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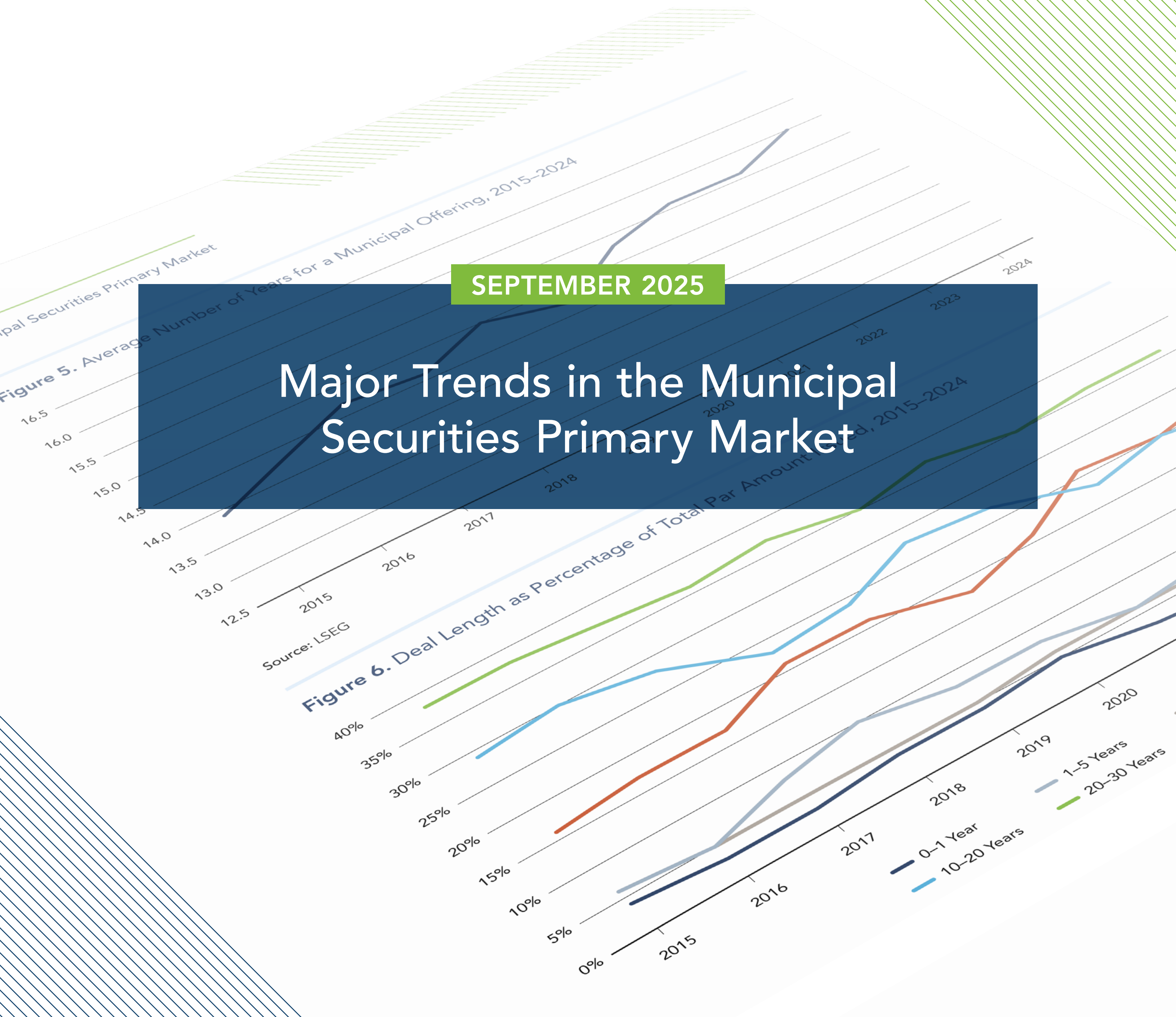

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Major Trends in the Municipal Securities Primary Market

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Introduction[1]

State and local governments along with some entities in the private sector (issuers or obligors) utilize the municipal securities market as the predominant means to access capital, borrowing hundreds of billions of dollars annually to finance their needs. The capital raised is used to invest in public works such as transportation, water and wastewater infrastructure, electric utilities, airports, ports, dams, waste facilities, parks, railways, schools and more.

The primary market is where issuers and obligors raise the capital needed through the issuance of new municipal bonds. The new issuance process establishes the terms of the bonds and includes information on bond features and other essential information to help the investor community make decisions about whether to buy the bonds. This publication reviews some of these bond features and how their use has evolved within the municipal securities market over the last 20 years.

