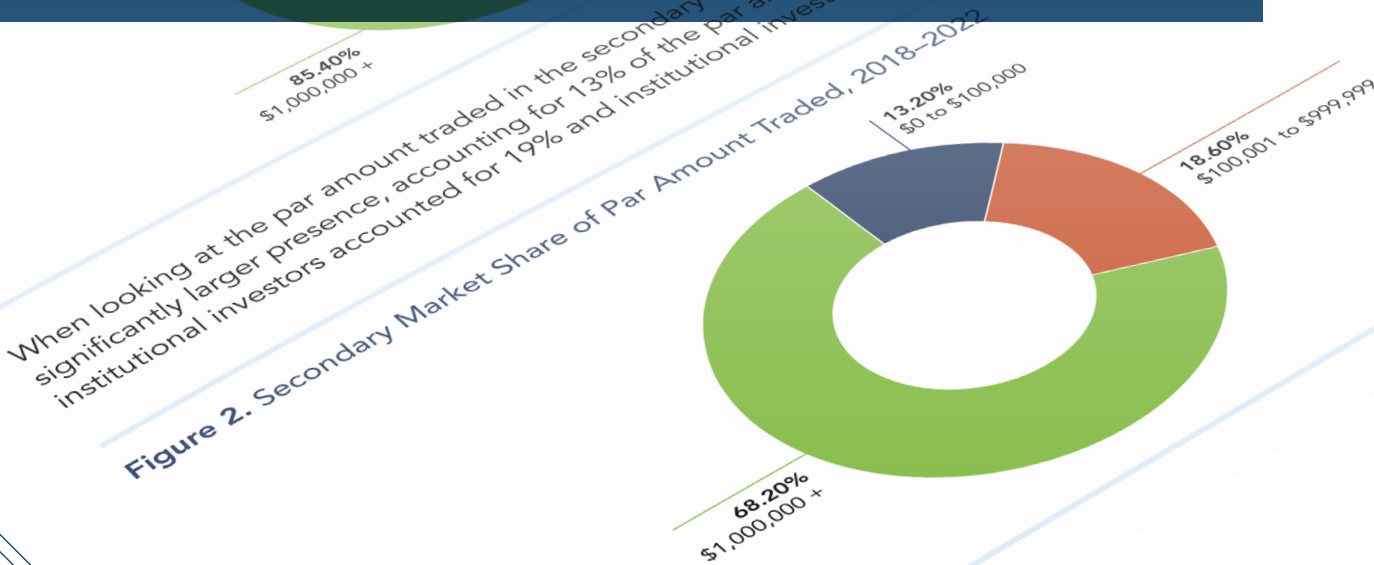




Municipal Securities Rulemaking Board

MAY 2023

Trading Patterns in the Primary vs. Secondary Market for Municipal Bonds



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Introduction¹

This publication seeks to identify and offer possible reasons for different patterns in customer trades in the primary and secondary markets for municipal bonds. From 2018 to 2022, about one-third of the par amount purchased by investors was purchased in the primary market and two-thirds in the secondary market. However, these percentages vary dramatically by trade size. The analysis clearly shows that customers purchasing bonds in smaller trade sizes are far more likely to purchase bonds in the secondary market than the primary market compared with customers purchasing bonds in larger size trades. In fact, of the total par amount purchased in blocks of \$100,000 or less from 2018 to 2022, only 4% of the par amount was purchased by customers in the primary market compared to 96% in the secondary market. By comparison, for the same time period, 38% of the par purchased in blocks of \$1 million or more was in the primary market versus 62% in the secondary market.

Methodology and Additional Information

This report is based on a set of transaction data from calendar years 2018 through 2022. The data set consists of approximately 17 million trades as submitted to the MSRB's Real-Time Transaction Reporting System (RTRS). To account for only customer purchases in the municipal market, customer sales and interdealer transactions were not included in the analysis. Also, all transactions in variable-rate products and commercial paper were excluded.

