



C A M B R I D G E A S S O C I A T E S L L C

## U.S. MARKET COMMENTARY

### The State of State Finances

February 2010

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# The State of State Finances

Wade O'Brien & Eric Schaaf

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Deteriorating municipal finances have implications for investors though default risk is remote. However, there are technical drivers that may support the tax-exempt market for some time.

Investors in municipal bonds could understandably be perplexed by the contrast between descriptions of deteriorating municipal finances in the press and the strong performance of their tax-exempt bond portfolios in 2009. Signs that states and municipalities are strapped for cash are increasingly omnipresent and include tales of employee layoffs, service cuts, and tax increases. Despite credit downgrades from the rating agencies and a growing chorus of doubters, issuers continue to pay interest and principal, and many analysts dismiss even the idea that a large municipality would default. Traditional arguments as to why this could never occur include the ability of cities and states to raise taxes and the willingness of the states and the federal government to assist smaller struggling entities.

In this commentary, we will provide an update on the advice given in our April 2009 Market Commentary *Can Municipal Bonds Get Up From the Canvas?*, and discuss trends in the municipal bond market since that time. We will also highlight the risks that exist across different types of municipal bonds and provide advice for investors attempting to navigate this difficult credit environment. Default risks for municipal bonds are rising, though they remain modest compared with those for other bond strategies. Explanations for why municipalities typically do not default need some revisiting. The magnitude of budget shortfalls and the fiscal demands placed on states and the federal government suggest that closing municipal budgetary shortfalls may become more

challenging. Furthermore, new evidence<sup>1</sup> suggests that people do move in response to higher taxes, so traditional cures to budget woes may not be as effective as was historically thought to be the case.

Whether or not defaults do increase, weakened state finances have serious implications for tax-exempt portfolios. Credit downgrades impact bond prices, as does the implied threat of greater bond supply to balance budgets. All of the news for municipal bond investors is not negative, however. The advent of the Build America Bond (BAB) taxable municipal bond program has reduced tax-exempt supply, supporting prices. The fear of higher federal taxes is boosting demand. Finally, better disclosure about municipal finances may spur issuers to manage finances more prudently, though these controversial proposals may be some ways down the road.

## What Is the Municipal Bond Market?

The municipal bond market in the United States is a \$2.8 trillion market that is highly fragmented by the large number of issuers<sup>2</sup> and bonds outstanding (1.5 million). There are two broad types of municipal bonds: general obligation bonds, which are backed by an issuer's ability to tax its citizens, and revenue bonds, which are backed by fees levied for use of a service or

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<sup>1</sup> See, for example, Leslie Kwoh, "N.J. Loses \$70B in Wealth During Five Years as Residents Depart," *New Jersey Star-Ledger*, February 4, 2010.

<sup>2</sup> For example, Moody's includes 18,400 separate municipal issuers in its default study, though the actual universe of issuers is even larger.

facility. Tax-exempt bonds are not always issued by municipal entities such as cities or school districts; in fact, a large number of revenue bonds are issued by corporations or nonprofit institutions such as colleges and hospitals. The municipal bond market is largely an investment-grade bond market, as 90% of outstanding issuance carries an investment-grade rating (Exhibit 1) and 59% carries a rating of AA or better. Understanding the differences among pledges, revenue streams, and collateral backing municipal bonds is the key for investors seeking to avoid the landmines of defaults and downgrades.

## Do Municipal Bonds Default?

Municipal bond defaults have been extremely rare by most accounts. Our April market commentary detailed the rarity of default in the market, and it is worth repeating those numbers. According to Standard & Poor's, the long-term cumulative default rate on investment-grade municipal bonds rated by their service is just 0.29%, which increases slightly to 0.37% if "junk-rated" instruments are included. This is much lower than the 4.1% long-term default rate for investment-grade corporate bonds (Exhibit 2). Moody's has calculated that the long-term cumulative default rate of rated municipal instruments is even lower at 0.09%, which drops to 0.06% if we look purely at investment-grade municipals. Independent studies, which include the 8.5% of municipal bonds that do not carry credit ratings, show that cumulative default rates are higher, but still less than 1.0%. The two data sets differ in that issuers that have chosen to obtain a credit rating are likely to have expected an investment-grade rating, biasing upward the credit quality within the default studies done by the rating agencies. Where defaults do happen, they almost always have three characteristics: they are revenue bonds that are part of a small deal (<\$50 million) and were

issued by an unrated or junk-rated non-government-backed issuer. Looking specifically at the 54 municipal bonds rated by Moody's that defaulted between 1970 and 2009, two were general obligation bonds (issued by counties), two were general obligation but limited tax bonds, and one was a general obligation issued by a hospital district. The vast majority of the defaults were revenue bonds issued for either housing finance or health care providers such as hospitals.

Recent trends show that default rates are increasing, but still heavily concentrated among the riskier non-rated, non-government-linked instruments. In 2009, according to Bloomberg, 183 tax-exempt bonds defaulted, representing \$6.35 billion of principal, compared with 162 defaults involving \$8.15 billion of debt in 2008 (Exhibit 3). These numbers equate to annual default rates of 0.23% and 0.30%, respectively. Unrated bonds issued to fund infrastructure for new residential real estate developments, such as Florida's notorious Community Development District bonds (a.k.a. "Dirt Development Bonds"), accounted for almost 50% of 2009's defaults. Instances of government entities defaulting, such as Vallejo, California, are extremely rare, which helps explain why even the recent increase in *discussion* about municipal defaults has caused such alarm.