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

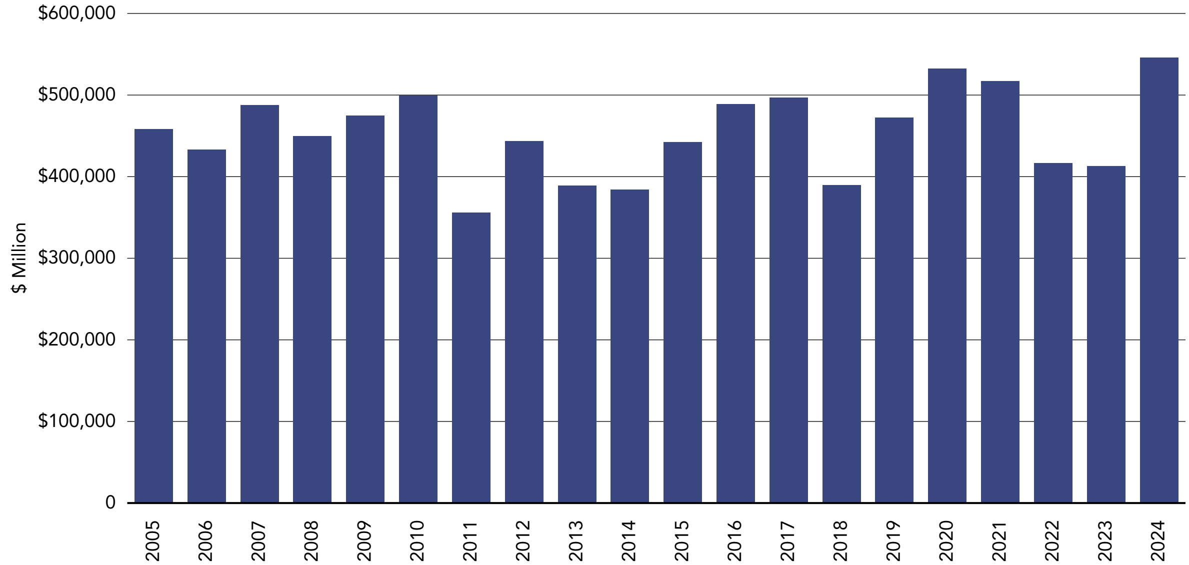
Methodology

Our research highlights trends in the primary market by analyzing data from municipal offerings for the period of January 2005 through December 2024. The primary market data consists of information such as maturity date, CUSIP, issuer name, issue description, payment dates along with other datapoints. For this analysis we provide an overview of market activity along with a review of five different features. These include issue length, tax-exempt vs taxable bonds, credit enhancement, coupon type, repayment source and bid type. The primary market data in the report is obtained from the LSEG municipal market primary offering database.[2] Overall, in this period, the amount of municipal bonds issued totals approximately $9 trillion and consists of 288,000 separate issues across all U.S. states and territories averaging $31.6 million per each issuance.

Total Issuance Trends

MSRB reviewed municipal securities primary market data for the period of 2005–2024. Overall, the total annual par amount issued ranged from a low of $355 billion in 2011 to a high of $545 billion in 2024.[3] Figure 1 shows that trend over the past 20 years.

Figure 1. Total Par Amount Issued, 2005–2024



Source: LSEG

2 SDC Platinum.

3 This analysis includes both municipal bonds and notes (short term obligations such as commercial paper or bond anticipation notes). For a full list the different types of short-term obligations see the MSRB Glossary of Municipal Securities Terms.

Issuance totaled $458 billion in 2005 and climbed between 2008 and 2010 reaching $499 billion in 2010. Much of the increase in 2010 could be attributed to the Build America Bonds (BABs) program, created by the 2009 American Recovery and Reinvestment Act.[4] Figure 2 shows that in 2009, BABs accounted for $64 billion out of $474 billion of the total par amount issued, or 14% of all issuance. It was even higher in 2010, with $117 billion out of $499 billion of the total par amount issued, or 24% of all issuance. In comparison, the entire amount of taxable debt issued averaged 6% of the total issuance between 2005 and 2008 and 12% of total issuance between 2011 and 2024. BABs became an important tool used by issuers to raise funds at lower borrowing costs, however the program expired by the end of 2010 and was not renewed by Congress. It is not coincidental that in 2011, new issuance totals reached a record low of $355 billion, due in part to the expiration of BABs program but also to reduced funding needs and negative expectations for the U.S. economy.[5]

Figure 2. Total BABs Issuance, 2009–2010

Year	Par Amount ($ Millions)	BABs Par Amount ($ Millions)	Percentage of BABs
2009	$474,457	$64,151	14%
2010	$499,061	$117,366	24%

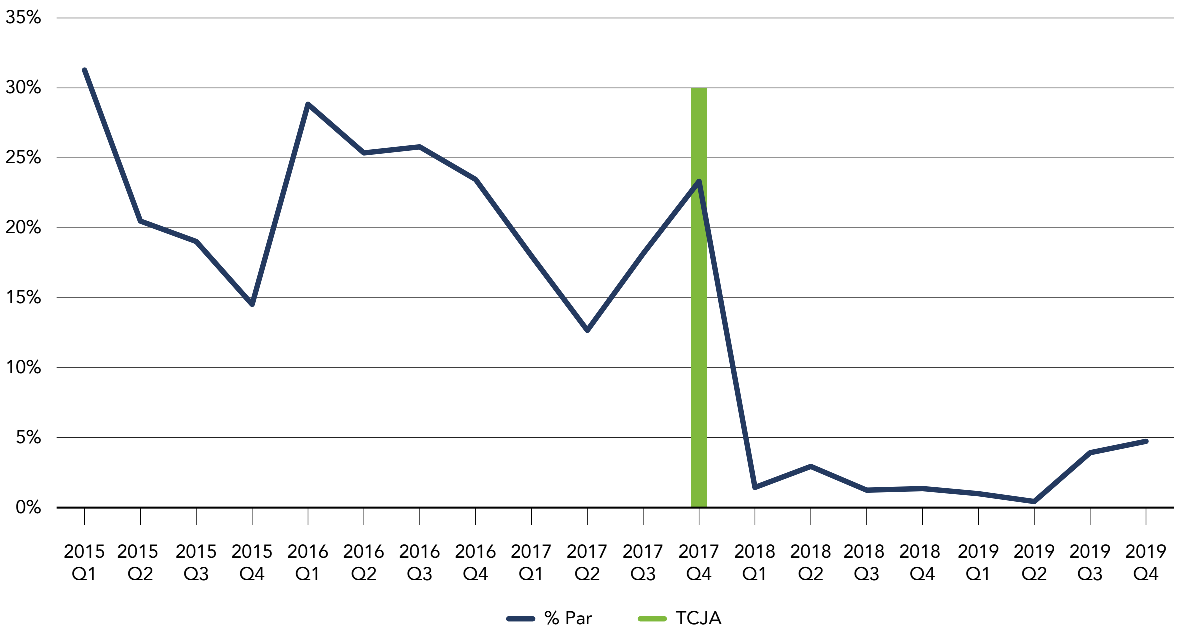
Source: LSEG

Total issuance started to increase again between 2014 and 2017. A rush of issuance in 2017 was influenced by the 2017 Tax Cuts and Jobs Act (TCJA), which eliminated the tax-exemption for advance refunding bonds. As a result, issuance reached $496 billion in 2017 before falling again to $389 billion by the end of 2018. Figure 3 illustrates that the amount of all new issuance that was identified as advance refunding increased from 13% of total par amount issued in the second quarter of 2017 to 23% of par amount issued by the end of fourth quarter of 2017. In the first quarter of 2018, the first period after the tax change was effective, advance refundings comprised 1% of the total par amount issued.

