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#### Introduction<sup>1</sup>

In May 2023, the MSRB published the research report <u>Trading Patterns in the Primary vs.</u> <u>Secondary Market for Municipal Bonds</u>. The paper found that individual investors not investing through separately managed accounts (SMA) had minimal participation in the primary market and were significantly more reliant on buying bonds in the secondary market than institutional investors.<sup>2</sup> Conversely, institutional investors' participation was significantly more balanced between customer purchases in the primary vs. secondary market. From 2018 through 2022, about 4% of the par amount purchased in trades of \$100,000 or less, a proxy for individual investor trades, was in the primary market and 96% in the secondary market. For trades of \$1 million or more, a proxy for institutional investor trades, 38% of the par amount was purchased in the primary market and 62% in the secondary market.

This report analyzes two different but related aspects of the municipal securities market. First, it compares customer purchases in the primary market<sup>3</sup> to customer purchases during the first seven days of secondary market trading after the first execution date, defined as the "recently issued" market. This is unlike the 2023 report, which analyzed all customer trades regardless of how long after the first execution date the trade occurred. The analysis also looks at the spread of prices

- <sup>1</sup> 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.
- Consistent with previous MSRB research, 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. However, customer trade data suggests that a significant portion of the trades of \$100,000 or less are actually executed with institutional investors, such as investment advisers, who are trading on behalf of individual investors.
- 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.

paid in the recently issued market to the initial offering prices and yields of securities sold in the competitive and negotiated markets. Next, the report compares the competitive and negotiated new issue markets, examining their characteristics and types of issues using each market.

Looking at the subset of data that covers trades within the first seven days of first execution, the analysis indicates that from 2019 through 2023, 53% of the par amount purchased by individual investors happened in the primary market compared to 47% in the recently issued market, whereas institutional investors acquired 92% in the primary market and 8% in the recently issued market.

As to the prices customers paid in the recently issued vs. the primary markets, overall, from 2019 through 2023, individual investors paid an average of just over \$10 per bond above the list offering price on trades in the recently issued market, which is about twice as much as what institutional investors paid. If individual investors accessed the primary market more often, they likely would receive more favorable pricing than in the recently issued market.

Finally, this paper examines overall characteristics of the competitive and negotiated markets, including the number of deals and par amount issued, and factors such as sector, ratings, tax status, refunding vs. new money deals, etc., that may influence what type of issuers are likely to use one market over the other. The analysis shows that although the number of competitive and negotiated deals was almost even for the five years examined, nearly three-fourths of par amount issued came in the negotiated market. There were significant differences in which sectors accessed the market via the negotiated vs. competitive market. For example, the electric power, health care and housing sectors overwhelmingly use the negotiated market. Also, lower rated issues, refunding issues, taxable issues and those subject to the alternative minimum tax (AMT) were more likely to use the negotiated market than the competitive market.

### Methodology and Data Description

This report analyzes customer trade data obtained from the MSRB's Real-Time Transaction Reporting System (RTRS), covering the period from 2019 through 2023. The dataset comprised about 2.5 million customer purchases, including approximately 1.6 million trades occurring in the primary market and about 894,000 in the recently issued market. Primary market trades are differentiated from recently issued market trades by using MSRB trade data flagged as list offering price and takedown transactions (LOP), which encompass primary market transactions. For this study's purposes, the recently issued market is defined as customer purchases within the first seven days after the date of first execution, excluding LOP trades. Also, all transactions in variable rate products, commercial paper and private placements are excluded from the analysis.

Following the approach of previous work on trading patterns in primary vs. secondary markets, the data is segmented by trade size to differentiate between three investor groups. 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.<sup>4</sup> However, customer trade data suggests that a significant portion of the trades of \$100,000 or less are actually executed with institutional investors, such as investment advisers, who are trading on behalf of individual investors.

