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Investment Strategy Group



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The Investment Opportunity in the Municipal Bond Market

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Just as we were settling into a more stable and sustainable economic trajectory in the US and beginning to enjoy lower S&P 500 volatility, an increase in Treasury rates in late 2010, coupled with particularly unfavorable and widely publicized commentary about the municipal market by a research firm, resulted in significant outflows from municipal bond mutual funds. These outflows, estimated at about $34 billion since early November, in turn led to a supply and demand imbalance, particularly since the broker-dealer community was not eager to add to their balance sheets into year-end. These pressures were exacerbated by the expiration of the Build America Bonds program, culminating in a notable increase in municipal bond yields relative to Treasuries. In fact, longer maturity municipal bonds now have higher yields than Treasuries, despite the tax-exempt status of such bonds! In our view, municipals bonds offer a very attractive investment opportunity at these levels, as discussed below.

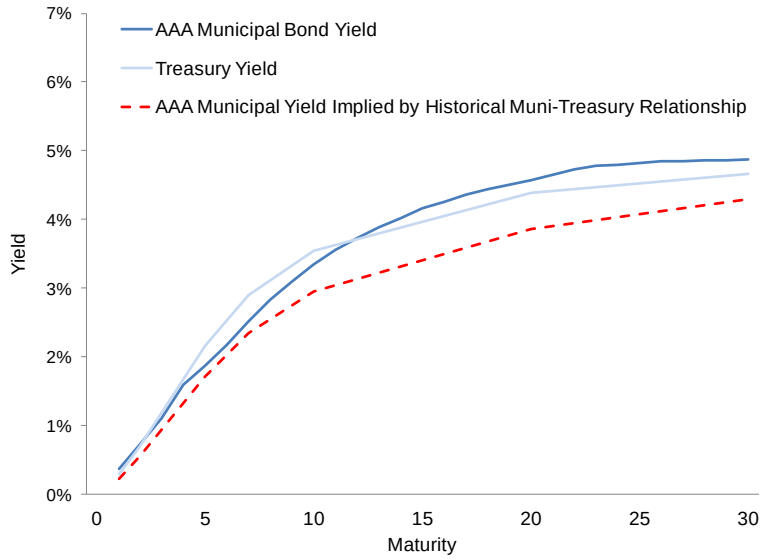
In addition to volatility in the municipal market, capital markets have also been bombarded with pictures of demonstrations in Egypt (for a replay of our client call on Egypt, please contact your private wealth advisor) and, to a lesser extent, in Yemen. Earlier in the year, we had a change of president in Tunisia, and within the last week the King of Jordan appointed a new prime minister and is encouraging opposing parties to work together to initiate reform. While none of these countries are particularly large in terms of GDP or market capitalization and have had little impact on the equity markets in developed countries, they have certainly reminded market participants of the geopolitical risks in emerging market countries and, at the margin, have contributed to the outflows in emerging market funds. We believe that these disruptions in the region are unlikely to spill over to major oil producing nations in the Middle East and are unlikely to have a meaningful negative impact, through contagion, on the world economy or financial markets. Of course, events remain highly fluid and we will continue to closely monitor this situation.

Let's now turn to a review of the municipal market and examine the rationale for our favorable view of this investment opportunity.

The Current Concern with Municipal Bonds

There has been no shortage of negative headlines concerning the municipal bond market recently. Put simply, the fear is that states' budgetary shortfalls, perceived high debt burdens, waning Federal assistance and massive unfunded pension liabilities will soon result in widespread municipal defaults and state bankruptcies. The result, as seen in Exhibit 1, has been a notable shift higher in municipal bond yields, such that they are now generally in line with or above Treasury yields across the curve, despite municipals' inherent tax advantage.

1. Municipal and Treasury Yield Curves (Pre-Tax)



Source: Investment Strategy Group, Bloomberg, Plot Tool.

This market dislocation has caught the attention of cross-over buyers, including life insurance companies, pension funds, and hedge funds, among others. The key question facing investors is whether "this time is different:" do default concerns justify the upward shift in the municipal bond curve, or do current yields more than compensate for the credit risk, thereby offering an attractive investment opportunity?