## Why Defaults Are Rare

Defaults are rare and typically result in high recovery rates for several reasons. First, significant legal barriers exist to prevent governments or government-backed entities from going bankrupt. A U.S. state cannot file for bankruptcy. Local governments or government-backed entities can file for bankruptcy, but only after first going through a formal process to try to prevent this measure, typically involving a state-appointed oversight board or commission

working with the issuer to balance its budget. In 26 of the 50 states, bankruptcy is available to government-backed entities via Chapter 9 of the bankruptcy code (Exhibit 4).<sup>3</sup> This protects issuers from creditors, giving them time to restructure (for example, by extending) debts and figure out a plan to balance budgets. In the other 24 states, issuers may file for bankruptcy under state insolvency laws, but these typically also involve a heavy degree of state intervention prior to any debt restructuring.

In both instances, a government-linked municipal bond issuer cannot be forced to shut down operations or sell assets, and continues to collect taxes or fees. However, only issuers filing under Chapter 9 cannot be forced by a federal bankruptcy court to levy taxes or cut expenditures (given the Tenth Amendment of the U.S. Constitution). This decreases the probability that issuers will collect enough revenue to eventually fully service their debts. Pennsylvania's Act 47 offers an example of the formal mechanisms that exist across the United States that make local issuer bankruptcies so unusual. The city of Pittsburgh has worked with the state of Pennsylvania under this law in recent years; none of its debt has defaulted.

Before defaulting, issuers have a number of options to try and cover budget shortfalls. In the case of general obligation bonds issued by entities with the ability to levy taxes, taxes can be levied or increased, budgets can be trimmed, and other measures are available before default becomes necessary. For revenue bonds funded by essential services such as sewers and water, there is a captive user base that has little ability to find a lower cost

alternative provider.<sup>4</sup> Similarly, for other types of tax-exempt bonds issued to fund projects such as hospitals and parking garages, fees or service fees can be hiked to cover payments.

Finally, default rates are low because incentives are heavily skewed for all involved parties to see issuers cover their debts. An issuer such as a city or school district cannot go out of business and must maintain positive relationships with creditors. Given the bankruptcy process detailed above, they are also typically prevented from reducing debts or even interest through the courts. Higher government entities, such as states, are loath to see smaller entities default, fearful of the contagion risk it might create, making borrowing more difficult and expensive for other small issuers. States are often quick to offer assistance, even for non-government-affiliated entities such as nonprofit hospital corporations, since ensuring health care availability is a high priority for local constituents.

## Could This Change?

The deterioration of local finances is causing some to question historical assumptions about default and recovery rates. Formal mechanisms to prevent defaults notwithstanding, the pervasiveness of the crisis undermines assumptions that financial assistance for strapped borrowers from a higher government entity such as a state or federal government will continue indefinitely. Further, local governments historically have a difficult time balancing budgets of their own volition, as tax hikes are politically unpopular and

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<sup>3</sup> Chapter 9 filings have been extremely rare, with only four during 2008 and six through the first three quarters of 2009, according to a February 10 article in *BusinessWeek*.

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<sup>4</sup> The ongoing struggle with Jefferson County, Alabama, provides a rare example of a municipality that has not been able to raise sewer fees adequately to cover its gaping costs associated with \$3.2 billion of sewer debt. However, repayment difficulties have been exacerbated by a perfect storm of downgraded bond insurers, complex derivatives, and corruption charges.

labor contracts/forces are sticky given high levels of union involvement. These difficulties are compounding, and bankruptcy is increasingly being considered an option. If even a handful of municipalities successfully reduce debts through the courts rather than accept the bitter medicine of spending cuts and tax hikes, an important taboo could be lifted.

State and local finances are in a nearly unprecedented state of decay, as issuers are seeing revenues decline at rates not experienced since the Great Depression. Overall, states have an estimated budget gap of \$162 billion for fiscal year 2010,<sup>5</sup> and estimates for 2011 are even higher. Although the federal government is estimated to have filled 30% to 40% of the void this fiscal year, the question is whether transfers of this size can continue. The situation has been fueled by the housing crash and rising unemployment, but some states never fully recovered from the last economic downturn in 2000–01. Some question whether existing debts can ever be repaid and warn that a tipping point is coming in states with political or legal barriers to balancing budgets. Last year, California was forced to issue scrip debt to pay its interest payments as its politicians were unable or unwilling to pass a new budget. The state's proposed budget for next year includes unrealistic income sources, such as federal transfer payments, that have no hope of being approved, suggesting future shortfalls. U.S. states are said to have at least \$1 trillion of unfunded pension liabilities, with some estimates at multiples of this amount. The ability of states to bail out local issuers is being tested as never before.

At the local level, politicians who cannot see a way out of current deficits are starting to question the value of relationships with creditors and see

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<sup>5</sup> Pew Center on the States, "Beyond California: States in Fiscal Peril," November 2009.

debt write-downs as a better solution than state supervision and forced fiscal austerity. The current situation of Harrisburg, Pennsylvania, is illustrative. The city currently has sufficient reserves to service debts relating to an incinerator facility, but projections show substantial continuing revenue shortfalls. The city has guaranteed bond payments totaling \$68 million in 2010, which is more than the city's entire operating budget. In the past, the city might have raised taxes to cover these shortfalls, but local officials now question if the local population might respond to tax increases by decamping for the suburbs. Other issuers are watching these developments closely.

The city's fear is supported by new evidence that states and cities cannot simply raise taxes indefinitely to cover shortfalls. A recent study (the first ever on interstate wealth migration in the United States) found that the average wealth of households that left New Jersey in recent years was 70% higher than the average wealth of households that moved to the state—a result linked to rising tax rates. Depressed property valuations are among other factors that could see population migrations from fiscally challenged areas. In communities where residents are underwater on their mortgages, incentives are growing for citizens to simply move away. In one sign that this may already be occurring, Florida has seen its population shrink for the first time since World War II.