This report also looks at the difference between the price and yield paid by a customer for a recently issued security (purchased within seven days of the first execution date) and the list offering price or yield for the security.<sup>5</sup>

Additionally, this research extends the analysis of the 2023 report by also adding the new issuance data by type of issuance, specifically comparing between negotiated and competitive sales. For insights on the competitive and negotiated new issue market, data was incorporated from the London Stock Exchange Group (LSEG), covering about 57,000 new issues from 2019 through 2023. For consistency with the trade dataset, variable rate issues and private bid transactions also known as private placements were excluded.

## Comparison of Customer Purchases in the Primary and Recently Issued Markets

For the five years studied in this analysis, investors bought more of the total par amount traded in the primary market than in the recently issued market. As figure 1 shows, 88% of the par amount purchased by all investors was transacted in the primary market, while 12% was purchased in the recently issued market. However, access to the primary market varied greatly by trade size.

From 2019 through 2023, individual investors purchased 53% of the par amount traded in the primary market and 47% in the recently issued market.<sup>6</sup> By comparison, institutional investors purchased 92% of the par amount traded in the primary market and only 8% in the recently issued market. Similarly, predominantly institutional investors purchased 77% of their par amount in the primary market and 23% in the recently issued market. See Figure 1.

<sup>&</sup>lt;sup>4</sup> While individual investors may participate in trades larger than \$100,000, for the purpose of this paper, trade sizes of \$100,001 to \$999,999 will be referred to as predominantly institutional investors.

<sup>&</sup>lt;sup>5</sup> Prices and yields were not adjusted for changes in benchmark yields, however the period studied had two years of predominantly low and falling rates, two years of predominantly higher and rising rates and one year of low volatility.

<sup>&</sup>lt;sup>6</sup> For this analysis, the recently issued market includes all customer purchase trades within seven days of the first execution date, not including List Offering Price trades.

Looking at the par amount individual investors purchased in the primary market in percentage terms, 2019 was the lowest in the five-year period at 46% before increasing to a high of 58% in 2021 and subsequently declining to 53% in 2023. For institutional investors, the par amount purchased in the primary market increased slightly from 91% in 2019 to 93% in 2023. See Figure 1.

Figure 1. Primary and Recently Issued Market Share of Par Amount, 2019–2023

	\$0–\$100,000		\$100,001	\$100,001–\$999,999		\$1 Million or More		Total	
	Primary Market	Recently Issued Market	Primary Market	Recently Issued Market	Primary Market	Recently Issued Market	Primary Market	Recently Issued Market	
2019	46%	54%	72%	28%	91%	9%	86%	14%	
2020	56%	44%	75%	25%	90%	10%	87%	13%	
2021	58%	42%	78%	22%	92%	8%	89%	11%	
2022	55%	45%	80%	20%	93%	7%	90%	10%	
2023	53%	47%	82%	18%	93%	7%	89%	11%	
2019– 2023	53%	47%	77%	23%	92%	8%	88%	12%	

From 2019 through 2023, the number of trades are similar in percentage terms to those for par amount traded, with 52% of individual investor purchases happening in the recently issued market compared to 15% of institutional investor purchases.

As Figure 2 below shows, the vast majority (89%) of par amount purchased in the primary market was purchased in the negotiated market. Breaking this down by investor group, institutional investors purchased 90% of their par amount in the negotiated market, compared to 10% in the competitive market. Predominantly institutional investors and individual investors purchased 84% of their par amount in the negotiated market. Later in the paper, we show that 27% of the par amount issued in the last five years was in the competitive market, yet bonds in competitive deals represent only 11% of the par amount purchased in the primary market. This indicates that underwriters were likely more reliant on sales to customers in the secondary market for competitive issues than the secondary market for negotiated offerings.

