## Municipal Bond Market

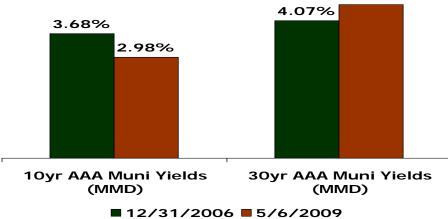
Review and Outlook May12, 2009

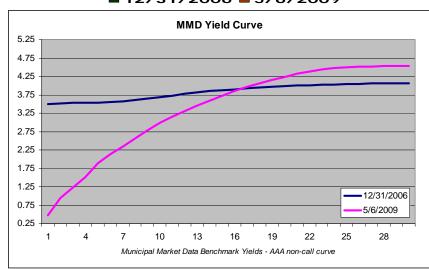
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The Municipal Bond Market Has Changed Dramatically Over the Last Two Years:

- Natural AAA Munis: 10-year bonds and shorter performed relatively well, with yields dropping.
- Bonds longer than 10-Years declined in value as yields increased.
- Individual retail investors have increasingly become the only consistent source of demand and liquidity.
- Most retail investors are focused on quality and lower risk: buying short term high quality bonds.
- Institutional selling pressure has been intense from 2007 – 2008 for bonds beyond 10-Years in maturity. Poor liquidity and supply/demand imbalances have pushed yields higher.
- Long-term Munis yields are elevated relative to U.S. Treasury yields:
  - 10-Year moved from 82.3%<sup>1</sup> to 94.3%<sup>1</sup> of UST.
  - 30-Year moved from 90%² to 111%² of UST.
  - □ These ratios are improved from over 200% at year-end, 2008.
- Market is Fragmented: Short vs. Long / High Quality vs. Low Quality / Large Issuers vs. Small Issuers.





Municipal Market Data Benchmark Yields - AAA non-call curve

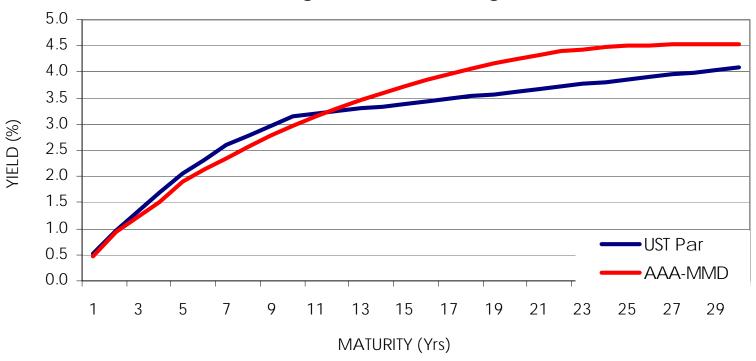
4.54%



## TAX-EXEMPT MUNI YIELDS EXCEEDED U.S. TREASURY YIELDS ACROSS THE YIELD CURVE:

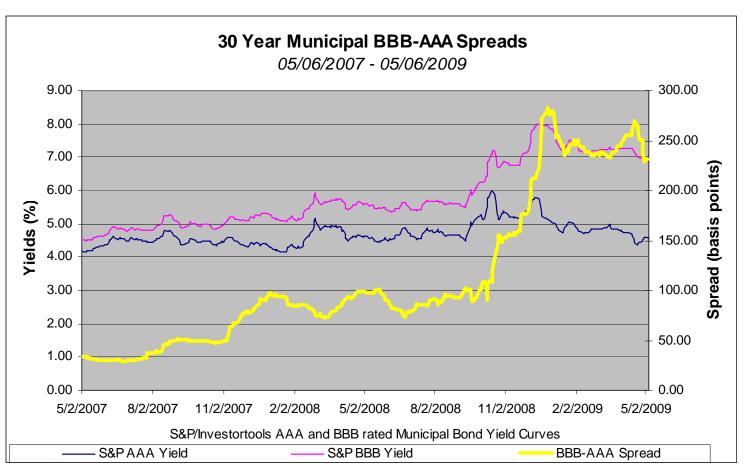
#### Par US Treasury Yield Curve vs AAA-MMD Yield Curve

(using 05/06/2009 closing levels)