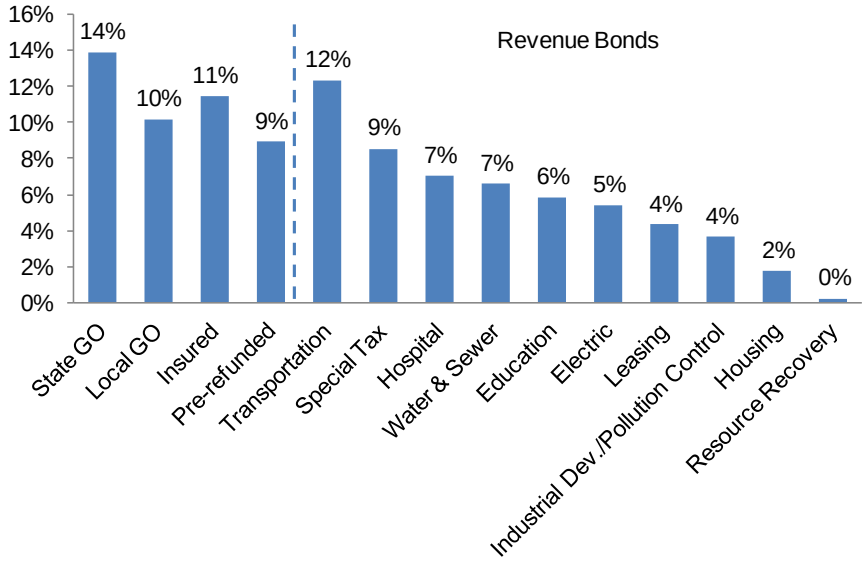
While we understand how these municipal bond warnings might resonate with our clients, we disagree that widespread defaults across the municipal market are imminent. In our view, most states and municipalities have begun to address their budget problems in earnest and most will pursue multiple strategies, from reducing expenses and raising taxes to re-negotiating retirement benefits, to balance their budgets. As such, the current dislocation in the municipal bond market has created an attractive investment opportunity. For clients who are underweight municipal bonds—investment-grade and high yield—and might be sitting on the sidelines in cash, we recommend moving back into the municipal market. We see an opportunity for clients to take advantage of both the steepness of the yield curve and the incremental yield of municipal bonds relative to comparable maturity Treasuries as long as they can withstand the interim volatility due to headline risks.

So let's first begin with a review of the default history of the municipal market and examine the underpinnings of our sanguine view of future default rates in this market. We will then address some of the key concerns that have been raised about the credit quality of municipalities. Throughout the piece, we have drawn upon a conference call we hosted for our clients on this topic with three guest speakers: Robert Kurtter, Managing Director for U.S. State and Regional Ratings at Moody's; Anne Van Praagh, Group Credit Officer of the Public Finance Group at Moody's; and Hector Negroni, Head of Municipal Bond Trading at Goldman Sachs.

Low Municipal Default Rates: Past, Present, and Future

Given the sheer number of issuers and types of bonds in the highly fragmented municipal space, it is actually surprising that default percentages are not higher historically. Indeed, the $2.9 trillion municipal bond market consists of roughly 50,000 issuers representing 3,000 counties, 36,000 municipalities, 37,400 special districts and 14,600 public school systems.[1] As a result, even within the same locale, borrowers and the types of bonds they issue can vary significantly (see Exhibit 2).

2. Composition of the Municipal Bond Market by Type of Bond
As of December 2010, based on Barclays Municipal Bond Index Universe



Source: Investment Strategy Group, Barclays Capital.

Despite this high level of fragmentation, the historical default rate among municipals is incredibly low. According to a recent Fitch report, the cumulative default rate over the past ten years for all rated municipal bonds – including non-investment grade – ranges from 0.04% to 0.29%, based on estimates from all three major rating agencies. By comparison, Moody's found 2.5% of investment grade and 0.5% of AAA-rated corporate bonds default over a similar time frame.[2] In fact, for all of 2010, new municipal defaults totaled about $2.7 billion or about 0.09% of outstanding issues, nearly all of which were unrated. Even during the Great Depression, the worst single-year default rate was only 1.8% in 1935. Within two years, nearly all the defaults by larger municipalities had been cured, with an average recovery rate close to 97%! High recovery rates persist today, with an average of nearly 70%.