The data throughout this report is segmented based on different trade sizes of primary and secondary market trades. Trade size is used to segment investors into three groups. Unless noted otherwise, trades of \$100,000 or less are categorized as individual investor-sized trades while trades of \$1 million or more are referred to as institutional investor-sized. Lastly, investors who buy or sell securities of trade size \$100,001 to \$999,999 are referred to as predominantly institutional investors in this report.² Additionally, primary market trades are differentiated from secondary

¹ The views expressed in the research papers are those of the author(s) and do not necessarily reflect the views and positions of the MSRB Board and other MSRB staff.

² While individual investors may participate in trades larger than \$100,000, trade sizes of \$100,001 to \$999,999 should be predominantly institutional investors.

market trades using MSRB trade data flagged as list offering price and takedown transactions,³ which encompass primary market transactions. While this indicator helps distinguish customer purchases in the primary market from those in the secondary market, a limitation to this is that individuals could buy bonds at the original offering price the day after the initial offering and the trade would not carry the list offering price flag.

In addition, the authors understand that individual investors have numerous ways to access the new issue municipal bond market, including buying individual bonds through managed or non-managed accounts as well as through mutual funds and exchange traded funds (ETFs). New issue trades for managed accounts, mutual funds and ETFs are likely to be in trades greater than \$100,000. The authors also acknowledge that individual investors may find it difficult to participate in the competitive new issue market because of how frequently scales, i.e., prices and yield, can change and how underwriters may focus on large orders to reduce their liability and potentially improve their bid. Also, the priority of orders for any deal will largely determine the type of investors that are likely to be allocated bonds and likely would discourage individual investors from participating in deals without a retail order period or deals that prioritize orders from institutional investors. This analysis does not try to estimate the amount of new issue paper that ends up being bought by individual investors but rather identifies trading patterns for various trade sizes.

Trends and Patterns in the Primary vs. Secondary Market

From 2018 to 2022, while approximately one-third of the par amount purchased by customers was in the primary market with the remaining two-thirds in the secondary market, in terms of number of trades, only 8% of the customer purchase trades have been in the primary market, with 92% occurring in the secondary market. However, these numbers vary greatly when broken down by trade size.

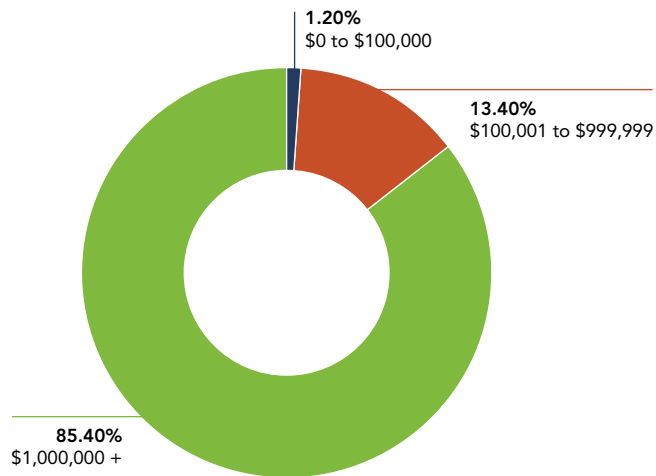
Previous MSRB research has shown that the overall number of customer trades is dominated by trades with individual investors, while institutions dominate the par amount of customer transactions. This is certainly true in the secondary market where individual investors accounted for 83% of the customer purchase trades and 82% of the customer sale trades from 2018 to 2022 compared with institutional investors, which accounted for 4% of purchases and sales. Trades in the primary market are far more balanced. Individual investors accounted for only 30% of the primary market trades, while predominantly institutional investors were responsible for 43% and institutional investors 27% of these trades.