Rating agencies are responding to this bleak mixture of short- and long-term problems with an increasing number of downgrades. Last year, Moody's downgraded 279 state and local government tax-backed bonds, up from 81 in 2008, and downgraded 300 revenue-backed issues, up from 133 the year prior. The \$200 billion of tax-backed bonds and \$56 billion of revenue bonds together represented roughly 9% of outstanding issuance. Downgrades included

the general obligation debt of the states of California, Illinois, Nevada, and Ohio. Standard & Poor's downgraded a record 466 municipal bonds during just the first six months of 2009, up from 262 issues during all of 2008.

## Are Things Really So Bad?

Municipalities are increasingly discussing the idea of bankruptcy. However, these discussions have been rare and not targeted at bondholders. Historically, local governments have made this threat in the context of untenable labor contracts and pension obligations, but rarely has it been invoked. Labor contracts can be renegotiated within a bankruptcy environment, but solutions are frequently achieved before reaching this extreme, often with state intervention. And even when bankruptcy is filed, bondholders may not face debt reduction.

If bankruptcy is reached, recovery rates are likely to be very high, especially for high-quality issues. Recovery rates for general obligation bonds that defaulted were estimated by S&P to be 100% over a 30-year period. In a different study, the average recovery rate was 85% for investors in insured municipal bonds, which drops to 70% without insurance.<sup>6</sup> In the famous bankruptcy of Orange County, California, creditors received 100% plus accrued interest. Vallejo, California, which has filed for protection, is asking to reduce interest rather than principal on its obligations. Courts have an incentive to treat creditors well because the restructured entity almost immediately will need to reestablish funding programs.

From a technical perspective, there are also tailwinds for municipal bonds, which may continue to support prices despite higher credit

risks. The first of these is the weak state of federal finances, which may lead to higher tax rates. This would boost the tax advantage offered by municipals, and thus their prices. The advent of the taxable BAB program, part of the stimulus package of 2009, has also had a significant and potentially long-lasting impact on the municipal market. Under the BAB program, entities issue bonds whose income is taxable at the federal level, and the federal government reimburses the issuer 35% of interest paid on the debt. These instruments have proven very efficient for issuers, opening up a new investor base such as pension plans and foreign funds. The BAB program has accounted for 32% of new municipal supply during fourth quarter 2009, and up to 33% of 2010's issuance may be in this format (Exhibit 5). Increasing the relative scarcity of tax-exempt bonds has boosted their prices. Under the recently released 2011 budget from President Obama, this program would become permanent, albeit with a smaller 28% subsidy.

A final reason why investors might not despair is the perverse twist that the worse things get, the more politically popular bailouts from higher entities of government become. Pennsylvania's program for strapped cities is a local example. On a federal level, the government has shown a willingness to step in and bail out overleveraged localities. A large part of the 2009 stimulus served this purpose, and there are hopes that another package might be created should the situation worsen. The danger is that some states, such as California, are already banking on such a bailout and have gone to the extreme of using assumed federal payments to fill projected holes in their budgets. If these payments are not forthcoming, investors will (at a minimum) suffer another round of budget delays and potential increases in borrowing that could lead to further rating agency downgrades.

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<sup>6</sup> Richard Lehmann, "The Coming Bond Default Wave," *Forbes.com*, September 18, 2008.

## Would Better Disclosure Help?

Disclosure for municipal bond investors is more lacking than that for other fixed income investments such as corporate bonds. As a result, some have speculated that better and more frequently updated information on municipal finances might force issuers to address problems more quickly and could even result in lower risk premiums for issuers. Municipal issuers are required to present an annual financial statement and notify investors of any material event such as a missed coupon payment. However, enforcement mechanisms are lacking to guarantee even this limited disclosure, as no financial penalty is assessed for borrowers that are late or fail to file, resulting in widespread avoidance. A 2008 study from DPC Data, a municipal bond data provider, found that around 25% of issuers did not provide documentation for three or more years, led by borrowers with the riskiest credit.

Would better disclosure help the market? Many industry observers, including the Securities and Exchange Commission (SEC), seem to think so. Concerned about the rising risk of municipal defaults, last summer the SEC preliminarily voted for tougher disclosure rules over the strenuous objections of many in the industry. Many investors in municipal bonds may not realize that not only is current disclosure lacking, but historically it was even worse, which explains why underfunded state and local pension plans have become a hotly debated topic only in recent years. But even with better disclosure about their finances, municipalities will continue to benefit from accounting standards that allow great flexibility with respect to reporting long-term liabilities such as pension and health benefits.

## Implications for Investors

Credit quality is important for municipal bond investors, as are precedents for how creditors are treated during municipal bankruptcy proceedings. Defaults have been limited on a historical basis, but the market is entering uncharted territory with respect to deteriorating local finances. Options are narrowing for stressed borrowers, and higher taxes and spending reductions may not solve all their problems. In a worst case scenario, states that allow a small number of local entities to reduce principal or interest on outstanding debts could see increased bankruptcy filings.

Even if defaults do not rise, weakening credit quality will likely impair the value of tax-exempt holdings for investors. While credit downgrades may not signal higher default risk (as in the case of states that cannot go bankrupt), they may hint at greater debt issuance, impacting bond prices. Whether credit spreads on California's \$64 billion of outstanding general obligation bonds widen in response to credit downgrades or because of increased supply may not matter to investors. Exhibit 6, which charts credit spreads for California, Illinois, Michigan, and New York during 2009, shows that bond values fell as downgrades and supply increased.

