The NAIC Capital Markets Bureau monitors developments in the capital markets globally and analyzes their potential impact on the investment portfolios of U.S. insurance companies. Previously published NAIC Capital Markets Bureau Special Reports are available via its web page and the NAIC archives (for reports published prior to 2016).

# Small Increase in U.S. Insurers' Municipal Bond Exposure at Year-End 2022

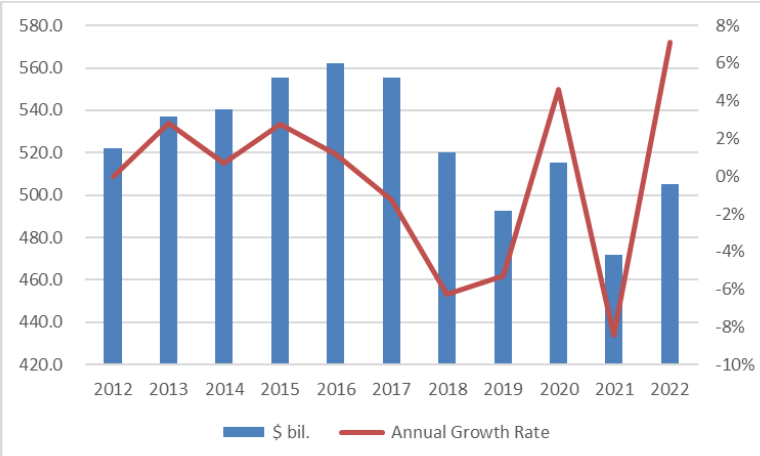
Analysts: Jennifer Johnson, Tim Nauheimer, and George Lee

## Executive Summary


- U.S. insurers' exposure to municipal bonds increased by 7% to $505.4 billion at year-end 2022 from almost $472 billion at year-end 2021.
- Municipal bonds were the third largest bond type for U.S. insurers at year-end 2022, at 10% of total bonds, preceded by corporate bonds and ABS and Other Structured Securities. In the previous year, municipal bonds were the second largest bond type.
- Property/casualty (P/C) companies accounted for half of U.S. insurers' exposure to municipal bonds, followed by 43% with life companies.
- Large insurers, or those with more than $10 billion assets under management, accounted for about 60% of U.S. insurers' municipal bond exposure.
- An overwhelming majority of municipal bonds held by U.S. insurers were the highest credit quality, evidenced by NAIC 1 designations.
- Twenty insurer groups accounted for half of U.S. insurers' total municipal bond exposure.


Historically, U.S. insurers' investment in municipal bonds has hovered around 6% to 7% of total cash and invested assets and in the range of 10% to 11% of total bonds. At year-end 2022, U.S. insurers' total investment in municipal bonds was $505.4 billion in book/adjusted carrying value (BACV), up from $471.8 billion in 2021, as reported in the annual statement filings. Municipal bonds were 6.2% of U.S. insurers' total cash and invested assets at year-end 2022 ($8.2 trillion) and about 10% of total bonds. Over the last decade, U.S. insurers' exposure to municipal bonds has decreased by 3.3%. This may be due to the lower for longer interest rates that persisted and insurers seeking higher yields in non-traditional investments. Lending support to this concept, municipal bonds were the third largest bond type for U.S. insurers at year-end 2022, falling from the second largest at year-end 2021. ABS and Other Structured Securities surpassed municipal bonds as the second largest bond type in 2022, from the third largest in 2021.

**Chart 1: U.S. Insurers' Historical Municipal Bond Investment, 2012–2022 ($bil. BACV)**




Property/casualty (P/C) companies continue their reign as the largest holders of this asset class. P/C companies are generally more active in the municipal bond market due to the tax-exempt status of most municipal bonds. While life insurers are not excluded from the tax benefits of municipal bonds, they typically have lower taxable income; i.e., their taxable income is reduced by the amount credited to policyholders. As such, P/C companies are more attracted to the tax benefits of municipal bonds than life companies; i.e., the after-tax yield of tax-exempt municipal bonds is generally not high enough for life companies to find them competitive with taxable investments.

As of year-end 2022, P/C companies accounted for about half, or $264.1 billion, of U.S. insurers' municipal bonds. This was followed by $217.2 billion with life companies, and health and title companies accounting for the remainder. P/C companies accounted for a smaller proportion of municipal bonds in 2022 than 2021, countered by an increase among life companies. (Refer to Table 1.) Similar to year-end 2021, the majority of U.S. insurers' municipal bond investments carried NAIC 1 designations, or almost 97%, followed by 3% with NAIC 2 designations.

**Table 1: U.S. Insurers' Municipal Bond Investments by Industry Type ($bil. BACV)**

| Industry Type | YE 2022 BACV | % of YE 2022 Total | YE 2021 BACV | % of YE 2021 Total |
|---|---|---|---|---|
| P/C | 264.1 | 52% | 263.9 | 56% |
| Life | 217.2 | 43% | 186.3 | 39% |
| Health and Title | 24.1 | 5% | 21.5 | 5% |
| **Total** | **505.4** | **100%** | **471.8** | **100%** |

Large insurers accounted for more than half of U.S. insurers' exposure to municipal bonds, or 60% of the total, as of year-end 2022. In general, municipal bond exposure was concentrated among insurers with more than $1 billion assets under management.

