Transaction Cost: Municipal Securities and Other Fixed-Income Securities

Simon Wu, Chief Economist

Municipal Securities Rulemaking Board

Municipal Securities Rulemaking Board (MSRB)

- An industry self-regulatory organization (SRO) overseen by Congress and the SEC
- Established by Congress in 1975 with the mission to:
  - Protect investors, issuers and the public interest
  - Promote a fair and efficient market
- Investor protection rules and other rules regulating broker-dealers, bank dealers and municipal advisors in the municipal securities market
- A key goal: To advance market transparency

50 YEARS MSRB PROTECTING INVESTORS, ISSUERS AND THE PUBLIC INTEREST

EMMA® Electronic Municipal Market Access

Background on Transaction Cost

Overview of Main Topics

- Recent effective spread trends for municipal securities
- Why did the effective spread surge in 2022?
- Comparison of effective spread between municipal securities and other fixed-income securities

What is Transaction Cost?

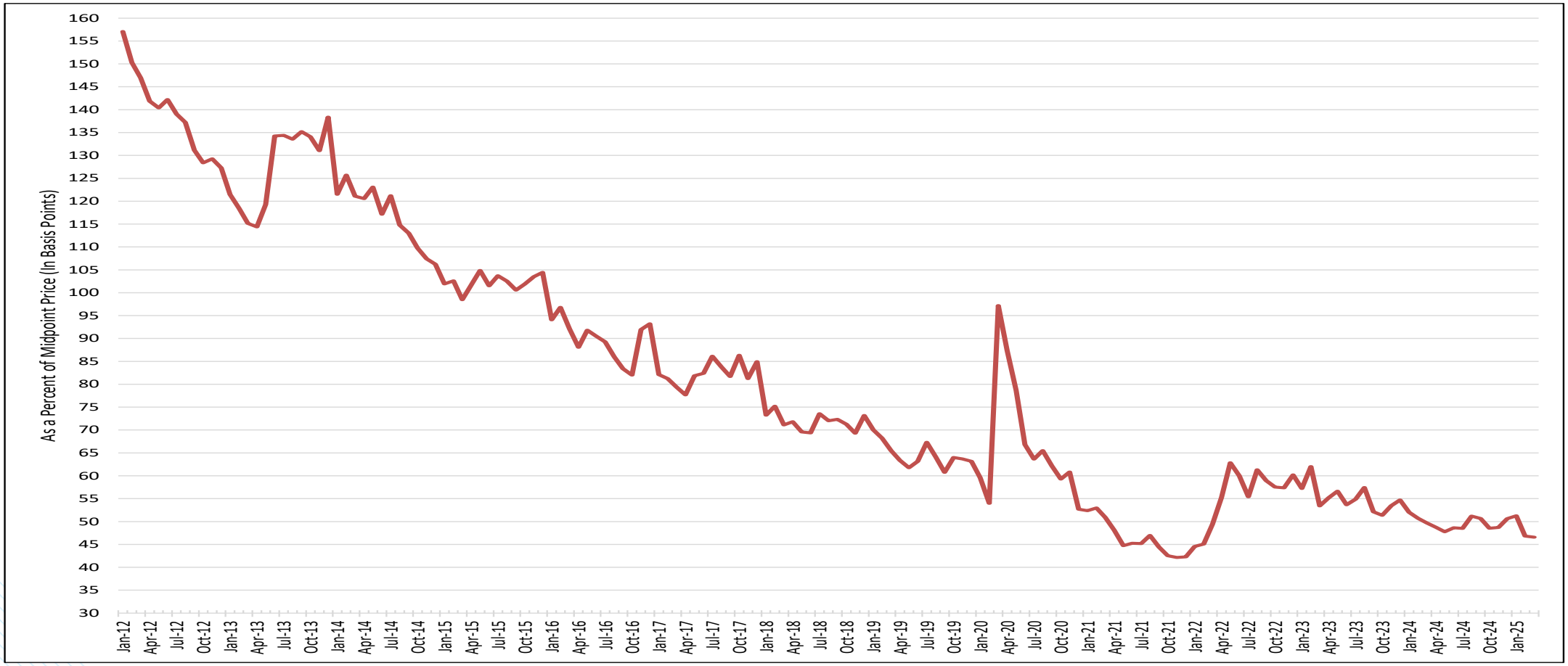
- Cost to trade in the secondary market for investors
- Commonly known as “bid-ask” spread
- With no national consolidated pre-trade quotes, economists use actual customer trade prices to calculate the effective spread for the cost
- Why does the MSRB care about the transaction cost?
  - A fair, efficient and transparent market should help lower the cost of trading for investors over time, particularly for individual (retail) investors

