

Municipal Bond Worries

In 2010, prominent industry analysts warned of a looming fiscal crisis among state and local governments. Some experts even predicted widespread municipal bond defaults in the US.¹ Investor fears intensified in late 2010 when the municipal bond market experienced one of its largest selloffs in decades, which drove down prices and raised yields.² While factors unrelated to credit concerns may have contributed to the selloff, some investors were motivated by a perception of rising credit risk among municipal bond issues.³

So, is the municipal bond market at risk of massive default? No one knows—and we are not in the prediction business. But your view probably depends on your economic expectations and familiarity with the municipal bond market. With this in mind, consider these principles:

- **The municipal bond market is large and diverse.** The media often report on municipal bond problems as though the market is a single, uniform sector. In reality, the market comprises an estimated \$3 trillion in debt, with over 50,000 state and local issuers and about two million outstanding issues. These bonds are rated across a broad spectrum of credit categories and have different characteristics and structures for paying their obligations. Such complexity does not afford simple observations about the market.
- **Historical default rates are low.** Muni bonds have a strong track record of repayment. One reason is that state and local governments are motivated to avoid default since failure to pay affects their ability to raise capital in the future. Another reason is that most issues repay investors from either project revenues or from a general fund backed by the taxing power of the issuer. Chart 1 shows bond default rates in the US from 1970 to 2008. There have been no defaults in the top-rated investment grade tier (Aaa/AAA). Most defaults are limited to the non-investment grade universe.

Chart 1: Bond Default Rates—Cumulative Percent (1970-2008)

Rating Categories ¹	Moody's		Standard & Poor's	
	Municipal	Corporate	Municipal	Corporate
Aaa/AAA Bonds	0.00	0.52	0.00	0.60
Aa/AA Bonds	0.06	0.52	0.00	1.50
Investment Grade	0.07	2.09	0.20	4.14
Non-Investment Grade	4.29	31.37	7.37	42.35

¹ Aaa/AAA indicate top-rated investment grade bonds; Aa/AA bonds represent the lower part of the upper-half tier of investment grade. Moody's ratings for the full range of investment grade bonds are Aaa, Aa, A, and Baa; Standard & Poor's and Fitch investment grade ratings are AAA, AA, A, and BBB. Non-investment grade ratings are all ratings below Baa and BBB.

Source: Municipal Securities Rulemaking Board (MSRB)

- **Most fiscal problems are concentrated in a few large states.** An estimated 58% of the recent budget shortfalls have occurred in five states: Arizona, California, Illinois, New York, and Texas.⁴

However, operating budgets deal with short-term revenues and costs, while municipal bond debt represents long-term borrowing to fund infrastructure projects (e.g., roads, bridges, schools, water systems, and hospitals). Moreover, current levels of state and local government debt, as well as interest payments on that debt, remain well within the historical range.⁵ Of course, many states are also wrestling with unfunded pension liabilities that may ultimately impact their budgets, but these tend to be longer term obligations as well.

- **Municipal bonds are assessed according to actual financials, not models or projections.** Some reports have compared the municipal bond market to the subprime mortgage securities market prior to the financial crisis. The circumstances are different. For one, state and local issuers are subject to financial disclosure rules, and the information they provide affects the market prices and credit ratings of their bonds. Also, municipal bonds are not exotic instruments with complex structures that obscure the underlying credit rating and market value of the assets.⁶ While municipal bond reporting is not as timely or thorough as reporting on corporate debt, investors hold an instrument that is more transparent than the mortgage derivatives that helped spark the financial crisis.
- **Current market conditions do not imply unusually high risk.** The market incorporates information and expectations into prices, including perceived risk, as illustrated by rising bond yields during the financial crisis and in the recent municipal market selloff. However, since the start of the recession in November 2007, average yields for the AAA-, AA-, and BBB-rated municipal securities have fallen.⁷ Also, total market volume as measured by total number of trades has been generally flat over the last three-year period.⁸

Risk Management Issues

Investors should always consider ways to manage risk in their fixed income portfolios. Here are a few guiding principles:

- **Hold shorter-term issues.** This approach may help reduce volatility and credit risk while enhancing liquidity. Also, fixed income investors who hold investment grade bonds must also consider their exposure to changes in interest rates. Bond prices move in the opposite direction of interest rate changes—and the longer a bond’s maturity, the greater its price change.
- **Stay broadly diversified.** Holding many municipal bond issues and avoiding concentration in a particular state, sector, or issue type can help reduce the impact of a few non-performing bonds. If default rates were to rise, investors with a well-diversified municipal portfolio should be less exposed.
- **Focus on quality and use market pricing to confirm credit ratings.** The most creditworthy bonds are those rated AAA or AA, and most of the current problems involve lower-rated bonds. Although ratings are useful, recent history in the mortgage-backed securities market has shown that a bond may not be rated accurately. A bond that is rated AAA should trade in a similar price range to other bonds with similar characteristics and a comparable rating.

