HIGHLIGHTS

- Given the broad ability of governments to raise taxes and cut services, the predominant risks facing the municipal bond market are price declines and ratings downgrades
- Financial markets may have become overly pessimistic over the potential deterioration in the revenue base of municipal governments
- Declaration of municipal bankruptcies could very well increase in 2011, but these events would be isolated and few and far in between
- Likewise, broad-based bond defaults seem highly unlikely, although the much-touted 50 to 100 defaults is certainly within the realm of possibility
- A bankruptcy declaration does not necessarily translate into a municipal bond default
- Investors should consider the revenue sources of municipalities when purchasing bonds. An overdependence on state transfers/subsidies does present a downside risk
- Default risks are further minimized when local credit obligations are deemed essential to the ongoing operation and support of the respective municipality

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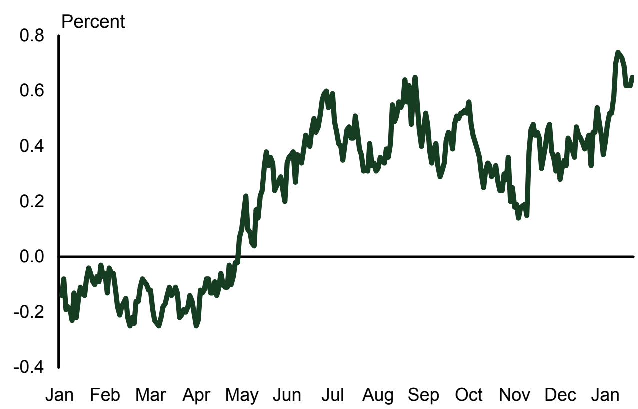
MUNICIPAL BONDS: NOT FOR THE FAINT OF HEART, BUT NO CAUSE FOR PANIC

Local government finances have come under increased investor scrutiny of late, especially after recent media headlines highlighted comments by an influential analyst who reported the possibility of 50 to 100 significant municipal bond defaults in 2011, totalling hundreds of billions of dollars. It is no secret that municipal finances are strained under the legacy of the Great Recession, which led to greater demand for social services, a deceleration in tax revenues, and cuts in state revenues. The low point for city fiscal conditions typically lags the trough in the economy by at least two years, which means that 2011 may be the worst year yet for city finances.

Fitch Ratings has already indicated that municipal bond rating downgrades are on the rise and that downgrade activity will likely remain at a higher level than anything we've seen historically. We agree that an increasing number of cities and local bond issuing entities could declare bankruptcy or default on loans in 2011. And, maybe there will be 50-100 defaults, but these will continue to be isolated events. And, with this magnitude of defaults, it would be difficult to achieve $100 billion or more in value unless a number of the largest municipal debt issuers in the country were to simultaneously collapse – a scenario that even the most bearish analyst would consider unlikely. There were 79 municipal defaults in 2010, which amounted to only $2.8 billion. In 2009, there were 207 defaults totalling $7.3 billion.[1] By extension, it's easy to see how difficult it would be to achieve $100 billion or more in defaults. Even so, it would be in the context of a total municipal bond market estimated to be almost $3 trillion, with over 19,000 cities, 4,000 counties, 15,000 school districts and an untold number of special purpose entities and enterprises.[2]

30-YEAR AAA MUNICIPAL BOND YIELD SPREAD*



*Over 30-year U.S. Treasuries
Source: Federal Reserve Board, WSJ, TD Economics

It will be incumbent upon investors to weed the good from the bad, just as they must do with any other investment choice – but perhaps with greater scrutiny at the moment. In addition, the magnitude of defaults will not be enough to materially impact the broader US economy, unless we get into a self-fulfilling cycle where broad-based investor risk aversion causes severe price degradation across the entire municipal and state bond spectrum.

In this report, we review the risks associated with municipal finances and debt.

The discussion is separated into three risk categories: the health of municipal finances, the likelihood of bankruptcy and the types of municipal bonds.