4 Build America Bonds (BABs) are taxable municipal securities issued from April 2009 to December 2010 as direct pay subsidy bonds (federal cash subsidy paid directly to the issuer) or tax credits. In total, more than $181 billion was issued to finance new public capital infrastructure projects. *See* "Treasury Analysis of Build America Bonds Issuance and Savings," U.S. Treasury Department, May 16, 2011.

5 Aaron Barnes, "Municipal Bonds, 2011," Internal Revenue Service, Statistics of Income Bulletin, Summer 2014. See also: Gene Amromin and Anna Paulson, "Tempestuous Municipal Debt Markets: Oxymoron or New Reality?," *Chicago Fed Letter*, no. 291 (October 2011), Federal Reserve Bank of Chicago.

Figure 3. Advance Refunding as a Percentage of Total Par Amount Issued, 2015–2019



Source: LSEG

Finally, the last few years have experienced a few records. In 2020, total issuance reached $532 billion, due to low interest rates and municipal budget strains associated with the COVID-19 pandemic. The record was broken again in 2024 when new issuance reached $545 billion. The increase in new issue volume was likely aided by an end to COVID relief money for some issuers, a continued high level of tender offers in the market and some large tax-exempt deals that refunded outstanding Build America Bonds.[6] Figure 4 illustrates the total par amount issued along with the total tax-exempt and taxable issuance. In 2024, the record issuance amount was fueled by the issuance of tax-exempt debt, which is the opposite for the last record year of 2020, when 28% of the total par issued was taxable debt due to issuers taking advantage of record low interest rates to advance refund outstanding debt in an effort to reduce budget gaps caused by the COVID-19 pandemic.

[6] John Bagley, Carol Converso and Marcelo Vieira, "2024 Municipal Market Year in Review," MSRB, January 2025.

Figure 4. Par Amount by Tax Status ($ billions), 2019–2024

Year	Tax Exempt	Taxable	Taxable % of Total Par
2019	$377,034	$73,570	16%
2020	$372,956	$149,701	28%
2021	$373,062	$128,865	25%
2022	$338,743	$55,980	13%
2023	$354,949	$41,358	10%
2024	$480,873	$39,577	7%

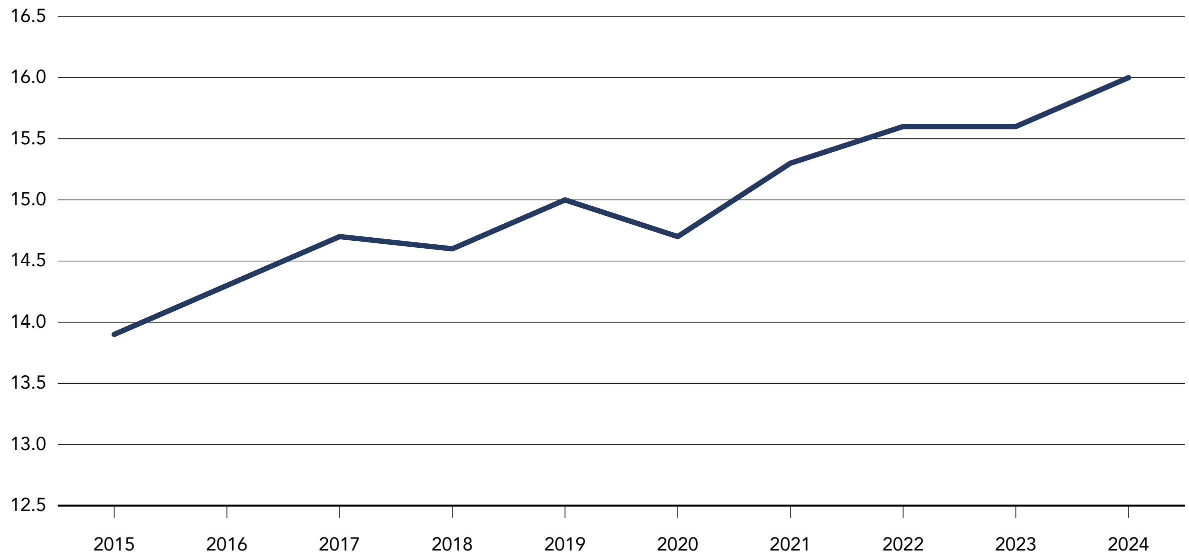
Source: LSEG

Issue Length

For this study, the length of an issue is calculated as the time between the sale date and the date of the final maturity. The average length of a municipal offering between 2015 and 2024 was approximately 15 years, increasing almost every year between 2015 and 2024. The longest dated issues in the dataset were the so called "century bonds," which were issued with a 100-year maturity.[7] Figure 5 illustrates that the average length of an offering was 13.9 years in 2015 and 16 years in 2024. Much of the increase can be attributed to issues that are more than 30 years in length. Figure 6 shows that 16% of total par issued in 2015 had more than 30 years to the final maturity date. By 2024, that amount increased to 27%. The overall issue length increase may be driven by a number of factors over the course of the 10 years studied. Following the financial crisis, interest rates declined and remained low through the 2020 COVID-19 pandemic and into 2021. A lot of the increase could be attributed to a rise in the issuance of taxable offerings. A combination of the effects from the TCJA, a historically low interest rate environment and shrinking budgets during the pandemic led issuers towards taxable offerings, which increased during this time (see section on taxable bonds).