This low default rate is not historical happenstance. Roughly 70-80% of the $2.9 trillion in municipal par value outstanding is rated investment-grade, leaving a smaller pool of higher risk bonds to default. In addition, states are generally constitutionally bound to balance their budgets and meet their municipal debt obligations. Moreover, states cannot legally file for bankruptcy and would likely be reluctant to do so anyway, given their ongoing need for public financing. Although other public entities can file under Chapter 9, city managers are averse to doing so given the financial and political costs, as well as the uncertainty of the outcome. Lastly, municipalities have several options available to address short-term cash deficits, such as issuing cash-flow notes, delaying vendor and state-aid payments, arranging lines of credit and allowing inter-fund borrowing.

Federal Government Unlikely to Condone State Bankruptcy

Notwithstanding recent discussions in the media and Washington, we think the odds of the Federal Government allowing states to file for bankruptcy are low. Instead, the threat of state bankruptcy appears to be another political tool to bring key parties, such as the unions, to the negotiating table. Notably, states are not asking for this provision and some policymakers have already spoken out against the idea (despite being on the same side of the aisle as those that first proposed it).[3]

Moreover, as discussed above, even if states could file for bankruptcy, the potential loss of access to the capital markets, significant legal fees, and uncertainty of the outcome provide a strong deterrent. For these reasons, filings are rare even in the 26 states where local municipalities can voluntarily file for Chapter 9 protection (which allows debt restructuring as opposed to asset liquidation). Furthermore, despite fears that Vallejo, California's May 2008 filing would trigger a wave of additional rated government bankruptcies across the nation,[4] only Sierra Kings Health District has filed since and even it has not

subsequently defaulted on its general obligation bonds. Perhaps Vallejo Council Member Stephanie Gomes stated it best, "It's best to negotiate your way out of the fiscal problem…before you go into bankruptcy."[5]

Budgetary Shortfalls are Cyclical and Improving

The good news for deficits in an improving economy is that tax revenues are highly cyclical. Therefore, given the backdrop of an improving US economy and our expected GDP growth rate of 3 or more percent in 2011, most states will benefit from rising tax revenues. In New York, for example, economically-sensitive personal income, sales and corporate income taxes account for 89% of revenues; in California, it's 95%. Given the accelerating trajectory of US growth, each of the first three quarters of 2010 showed sequential improvement in state tax receipts. According to the Nelson A. Rockefeller Institute of Government, this improvement continued in the fourth quarter of 2010, with 6.9% yoy revenue growth across 41 states – California revenue was up 19.3% yoy, Illinois 12.4%, and New York 9.7%.

US States are not Greece, Ireland, or Portugal

While US states are frequently compared to the peripheral European countries with high deficits and debt/GDP ratios, we think these comparisons are not justified. First, unlike European sovereigns, US states are generally required by their constitutions to operate under balanced budgets, thus preventing them from routinely issuing debt to fund deficits over multiple years. Second, outside of deliberately fraudulent reporting, it is highly unlikely that a US state could miscalculate their budget deficits in the way Greece did, given the Government Accounting Standards Board requirement for annual audits to be submitted 6-months after the end of each fiscal year. Third, much of municipal debt has an amortizing maturity schedule so roll-over risk is substantially less than that seen in the troubled sovereign countries in Europe.

As a result of the balanced budget requirement at the state level, the average state debt/GDP ratio is only 2.4%, ranging from just 0.03% in Nebraska to 8.32% in Massachusetts, compared to triple-digit levels in many troubled sovereigns. Even including each state's share of federal debt to make the numbers more conservative, the highest ratio among US states is 72% for Massachusetts, still below the estimated 2010 ratios of 83% for Portugal, 94% for Ireland, and 130% for Greece. Meanwhile, Moody's estimates that states spend a mere 5-7% of their expenditures to service their debt, compared to 15% in Greece.

Unfunded Pensions are Not a Source of Near-Term Default Risk

While pension costs are a significant long-term credit issue, they are not a source of near-term default risk, in our view. States have many years to address these costs, and nearly three-quarters of states have already implemented some form of pension reform since 2007, according to PEW Center on the States report.[6] In fact, 19 states enacted changes in 2010 alone. In addition, state pensions are 84% funded in aggregate, above the government accounting guidelines of 80%. The dispersion, however, is quite wide, with 29 states being above the guideline and the balance below.

Perhaps most importantly, growing public concern over this issue is providing governments with political cover to bring key parties, such as the unions, to the negotiating table to implement difficult but necessary structural changes, such as increasing the retirement age, reducing program benefits, raising contribution rates and even converting to defined contribution plans.