With institutions so prevalent in the primary market and individual investors accounting for the overwhelming number of trades in the secondary market, it is not surprising that the average trade size in the primary market is dramatically higher than in the secondary market. From 2018 to 2022, the average trade size in the new issue market was over \$1.2 million compared to just over \$200,000 in the secondary market.

³ Indicates a trade executed on the first day of trading of a new issue, either by an underwriter or another broker-dealer or bank involved in the initial distribution of the securities at the published "list offering price" for the security, or by an underwriter to another broker-dealer or bank involved in the initial distribution of the securities at a discount (or "takedown") from the published list offering price for the security.

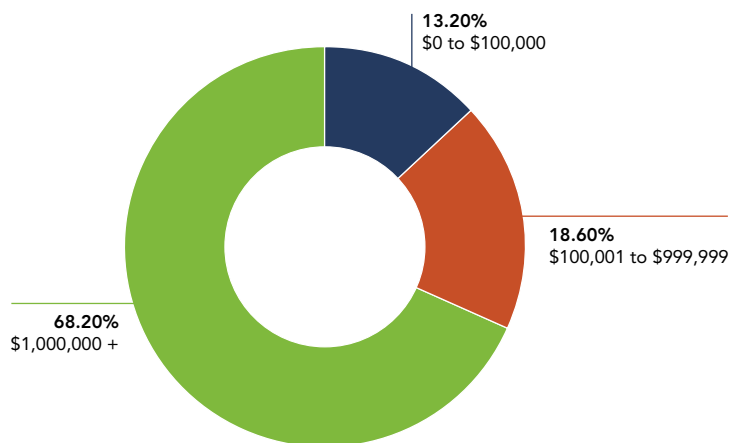
The new issue market is vital to issuers to help them finance projects to meet the needs of their constituents. The new issue market may also be an opportunity for investors to access different bonds from those accessed in the secondary market. However, MSRB trade data shows that institutional investors purchase the vast majority of the par amount of the primary issuance and individual investors purchase almost none of it. From 2018 to 2022, institutional investors purchased 85.4% of the par amount traded in the primary market, while 13.4% was purchased by predominantly institutional investors and only 1.2% by individual investors. These percentages were consistent for each of the five years studied.

Figure 1. Primary Market Share of Par Amount Traded, 2018–2022



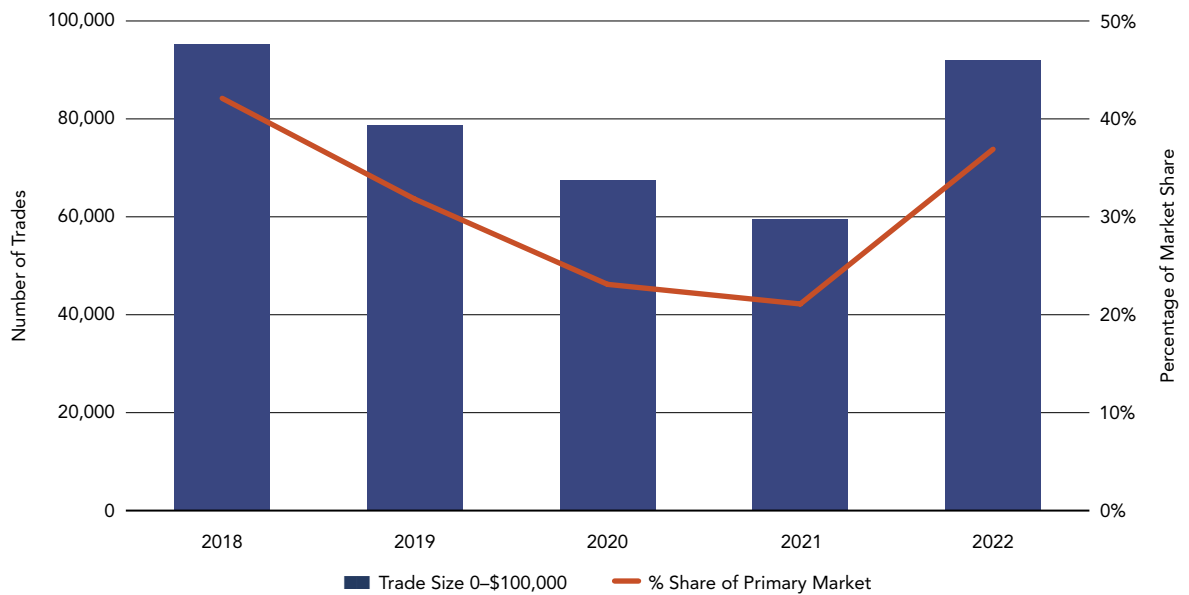
When looking at the par amount traded in the secondary market, individual investors were a significantly larger presence, accounting for 13% of the par amount purchased, while predominantly institutional investors accounted for 19% and institutional investors the remaining 68%.