Risk 1: Deteriorating revenues

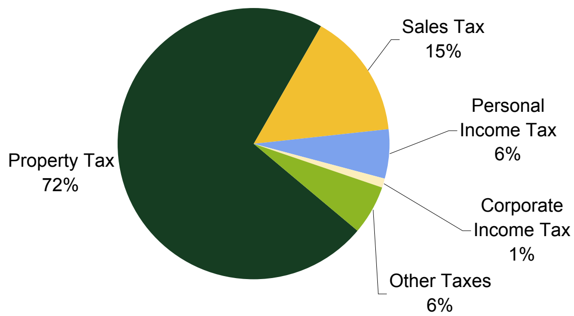
There may be too much market skepticism over municipal finances

Municipal governments generally have three key sources of revenues: inter-government transfers, fines/fees and tax receipts. On aggregate, the latter makes up half to two-thirds of total local revenues, though the experience will vary from state-to-state. A key concern of investors regarding municipal finances is that local governments will be experiencing reduced or slower growth in state transfers, while also disproportionately relying on sagging property tax revenues. Lags in property assessment values means that the peak impact from the unprecedented drop in home prices has yet to fully impact local revenues.

There's no arguing that with many states also fiscally constrained and with Federal assistance funding coming to an end in 2012, states may shore up budget shortfalls by cutting transfers to local governments. This element of local finances has a bit of a 'wild card' element, since the degree to which it occurs is likely going to be tied to those states that are already in dire straits. So, there are valid concerns that this part of the balance sheet among some local governments will deteriorate in the coming years.

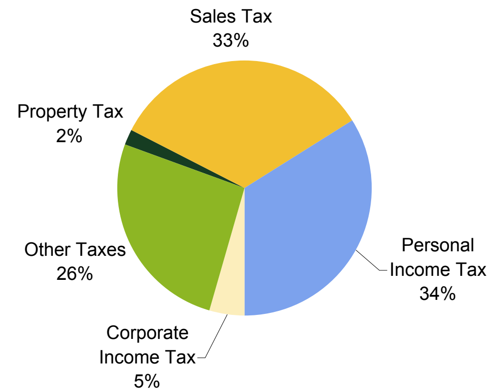
However, market perception on the larger revenues source – taxes – may be too pessimistic. On average, roughly three-quarters of local government tax revenues are derived from property taxes (compared to just 2% for state governments). So even though we have already seen the bottom in state tax revenues in 2009 – which has since expanded for three consecutive quarters in 2010 – the same cannot be said for local tax revenues. The market fear is that the worst may be yet to come.

SOURCES OF TAX REVENUE - LOCAL GOVERNMENTS



Source: Bureau of Economic Analysis, TD Economics

SOURCES OF TAX REVENUE - STATE GOVERNMENTS



Source: Bureau of Economic Analysis, TD Economics

Research conducted by the Federal Reserve does show that property tax revenues are highly responsive to changes in home prices with a lag of several years, but there is inherent stickiness on the downside with property taxes. On average, it was found that for every $1 dollar appreciation in home prices, property tax revenues rose by 40 cents (with a lag).[3] Full pass-through does not occur because limitations and caps may exist, and policymakers are generally reluctant to pass along large increases in property tax bills to homeowners. However, there was little evidence that home price declines influenced property tax revenues to the same degree, as it appears that policy makers raise the effective tax rates to offset declines in tax revenues that come with lower property assessments. Although the data sample never reflected home prices declines of the magnitude we've recently witnessed, there is some evidence to corroborate the notion that property taxes lean against downside pressures. For one, a survey of municipalities in 2010 indicated that nearly one-quarter intended to increase the local property tax rate.[4] Second, while local government revenue data is not available for 2010, quarterly state revenue data is and it showed that property taxes were still up nearly 10% y/y in the third quarter. Of the two, state property taxes are far more volatile than local revenues, suggesting that if property taxes did not materially deteriorate at the state level, they may have also been more resilient at the local level. So, while the lag in property assessments continues to feed through, downward pressure will undoubtedly build on the property tax base in 2011. However, the impact will likely be more limited than markets currently fear.

On the flip side, even if property tax revenue growth slows markedly in 2011, there should be a partial offset from sales taxes, which make up about 15% of local tax revenues. These receipts should be on the upswing in 2011, as improved employment and retail sales prospects kick in. We have already seen this area of tax receipts bounce back at the state level in 2010.

Risk 2: Bankruptcy

A rare event and does not necessarily equal default

A declaration of bankruptcy by a municipality is rare (only 618 cases since 1934, about 8 per year). Municipalities have a long history of avoiding Chapter 9 by implementing tax and fee hikes, alongside aggressive budget cuts. We see this again playing out today with 378,000 local government workers being laid off since the recession gripped the nation.