States are Already Taking Steps to Close Budget Gaps

Against an improving cyclical backdrop, states have already taken aggressive steps to close budgetary gaps. Since fiscal year 2008, spending has been reduced by about $42 billion. Even so, states continue to implement further measures, including additional spending cuts, wage freezes, deficit financing, new taxes and asset sales.

As recent examples, Illinois is raising its personal income tax rate to 5% from 3% and its corporate tax rate to 7% from 4.8%, and California governor Jerry Brown announced his intention to cut $12.5 billion, or 20% of spending, from the state's 2011 budget. Arizona, for instance, raised $1 billion by selling state

buildings and leasing them back. Indeed, projected budgetary shortfalls do not take into consideration the numerous assets that states own, including roads, sewers, buildings and water reservoirs, which could be privatized, if necessary.

In addition, we note that the alarming $160-$200 billion state deficit numbers that are frequently cited in the press include projected spending increases. Excluding these increases, the shortfall is closer to $50 billion, a nontrivial but more manageable sum. New Jersey Governor Christie, for instance, was able to close an $11 billion budget gap by simply preventing automatic spending increases. While doing so is no easy political task, it is much easier, and significantly less disruptive to the economy, than cutting $11 billion worth of expenditures.

Of course, despite these improvements, headwinds remain. Notably, the lagged impact of falling home prices is likely to be a drag on local government property tax revenue going forward. On this point, various studies show there is about a 70% correlation between property tax revenue and home prices, with property tax revenue lagging by 1-4 years. Even so, only about 40%-60% of home price changes are passed through to property taxes, so this suggests a mid-double-digit drag on property tax revenue over the next couple of years, well short of the peak-to-trough decline in home prices. Moreover, home prices have begun to stabilize and even increase in some areas, further cushioning the blow.

Impact of the Withdrawal of Fiscal Stimulus

States in aggregate have received about $53 billion in aid annually from the federal government since 2008, leaving many to conclude that the withdrawal of this support will cripple state budgets. Since aid in the amount of about $16 billion was extended through the end of fiscal 2011 (ending June 2011), it is true that states are set to lose this $16 billion in the second half of this year. Even so, this is equivalent to roughly 2.5% revenue growth which can probably be offset through a combination of stronger US growth and some tax increases. In fact, state budgets were set during last year's mid-cycle slowdown, making it probable that this year's revenues exceed expectations. Even when we remove fiscal stimulus, state and local deficits have already improved some $50 billion since Q2 2009 and seem to be following a trajectory similar to the last recovery.

Municipalities Can Likely Handle the Expiration of Bank Liquidity Facilities

Another commonly cited concern is whether municipalities will be able to renew letters of credit or bond purchase agreements for their variable rate debt obligations. In September 2010, Moody's estimated that $10-15 billion of expirations would have to be addressed in Q4 2010 and another $65 billion throughout 2011. So far, issuers have navigated through these expirations, with some opting to transition to fixed rate securities. Generally, most issuers are viewed as being in a good position to extend or renew their bank agreements if they choose, but smaller or weaker credits may have more challenges replacing a bank that has decided to exit the market or extending their facilities without paying more.

Global Economic and Earnings Update

The latest economic and earnings data remain supportive of continued growth not only in the US, but also globally with the most recent releases pointing to accelerating trends in some markets.

In the US, the highlight of data releases appears to be the vitality of the consumer. Personal consumption increased at a 4.4% annualized rate in Q4 2010 and contributed 300 basis points to the total 3.2% annualized GDP growth rate. Additional data generally point to stable consumption: the employment components of the manufacturing and services PMIs inched higher and the University of Michigan Consumer Confidence Survey revealed a decade-low percentage of respondents expecting a rise in the unemployment rate this year. However, the January employment report was mixed. While the Establishment Survey only reported a gain of 36k non-farm payrolls in January, the Household Survey reported a gain of 589k jobs which drove the unemployment rate down 0.4% to 9.0% (the lowest level since April 2009). The numbers are not as divergent as they appear. Estimates are that non-farm payrolls would have increased approximately 111-136k absent weather disruptions, and the Household Survey adjusted for methodology differences with the Establishment Survey would have shown a gain of

153k. The weakest aspect of US economic data remains housing – while new and existing home sales and housing starts picked up in December, the Case Shiller index of home prices fell 0.5% mom after a 1.0% mom decline in November.[7]