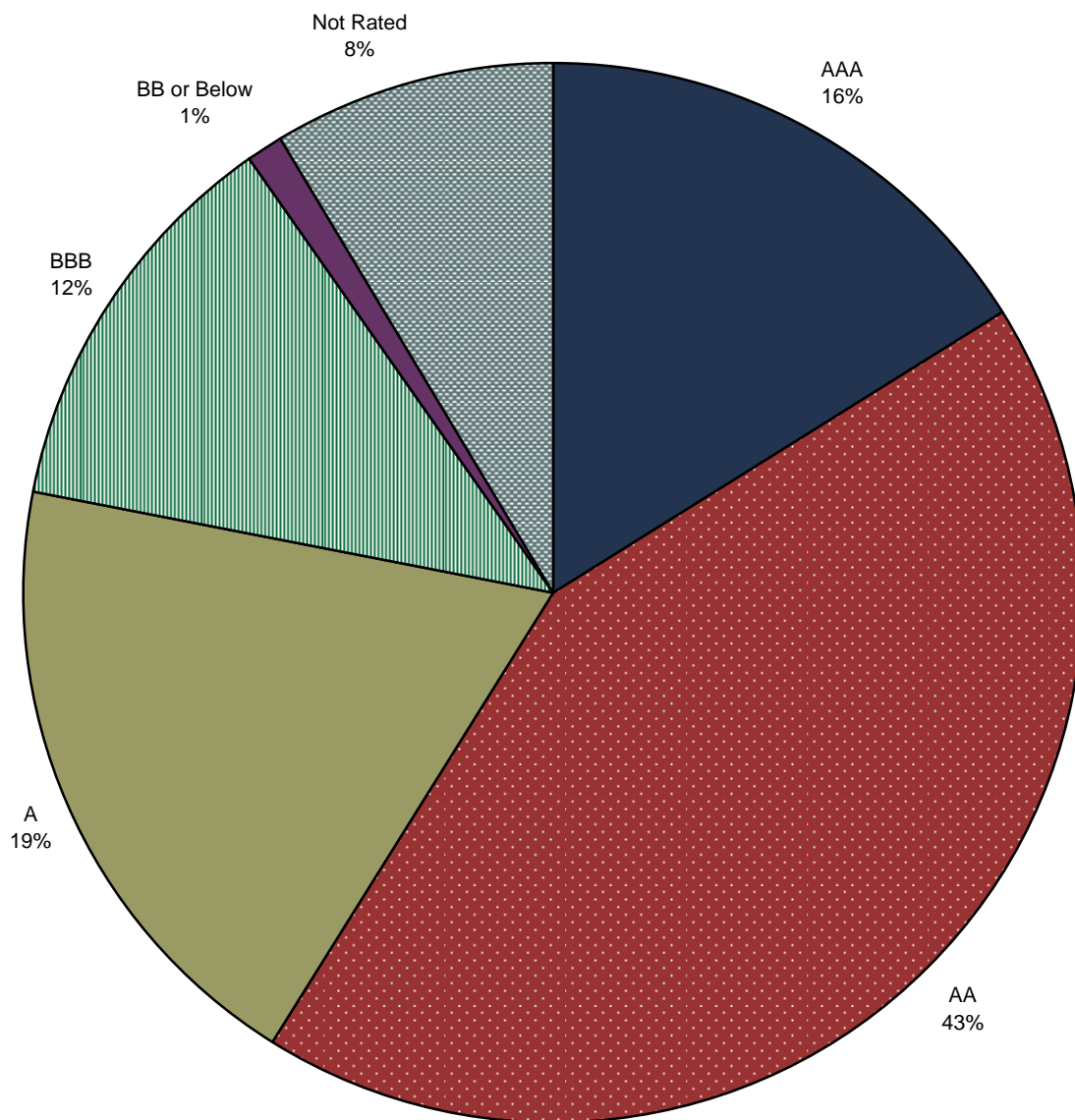
The good news for investors is that while default risks are rising, they are likely to remain concentrated in areas that are easily avoided. General obligation issuers almost never default, and when they do, recovery rates are high. Investors should stick to high-quality general obligation and revenue bonds, and consider an issuer's finances. While states cannot default, they can issue increasing volumes of debt. Investors looking at revenue bonds should stick to essential services and avoid lower-quality issuers, including speculative development issuers. Building a diversified portfolio is important, not only because of the impact that downgrades and issuance might

have on spreads, but also because a concentrated portfolio faces risks from creditor-unfriendly bankruptcies. Default risks are highest for unrated non-government-backed issuers, and among rated bonds in the housing and health care sectors. There was a time when lower-rated instruments offered value, but spread compression has eliminated much of the opportunity (Exhibit 7).

Finally, technical drivers are supporting the tax-exempt market, such as the advent of the BAB program and the potential for higher taxes. These drivers had a large impact on the market in 2009, and we expect they will continue to be a force in 2010. Investors staying the course in municipals should be able to avoid most hazards, but this will require greater management skill than in the past. ■