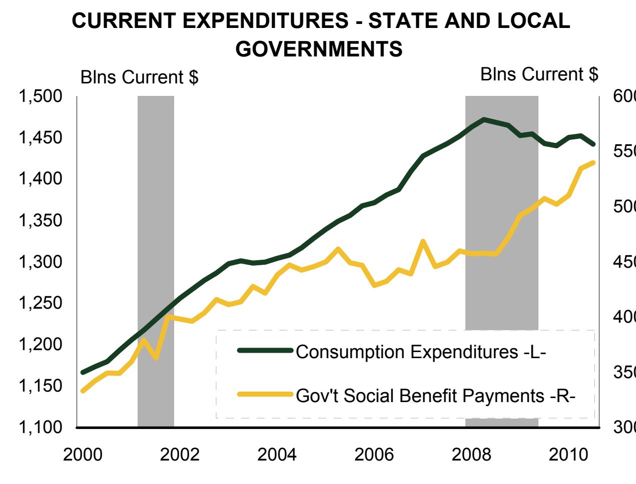
While Chapter 9 does provide municipalities a means to adjust debt obligations by reducing, extending, or restructuring payments, it is sparingly used as a last resort because it carries a hefty market and social cost to the city. For instance, the immediate market reaction will be to close the financing taps or make it prohibitively expensive to borrow to finance needed projects. Regular operations of local governments would likely be disrupted by vendors who cut off credit or demand prepayment for services. And, this financial penalty could linger for many years.

In addition, the cost of declaring bankruptcy can be counterproductive to the actual objective of shoring up city finances. For instance, the City of Littlefield (TX) recently ran into financial distress under the weight of a prison project. In response to the prospect of bankruptcy, Littlefield's city manager noted that "bondholders will just come in and make you raise your taxes to the point that you recover those funds, so you are really spitting in the wind."[5] Case in point, Harrisburg (PA) is currently in financial distress and faces one lawsuit in particular by a bond insurer. If successful, the suit would force Harrisburg to pay the bonds by raising taxes, selling assets or making steep expenditure cuts.[6]

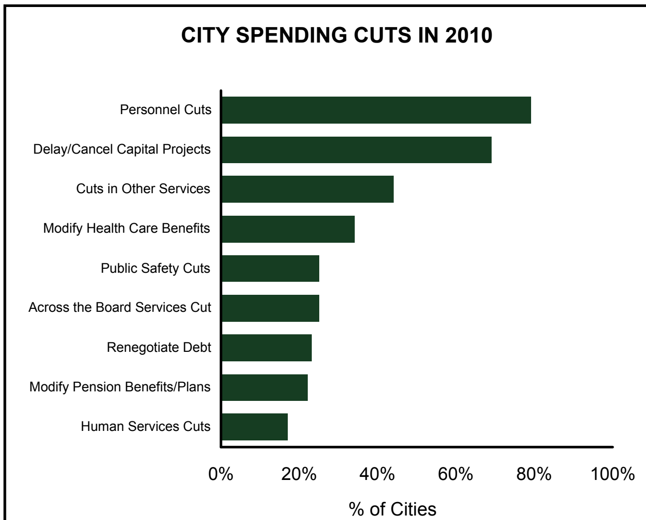
And, while a bankruptcy filing is suppose to give a city breathing room to deal with outstanding debts; the financial costs in doing so can be steep. Unlike when a corporation files for bankruptcy under Chapter 11, a judge has no authority to liquidate a municipality in Chapter 9 when debtors and creditors cannot reach a compromise. Thus, a city's finances can become bogged down for years with legal fees and other costs for motions and appeals. Take the City of Vallejo (CA), which has been stuck in bankruptcy since May 2008. The city has spent $9 million responding to 825 court filings, even though the city has an $82 million budget deficit.[7] This is why many states have their own processes for dealing with distressed municipalities. Harrisburg (PA) is one example, where it entered into Pennsylvania's Act 47 program to receive help from state officials and specially-appointed financial advisors.

As if the above risks weren't bad enough, the stigma of declaring bankruptcy may be so great that it deters businesses and residents from locating in the city, thereby hindering the very tax revenue base that a city needs to shore up its finances.

The bottom line is that bankruptcy causes the escalation of near-term costs, which merely serves to increases the pain on a jurisdiction. Thus, bankrupcty fillings have been rare, and likewise municipal default rates are low on a structural



Source: Federal Reserve Board, TD Economics



Source: National League of Cities

basis (not just cyclical).