**Figure 2.** Annual Average of Par Amount Purchased in the Primary Market by Bid Type, 2019–2023

	\$0–\$100,000	\$100,001–\$999,999	\$1 Million or More	Total
Competitive	\$788,155,257	\$7,656,198,138	\$24,128,150,051	\$32,572,503,447
Negotiated	\$3,998,832,480	\$40,446,341,528	\$221,459,327,916	\$265,904,501,924
Total	\$4,786,987,737	\$48,102,539,666	\$245,587,477,967	\$298,477,005,370
Competitive	16%	16%	10%	11%
Negotiated	84%	84%	90%	89%

# Comparing Prices Paid on Customer Purchases in the Recently Issued Market with Those in the Primary Market

There can be advantages to purchasing bonds in the secondary market, including in the recently issued market, compared with doing so in the primary market. Not only is it often faster to trade in the secondary market, but there is also a significantly wider range of bonds available to purchase. For example, unlike the nearly instantaneous execution in the secondary market, a new issuance with a two-day retail order period could have multiple repricings, and it could take a few days for an investor to know if they were allocated any bonds and the final price/yield they received on the bonds. The uncertainty of not knowing how many (or if any) bonds an investor would get on a new issue and having to wait a few days to find out, could lead some investors to prefer the secondary market for its near instantaneous execution. However, this analysis shows that most trades in the recently issued market are executed at a higher price than the initial offering price, and the difference is larger for negotiated offerings and smaller-size trades, consistent with findings in previous MSRB research.<sup>7</sup>

Figure 3 shows the average spread paid for bonds purchased in the recently issued market, broken down by trade size. From 2019 through 2023, individual investors paid an average of just over \$10 per bond above the list offering price on a deal in the recently issued market. The average spread varied from a low of \$8.90 in 2019 to a high of \$11.50 in 2023. As a result, the average yield received by individual investors was 8.90 basis points below the initial offering yield for the security. Consistent with previous MSRB research on secondary market trading, institutional

See Wu, Simon Z. and Nicholas J. Ostroy, "Primary Offerings of Municipal Securities: Impact of COVID-19 Crisis on Competitive and Negotiated Offerings" Research Paper, Municipal Securities Rulemaking Board, October 2022. <a href="https://www.msrb.org/sites/default/files/2022-10/Competitive-and-Negotiated-Offerings.pdf">https://www.msrb.org/sites/default/files/2022-10/Competitive-and-Negotiated-Offerings.pdf</a>.

investors and predominantly institutional investors paid less than half the average spread paid by individual investors.<sup>8</sup>

Figure 3 illustrates that there is quite a difference in an average spread that considers the par amount (weighted average) compared with an average spread that is based on only the number of trades (simple average). The largest trades have the smallest spread, which is why the weighted average spread is dramatically smaller than the simple average spread.

**Figure 3.** Average Dollar Spread Between the Initial Offering Price and Price in the Recently Issued Market, 2019–2023

	\$0– \$100,000	\$100,000– \$999,999	\$1 Million or More	Total Simple Average	Total Weighted Average
2019	\$8.90	\$3.00	\$2.90	\$7.10	\$3.40
2020	\$10.54	\$5.37	\$7.69	\$8.54	\$7.12
2021	\$7.98	\$4.40	\$5.00	\$6.44	\$4.77
2022	\$11.19	\$5.00	\$3.20	\$9.48	\$4.38
2023	\$11.50	\$6.00	\$3.30	\$10.11	\$5.03
2019–2023	\$10.02	\$4.75	\$4.42	\$8.33	\$4.94

Additional analysis shows that there is a significant difference in the average spread for competitive and negotiated offerings, as shown in Figures 4 and 5. Spreads in the recently issued market for negotiated deals are significantly higher than for competitive deals for all trade sizes, with individual investors paying a spread of \$12.89 for negotiated deals compared to \$5.75 on competitive deals. Similarly, institutional investors paid an average spread of \$7.28 for negotiated deals but virtually no spread (27 cents) on competitive deals. It is interesting to note that the average spread on competitive deals was actually negative in 2022 and 2023, which could reflect difficulty distributing new issue product during periods of rising rates.

The next section of this paper compares the use of the negotiated market vs. the competitive market taking into account various factors, including sectors ratings, tax status, new money vs. refunding deals, etc. The same factors that likely make an issuer choose the negotiated market could also affect the amount of spread in the recently issued market.