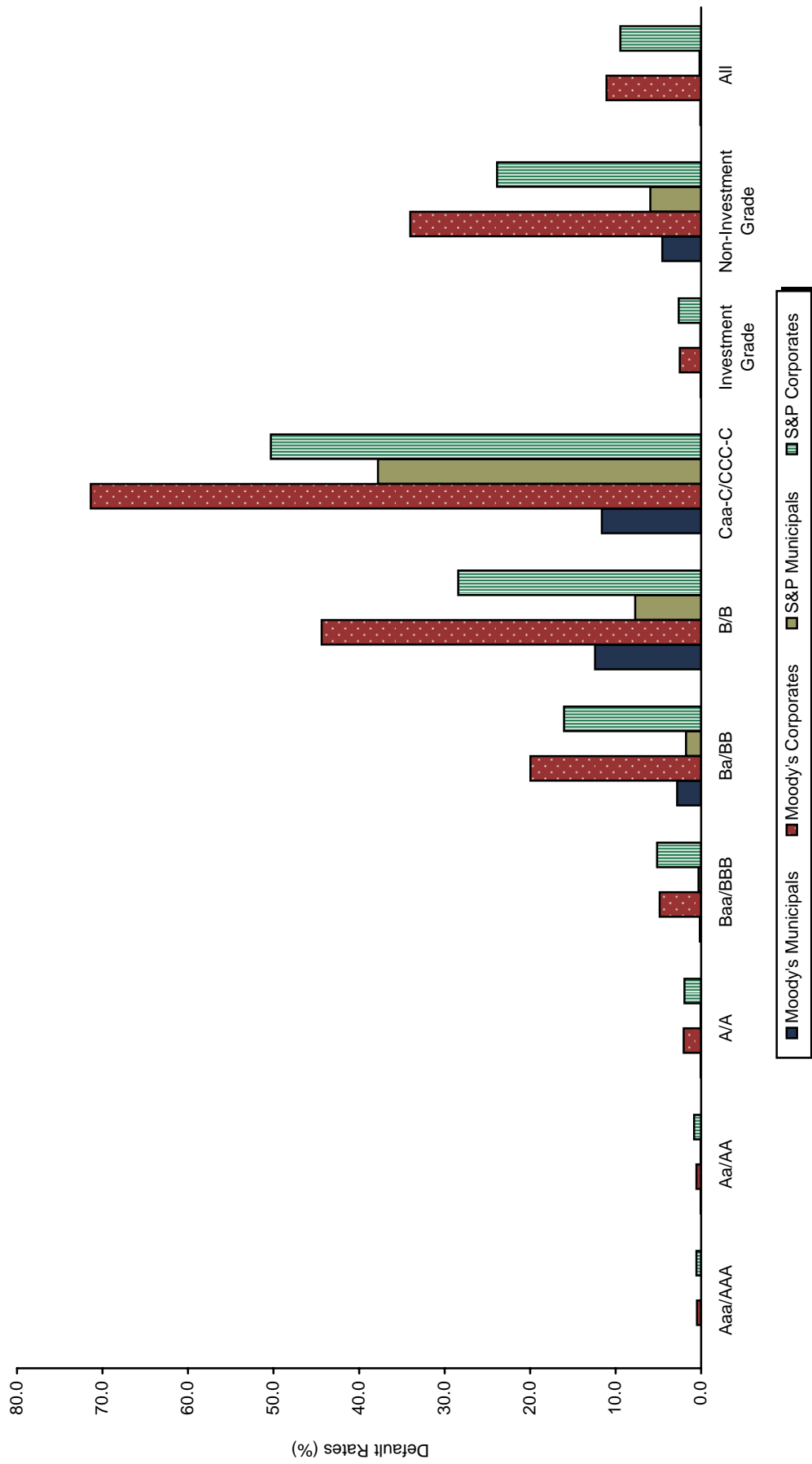


**Exhibit 1**  
**Outstanding Municipal Issuance by Credit Rating**  
November 30, 2009



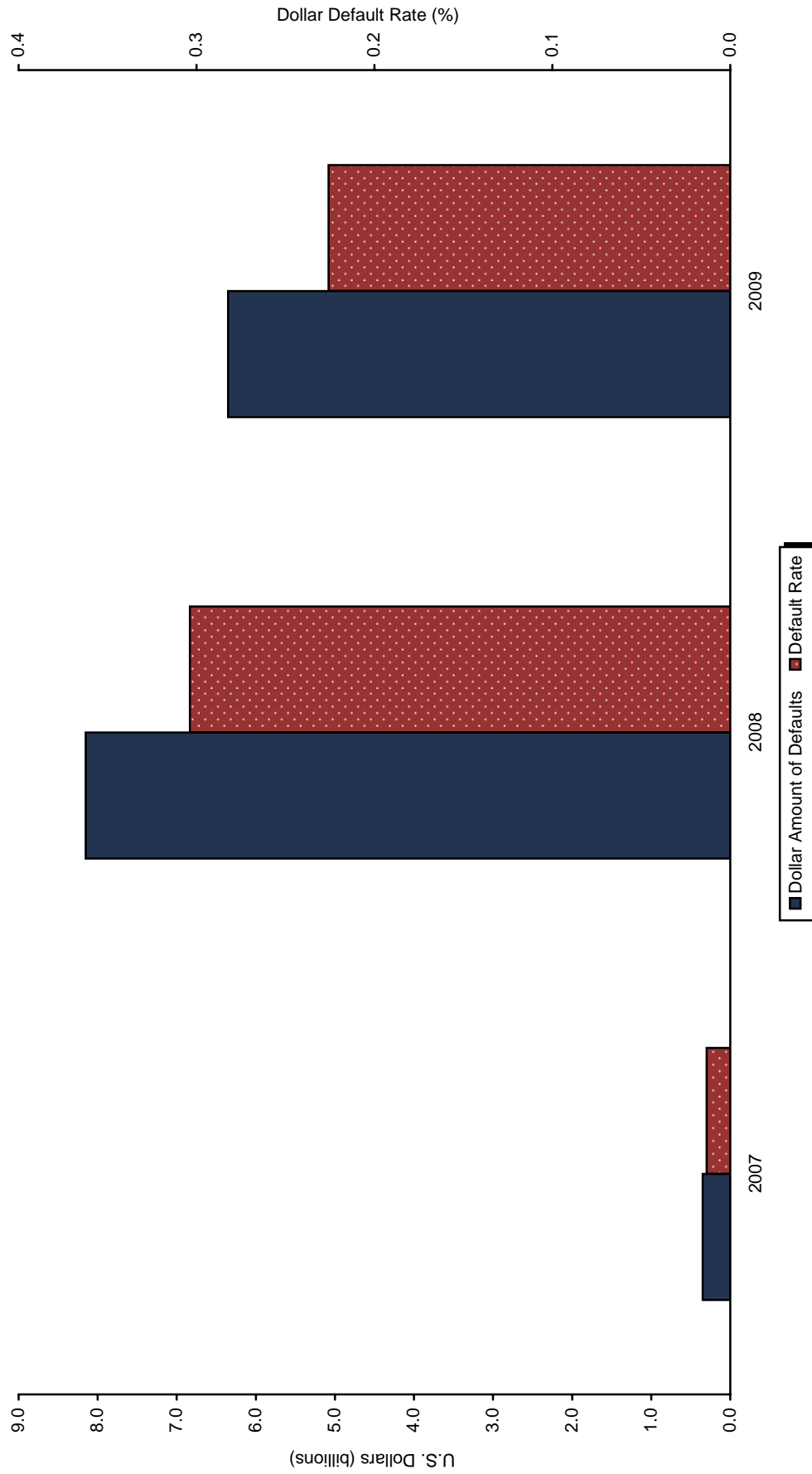
Source: BofA Merrill Lynch.