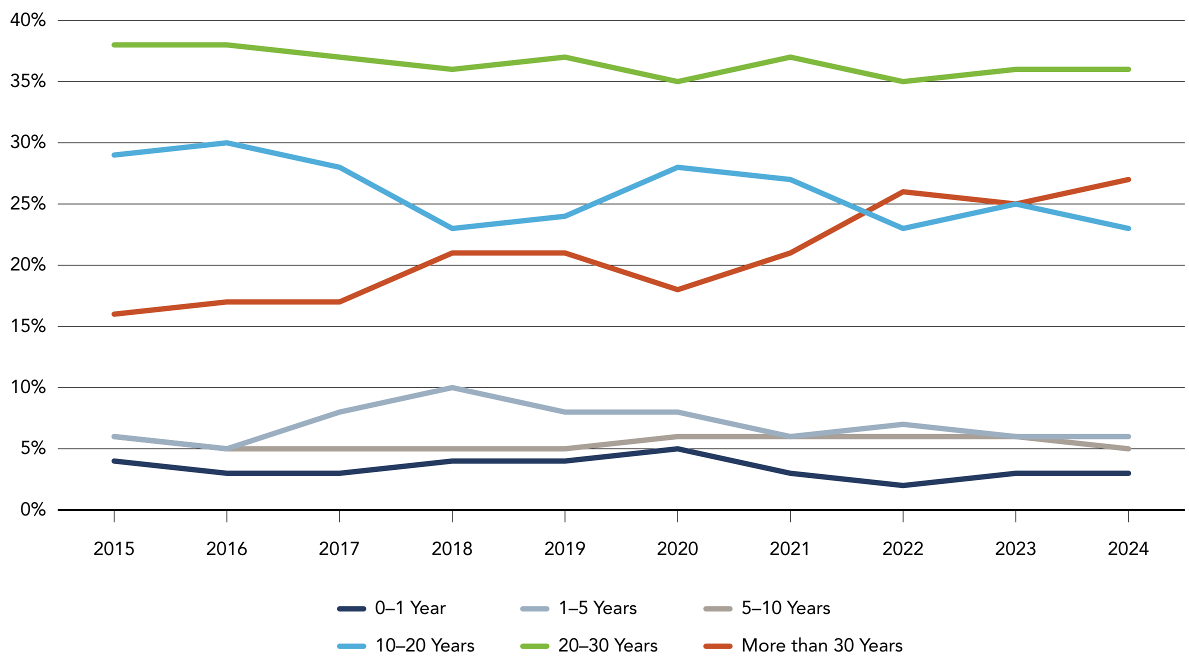
7 Based on our primary market dataset from LSEG, there were eight century bonds issued between 2015 and 2024. All eight offerings shared similar characteristics. Each of them was issued by a university system, was taxable, refunded existing debt, and came to market using the negotiated process with an underwriter.

Figure 5. Average Number of Years for a Municipal Offering, 2015–2024



Source: LSEG

Figure 6. Deal Length as Percentage of Total Par Amount Issued, 2015–2024



Source: LSEG

Taxable Bonds

In the last 20 years, the municipal securities market has experienced two distinct periods of concentrated usage of taxable debt issuance. The first period was in the follow-up to the financial crisis and the creation of the BABs program. As previously discussed,[8] the BABs program had a substantial impact on overall par amount issued between 2009 and 2010, leading to significantly higher issuance in those years. Figure 7 demonstrates that in 2008, taxable issuance was 5.6% of total par amount, in line with previous years. The total increased to 18% of total par in 2009 and 31% of total par in 2010. In the following years, taxable issuance dropped below 10% until 2019.

Figure 7 shows tax-exempt, taxable and alternative minimum tax (AMT) issuance. In 2020, taxable bonds reached almost 30% of the total new issuance volume, having increased between 2018 and 2020 when interest rates were at or near historic lows. Because of the 2017 TCJA, starting in 2018 the only option for an advance refunding was to issue taxable bonds. Tax-exempt bonds are typically issued at yields lower than taxable bonds including Treasury bonds. When interest rates decreased to a level that made a taxable refunding attractive, issuers utilized the advance refunding feature in increasing amounts.[9] When budgets were strained during the COVID pandemic in 2020 and 2021, the ability to refund outstanding bonds with taxable bonds allowed issuers to free up cash flow during a period of financial stress.[10] Previous MSRB research identified that 62% of taxable municipal issuance in 2020 was for refundings in comparison to 2% in 2010.[11] The growth of taxable bonds during this period stimulated demand from international investors such as banks and life insurance companies in Asia, the United Kingdom and Germany.[12] Overwhelmingly, many of the taxable bonds issued during this period had an offering length of either 10–20 years or 20–30 years, as demonstrated by Figure 8.

In comparison to taxable municipal bonds, the tax-exempt market reached a low of 68.2% of the total par issued in 2010, most likely due to the popularity of taxable BABs. Its second low occurred in 2020, at 70% of the total issuance, partly due to the historically low 10-year Treasury interest rate of 0.89% for the year and the popularity of taxable refunding bonds.

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8 *See* Footnote 4.

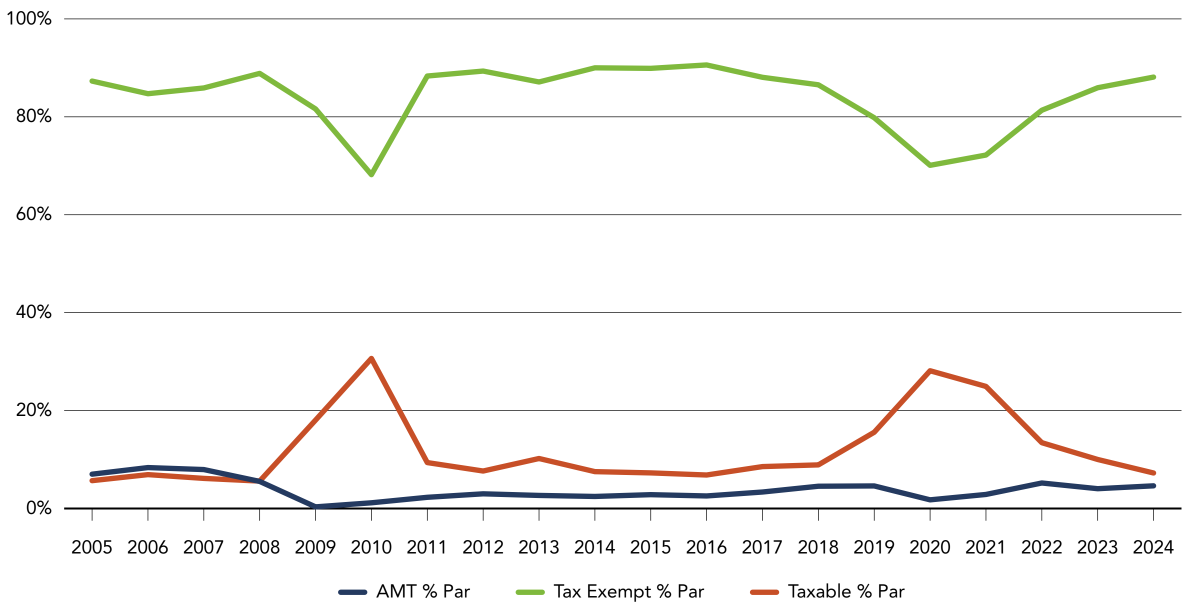
9 Lorena Hernandez Barcena and David Wessel, "Why the Surge in Taxable Municipal Bonds?," The Brookings Institution, January 22, 2021.