The difference in spread between individual investor and institutional investor-size trades on negotiated offerings varied dramatically by year. In 2019, the spread individual investors paid on negotiated offerings was more than double the spread institutional investors paid. In 2020 and 2021, the spreads were closer before dramatically widening in 2022 and 2023. The difference in spreads for competitive deals was much more consistent, with spreads ranging from \$5.48 to \$6.21 for individual investors and from \$(0.90) to \$1.65 for institutional investors.

See Wu, Simon Z. and Nicholas J. Ostroy, "What Has Driven the Surge in Transaction Costs for Municipal Securities Investors Since 2022?" Research Paper, Municipal Securities Rulemaking Board, August 2023. <a href="https://www.msrb.org/sites/default/files/2023-08/What-Has-Driven-the-Surge-in-Transaction-Costs-for-Municipal-Securities-Investors-Since-2022.pdf">https://www.msrb.org/sites/default/files/2023-08/What-Has-Driven-the-Surge-in-Transaction-Costs-for-Municipal-Securities-Investors-Since-2022.pdf</a>.

**Figure 4.** Average Dollar Spread Between the Initial Offering Price and Price in the Recently Issued Market for Competitive Offerings, 2019–2023

	\$0– \$100,000	\$100,001– \$999,999	\$1 Million or More	Total Simple Average	Total Weighted Average
2019	\$5.50	\$1.30	\$0.10	\$4.00	\$0.90
2020	\$5.55	\$1.53	\$1.65	\$3.70	\$1.80
2021	\$5.48	\$1.14	\$0.63	\$3.30	\$0.90
2022	\$6.21	\$1.96	\$(0.12)	\$4.90	\$1.00
2023	\$6.00	\$2.40	\$(0.90)	\$4.90	\$0.90
2019–2023	\$5.75	\$1.67	\$0.27	\$4.16	\$1.10

**Figure 5.** Average Dollar Spread Between the Initial Offering Price and Price in the Recently Issued Market for Negotiated Offerings, 2019–2023

	\$0– \$100,000	\$100,001– \$999,999	\$1 Million or More	Total Average	Total Weighted Average
2019	\$11.20	\$4.60	\$5.20	\$9.40	\$5.60
2020	\$13.03	\$7.97	\$11.05	\$11.30	\$10.40
2021	\$9.40	\$6.74	\$7.93	\$8.40	\$7.60
2022	\$15.31	\$8.11	\$6.29	\$13.50	\$7.70
2023	\$15.50	\$9.20	\$5.90	\$13.90	\$8.00
2019–2023	\$12.89	\$7.32	\$7.28	\$11.30	\$7.86

Figures 6, 7, and 8 show the average spread calculated between the initial offering yield of a security and trades in the recently issued market. On average, individual investors bought bonds in the recently issued market for competitive deals at yields approximately 5 basis points lower than the initial offering yield, while institutional investors saw almost no difference in yield between the primary and recently issued market. As to negotiated deals, individual investors purchased bonds in the recently issued market at yields more than 11 basis points lower than the original yield, and institutional investors similarly bought bonds at yields more than 9 basis points lower than the original yield.

**Figure 6.** Average Yield Spread Between the Initial Offering Yield and Yield in the Recently Issued Market (in Basis Points), 2019–2023

	\$0–\$100,000	\$100,001–\$999,999	\$1 Million or More
2019	-8.00	-4.00	-4.00
2020	-9.29	-6.85	-8.90
2021	-6.53	-6.00	-7.00
2022	-9.68	-6.00	-4.00
2023	-11.00	-6.00	-4.00
2019–2023	-8.90	-5.77	-5.58

**Figure 7.** Average Yield Spread Between the Initial Offering Yield and Yield in the Recently Issued Market for Competitive Offerings (in Basis Points), 2019–2023

	\$0–\$100,000	\$100,001–\$999,999	\$1 Million or More
2019	-5.00	-1.00	0.00
2020	-4.58	-1.72	-1.45
2021	-4.28	-1.09	-0.36
2022	-5.77	-2.27	0.49
2023	-6.00	-3.00	1.00
2019–2023	-5.13	-1.82	-0.06

