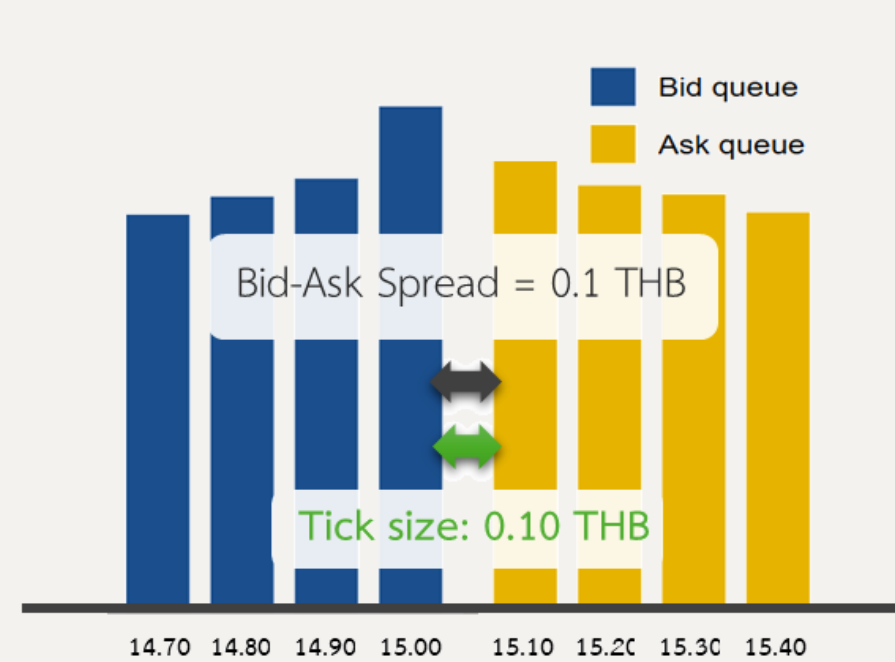
ข้อมูลปี 2024

Source: Bloomberg complied by RD SEC

Note: The tick-to-price ratio is calculated based on representative large-cap stocks that are members of the large-cap index in each market; Thailand (SET50), Singapore (STI), Malaysia (FBMKLCI), Indonesia (LQ45), Philippines (PCOMP), Australia (AS31), China (SZSE), Hong Kong (HSI), Vietnam (VN30), US (DJI), Japan (TPXC30)
The tick-to-price ratio measures the smallest possible price movement relative to the stock price. "The tick-to-price ratio is calculated by dividing the tick price by the stock price at the end of the year 2024.
*Calculated with new tick size scheme that will be implemented in mid-2025. **The US SEC proposed to reduce the tick size to half a decimal, which is likely to halve the tick-to-price ratio to 0.0035 in November 2025.

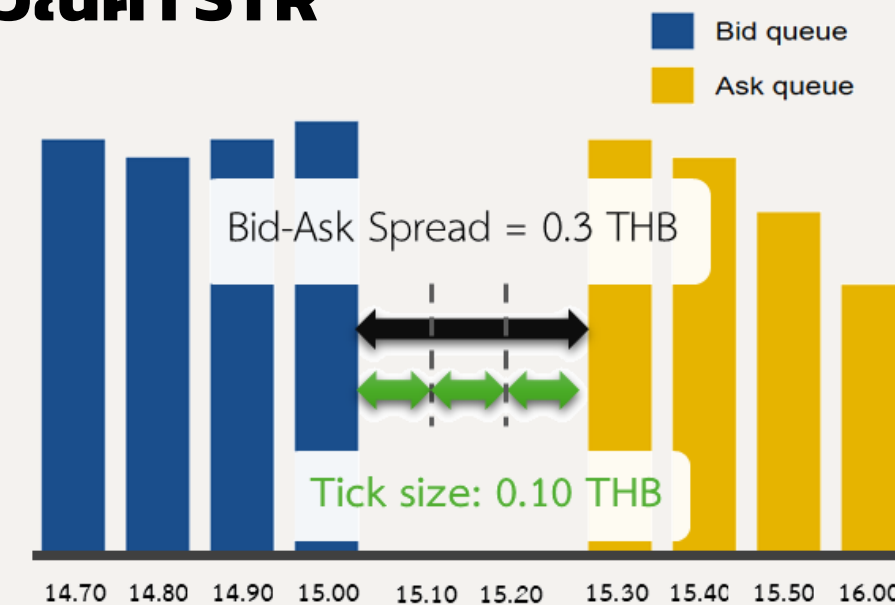
Tick-Constraint Analysis: วิเคราะห์ผ่าน Spread-to-Tick Ratio (STR) ค่าที่ต่ำกว่า 1.5 บ่งชี้ว่า Spread มีลักษณะเป็น Tick Constrained