Data and Methodology

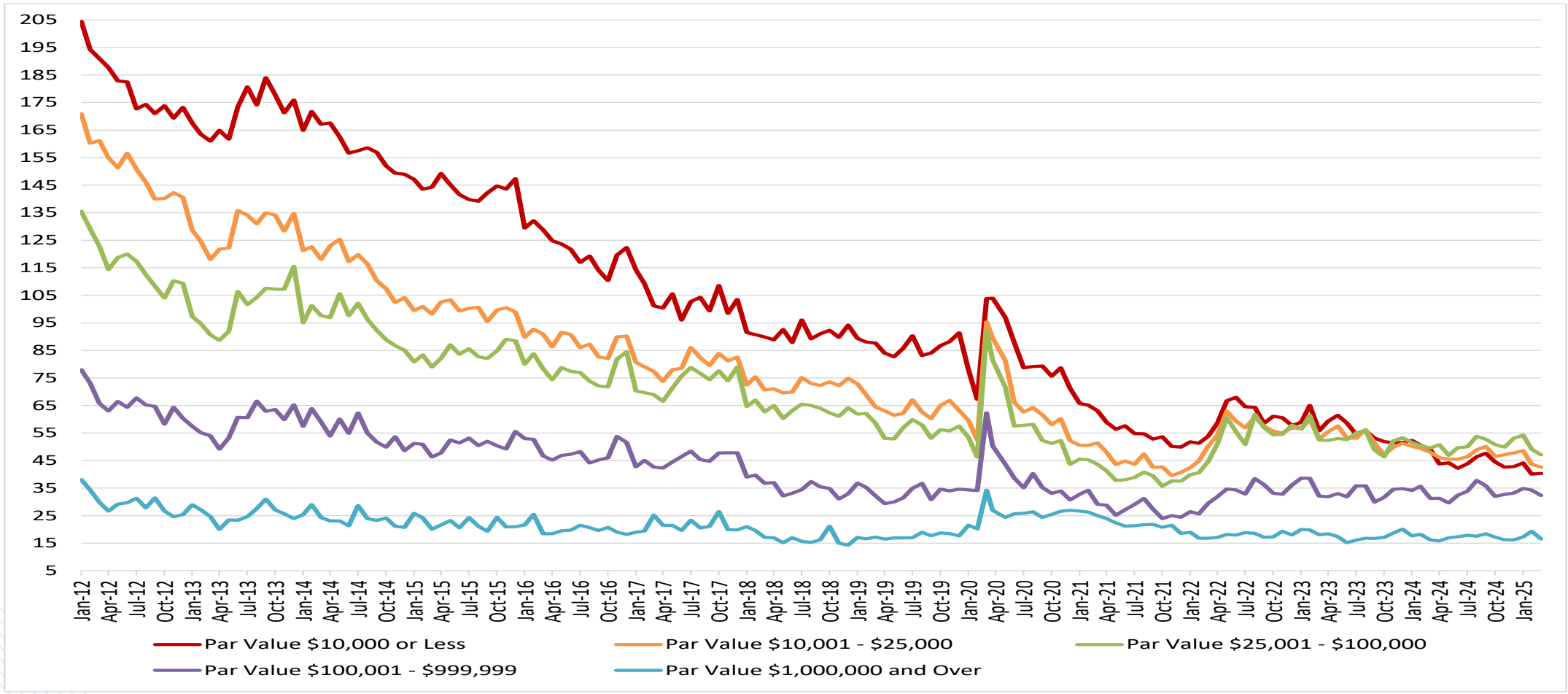
- Data
  - Municipal securities data from MSRB's RTRS
  - Corporate bonds and agency securities data from FINRA's TRACE
  - Only fixed-rate and zero-coupon bonds were included
- Methodology
  - Effective spread: Calculated daily for each security as the difference between volume-weighted average customer buy and sell prices
  - Expressed as a percentage of the average of customer buy and sell prices

Recent Trends for Municipal Securities

Overall Trend of Effective Spread for Fixed-Rate Muni's January 2012 – March 2025



Effective Spread by Trade Size for Fixed-Rate Muni's January 2012 – March 2025



Why Did the Effective Spread Spike in 2022?

- Not because of liquidity – Trading volume has been heavy since 2022
- Maybe volatility – Uptick of volatility compared to previous periods
- Main culprit – Inflation rate, interest rate and bond price
  - Markup stickiness: When bond prices dropped, effective spread as a percent of price rose because of dealers' preference for a fixed markup
  - Discount bonds are less liquid due to IRS's Market Discount Rule
- Regression analysis confirms the inverse relationship between bond price and effective spread
  - Attributed 5.2 out of 9.6 basis points increase in effective spread to the bond price decline in 2022

Trade Price Declined Starting from 2022

Year	Percent of Trades for Premium Bonds	Average Traded Bond Price
2019	85.1%	106.3
2020	88.6%	108.6
2021	91.7%	110.9
2022	73.5%	103.3
2023	66.5%	101.1
2024	71.2%	102.3

Source: Analysis of MSRB's RTRS data

Comparison with Other Fixed-Income Securities

Comparison of Fixed-Income Securities

Securities	Average Daily Par Value Traded	Outstanding Amount	Number of Outstanding Securities	Number of Issuers
Municipal Securities	$13 billion	$4 trillion	1,000,000	55,000
Corporate Bonds	$49 billion	$11 trillion	49,000	6,600
Agency Securities	$4 billion	$2 trillion	20,000	25
Treasury	$908 billion	$28 trillion	1,200	1

Source: Bloomberg and SIFMA

Comparison of Effective Spread
January 2023 – June 2024

By Par Value		Corporate Bonds	Agency Securities	Municipal Securities
$100,000 or Less		46.6	45.5	56.1
$100,001 - $999,999		21.0	23.2	33.3
$1,000,000 and Over		21.2	13.3	17.6
All Trades		36.3	40.1	52.9
All Trades (2019)		45.7		64.8

Source: Analysis of FINRA's TRACE and MSRB's RTRS data

Conclusions

- Higher interest rates and lower bond prices caused the effective spread to surge in 2022, though it has since come down
- Wider effective spreads for municipal securities were in part due to a larger number of outstanding securities and issuers
  - Compared to corporate bonds and agency securities, liquidity is less concentrated
- Odd-lot customer trades continue to have a higher effective spread than block customer trades for all three fixed-income securities
  - The difference between odd-lot trades and block trades was higher for municipal securities (38 basis points) than for corporate bonds (25 basis points) and agency securities (32 basis points)

Questions?