10 In 2020, The City of Chicago's O'Hare airport issued a $1.2 billion refunding bond that saved the city approximately $200 million in debt service costs which were utilized to help stabilize the airport's finances when airlines and airports nationwide were facing budgetary shortfalls due to the pandemic restrictions.

11 Emma Tilley, John Bagley, Marcelo Vieira, "Overview of the Taxable Municipal Bond Market," Research Paper, MSRB, August 2021. Of note, this paper also finds that the 2009–2010 taxable bonds trading activity involved individual investors while the 2020 increase was dominated by institutional investors.

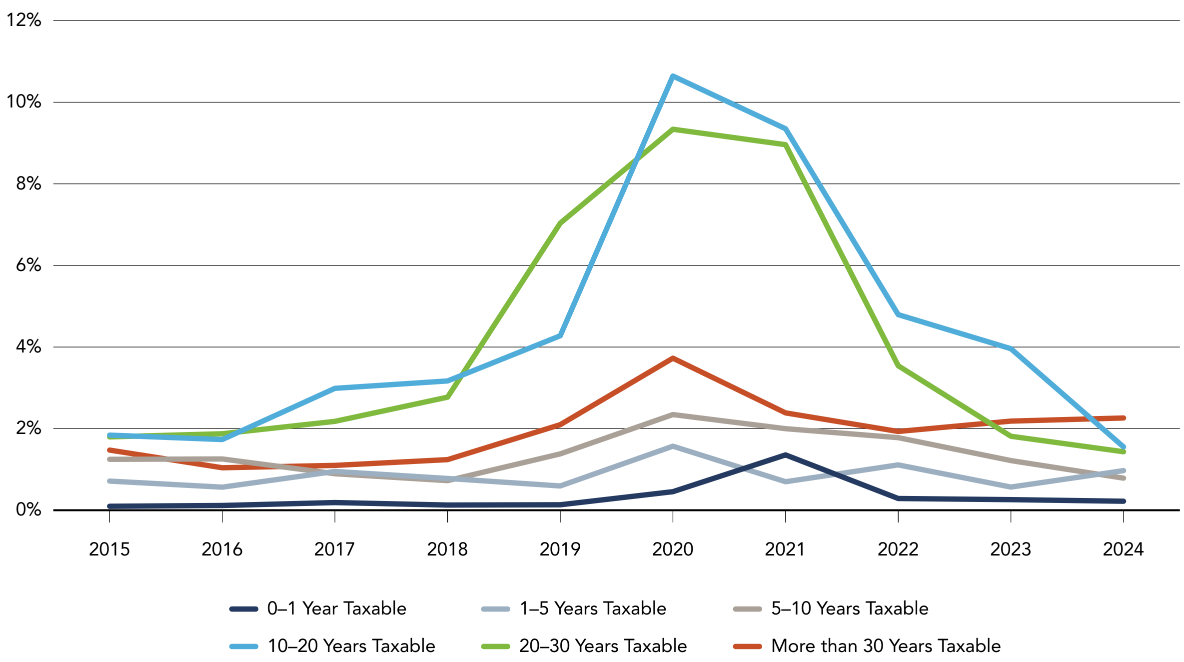
12 Lynne Funk, "Why the Explosive Growth of Taxable Munis Could be Sustainable," *The Bond Buyer*, November 06, 2019.

Figure 7. Tax Status as a Percentage of Total Par Amount Issued, 2005–2024



Source: LSEG

Figure 8. Taxable Deal Length as Percentage of Total Par Amount Issued, 2015–2024



Source: LSEG

Credit Enhancement

The financial crisis of 2008 and 2009 had a major impact on the municipal bond market, with elevated credit risk putting stress on monoline insurance companies. These insurers suffered extensive losses in the asset-backed market. As a result of the stress, rating agencies downgraded the monoline insurance companies—often to junk bond level, a significantly lower rating than the underlying rating for most of the bonds they insured.[13] This made investors wary of buying bonds insured by these entities and caused many insurers to restructure or even cease operations, essentially shrinking the bond insurance market. In recent years, issuers have started to use bond insurance again but at substantially lower levels than before the financial crisis.

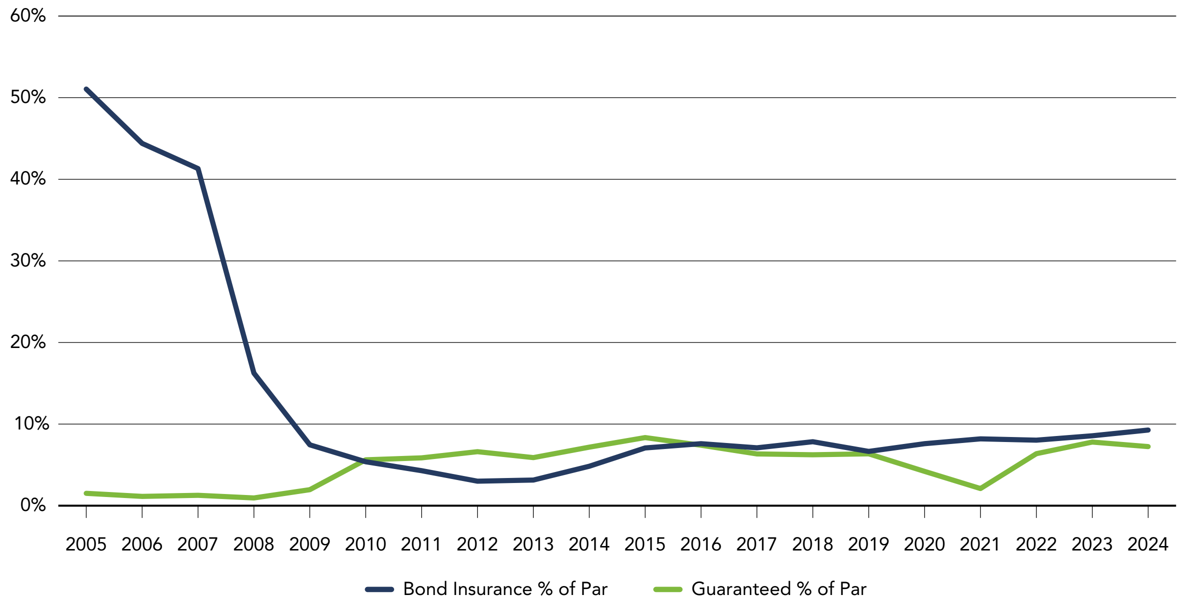
Figure 9 illustrates that in 2005, 51% of all new issuance as a percentage of par was insured by one of the monoline companies. By 2012, only 3% of all new issuance was insured. After 2012, bond insurance started to slowly increase again. By the end of 2024, 9% of all new issuance was insured as issuers sought ways to better market their securities.[14]