Spread-to-Tick Ratio (STR) คือ อัตราส่วนระหว่าง bid-ask spread และ tick size ใช้เป็นตัววัดความเหมาะสมของ tick size



$$\begin{aligned}\text{STR} &= \text{Spread} / \text{Tick Size} \\ &= 0.1 / 0.1 \\ &= 1\end{aligned}$$

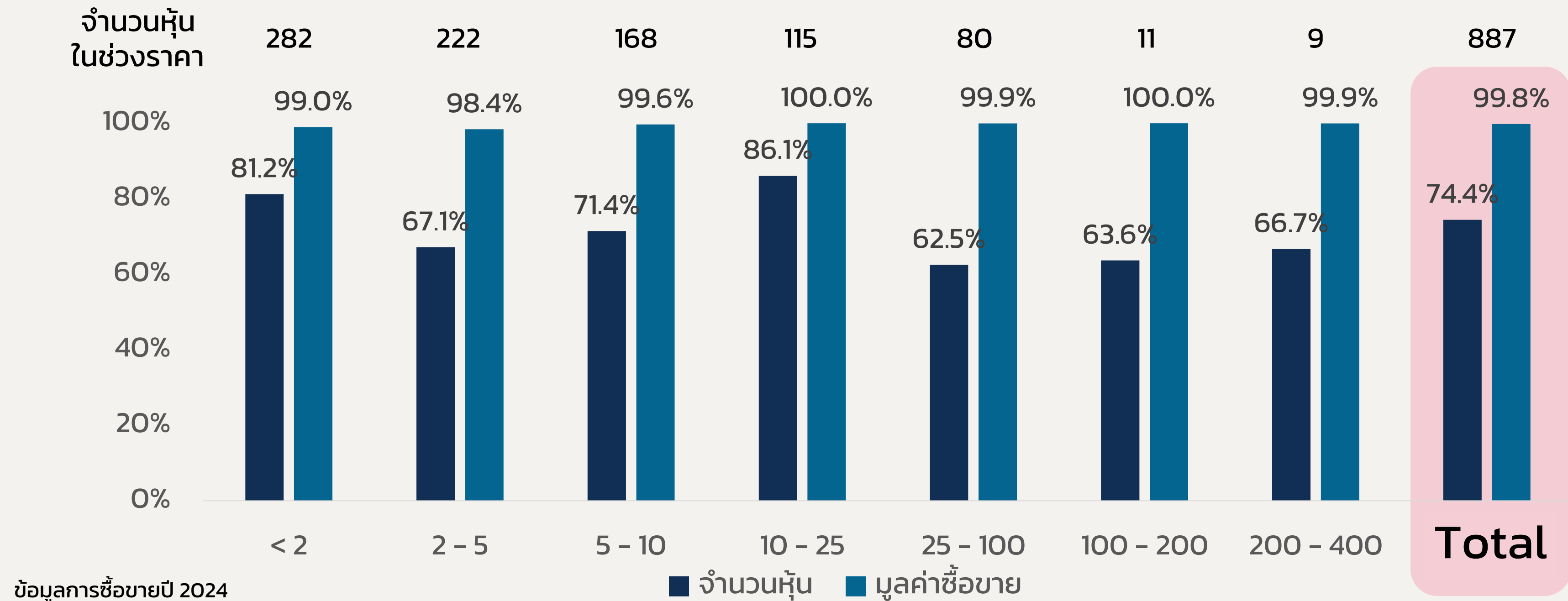
"Tick Constrained"



$$\begin{aligned}\text{STR} &= \text{Spread} / \text{Tick Size} \\ &= 0.3 / 0.1 \\ &= 3\end{aligned}$$

- ค่า STR ที่น้อยกว่า 1.5 แสดงถึง Tick Size มีความกว้างเกินไป และจะได้ประโยชน์จากการปรับลด Tick Size (Huang et al., 2017; Gorelick, 2014; Ye et al., 2014)
- โดยระดับของ STR นี้มีการนำไปใช้โดยในวงกว้างโดย securities regulators และ exchanges เช่น FCA (2025), JPX (2022), Nasdaq (2023), AMF (2018)

74% ของหุ้นไทยมีลักษณะ Tick Constrained โดยหุ้นกลุ่มนี้คิดเป็น 99.8% ของมูลค่าซื้อขายทั้งตลาด



Additional analysis:

วิเคราะห์ในส่วนของ breadth พบว่า 74% ของหุ้นทั้งหมด มี breadth sufficiency ratio >= 1

$$\text{Breadth sufficiency ratio} = \frac{\text{Average notional value of best bid and best ask}}{\text{Trading value at percentile 75}}$$

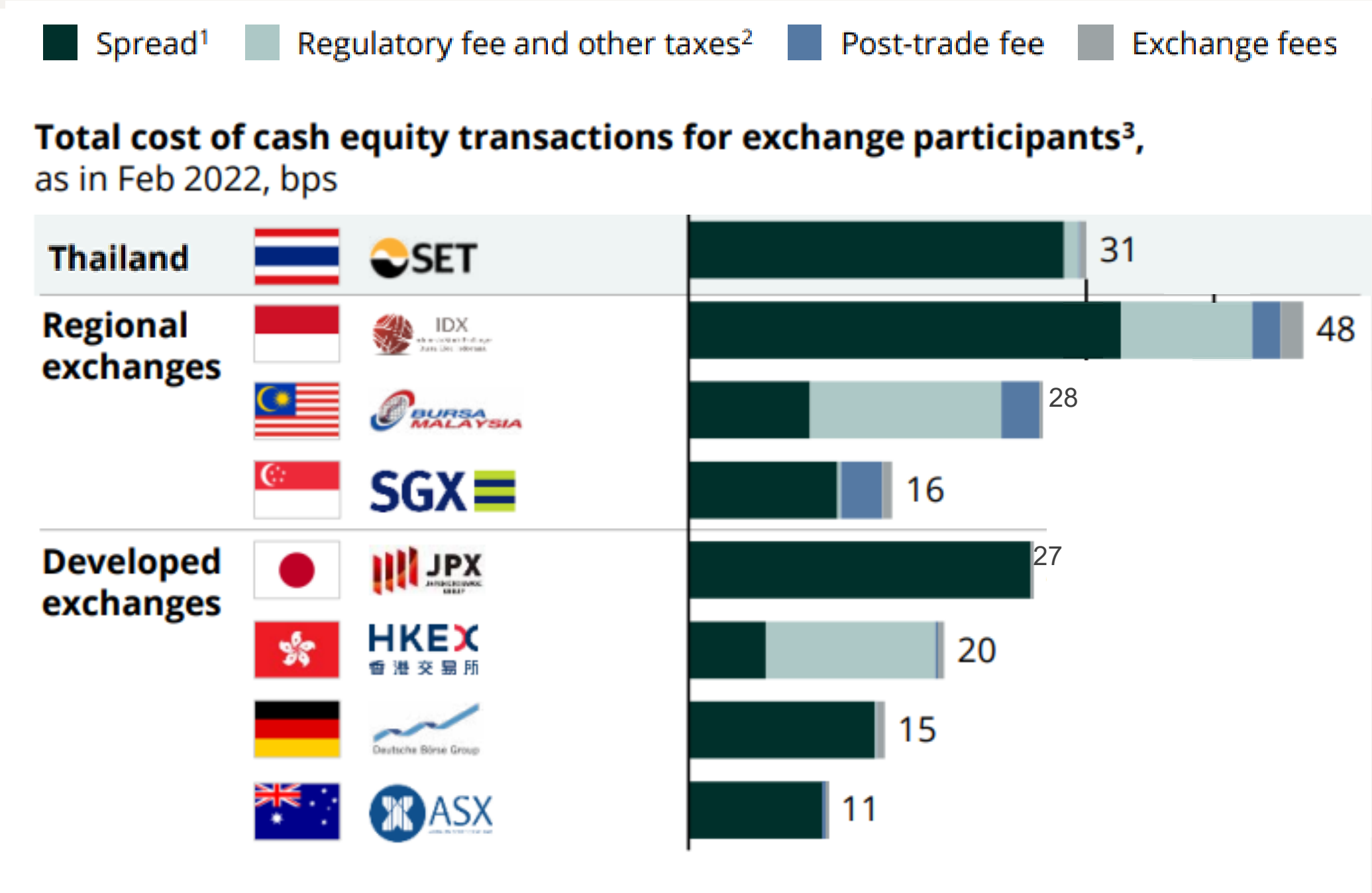
Include common stocks in SET and MAI with active status.

Bid-ask spread (tick) calculated best bid/ask from intraday trading data of normal board for the year ended 2024. Auction market sessions were excluded. Tick group assigned by average closing price for the year ended 2024.