**Exhibit 2**  
**Average Cumulative Ten-Year Default Rates by Credit Rating and Agency**



Sources: Moody's Investors Service and Standard & Poor's.  
 Note: Default rates are calculated from 1970 to 2009 for all Moody's data, from 1986 to 2008 for S&P municipal bonds, and from 1981 to 2008 for S&P corporate bonds.

**Exhibit 3**  
**Total Municipal Bond Defaults and Default Rates**  
 2007-09



Sources: Bloomberg L.P. and SIFMA.

## Exhibit 4

# U.S. States Authorizing Chapter 9 Bankruptcy

As of February 2010

### Authorizing Chapter 9

Alabama  
Arizona  
Arkansas  
California  
Colorado  
Connecticut  
Florida  
Idaho  
Iowa  
Kentucky  
Louisiana  
Michigan  
Minnesota  
Missouri  
Montana  
Nebraska  
New Jersey  
New York  
North Carolina  
Ohio  
Oklahoma  
Oregon  
Pennsylvania  
South Carolina  
Texas  
Washington

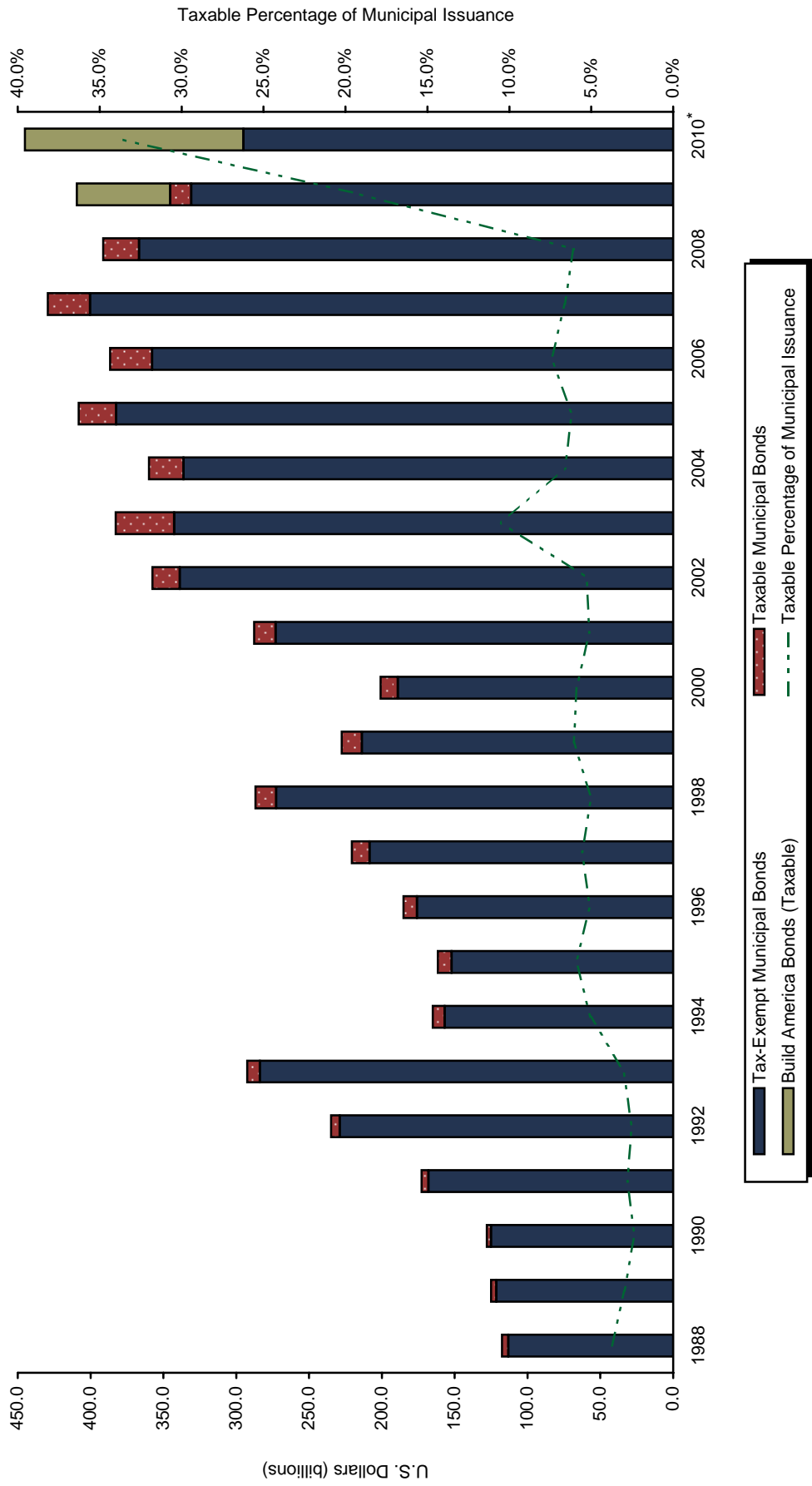
### Not Authorizing Chapter 9

Alaska  
Delaware  
Georgia  
Hawaii  
Illinois  