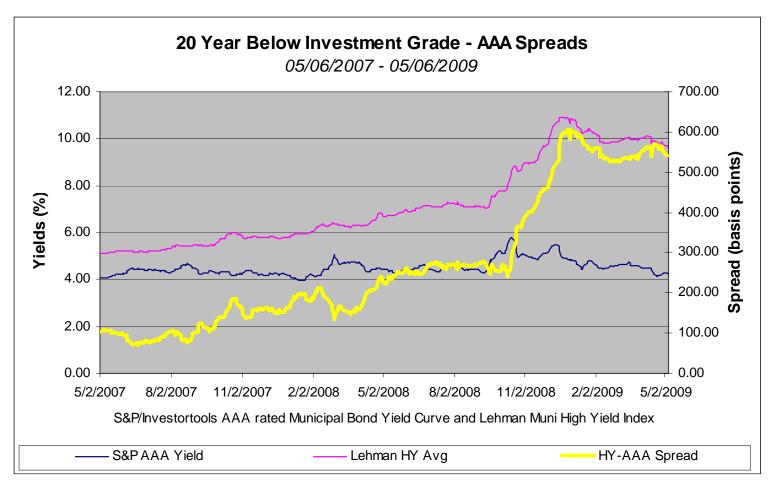


## BBB MUNICIPAL BOND SPREADS HAVE WIDENED TREMENDOUSLY:





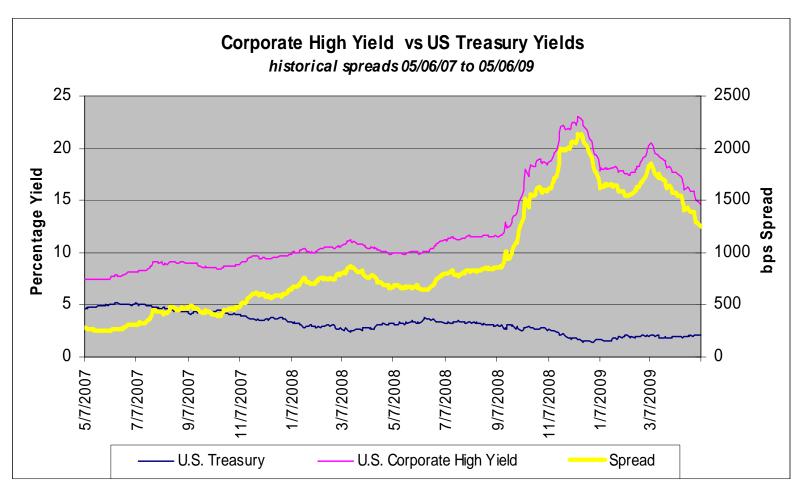
## BELOW INVESTMENT GRADE MUNICIPAL SPREADS WIDENED TO RECORD LEVELS:



Past performance is no guarantee of future results.



## CORP. HIGH YIELD SPREADS ALSO WIDENED. NOW HAVE ALREADY TIGHTENED SIGNIFICANTLY:





# **Key Question Among Investors: Is this Market Overshooting, or Forecasting Future Problems?**

- Technical Pressures have been Intense and widespread:
  - Monoline Insurance Company Downgrades: Flooded the marketplace with mostly A-range and BBB-range municipal bonds. Widened credit spreads due to sudden oversupply. Rattled investor confidence.
  - <u>Wirehouse Broker/Dealers in Disarray</u>. Reducing capital commitments to municipals. Saddled with mortgage-backed losses in other departments of the firms. Liquidating their own inventories of bonds. Adding to the institutional selling pressure, and reducing liquidity in the marketplace.
  - <u>Hedge Funds Unwinding</u>. Had grown into a powerful force in the municipal market. Short term rate volatility and monoline downgrades made sustaining high levels of leverage impossible. Outperformance of U.S. Treasury bonds created a short squeeze. Simultaneous unwinds into a fragile market pressured pricing lower.
  - Crossover Buyers Remained on the Sidelines: Insurance companies experiencing lower profitability. Hold mortgage backed securities and CDO's which are difficult to liquidate. Need to maintain or increase cash balances to fulfill regulatory requirements and be prepared to pay claims.
  - > <u>Auction Rate Freeze-Up</u>: Creates supply of unusually cheap new issues.
- Several of the problems described above still exist. However, the market has begun to improve. Many of the factors above have run their course, and therefore no longer pressuring the market lower.



### G.O. Credits: Key Fundamental Strengths

#### State General Obligation Debt

- > 49 out of 50 States require a Balanced Budget.
- Array of tools with which to raise revenues:
  - > Taxes: Income; Sales; Excise
  - > Fees
  - Surcharges
- Most States: Debt Service is at or near the <u>top of the priority list</u> of expenditures: Louisiana – D/S ranks 1st. In California, D/S ranks 2nd only to education.
- As revenues fall in recession, States have begun taking <u>corrective action</u><sup>1</sup>:
  - > 2009 State Budgets saw an average 0.1% decrease in expenditures.
  - 22 States further reduced 2009 budgets by cutting \$12.1 billion in expenditures.
  - > Taxes increased by \$4.5 billion in FY 2008, and \$1.5 billion in FY 2009.
  - > Several large States are currently considering additional tax increases.
- Rainy Day Funds: Collectively, States had \$50.8 billion in reserves going into FY 2009, which equates to 7% of expenditures<sup>1</sup>.
- G.O. Debt is a valid, binding obligation of the entity which issued it.
- States are not authorized under Chapter 9 to File for Bankruptcy protection<sup>2</sup>.
- States value maintaining access to the capital markets.