Appendix

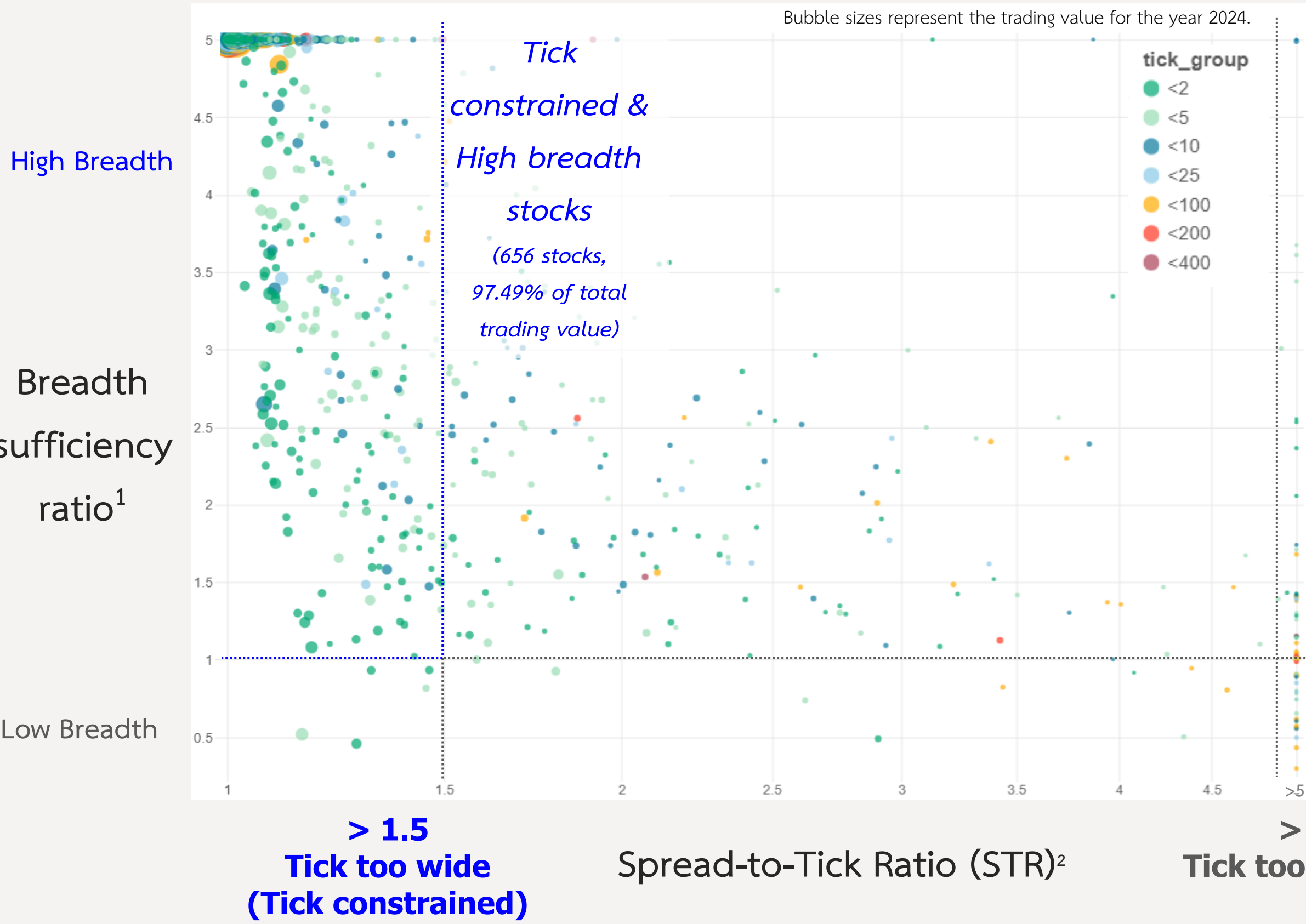
ตลาดหุ้นไทยมีต้นทุนในการซื้อขายสูง มี Spread เป็นองค์ประกอบหลัก

SET's cost of cash equity transactions (trading) compared with peers



Source: Capital Market Development Fund (CMDf) & McKinsey & Company. (2022). Improving Thailand's Capital Market Competitiveness and Efficiency.