Indiana  
Kansas  
Maine  
Maryland  
Massachusetts  
Mississippi  
Nevada  
New Hampshire  
New Mexico  
North Dakota  
Rhode Island  
South Dakota  
Tennessee  
Utah  
Vermont  
Virginia  
West Virginia  
Wisconsin  
Wyoming

Sources: Compiled from several law firms including Mintz, Levin, Cohn, Ferris, Glovsky, and Popeo, P.C.; Orrick, Herrington & Sutcliffe LLP; and King & Spalding LLP.

Notes: The lists above are based on the general rule in each state. The scope of statutes in each state differs, such that within states authorizing Chapter 9 filings, some government entities may be ineligible, and in states listed as not authorizing such filings, under some circumstances certain entities may be able to file.

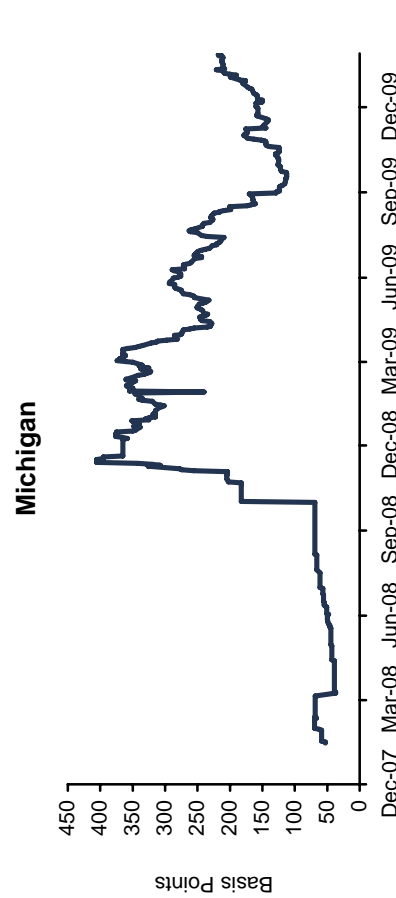
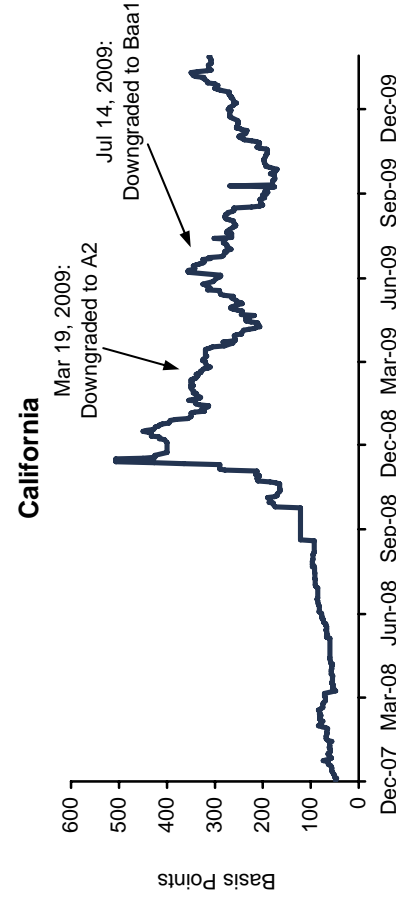
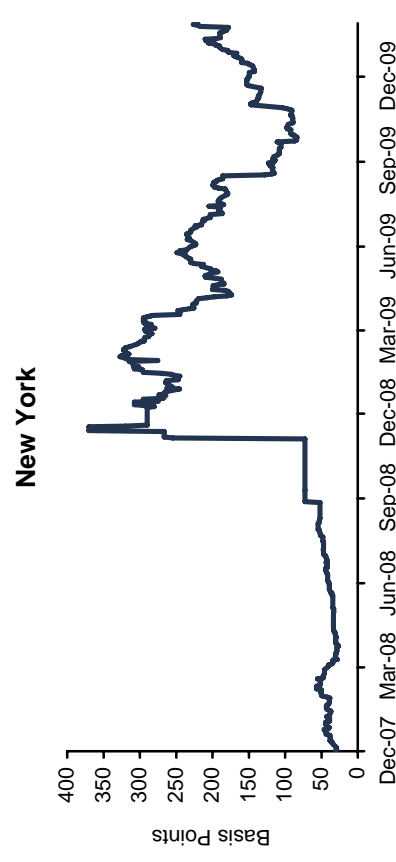
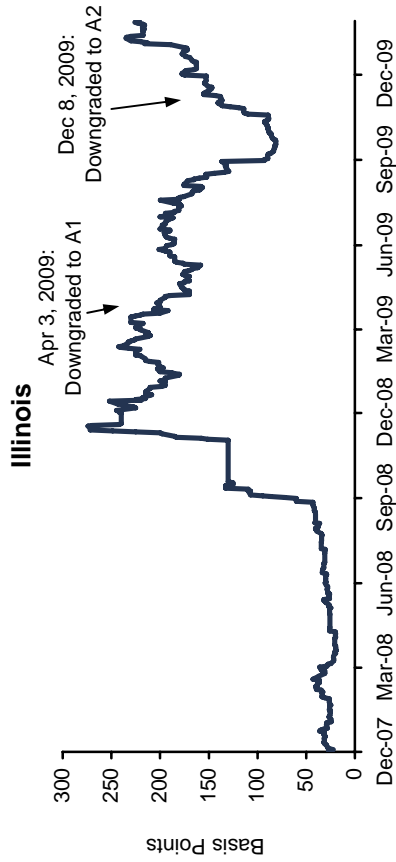
**Exhibit 5**  
**Taxable versus Tax-Exempt Issuance**  
 1988-2010