Another type of credit enhancement, guarantees, has been a small portion of the overall market before and after the financial crisis. Guarantees have never been larger than 8% of all types of insurance. Guarantees include state aid programs to backstop issuers, such as school districts. From 2005 to 2009, guarantees were 1–2% of total par amount issued. It was only in the period from 2010–2014 that there were more guaranteed issues than issues with bond insurance. In 2020 and 2021, the usage of guarantees decreased to 4% and 2%, respectively. In 2023 and 2024, the total amount of par issued with guarantees returned to the 7–8% levels.

[13] John Bagley et al., "Municipal Securities Market, Trade Activity 2007–2021," Research Paper, MSRB, May 2022. Additional MSRB Research indicated that trades with a insured CUSP dropped from 62.7% in 2005 to 19.2% in 2017. Simon Z. Wu, "Transaction Costs for Customer Trades in the Municipal Bond Market: What is Driving the Decline?," Research Paper, MSRB, July 2018.

[14] Jessica Lerner, "Demand for Bond Insurance Grew in 2024," *The Bond Buyer*, February 24, 2025.

Figure 9. Insurance and Guarantees as a Percentage of Total Par Issued, 2005–2024



Source: LSEG

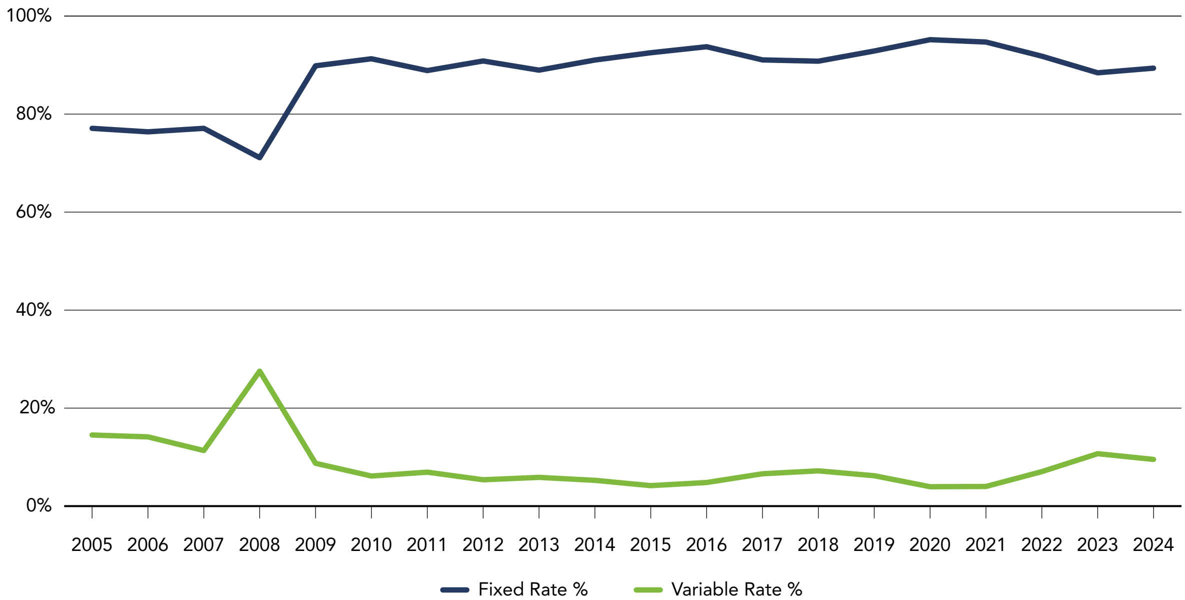
Coupon Type

Figure 10 demonstrates that between 2005 and 2024, fixed-rate securities remained the most popular way to structure a municipal bond. Starting with the financial crisis of 2008–2009, fixed-rate securities have increased from approximately 80% of the municipal market to the 90% range at present. The increase in the issuance of fixed-rate securities is directly related to the collapse of auction-rate securities (ARS) and the contraction of the variable-rate demand obligation (VRDO) markets.[15] The financial crisis of 2007–2008 resulted in the widespread failure of auctions, the result of the deleveraging of tender option bond programs. VRDOs suffered from a lack of bank liquidity and, as a result, the ARS and VRDO market contractions caused a decline in the overall issuance of variable-rate securities.[16] VRDOs reached a high of 28% in 2008 and have never again been at that level. The market contracted in part because the banks issuing a liquidity facility were facing stress and did not renew letters of credit to help improve their balance sheets.

[15] Nicholas Ostroy, Marcelo Vieira and John Bagley, "Municipal Variable-Rate Demand Obligations and Auction-Rate Securities (2009–2022)," Research Paper, MSRB, May 2023.

