MSRB
Municipal Securities Rulemaking Board

# Trends in Municipal Bond Ownership

## BACKGROUND

Between 2006 and 2016, there has been a shift in the ownership profile of municipal bonds. As measured by the Federal Reserve Board, the percent of municipal bonds owned by various categories of investors shows an overall decline by households and municipal securities dealers, and an increase by banks, mutual funds and exchange-traded funds. An understanding of this change may provide insight into aggregate market dynamics, the potential effect of changing market conditions on ownership behavior and risks to the market.

Federal Reserve data show that direct retail holdings by households have declined over the 10-year period, to $1.5 trillion in 2016 from $1.6 trillion in 2006. This category includes individual holdings of municipal bonds, as well as hedge fund holdings of municipal securities, which are not separated by the Federal Reserve Board in its calculations. This decline may reflect the move to ownership of municipal securities through mutual funds and exchange-traded funds, and may also reflect a decrease in demand for individual securities caused by a prolonged period of low interest rates.

A study analyzing the Survey of Consumer Finances for ownership trends of municipal securities likewise found a decrease in households that reported owning municipal bonds directly, from 3.5 percent of households in 1989 to less than one percent in 2013.[1] The study also found that municipal bond holdings tend to concentrate among high wage earners, though an alternate study[2] disagrees on the degree of ownership concentration among households when categorized by income percentile.

Dealer inventories of municipal securities have also changed significantly since 2006, when they held approximately $50 billion, compared to $25 billion in 2016 (*see Chart 1*). The number of dealer firms in the municipal market continues to decline, which contributes to shrinking bond inventories. For example, since October 2009, the number of MSRB-registered dealers is down by 26 percent. This decrease is a result of both the exit of registered dealers from the market, as well as mergers and acquisitions of dealer firms. One trend possibly related to the decrease in the number of dealers is a dramatic decline in overall trading volume since 2007 (*see Chart 2*). Lower trading volume could also be the result of an extended period of low volatility, historically low interest rates and the drastic reduction in variable rate demand obligation (VRDO) activity in the market. Whatever the cause, this dramatic reduction in par trading volume is a factor for consideration when observing the reduction of the number of dealers in the market as well as the reduction in dealer inventories.

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[1] Daniel Bergstresser and Randolph Cohen. "Changing Patterns in Household Ownership of Municipal Debt." (2015) https://www.brookings.edu/wp-content/uploads/2016/07/Bergstresser-Cohen-with-tables.pdf

[2] J.P. Morgan US Fixed Income Strategy, November 7, 2016.

Meanwhile, in the 10-year period ending in 2016, there has been an increase in municipal securities ownership through mutual funds (closed-end and money market) and exchange-traded funds. These fund holdings increased from $855 billion in 2006 to $955 billion today. Ownership of municipal bonds through mutual funds may be attractive for investors given the historically low interest rate environment, as they may provide a higher rate of return by investing in a large portfolio of securities that may include high yield bonds. Mutual funds also offer a diversity of holdings, even for small investments. Likewise, access to professional management and the ability to easily redeem shares may be considered benefits to ownership through mutual funds as opposed to directly holding municipal securities. Despite an overall increase in mutual fund holdings of municipal securities since 2006, the share of households on a percentage basis that own municipal bonds through mutual funds has decreased over the past 10 years – meaning that municipal bond ownership is becoming concentrated in a smaller number of hands.[3]

In the last decade, the greatest increase in municipal bond holdings have come from banks, with an increase in holdings from $191 billion in 2006 to $537 billion in 2016. Factors that may have initially fueled this trend include the relaxed tax rules associated with the 2009 American Recovery and Reinvestment Act (ARRA). ARRA provided a safe harbor for banks, allowing them to deduct 80 percent of the interest costs on tax-exempt bonds issued in 2009 and 2010, given certain limits. Previously, banks could only deduct interest attributable to bank-qualified bonds. Though the safe harbor expired in 2010, general economic conditions in the subsequent years led to continued bank investment in municipal securities, as fewer opportunities exist for banks to lend in traditional ways, such as through mortgages. An investment in municipal securities provides banks with a reliable coupon, safe investment and the opportunity to invest in local projects. However, market changes that reduce a bank's appetite for municipal securities could have adverse implications for the market in the long term. For example, changes to regulatory rules related to capital adequacy could affect demand for municipal securities by banks in the future, or the desire to keep or sell their current holdings.