<sup>1</sup> Source: National Association of State Budget Officers report - Fiscal Survey of States, December 2008.

<sup>2</sup> Source: http://www.uscourts.gov/bankruptcycourts/bankruptcybasics/chapter9.html

### Local G.O. Credits: Key Fundamental Strengths

- <u>Local General Obligation Debt:</u>
  - Local G.O. Debt is secured by ad valorem real estate taxes without limit as to rate or amount.
  - Property taxes: are the <u>backbone of local G.O. revenues</u>, and tend to be more stable than income or sales taxes.
  - Not a one-to-one relationship between property tax amount and property values.
  - Unpaid property taxes will ultimately result in the loss of the property by the owner.
  - > If a bank owns a foreclosed home, it is highly likely that the bank will pay the property taxes.
  - ▶ Investment Grade Local G.O.'s: Debt service represents on average 7% of expenditures¹.
  - > State Governments are reluctant to allow their political subdivisions to falter: State Oversight Boards created for NYC in the '70's, Philadelphia in the '80's, and Pittsburgh in 2004.
  - ▶ Local school district GOs often have significant support and/or supervision from the State.

1 Source: Standard & Poor's



### Healthcare Sector: Wider spreads and over-supply

- Hospital Bond Sector:
  - > As a whole, provides an essential public service.
  - Secured by operating cash flow more than half of which from Government Payers.
  - > Additional support comes from 1st mortgage liens on facilities, equip. and accounts receivable.
  - Demographic trends growth and aging of the population favor increasing utilization. Overcapacity has not been a material issue in most locations.
  - Hospitals as a class have proven remarkably resilient during challenging times.
- Challenging Credit Developments Have Caused this Sector to Underperform the Muni Recovery:
  - Rising unemployment causes percentages of insured patients to fall.
  - > Rising unemployment and economic weakness causes elective surgeries to be deferred.
  - > The above forces pressure the already thin operating margins of municipal hospitals.
  - > Municipal hospitals tend to take on the bulk of the burdens of charity care in each region or city.
  - > Balance sheet resources have been eroded by charity care and investment losses.
  - > Auction rate security freeze-up and penalty rates was harmful to many municipal hospitals.



#### DEFAULTS IN THE GREAT DEPRESSION<sup>1</sup>

- The largest number municipal defaults occurred during the Great Depression
  - Between 1929 and 1937 almost 4800 units of government defaulted, approximately 7% of outstanding debt
  - Estimated losses on defaulted debt was about 0.5%
  - Most defaults did not last very long
- The current economy has many stabilizing mechanisms that were not available to deal with the economic downturn that began in 1929. These mechanisms include:
  - Insurance of bank accounts by the Federal Deposit Insurance Corporation.
  - Unemployment insurance.
  - Social Security and Medicare.
  - The commitment of the Federal Reserve Board and U.S. Treasury to provide liquidity as needed.
  - Coordination by central banks around the world.

Average State and Local debt in early 1930's	\$18.5 Billion
Annual principal and interest payments	\$2.0 Billion
Total debt of units that defaulted 1929- 1937	\$2.85 Billion
Defaulted debt plus past due interest 1929-1937	\$1.39 Billion
Total debt of units still in default in 1939	\$0.2 Billion
Maximum past due principal and interest payments	\$320 million
Maximum past due as a % of average debt	1.7%
Maximum past due as a % of annual debt service	16%
Estimated losses on defaulted debt	\$100 million

- A review of the Great Depression suggests that state and local governments have strong incentives to maintain access to the credit markets. Thus, governments tend to cure any missed D/S payments as soon as possible:
- ➤ <u>Great Depression Experience</u>: Of the 48 cities with population over 25,000 that defaulted during the Depression era, all were out of default by 1938.