**Figure 8.** Average Yield Spread Between the Initial Offering Yield and Yield in the Recently Issued Market for Negotiated Offerings (in Basis Points), 2019–2023

	\$0–\$100,000	\$100,001–\$999,999	\$1 Million or More
2019	-10.00	-5.00	-7.00
2020	-11.63	-10.17	-13.04
2021	-7.78	-8.83	-11.66
2022	-12.91	-9.27	-7.73
2023	-15.00	-10.00	-7.00
2019–2023	-11.46	-8.65	-9.29

### Comparison Between the Competitive and Negotiated Markets for New Issuance

#### **Overall Findings**

The analysis in this section examines distinct characteristics of securities issued in the competitive and negotiated markets from 2019 through 2023. The sale methods for competitive and negotiated offerings are significantly different and likely offer different opportunities and risks to issuers and underwriters. In the end, the issuer determines the method of sale that is best for them.

The competitive process for municipal bonds is fairly unique in the capital markets. For example, corporate bond new issue deals come to market through a negotiated process and tend to be larger than municipal bond deals. They also tend to be lower rated than the average municipal deal. Whether a municipal bond issuer will use the negotiated or competitive market depends on myriad factors, including deal size, complexity, sector, credit rating, etc. Another factor is that given low dealer balance sheets, it is uncertain if dealers could take on substantially more competitive bids without widening spreads. Even today, larger competitive offerings, such as ones over \$1 billion, are often divided into smaller series, often with different bid times, likely in order to limit a dealer's needed capital to buy a deal competitively.

Figure 9 shows that between 2019 and 2021, most of the deals were sold in the negotiated market, ranging from 52% in 2019 to a high of 56% in 2021. However, for the past two years, more competitive offerings were brought to market, accounting for 52% in 2022 and 55% in 2023.

Figure 9. Number of Competitive and Negotiated Offerings, 2019–2023

Year	Competitive	Negotiated	Total	Competitive	Negotiated
2019	5,969	6,497	12,466	48%	52%
2020	6,170	7,605	13,775	45%	55%
2021	5,864	7,598	13,462	44%	56%
2022	4,816	4,449	9,265	52%	48%
2023	4,693	3,903	8,596	55%	45%
Total	27,512	30,052	57,564	48%	52%

Source: LSEG

According to LSEG, for this analysis only fixed rate and zero-coupon deals were included, private placements and variable rate debt were excluded.

Analyzing the par amount issued shows very different results than the number of issues. Figure 10 below shows the amount and percentage of par amount issued in the competitive and negotiated markets. In terms of par amount, nearly three-fourths of issuance came in the negotiated market. That ratio was consistent from 2020 through 2023, though it was lower, at just over two-thirds, in 2019.

Figure 10. Par Amount Issued for Competitive and Negotiated Offerings, 2019–2023 (in millions)

Year	Competitive	Negotiated	Total	Competitive	Negotiated
2019	\$134,751	\$286,754	\$421,505	32%	68%
2020	\$120,187	\$359,459	\$479,646	25%	75%
2021	\$117,727	\$348,291	\$466,018	25%	75%
2022	\$94,268	\$261,520	\$355,788	26%	74%
2023	\$89,985	\$256,676	\$346,660	26%	74%
Total	\$556,917	\$1,512,700	\$2,069,617	27%	73%

Source: LSEG

Although 27% of the par amount issued in the last five years was in the competitive market, only 11% of the par amount purchased by customers in the primary market was in the competitive market, while 89% was in the negotiated market (see Figure 2). This imbalance of primary market purchases and the amount of new issuance brought in the competitive arena seems to indicate a need for underwriters to sell substantially more of their competitive offerings in the secondary market relative to negotiated offerings. This implies that underwriters may have more risk from remaining balances on competitive deals taking longer to place in the market and could help partially explain the much smaller spreads in the competitive market.

Figure 11, which shows the average offering size by year in the two markets, reveals that on average, negotiated issues are substantially larger than competitive issues. For the five-year period, issues in the negotiated market were more than three times the size of the average issue in the competitive market. In 2023, the average par amount for negotiated issuance was about three and a half times the amount issued in the competitive market.