Portfolio Decisions

Investors can either hold a portfolio of individual municipal bonds or buy shares in a fund. Building a portfolio of individual bonds offers more direct control over maturity, face value, bond type, credit range, and other issue characteristics. This approach may be useful for matching future liabilities and

pursuing other investment objectives. But achieving broad diversification with a custom portfolio may prove a challenge, and the portfolio may be illiquid and expensive to trade, and require more attention and oversight than is feasible for an individual.

Investors often favor professional fund management for many reasons, including those specific to the way the bond market operates. Since bonds are traded through a network of dealers and not a centralized exchange, price discovery may not be easy. Muni bonds also tend to be illiquid since only about 0.7% of the market is traded daily (i.e., only 14,000 out of 2 million issues). These market realities result in high transaction costs. In fact, research shows that municipal bond trades are significantly more expensive than equity trades of equal size.⁹

Professional managers should have better access to multiple dealers and have the capacity for large-volume trades, which renders a cost advantage over smaller investors. Funds also offer better liquidity and broader diversification across issue type, maturity, credit quality, and geography. A shareholder can access daily share price and know the average credit rating within the portfolio. Equally important, managers should monitor average yields at different maturities, qualities, and regions to gauge the relative riskiness of different issues.

On the downside, managed funds can lose value and shareholders do not control the selection of bonds in the portfolio.

Fixed income securities are subject to increased loss of principal during periods of rising interest rates. Fixed income investments are subject to various other risks, including changes in credit quality, market valuations, liquidity, prepayments, early redemption, corporate events, tax ramifications, and other factors. Municipal securities are subject to the risks of adverse economic and regulatory changes in their issuing states. All expressions of opinion are subject to change without notice in reaction to shifting market conditions. This article is distributed for informational purposes, and it is not to be construed as an offer, solicitation, recommendation, or endorsement of any particular security, products, or services. Dimensional Fund Advisors LP is an investment advisor registered with the Securities and Exchange Commission.

End Notes:

1. Shawn Tully, "Meredith Whitney's New Target: The states," *CNNMoney.com*, Sept. 28, 2010.
 2. Dan Seymour, "Default Uneasiness Chases Investors from Muni Funds," *American Banker*, Jan. 25, 2011.
 3. Ben Levisohn, Jane J. Kim, and Eleanor Liaise, "Munis: What to Do Now," *The Wall Street Journal*, Jan. 15, 2011.
- Other factors that possibly contributed to the selling pressure are: (1) a major Treasury selloff in late 2010, (2) Standard & Poor's downgrade of "tobacco bonds" to junk status, (3) expiration of the Build America Bonds program in 2010, and (4) extension of the Bush-era tax cuts.
4. Randall Forsyth, "The Sky Isn't Falling on the Muni Market," *Barrons.com*, January 7, 2011.
 5. Iris J. Lav and Elizabeth McNichol, "Misunderstandings Regarding State Debt, Pensions, and Retiree Health Costs Create Unnecessary Alarm," Center on Budget and Policy Priorities, Jan. 20, 2011.
 6. Agnes T. Crane, "States' Troubles Are Not the Real Risk for Muni Bonds," *The New York Times*, Jan. 30, 2011. Also see Randall W. Forsyth, "Man Bites Dog in the Muni Market," *Barrons.com*, Feb. 1, 2011.
 7. Bank of America Merrill Lynch 1-10 Years AAA-BBB US Municipal Bond Index.
 8. Municipal Securities Rulemaking Board (MRSB) 2010 Fact Book.
 9. Lawrence E. Harris and Michael S. Piwowar, "Secondary Trading Costs in the Municipal Bond Market," *Journal of Finance*, June 2006, Volume 61, Issue 3, pp 1361-1397.