Even when a city is in financial distress or goes to the extreme of declaring bankruptcy, it does not necessarily mean that bond holders will have to forgo the principal and interest owed. For instance, Orange County (CA) filed for bankruptcy in 1994, but all principal and interest payments were made on its bonds. It did so by delaying payments and restructured existing debt by selling AAA rated insured recovery bonds.[8] Likewise, New York City restructured its debt in the mid-70s without defaulting on interest payments or declaring bankruptcy. These two cities demonstrate a willingness to find a favorable solution, particularly when a debt default could have larger financial market ramifications.

Risk 3: Buyer beware

Not all Bonds are Created Equal

Up until now the discussion has been on generic features of the municipal bond market; but quality, source and the size of the bond issuance matter when it comes to probability of default and knock-on effects to the local and broader economies.

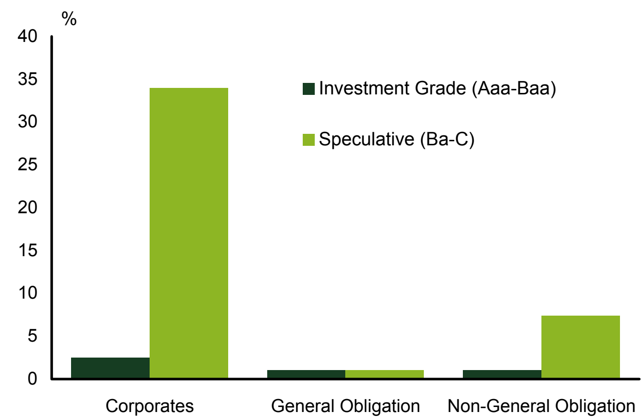
Here are some basic features about municipal bonds to help investors minimize risk and make an informed investment decision:

Municipal bonds are broadly divided into two classes: general obligation (GO) and revenue bonds (REO). The difference in the two reflects the specific security pledged to repay the debt. GO bonds are secured by the full faith and credit of the issues, which means the borrower is committing to raise taxes and other revenues sufficient to cover the amount owed. In contrast, REO bonds are secured by a defined revenue stream. This means the repayment of principal and interest is dependent on the reliability of the revenues pledged *and* whether that revenue stream has been pledged toward other debt or is needed for other purposes.[9] Within the revenue bond classification, there are 'conduit' bonds. These are bonds that the government has issued on behalf of a third party, such as a hospital or university. While conduit bonds get swept up in the municipal classification, they are really private debt, in which the bond is secured by revenues generated by the project being financed, the credit of the conduit borrower and/or a mortgage on the property. The issuance market for non-GO bonds is larger than for GO bonds, with some municipalities unlikely to issue any GO bonds.

While past performance is not necessarily a reflection of future, non-GO bonds do carry greater inherent risks than GO bonds, which leads to higher default rates. Moody's looked at their sample of municipal debt between 1970 and 2009 and found that investment grade GO bonds had a 0.01% default rate compared to 0.13% for non-GO bonds (controlling for differences in rating levels).[10] Speculative grade bonds are more likely to be issued for non-GO bonds, which carried a default rate of 7.37%. However, these are low incidences relative to global corporate default rates which were 2.5% for investment grade and 34.01% for speculative grade. Governments have captive tax bases and strong control over taxing and spending – a key advantage not available to corporations – that supports the much lower default rates.

Nevertheless, the risk profile for municipal bonds does differ depending on the source. Moody's found that within their sample, municipal defaults tended to be concentrated in housing and health care projects, which includes conduits. In a separate report, the findings specifically for 2010 indicated that although there is a low incidence of default with bonds that had been rate by Moody's and other accredited rating agencies, the vast majority (83%) of municipal de-