74% ของจำนวนหุ้นไทยมีความหนาของ Best-Bid/Ask สูง และมีลักษณะ Tick-Constrained คิดเป็น 97.49% ของมูลค่าซื้อขายทั้งตลาด



Number of stocks (%)			
	STR ≤ 1.5	STR > 1.5	Total
High breadth	73.96%	22.32%	96.28%
Low breadth	0.45%	3.27%	3.72%
Total	74.41%	25.59%	100.00%

Contribution to 2024 trading value (%)			
	STR ≤ 1.5	STR > 1.5	Total
High breadth	97.40%	2.49%	99.89%
Low breadth	0.09%	0.02%	0.11%
Total	97.49%	2.51%	100.00%

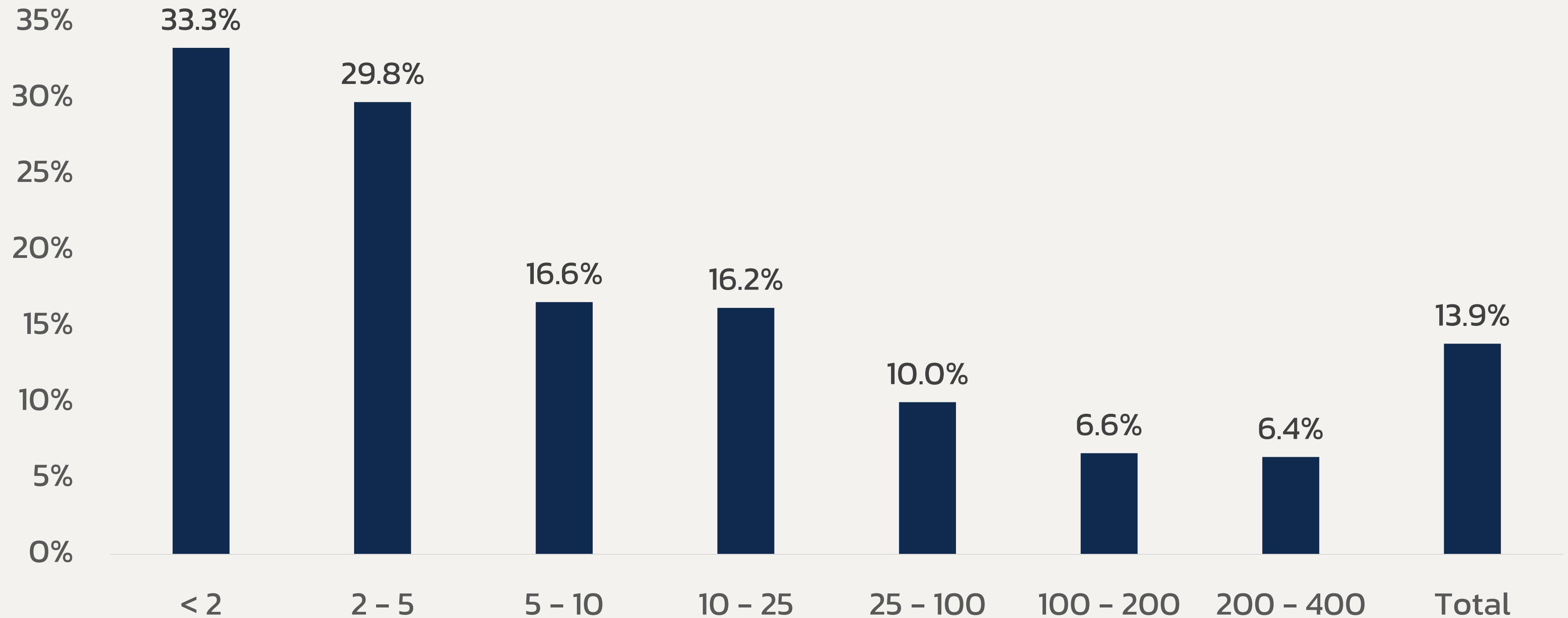
Include common stocks & REIT/PF in SET and mai with active status (total 887).

¹Breadth sufficiency ratio = (Average notional value of best bid and best ask / trading value at percentile 75). Based on the methodology of HKEX (2024)*, the order book breadth, comparing average notional values on best bids and best asks against average trade size.

²Bid-ask spread (tick) calculated best bid/ask from intraday trading data of normal board for the year ended 2024. Auction market sessions were excluded. Tick group assigned by average closing price for the year ended 2024.

Note: if the threshold suggested by Nasdaq of 1.08 is applied, there are 333 tick-constrained stocks, contributing 95.10%.

สัดส่วนผู้ลงทุนบุคคลที่มีกลยุทธ์ซื้อขายแบบ Day Trade มีสัดส่วนประมาณ 13.9% ของมูลค่าซื้อขายทั้งตลาด



Day trading: the purchase and sale, in any order, of the same stock on the same day by an account. (Barber, Lee, Liu, & Odean, 2014)

Include common stocks in SET and MAI with active status.