**Table 2: U.S. Insurers' Municipal Bond Investments by Assets Under Management ($bil. BACV)**

| Assets Under Management | BACV | % of Total |
|---|---|---|
| Less Than $250M | 21.8 | 4% |
| Between $250M and $500M | 17.2 | 3% |
| Between $500M and $1.0B | 26.9 | 5% |
| Between $1.0B and $2.5B | 47.1 | 9% |
| Between $2.5B and $5.0B | 48.9 | 10% |
| Between $5.0B and $10.0B | 39.4 | 8% |
| Greater Than $10.0B | 304.0 | 60% |
| **Total** | **505.4** | **100%** |

The top 20 insurer groups accounted for half of U.S. insurers' exposure to municipal bonds at year-end 2022 and included a mix of life and P/C companies.[1] The largest insurer group held 12% of the exposure.

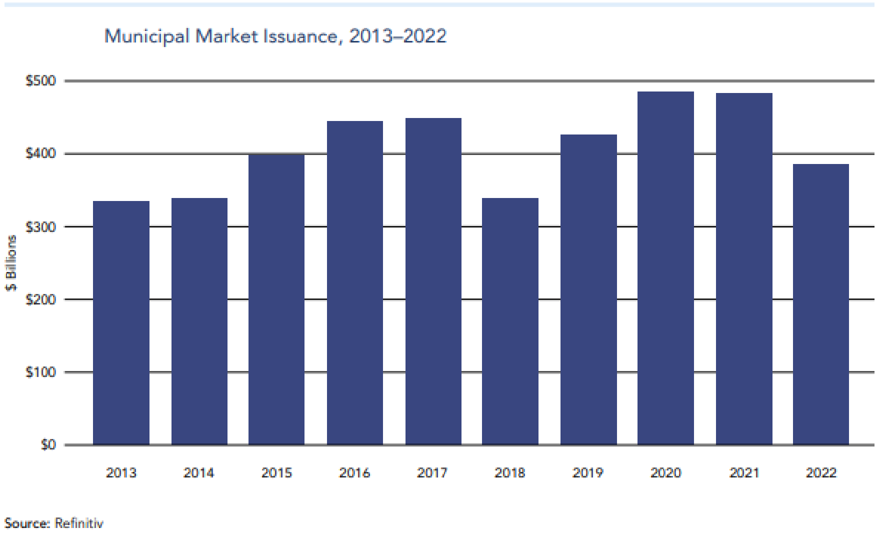
## Municipal Bond Market Trends

The municipal bond market reached $3.8 trillion at year-end 2022, according to Invesco.[2] The majority of the market is owned by retail investors—i.e., individuals—at about 40% of total municipal bonds outstanding due in part to their tax-exempt status. Insurance companies owned approximately 12% of total municipal bonds. The municipal bond market primarily consists of general obligation (GO) bonds and revenue bonds. GO bonds are issued at the local or state government level and are secured by the respective government pledge to use all available resources to repay the bond. Revenue bonds are secured by specific sources of revenue, such as projects. Municipal bonds are considered attractive investments due to strong credit quality, historically low default rates, and tax-free income. They also serve as a source of diversification. Invesco cites that since 1970, there has never been a default on a AAA-rated municipal bond (highest credit quality), and less than 1% of municipal bonds rated AA have ever defaulted.

New issuance of municipal bonds was about $384 billion in 2022, which was $100 billion less than in 2021. (Refer to Chart 2.) In addition, new issuance for the first half of 2023 was down 15% at about $178 billion, compared to the same time last year. This is due in part to unspent funds from COVID-19 relief bills, as well as record tax receipts such that municipalities were "cash-rich" and did not need to access the bond market for funds at this time.

[1] A list of the top 20 U.S. insurer groups with exposure to municipal bonds is available to state insurance regulators only via StateNet.
[2] Invesco, *Primer on Municipal Bonds*, May 2023.

**Chart 2:**




## Climate/Transition Risk in U.S. Insurers' Municipal Bond Investments

The NAIC has a process in place to measure transition risk in insurers' investment portfolios by identifying investments in Climate Policy Relevant Sectors (CPRS) included in the Battiston Study.[3] The initial Battiston methodology could only be applied to corporate bonds, common stock and preferred stock. To enhance the coverage and identification of climate affected invested asset categories, the NAIC recently completed a project to identify the climate-affected component of municipal bonds, since it is a significant asset category held by insurers. The NAIC contracted with Spatial Risk Systems (SRS), a data connectivity company, to assist in matching both revenue bonds and GO bonds to issuing jurisdictions and allocating revenues to the appropriate CPRS.

The NAIC also developed a revenue-based approach to assess the exposure of municipal bonds to climate-related risk. The methodology identifies governmental revenue sources related to climate-related industries and categorizes them as such. The identification of climate-related industries aligns with Battiston's classification of the six climate sectors using the North American Industry Classification System (NAICS) industry codes.

The analysis was conducted for all municipal bonds held by U.S. insurance companies at year-end 2022. The results showed that approximately 55% of total U.S. insurer industry municipal bond holdings may be considered climate-affected or linked to revenue sources related to climate-related industries. More

[3] The Battiston Study is a climate stress-test of the financial system that identifies climate-affected investments in six categories known as Climate Policy Relevant Sectors (CPRS): fossil fuel, utilities, energy-intensive, housing, transportation, and agriculture.

details on the analysis will be published in a separate report to be published by the Center for Insurance Policy and Research (CIPR).

The NAIC Capital Markets Bureau will continue to monitor trends with municipal bond investments and report as deemed appropriate.

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Questions and comments are always welcome. Please contact the Capital Markets Bureau at *CapitalMarkets@naic.org.*