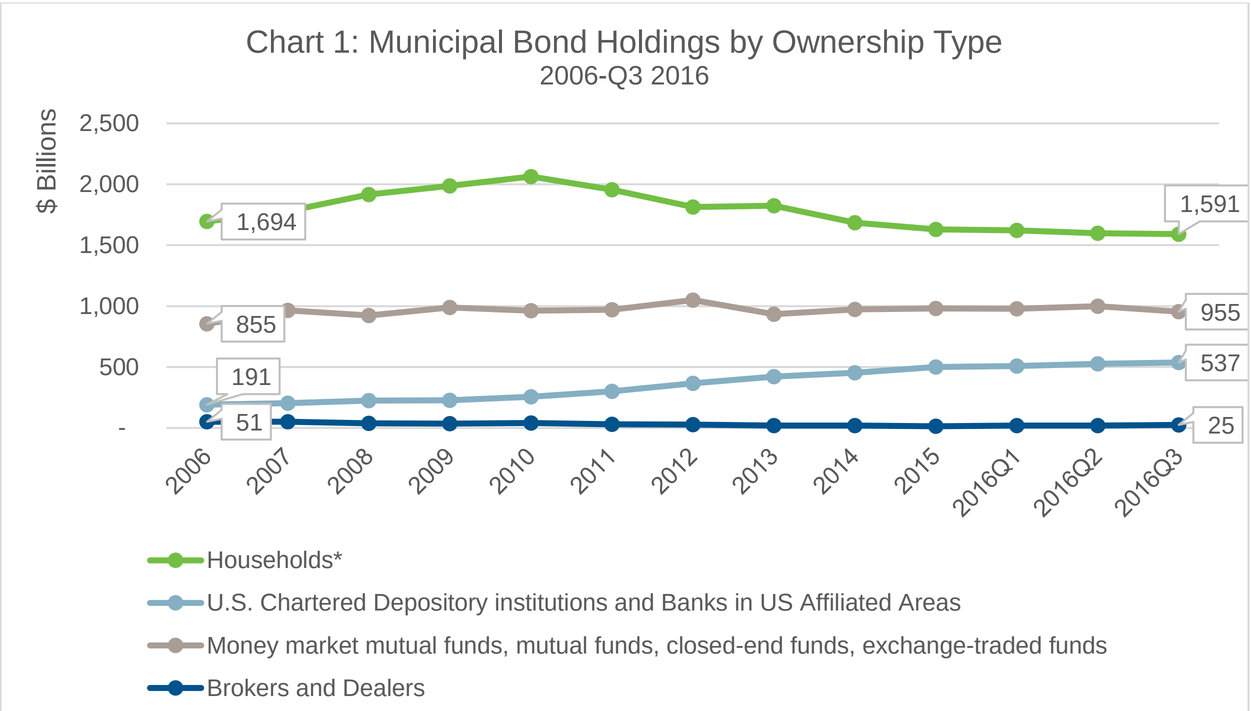
Given changes in the ownership profile of municipal securities, including the significant drop in the number of dealers and shrinking dealer inventories of municipal securities, the MSRB sees the potential for risk in a rising interest rate environment. An increase in interest rates would cause a mutual fund's net asset value (NAV) to decline. Declining NAVs could lead to redemptions by individual investors of their mutual fund shares and the sale of municipal bonds by mutual funds could lead to market dislocation as the liquidity needs of mutual funds could exceed the willingness or ability of dealers to increase their municipal securities holdings. Though not nearly as pronounced, similar trends can be seen with separately managed accounts and municipal bond exchange traded funds, as well. This type of market dislocation could have a significant impact on mutual fund NAV and the overall value of investors' municipal bond positions.