[16] *Id.*

Figure 10. Fixed Rate vs Variable Rate Securities as a Percentage of Total Par Issued, 2005–2024



Source: LSEG

Although the issuance of variable-rate securities has not approached the pre-financial crisis levels, Figure 10 illustrates that the usage of variable-rate securities increased from 4% of par in 2015 to 10% in 2024. From 2005 until the financial crisis, variable-rate securities ranged from 11% to 28% of total par issued. After the financial crisis, between 2009 and 2021, variable-rate securities ranged from 9% in 2009 to a low of 4% 2015, 2020 and 2021. However, starting in 2022, variable-rate securities increased from 4% of new issuance par each year to 10% of new issuance in 2024. The increase in the usage of variable-rate securities may be attributable to issuers wanting to refinance in reaction to interest rate cuts from the Federal Reserve.[17]

[17] Jessica Lerner, "Variable-Rate Debt Rises to Highest Level Since 2017," *The Bond Buyer*, February 20, 2024, and "VRDOs Tick Up in 1H 2024," *The Bond Buyer*, August 19, 2024.

Repayment by Source

Prior to 2020, issuance of general obligation and revenue bonds did not change significantly, averaging 42% and 58%, respectively. However, Figure 11 shows that starting in 2020, the two repayment types took on different trajectories. Revenue bond issuance increased from 54.1% to 64.2% between 2020 and 2024.[18] On the other hand, general obligation bonds decreased from 42% in 2023 to 35.8% of total new issuance in 2024. Overall, the volume of new issuance in 2024 was driven by revenue bonds. This may be due to their use for infrastructure projects with matching funds from the federal government. Between 2021 and 2022, the 117th Congress approved $1.25 trillion for the Infrastructure Investment and Jobs Act (IIJA) and the Inflation Reduction Act. These funds were distributed to issuers through competitive grants or funding formula programs.[19] Many of these grants included matching funds requirements that spurred bond issuance.[20] Infrastructure projects tend to be financed with revenue bonds, which tend to have a dedicated source of funding.[21] Also, the IIJA increased the number of eligible activities that qualify for private activity bonds (PABs), such as broadband access.[22] PABs have been used to promote public-private-partnership (P3) projects, such as transportation and infrastructure. PABs are also used for multi-family housing projects.

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18 Jessica Lerner, "2024 Issuance Surpasses $500B, Setting New Record," *The Bond Buyer*, December 31, 2024.

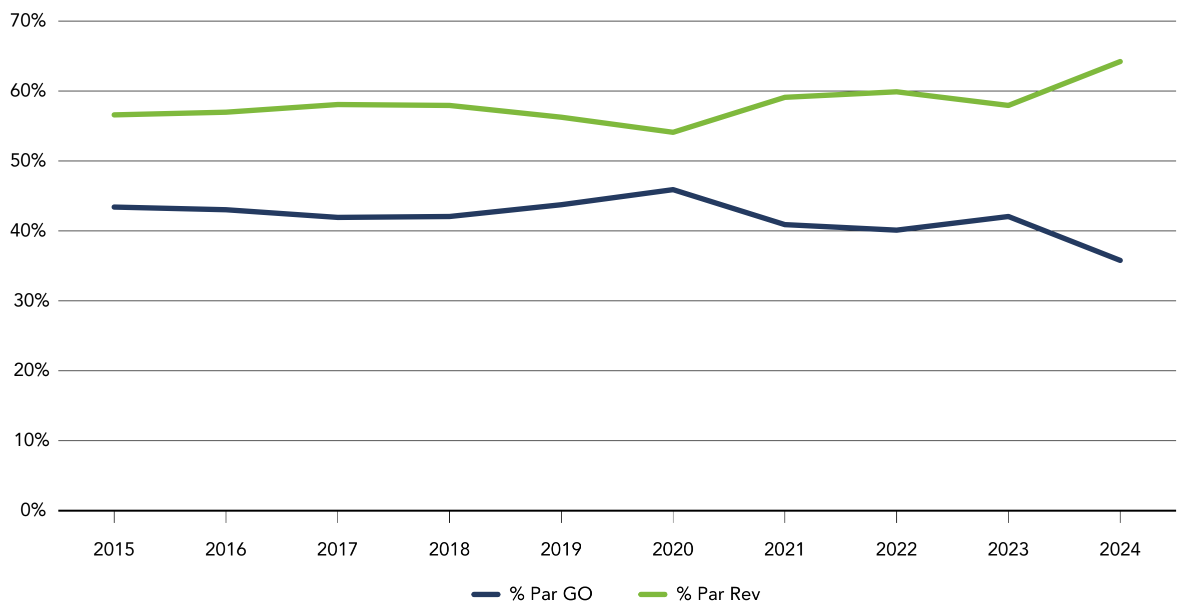
19 Adie Tomer, Caroline George and Joseph W. Kane, "The Start of America's Infrastructure Decade: How Macroeconomic Factors May Shape local Strategies," Research, The Brookings Institute, February 1, 2023.

20 Samuel Labi and Deepak Benny, "Guidebook on Policies and Estimation of Matching Funds for New BIL Grants," University of Maryland Build America Center, June 2023, Publication No: 23–06.

21 "National Infrastructure Investment Creates Potential Opportunity," *Insights*, Eaton Vance, December 04, 2024.

22 U.S. Library of Congress, Congressional Research Service, "Private Activity Bonds: An Introduction," RL31457 (2022), 10.

Figure 11. Revenue Source as a Percentage of Total Par Issued, 2015–2024



Source: LSEG

Bid Type

Figure 12 demonstrates that negotiated offerings continued to be the predominant way for issuers to issue new municipal securities.[23] The use of negotiated sales can be influenced by a several factors, such as the size of the deal, an issuer's credit rating, the structure of the bonds or whether the issuer wants to work with a particular underwriter.[24] MSRB's previous analysis illustrated that on average, negotiated offerings tend to be significantly larger than competitive offerings.[25]

[23] For more information 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, MSRB, October 2022. See also See John Bagley, Tatiana Quiceno Rosero and Marcelo Vieira, "Analysis of Primary vs. Recently Issued and Competitive vs. Negotiated Municipal Securities Markets" Research Paper, MSRB, August 2024.