For their part, US corporate earnings continue to provide a solid fundamental underpinning to the equity market, with 78% of the 304 S&P 500 companies that have reported thus far topping earning expectations, while another 72% beat revenue expectations. Notably, earnings gains were not simply a function of cost cutting, as close to 80% of these firms posted positive yearly revenue growth. Indeed, overall revenues grew close to 9% compared to last year, far outstripping US GDP growth. Of equal importance, despite the incipient upturn in companies' capital expenditures and hiring in the fourth quarter, 67% of reporting firms actually saw their margins expand, a testament to still pervasive operating leverage. Against this backdrop, analysts now expect S&P companies to earn roughly $22.60 for the quarter, 5% higher than at the start of the earnings season and slightly more than $90 annualized. This impressive earnings run-rate suggests upside risk to ISG's $88-93 operating EPS range for 2011.

Outside the US, global purchasing manager manufacturing and services indices point to continued expansion as well. In fact, the strength in the UK PMIs, both the manufacturing and services, give credence to the view that the UK's 0.5% Q4 qoq GDP contraction was more likely a reflection of weather disruptions than the start of a double-dip recession. Recent data in Japan suggest the potential for a similar pick up in activity. Japan's manufacturing PMI moved to growth territory for the first time in 4 months, and December export yoy growth accelerated for the second month to 13%. In addition, while several headwinds, including a large deceleration in domestic demand due to waning fiscal stimulus, slowed the earnings recovery, Japanese firms have nonetheless raised their earnings forecasts and the growth backdrop (both domestic and international) is likely to remain supportive.

Investment Conclusion

Although many of the municipal credit concerns may be unwarranted, there is little doubt that the slower pace of economic recovery relative to past recoveries, media headlines about "impending" defaults, and more recent mutual fund outflows have resulted in significant market dislocations. And according to our guest speakers, market volatility will continue. Some of this volatility will be driven by what Bob Kurtter of Moody's called "near-misses" like Harrisburg, where the state of Pennsylvania stepped in at the last minute to provide aid; some of it will be driven by supply and demand imbalances; and finally, some of it will be driven by one-off defaults in lower rated or unrated municipal securities. For those clients who can withstand the interim volatility, we recommend staying invested in both the investment grade and high yield municipal markets; for those who have stayed on the sidelines in cash, we recommend taking advantage of the market dislocation to build positions.

For clients who are very concerned about interim downside or a double-dip recession, or who cannot tolerate the volatility, alternative strategies to holding a single-state municipal bond portfolio include diversifying across municipal issuers in both state and national portfolios and diversifying into high quality, taxable fixed income assets (although these strategies have some tax drawbacks relative to a single-state municipal bond portfolio).

[1] Congressional Budget Office. "Fiscal Stress Faced by Local Governments." December 2010.
[2] Richard Raphael, Laura Porter, et al. "U.S. State and Local Government Bond Credit Quality: More Sparks than Fire." Fitch Ratings, 16 November 2010.
Hampton, Ted and Robert Kurtter. "Combining Debt and Pension Liabilities of U.S. States Enhances Comparability." Moody's Investor Service, 26 January 2011.
[3] E.J. McMahon. "State Bankruptcy is a Bad Idea," The Wall Street Journal, January 24, 2011; Michael A. Fletcher. "No Bankruptcy Option for States, Cantor Says," *The Washington Post,* January 25, 2011
[4] Ward, Andrew. "Bankruptcy Rumor Mill." *The Bond Buyer*, 8 May 2009.
[5] Vekshin, Alison and Martin Z. Braun. "Vallejo's Bankruptcy 'Failure' Scares Cities Into Cutting Costs." *Bloomberg*, 14 December 2010.
[6] "The Trillion Dollar Gap: Underfunded State Retirement Systems and the Roads to Reform." Pew Center on the States, February 2010.

[7] The Case-Shiller Index of home prices calculates the observed price change of existing homes, using a repeat-sales approach, i.e. properties that have prior transaction value data. It looks at home prices across a low, medium and high tier and geographic regions are weighted based on their portion of the country's housing stock (by value). It is calculated monthly but uses a 3-month moving average methodology.

Sources: Congressional Budget Office, US Census, Bloomberg, Case-Shiller, Datastream, Moody's, Pew Center on the States, Fitch Ratings, *The Wall Street Journal*, Moody's.

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