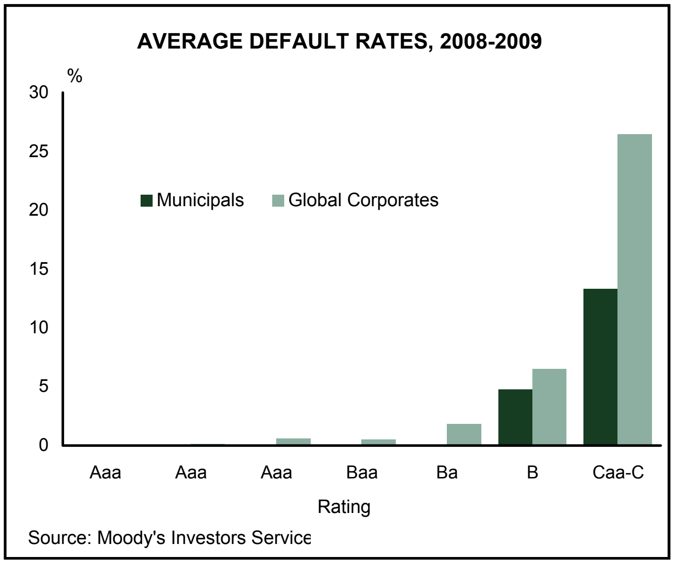
AVERAGE CUMULATIVE DEFAULT RATES, 1970-2009



Source: Moody's Investors Service

Default Counts by Purpose* - 1970 to 2009	
Housing	21
Healthcare	21
Electric, Water or Sewer Enterprise	3
Higher Education	1
Recreation	1
City, Town, County -- non-General Obligation	4
General Obligation	3
Total	**54**

*Moody's-rated municipal issuers. Source: Moody's Investor Service



faults took place among 'unrated' bonds. In addition, 90% of the defaults in 2010 (thru November) occurred with smaller deals carrying a value of $50 million or less.

Rising debt service costs worth considering

The one question we're being asked by clients is what happens to the debt service costs of municipalities when interest rates inevitably rise from their current low levels. Coming up with an estimate is difficult with the limited information available, however we did find that the outcomes are highly sensitive to the assumptions made on expenditure growth. Debt service costs currently make up roughly 5.6% of total local government expenditures. If there was a large jump in interest rates of 300 basis points, we estimate debt service costs could rise to a 6%-8% range of total local expenditures by 2017. The long term average has been in the 6-6.5% range. No doubt, the upper end of the estimate would squeeze local government finances, particularly those already on the financial ledge. However, interest rates are unlikely to rise in the absence of stronger economic growth, which would correspond to stronger growth in the tax base (with a lag) as a tempering influence on any expenditure squeeze. This simply returns us to the notion presented at the start of this report: investors must do their homework and look at the credit position of the issuer and whether or not they are facing solvency and liquidity challenges. The risks for municipalities appear exaggerated, but there will be isolated default events and financial health will differ from city to city.

Conclusion

Putting all the pieces together, the main findings are:

- Given the broad ability of governments to raise taxes and cut services (and the demonstrated willingness to do so), the predominant risk facing the municipal bond market is price declines and ratings downgrades.
- Broad-based defaults seem highly unlikely, although the much-touted 50 to 100 defaults is certainly within the realm of possibility. Nevertheless, financial markets may have become overly pessimistic over the potential deterioration in the revenue base of municipal governments.
- Investors should consider the revenue sources of municipalities when purchasing bonds. An overdependence on state transfers/subsidies does present a downside risk.
- Declaration of municipal bankruptcies could very well increase in 2011, but these events would be isolated and few and far in between, given that there are 38,000 local government and countless of special purpose entities and enterprises.
- A bankruptcy declaration does not necessarily translate into a municipal bond default.
- The contractual obligation described by the type of bond matters, as does the source. Default risks are further minimized when local credit obligations are deemed essential to the ongoing operation and support of the respective municipality.
- Although weakness in municipal bonds do not pose a systemic risk to the financial system, worries about related defaults highlights the fact that local government finances have yet to turn the corner, and further budgetary cuts in response to this will constrain the recovery.

Endnotes

1 Income Securities Advisor, Distressed Debt Securities Newsletter, January 2011

2 Hoene, Chris, "Crying Wolf about Municipal Defaults", National League of Cities, December 2010

3 Lutz, Byron, "The Connection Between House Price Appreciation and Property Tax Revenues", Federal Reserve, September 2008

4 City Fiscal Conditions in 2010, National League of Cities, October 2010

5 http://www.ft.com/cms/s/0/050bce4a-2809-11e0-8abc-00144feab49a.html#axzz1C9PWVrbt

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7 Seymour, Dan, "Chapter 9 is a Very Tough Slog", The Bond Buyer, October 20, 2010.

8 Moody's, U.S. Municipal bond Defaults and Recoveries, 1970-2009

9 https://self-evident.org/?p=877

10 Moody's, U.S. Municipal bond Defaults and Recoveries, 1970-2009