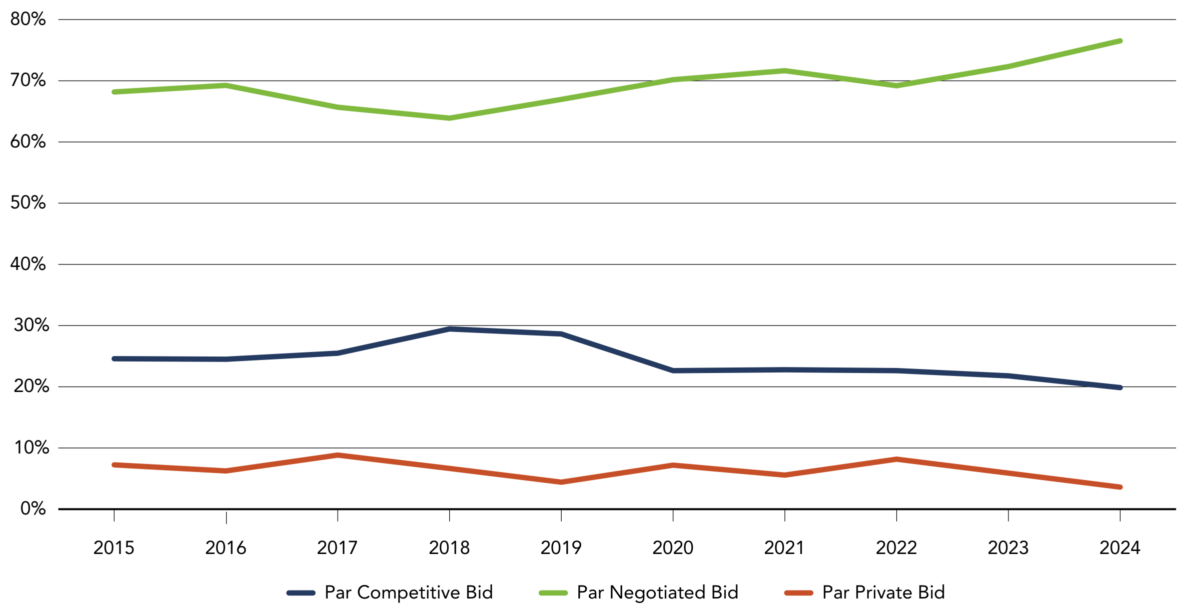
Also *See* Fruits, Eric and James Booth, Randall Pozdena and Richard Smith, "A Comprehensive Evaluation of the Comparative Cost of Negotiated and Competitive Methods of Municipal Bond Issuance," Municipal Finance Journal, January 2008; and Krupa, Olha, "Is There a Reason for Higher-Cost Financing?," Working Paper, February 2005.

[24] Government Finance Officers Association (GFOA), "Selecting and Managing the Method of Sale of Bonds," Best Practices, March 2021.

[25] Analyzing offerings between 2019 and 2023, negotiated offerings accounted for 73% of total par amount while competitive offerings accounted for 27% of total par amount.

In 2015, negotiated offerings accounted for 68% of the total par amount issued. In 2024, that number increased to 77%. In contrast, competitive offerings accounted for 25% of the total par amount issued in 2015 and 20% by the end of 2024. However, it is important to note that when analyzing bid type by the number of deals, as opposed to percentage of par amount, MSRB's previous research identifies 48% of all issues as competitive and 52% as negotiated.[26] Lastly, private placements have been a small segment of the market and continue to be trending down since 2022.

Figure 12. Issuance by Offering Type as a Percentage of Par Issued, 2015–2024



Source: LSEG

[26] These percentages are the averages for the period between 2019 and 2023. *See* John Bagley, Tatiana Quiceno Rosero and Marcelo Vieira, "Analysis of Primary vs. Recently Issued and Competitive vs. Negotiated Municipal Securities Markets" Research Paper, Municipal Securities Rulemaking Board, August 2024.

Conclusion

The primary market provides valuable insight into the functioning of the municipal securities market, and this report illustrates important market trends. The time period covered in this analysis, 2005–2024, was punctuated by events such as the financial crisis, the TCJA enactment, the COVID-19 pandemic and the influx of federal subsidies that followed.

First, the 2007–2008 financial crisis had a major impact on all parts of the municipal securities market, including the primary market. The most pronounced impact was the drop in variable rate issuance, which went from 28% of par in 2008 to 9% the following year and remained below 10% until 2023. The BABs program, a reaction to the financial crisis, made taxable debt attractive to municipal issuers. As a result, taxable new issue volume soared in 2009 and peaked in 2010 at $117 billion. In fact, the taxable market was 18% of issuance in 2009 and 31% in 2010 compared to 6% in 2007 and 6% in 2008.

Also during the financial crisis, monoline insurance companies were repeatedly downgraded and insured new issue volume collapsed. In 2005, 51% of all new issues were insured, however, by 2012 the amount decreased to 3% and has remained a minor factor of the market.

Another external impact on the market was the enactment of the TCJA in 2018. In 2017, Congress eliminated the ability to use tax-exempt debt to advance refund outstanding debt, and this became effective at the start of 2018. As a result, issuers rushed to market in the last quarter of 2017, dramatically raising new issue volume to $497 billion in 2017. As expected, advanced refunding volume was virtually non-existent in 2018.

Lastly, the COVID pandemic had a dramatic impact on new issuance, as accommodative monetary policy helped interest rates reach or approach all-time lows. Municipalities capitalized on historically low rates to advance refund tax-exempt debt with taxable debt in order to plug budget gaps and reduce uncertainty. In 2020, new issue volume reached a new all-time high of $532 billion, with volume in 2021 not far behind at $517 billion.

In 2024, new issue volume reached a new record of $546 billion spurred by the issuance of tax-exempt debt, as municipalities returned to the primary market following the exhaustion of COVID relief funds. In addition, recent issuance activity indicates that private activity bonds (PABs) have become a larger segment of the municipal securities market, with much of the growth of revenue bonds attributed to non-public entities using the PABs tax provisions.

ABOUT MSRB

The Municipal Securities Rulemaking Board (MSRB) was established by Congress in 1975 with the mission to protect investors, issuers and the public interest and to promote efficiency, competition and capital formation. MSRB is a private, self-regulatory organization governed by an independent board of directors with market knowledge and expertise. MSRB does not receive federal appropriations and is funded primarily through fees paid by regulated entities. MSRB is overseen by Congress and the Securities and Exchange Commission.

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