## MSRB ACTIVITIES

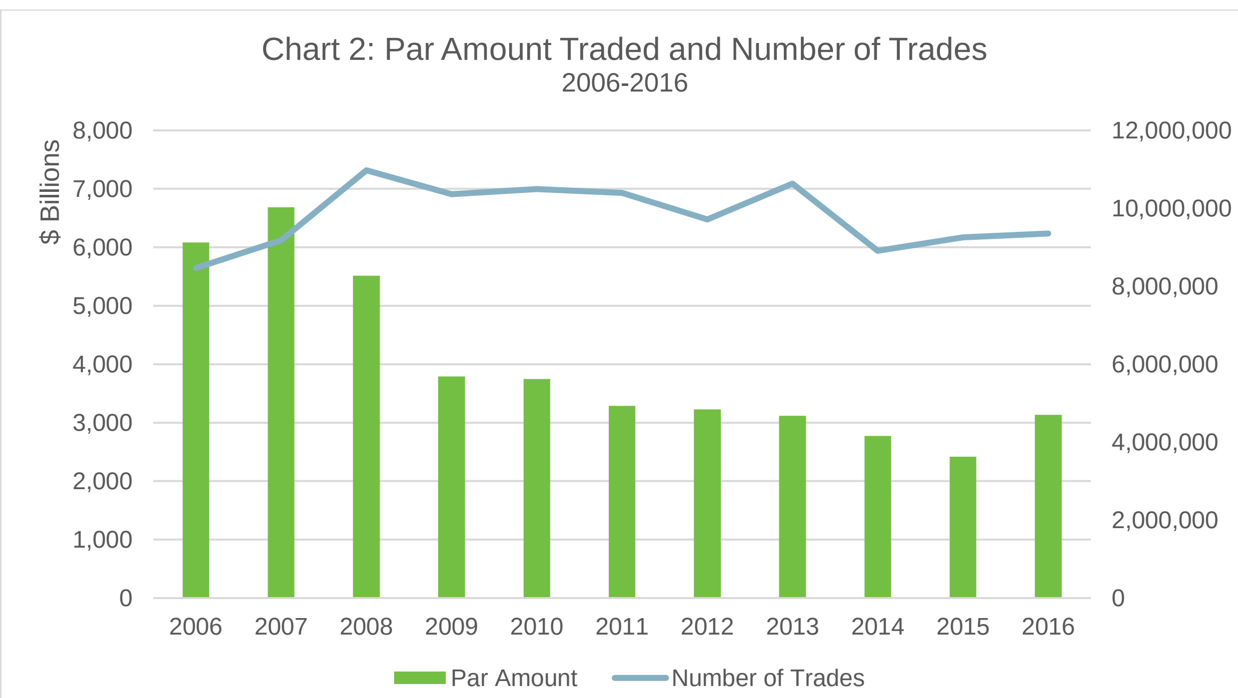
The MSRB publishes a variety of municipal market statistics and data on MSRB.org and on the Electronic Municipal Market Access (EMMA®) website. This information includes a set of dynamic municipal market statistics that reflects market-wide trading activity by trade type, size, sector, maturity and coupon type, as well as statistics on new issuance levels and counts of continuing disclosure submissions. The MSRB also

[3] Bergstresser and Cohen. "Changing Patterns in Household Ownership of Municipal Debt."

makes available various statistical reports including the annual *Fact Book* and quarterly and monthly data summaries that aggregate and summarize trade characteristics, interest rate resets, and primary and continuing disclosure information. Additionally, research reports related to continuing disclosure and other topics are also published on a periodic basis. All data is available to the public for free.




Source: Federal Reserve Board Financial Accounts of the United States. December 8, 2016 (2016: Q3 Release).




Source: MSRB