Figure 11. Average Offering Size in Millions, 2019–2023

Year	Competitive	Negotiated
2019	\$23	\$44
2020	\$19	\$47
2021	\$20	\$46
2022	\$20	\$59
2023	\$19	\$66
Total	\$20	\$50

Source: LSEG

#### Sector

While negotiated deals accounted for almost 73% of the par amount issued, there are some significant differences by sector. <sup>10</sup> In fact, some sectors, such as general purpose and education, do not use the negotiated market as often, while other sectors, including healthcare and housing, almost always use only the negotiated market.

Looking at specific sectors in the negotiated market, the percentage of par amount issued for general purpose was much lower than for the other sectors between 2019 and 2023. However, the general purpose sector has seen a steady increase, from 44% of par issued in 2019 to 56% in 2023. The electric power, healthcare and housing sectors accessed the market using primarily the negotiated market, with negotiated offerings representing 95%, 98% and 97%, respectively, of the issuance in those sectors. The overwhelming use of the negotiated market for issues in these sectors seems to indicate that more complicated structures and credits use the negotiated market far more often than the competitive market, which is consistent with previous MSRB research. Except for issues in the development sector, all other sectors have a greater percentage of par amount issued relative to the number of offerings in the negotiated market than they do in the competitive market. This suggests that larger deals tend to come to market on a negotiated basis more often than on a competitive basis. See Figures 12 and 13.

<sup>&</sup>lt;sup>10</sup> Based on information provided by LSEG.

<sup>&</sup>lt;sup>11</sup> Wu, supra 6.

Figure 12. Percentage Par Amount Issued by Sector in the Negotiated Market, 2019–2023

Date	Development	Education	Electric Power	Environmental Facilities	General Purpose	Healthcare	Housing	Public Facilities	Transportation	Utilities	Total
2019	74%	68%	95%	97%	44%	99%	94%	77%	79%	76%	68%
2020	70%	75%	95%	88%	62%	99%	98%	76%	85%	78%	75%
2021	71%	72%	93%	91%	61%	96%	98%	78%	86%	75%	75%
2022	89%	71%	96%	92%	58%	98%	97%	68%	82%	79%	74%
2023	93%	73%	94%	77%	56%	99%	98%	76%	91%	74%	74%
Total	78%	72%	95%	90%	56%	98%	97%	76%	84%	77%	73%

Source: LSEG

Figure 13. Percentage of Deals Issued by Sector in the Negotiated Market, 2019–2023

Year	Development	Education	Electric Power	Environmental Facilities	General Purpose	Healthcare	Housing	Public Facilities	Transportation	Utilities	Total
2019	87%	54%	90%	81%	34%	97%	95%	57%	65%	59%	52%
2020	83%	57%	89%	73%	40%	97%	98%	53%	65%	64%	55%
2021	83%	58%	85%	77%	41%	95%	96%	57%	61%	62%	56%
2022	90%	50%	91%	62%	34%	95%	98%	41%	47%	47%	48%
2023	90%	48%	87%	85%	28%	96%	96%	46%	45%	39%	45%
Total	86%	54%	89%	76%	36%	96%	96%	52%	58%	57%	52%

Source: LSEG

#### **Tax Status**

The tax status of a deal also plays a significant role in the use of the competitive vs. the negotiated market. Since taxable offerings and deals subject to the Alternative Minimum Tax (AMT) are infrequent and may be considered more complicated than tax-exempt offerings, they are not typically brought to market using the competitive market. Figure 14 shows that only about 2% of AMT deals and 14% of the taxable deals come in the competitive market, compared with 29% of the tax-exempt volume.