Figure 2. Secondary Market Share of Par Amount Traded, 2018–2022



During this period, par amount traded varied more in the secondary market than in the primary market. For instance, 11% to 16% of the par amount purchased in the secondary market from 2018 to 2022 was purchased by individual investors. Individuals bought at their highest in 2018, accruing up to 16% of par before dropping to 11% in 2020 and bouncing back to 13% in 2022. Contrary to individual investors, institutions in the secondary market bought at their lowest in 2018, accruing up to 63% of par before increasing to 72% in 2020 and easing to 71% in 2022. In the primary market, the number of purchases varied significantly more between the three groups. Individual investors accounted for 42% of the customer purchases in the new issue market in 2018 before dropping to 21% in 2021, and then bouncing back to 37% in 2022 (see Figure 3).

Figure 3. Percentage Share of Number of Trades in Primary Market, Trade Size 0–\$100,000



Figures 4 and 5 show the percentages of customer purchases in terms of number of trades and par amount traded by the three investor categories from 2018 to 2022. Of all customer purchases by individual investors during that period, less than 3% were in the primary market (97% in the secondary market), accounting for 4% of the par value purchased by individual investors. By comparison, predominantly institutional investors were responsible for 21% of trades and 26% of par amount purchased in the primary market, while institutional investors made 38% of their purchase trades and purchased 38% of the par amount in the primary market.

Figure 4. Percentage of Primary Market Trades Compared to All Trades, 2018–2022

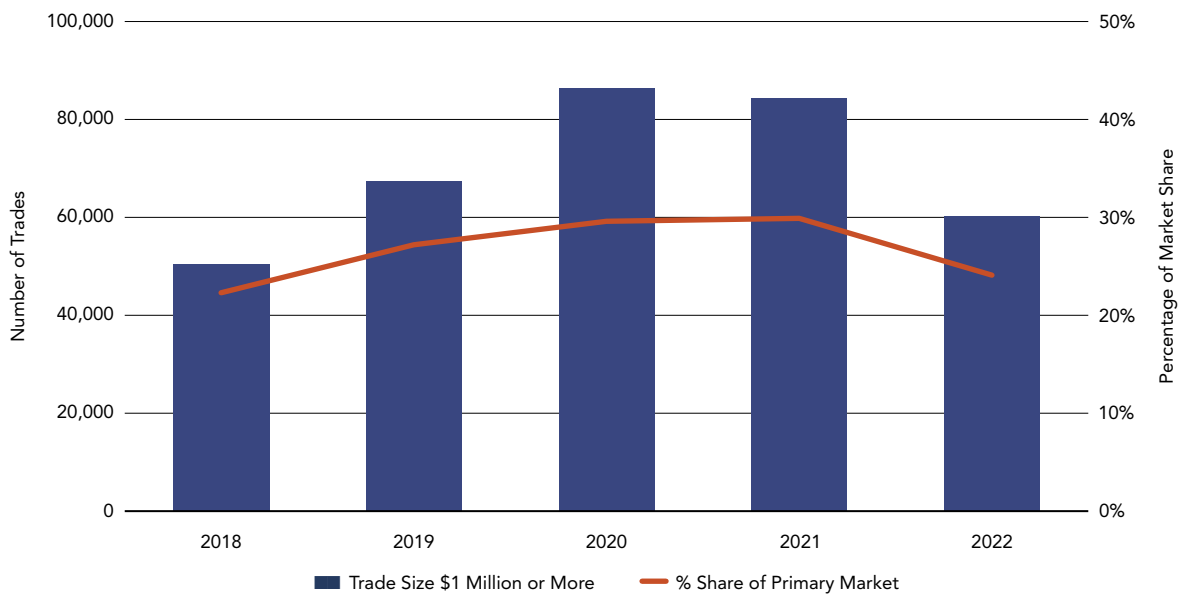
Year	\$0 –\$100,000	\$100,001–\$999,999	\$1 Million or More
	Percentage of Primary Market Trades to All Customer Purchases	Percentage of Primary Market Trades to All Customer Purchases	Percentage of Primary Market Trades to All Customer Purchases
2018	3.08%	15.24%	33.06%
2019	3.17%	19.91%	39.98%
2020	2.94%	26.54%	41.30%
2021	2.94%	29.07%	47.80%
2022	2.52%	15.28%	27.89%
Total	2.90%	20.80%	37.80%