#### **Municipal Default History:**

- Great Depression In Contrast to Today's Recession:
  - Real GDP was declining at 30% annually, versus 3.5% 5.5% range today.
  - Limited and delayed policy responses during the Great Depression, in comparison to the strong policy responses we have seen today.
  - Unemployment rose to 25%<sup>1</sup>. Today at 8.9%. Forecasts that it may peak in the 10% area<sup>2</sup>.
  - Property Tax Delinquencies reached 26% in the Great Depression (vs. 1% 2% in Jan, '09).
  - No Public Safety Net available during the Great Depression.
  - Post Depression Period: From 1945 1965, cumulative default rate for munis was 0.4% 3.
  - From 1970 to 2006, the cumulative 10-Year Default rates per rating category were<sup>4</sup>:
    - AAA 0.00%
    - AA 0.06%
    - A 0.03%
    - BBB 0.13%
    - BB 2.65%
    - B 11.68%
    - CCC 16.58%
- 1 Source: U.S. Bureau of the Census, Historical Statistics of the United States, Colonial Times to 1957
- 2 Source: Bloomberg
- 3 Source: Citigroup Research
- 4 Source: Moody's Municipal Credit Special Report.

#### Municipal Market has begun to recover in 2009: Primary Changes in 2009 have been Liquidity, Investor Confidence, and Relatively Lower Supply Levels:

#### <u>Liquidity:</u>

- Major B/D's have agreed to buy back over \$60 billion of ARPS: Unfreezing this investor capital.
- Retail demand has grown due to high and rising taxable equivalent yields. AMG data has shown consistent investor inflows to tax-exempt municipal products year-to-date in 2009.
- > Tax rates may increase for the top tax brackets. Bush Tax cuts are sun-setting in 2010.
- Broker/Dealer bond inventories have thinned out significantly. Although consolidation and smaller balance sheets have reduced dealer participation, the remaining traders are looking to re-load.
- ▶ U.S. Treasury: \$50 billion backstop of money market funds was critical to putting a floor under the credit markets after the Lehman Brothers Bankruptcy.
- > Federal Reserve Interest Rate Policy: T-E money market fund balances rose to a high \$500 billion, while MMF yields declined to near 0%. Encouraged investors to re-examine fixed rate bonds.

#### New Issue Supply:

- Initial expectations were for overwhelming supply to pressure the muni market further down in 2009.
- New Issues are actually down approximately 16% to date on a year-over-year basis.
- Waves of muni refinancing supply had made substantial progress in MARS takeout in 2008.
- Muni deals (and their associated projects) have been postponed indefinitely due to the fragility of the municipal market, high yields, wide credit spreads and limited demand.
- Stimulus Act has helped municipalities start to deal with severe budgetary pressures without tremendous growth in debt issuance yet.



#### Federal Support for the Municipal Market has Helped:

- □ <u>American Recovery and Reinvestment Act of 2009</u> ("the Stimulus Act") provides certain benefits to municipalities. Direct and Indirect offsets to municipal budgets include¹:
  - \$144 Billion for State & Local Fiscal Relief.
  - > \$111 Billion for Infrastructure and Science Spending.
  - > \$59 Billion for Healthcare Spending.
  - \$53 Billion for Education and Training.
  - Some relief from the Alternative Minimum Tax ("AMT") was recently passed: In addition to raising the exempted income levels, Congress created a two year window during which Private Activity Bonds may come to market as *non-AMT*. <sup>2</sup> Helps to broaden the investor base.
  - Housing bonds' ability to come to market as non-AMT was previously passed (Housing Recovery).
  - Ability for issuers to access the taxable bond market using "Build America Bonds." This program has highlighted the relative cheapness of munis, and is having a stronger influence than expected.
  - Using the U.S. Treasury to provide a backstop to municipal credit is also an idea under discussion and development. Barney Frank is one leading supporter of this effort.<sup>3</sup>
  - Municipal governments account for 15% of employment, approx. 12% of GDP, and provide for the operation, maintenance and expansion of much of the country's infrastructure.⁴

1-2 Source: www.recovery.gov 3 Source: *The Wall Street Journal* 

4 Source: Barron's

### Muni Market Recovery Has Been Uneven:

- Focus of investors has been on large names, high quality bonds, well known issuers.
- Build America Bonds tend to benefit high quality issuers in sizes of \$250 million or more.
- Hospitals underperforming significantly. Hospital bonds do not qualify to issue "BAB's".
- Smaller schools, charter schools, smaller taxing districts do not have market access. Bonds of this type are still trading at or near distressed levels (50 cents to 75 cents on the dollar).

### In Spite of a Solid Recovery, Fragilities Remain:

- Market appears to have little depth outside of retail investors or retail-driven products.
- Broker dealer consolidation, exit of hedge funds and reduced participation from insurance companies contribute to this condition.
- Significant concerns surrounding municipal credit: Constant barrage of negative media articles regarding budgetary crises. Widespread lack of confidence in Ratings Agencies.
- ➤These factors may keep credit spreads wider than historical norms.
- Barney Frank bill could evolve in to something positive. Market does not want to see a monoline insurance company bailout.
- Any hint or debate regarding scaling back the municipal tax exemption would be devastating throwing recent progress sharply into reverse.