Figure 14. Percentage of New Issues by Bid Type and Tax Status, 2019–2023

	Tax-Exempt	Taxable	АМТ	
Competitive	29%	14%	2%	
Negotiated	66%	79%	97%	
Private Placement	5%	8%	1%	

Source: LSEG

#### **Refunding Type**

Refunding new issue deals are usually more complex than new money deals. This is due to several factors, including the structure, pricing complexities, potential securities to be refunded, flexibility around timing and the ability to upsize or downsize a deal. All these factors seem to impact how issuers access the negotiated market for refunding deals. Figure 15 shows the percentage of par amount issued in the competitive and negotiated market for new money, refunding and combined deals. While 68% of the par amount for new money deals was issued in the negotiated market, 83% of refunding deals were issued in the negotiated market.

**Figure 15.** Percentage of Par Amount Issued in the Negotiated Market by Funding Type, 2019–2023

	New Money	Refunding	Combined	
2019	60%	81%	85%	
2020	68%	85%	84%	
2021	71%	82%	84%	
2022	71%	80%	92%	
2023	70%	84%	93%	
Total	68%	83%	87%	

Source: LSEG

#### **Ratings**

Although the authors had a limited amount of data, it was apparent and not surprising that lower rated deals used the negotiated market much more than the competitive market. In fact, for all deals rated "A" or lower, only 10% of the total par amount came via the competitive market, and virtually no deals that would be considered high-yield were issued on a competitive basis.

#### **General Market Conditions**

Although it seems logical that issuers may choose to issue bonds in the negotiated market over the competitive market during period of rising rates and volatility, it is difficult to prove. In the previously released research paper, <u>Primary Offerings of Municipal Securities: Impact of COVID-19 Crisis on Competitive and Negotiated Offerings</u>, <sup>12</sup> the analysis showed that all else being equal, the COVID-19 period between March and May 2020 had only a minor impact on issuers choosing the negotiated offering method over the competitive offering method, both economically and statistically. That said, it should be noted that private placements gained the most market share during the COVID period, likely at the expense of negotiated offerings. The paper also showed fewer bids on competitive deals and wider spreads on the high bids.

Similarly, the market had historically low rates and low volatility for much of 2020 and 2021 but experienced much higher rates and volatility in 2022 and 2023. Yet, there was virtually no difference in the percentage of par amount issued competitively vs. on a negotiated basis during those years. Although it seems more likely issuers would have chosen to issue bonds in the competitive market in 2020 and 2021 rather than in 2022 and 2023, in fact, issuers took advantage of historically low rates in 2020 and 2021 to issue taxable securities to refund outstanding taxexempt debt. As the data clearly shows, refunding deals are much more likely to come via the negotiated market than new money deals. However, as Figure 15 shows, the use of the competitive market did not change dramatically in any of those years, despite the vastly different interest rate and volatility environments.

Academic literature has not uniformly concluded whether an issuer's choice of primary offering method is economically rational. Some papers found that the method of sale had a significant impact on issuers' borrowing costs and issuers' selection of sale method may not be economically rational.<sup>13</sup> Other papers concluded that there are economic reasons why issuers choose the negotiated sale method over the competitive sale method despite the higher costs, and overall, municipalities choose the sales method that is most beneficial to them.<sup>14</sup>

See Wu, Simon Z. and Nicholas J. Ostroy, "Primary Offerings of Municipal Securities: Impact of COVID-19 Crisis on Competitive and Negotiated Offerings," Research Paper, Municipal Securities Rulemaking Board, October 2022.

For example, see Moldogaziev, Tima and Tatyana Guzman, "Which Bonds Are More Expensive? The Cost Differentials by Debt Issue Purpose and the Method of Sale: An Empirical Analysis," Public Budgeting and Finance, Fall 2012. Also see Liu, Gao. "Self-Selection Bias or Decision Inertia? Explaining the Municipal Bond 'Competitive Sale Dilemma.'" Public Budgeting and Finance (March 2018): 1-34.

For example, see Marlowe, Justin, "Method of Sale, Price Volatility, and Borrowing Costs on New Issue Municipal Bonds," Working Paper, January 26, 2009. Also see Fruits, Eric and James Booth, Randall Pozdena and Richard Smith, "A Comprehensive Evaluation of the Comparative Cost of Negotiated and Competitive Methods of Municipal Bond Issuance," Municipal Finance Journal, January 2008; and Krupa, Olha, "Is There a Reason for Higher-Cost Financing?" Working Paper, February 2005.