Figure 5. Percentage of Primary Market Par Traded to All Trades, 2018–2022

Year	\$0 –\$100,000	\$100,001–\$999,999	\$1 Million or More
	Percentage of Primary Market Par to All Customer Sales Par	Percentage of Primary Market Par to All Customer Sales Par	Percentage of Primary Market Par to All Customer Sales Par
2018	4.24%	19.03%	33.40%
2019	4.56%	24.78%	40.75%
2020	4.84%	31.93%	41.23%
2021	4.97%	35.28%	48.95%
2022	3.43%	20.07%	27.92%
Total	4.29%	26.04%	37.95%

These figures show that participation from individual investors in the primary market was minimal compared to their engagement in the secondary market. They also show that predominantly institutional and institutional investors had a much more balanced reliance on the primary versus secondary market compared with individual investors. The number of trades bought by institutional investors varied significantly more in the primary market than in the secondary market. At their lowest, institutional investors accounted for 22% of the trade volume in 2018 before increasing to 30% in 2021 and decreasing to 24% in 2022 (see figure 6).

Figure 6. Percentage Share of Number of Trades in Primary Market, Trade Size \$1 Million or More



Conclusion

For the past five years, individual investors buying bonds in non-managed accounts have had minimal participation in the primary market and a tremendous reliance on the secondary market to purchase municipal bonds. In contrast, institutional investor purchases are much more evenly balanced between purchases in the primary and secondary market. Although individual investors may be accessing the primary market through managed accounts, mutual funds or ETFs, it is apparent that individual investors who buy bonds in non-managed accounts very rarely participate in the new issue market. Although there are many reasons why individual investors purchasing bonds in non-managed accounts have not participated much in the new issue market, it seems they would benefit from more balanced participation between the primary and secondary markets. In addition to getting access to bonds not available in the secondary market, these investors may sometimes be able to pick up more yield by buying bonds in the primary market.

ABOUT THE MSRB

The Municipal Securities Rulemaking Board (MSRB) protects and strengthens the municipal bond market, enabling access to capital, economic growth, and societal progress in tens of thousands of communities across the country. The MSRB fulfills this mission by creating trust in our market through informed regulation of dealers and municipal advisors that protects investors, issuers and the public interest; building technology systems that power our market and provide transparency for issuers, institutions, and the investing public; and serving as the steward of market data that empowers better decisions and fuels innovation for the future. The MSRB is a self-regulatory organization governed by a board of directors that has a majority of public members, in addition to representatives of regulated entities. The MSRB is overseen by the Securities and Exchange Commission and Congress.



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