Sources: Barclays Capital, SIFMA, and Thomson Reuters.  
 \* Data for 2010 represent an estimate provided by Barclays Capital.

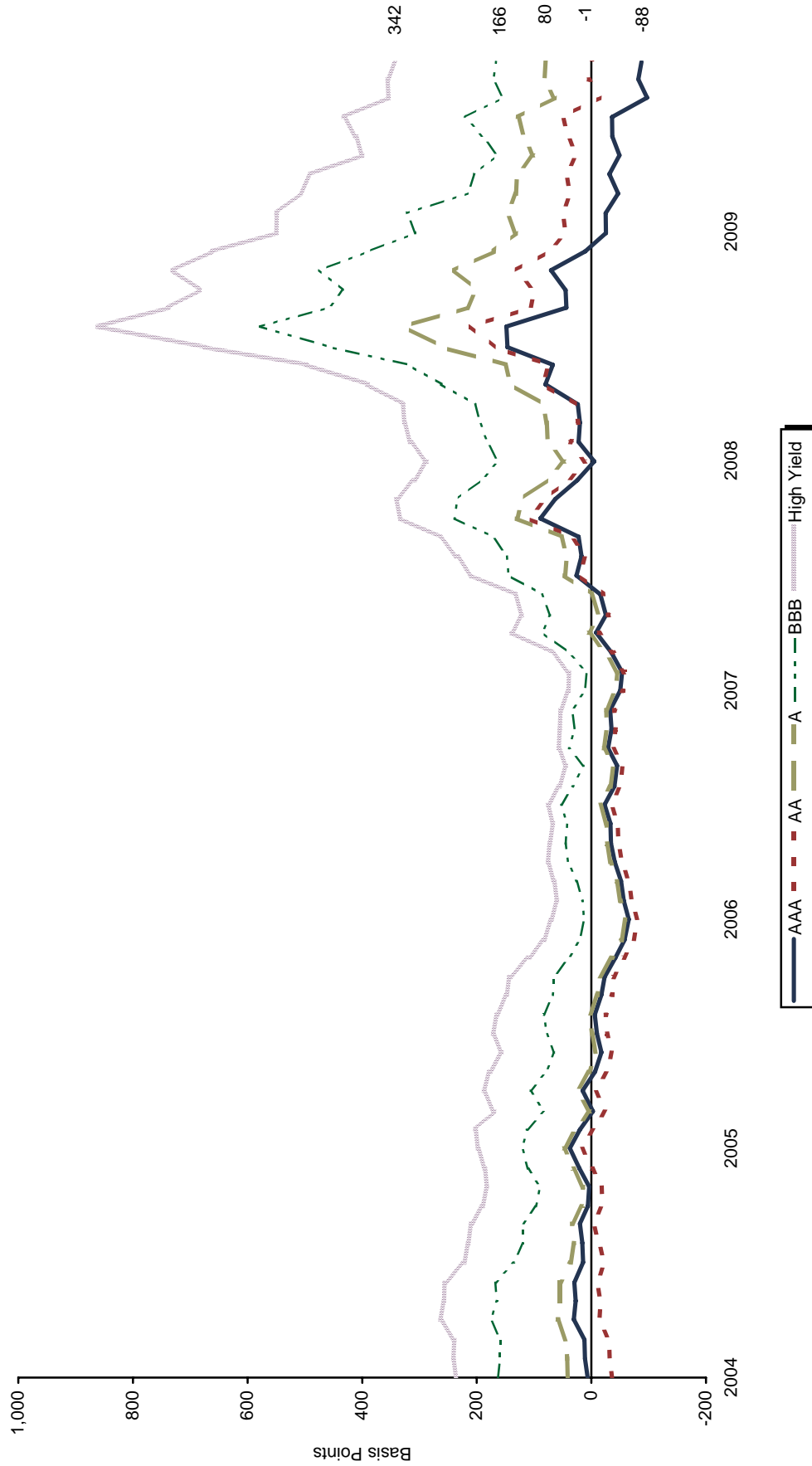
**Exhibit 6**  
**State Credit Default Swap Spreads**

December 31, 2007 – February 28, 2010



Sources: Moody's Investors Services and Thomson Datastream.  
 Notes: All downgrade data are provided by Moody's. Data for Michigan begin February 13, 2008.

**Exhibit 7**  
**Municipal Bond Yield Spreads by Credit Rating Relative to Ten-Year Treasury Bonds**  
 May 31, 2004 – February 28, 2010



Sources: BofA Merrill Lynch and Thomson Datastream.