#### **Conclusion**

The MSRB compared customer purchases in the primary market to customer purchases during the first seven days of secondary market trading after the first execution date over the past five years from 2019 through 2023. The MSRB also compared the negotiated and competitive new issue markets for municipal securities, examining factors that influence the decision to use one or the other.

The MSRB found that individual investors often obtain a large portion of their bonds in the recently issued market and at higher prices than institutional investors, which dominate the primary market. MSRB analysis showed that from 2019 through 2023, 53% of the par amount purchased of trades of \$100,000 or less, categorized as individual investors, happened in the primary market compared to 47% in the recently issued market. Meanwhile, 92% of the par amount institutional investors acquired was in the primary market and only 8% in the recently issued market.

Furthermore, individual investors bought a much higher percentage of their bonds in the recently issued market compared to institutional investors and paid higher spreads on their purchases. Smaller size trades had an average spread of just over \$10.00 compared to less than \$5.00 for larger-size trades.

As the 2023 primary market report showed, individual investors rarely participate in the primary market. A number of factors could limit their participation. For example, institutional investors, especially the larger ones, are likely to have access to almost all deals brought to market because they are likely customers of most, if not all, the dealers that underwrite the majority of the new issue volume. An individual investor, on the other hand, might be a customer of one or two of the large underwriters or none of them. As a result, they would only have access to deals their dealer is involved in. The priority of orders for a deal likely also can limit access for individual investors since individual investors are unlikely to get bonds unless there is a retail order period or retail priority. Also, depending on the deal, it can take a few days and multiple repricings for an investor to get bonds in a new issue compared to the almost simultaneous execution in the secondary market.

The analysis also showed significantly higher spreads on negotiated offerings across all trade sizes compared with competitive offerings. For trades of \$100,000 or less between 2019 and 2023, the average spread was \$12.89 on negotiated deals compared to \$5.75 on competitive deals. Factors discussed earlier, such as the complexity of a deal's structure, lower credit rating, and larger size transactions, could be part of the reason for larger spreads in the negotiated market. For trades of \$1 million or more, the average spread on negotiated deals was \$7.28 compared to \$0.27 on competitive deals. It should be noted that there was a negative average spread on large trades for competitive deals in 2022 and 2023, likely reflecting the difficulty underwriters experienced distributing competitive deals in a rising interest rate environment. Since a greater percentage of bonds from competitive deals are bought by customers in the secondary market than bonds from negotiated deals, competitive deals likely present more risk to underwriters.

<sup>&</sup>lt;sup>15</sup> Individual investors may buy bonds in trade sizes greater than \$100,000 especially if they are in an SMA accounts and block-size trades are allocated out to individual investors.

#### Analysis of Primary vs. Recently Issued and Competitive vs. Negotiated Municipal Securities Markets

The overall percentages of competitive offerings compared with negotiated offerings were dramatically impacted by several factors. The average offering size in the negotiated market was three and a half times larger than the average offering in the competitive market in 2023. This indicates that larger issues are likely to use the negotiated market more often than smaller issues. The data showed that issuers with higher credit quality and simpler structures tended to use the competitive market more, while issuers with lower credit ratings overwhelmingly issue through the negotiated market. The data also showed that issuers in sectors like housing and health care rarely issue in the competitive market. Similarly, offerings that are federally taxable or subject to the AMT come via the negotiated market much more than the competitive market. Finally, refunding deals are much more likely to use the negotiated market than new money deals.

#### **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.







CORPORATE OFFICE **Municipal Securities** Rulemaking Board 1300 I Street NW, Suite 1000 Washington, DC 20005 202-838-1500

MSRB SUPPORT 202-838-1330 MSRBSupport@msrb.org ONLINE MSRB.org EMMA.MSRB.org EMMALabs.MSRB.org Twitter: @MSRB\_News