Using Research to Navigate a Dynamic Bond Market

by Guy Davidson, Director—Municipal Investments

Amid the unusual developments in the bond market during the past year, an actively managed bond portfolio guided by rigorous research and a disciplined investment process avoided the pitfalls of a greedy market while taking advantage of its opportunities—earning significant premiums along the way.

IN BERNSTEIN'S VIEW, BONDS ARE AN essential complement to stocks in an investor's overall portfolio. They provide income, and they stabilize the total portfolio against stocks' volatility. In addition, a bond portfolio can generate incremental return when actively managed using a sound research framework. The investing landscape of the past 12 months provides the backdrop for a compelling narrative of how active bond management can add value across all three strategic imperatives.

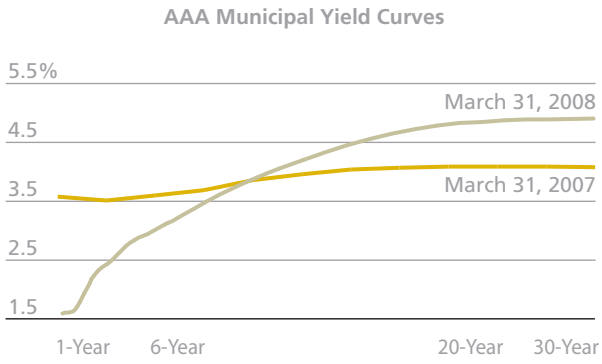
Setting the Stage: The Hunt for Yield

For several years prior to the summer of 2007, the stock and bond markets were unusually calm. With risk seemingly absent, many municipal bond managers were grabbing yield anywhere they could find it, purchasing both very long-term and lower-rated bonds. As a result, the shape of the municipal yield curve had become flatter than it had been in decades: With so many eager buyers, long bonds offered little additional yield versus short-term bonds of the same credit quality. Plus, the additional yield for riskier bonds fell to historically low levels.

But the reign of calm came to an abrupt end in July of last year, as the effects of the subprime crisis paralyzed the global markets.

Display 1

The shift from great calm to extreme fear caused the municipal yield curve to steepen dramatically



Estimates for AAA-rated insured municipal bonds
Source: Municipal Market Data Corp. and AllianceBernstein

Municipal bonds were not immune to the contagion: Buyers rushed to purchase safer (that is, higher credit-quality and shorter maturity) bonds, causing prices to rise in response to demand. And in its efforts to quell the subprime crisis, the US Federal Reserve aggressively cut interest rates several times, helping to further lift bond prices. As prices and yields are inversely correlated, by the end of March 2008, the yield curve had gone from flat to steep: Yields on short-term bonds had fallen, while yields on riskier longer-term bonds had risen (*Display 1*). Managers holding

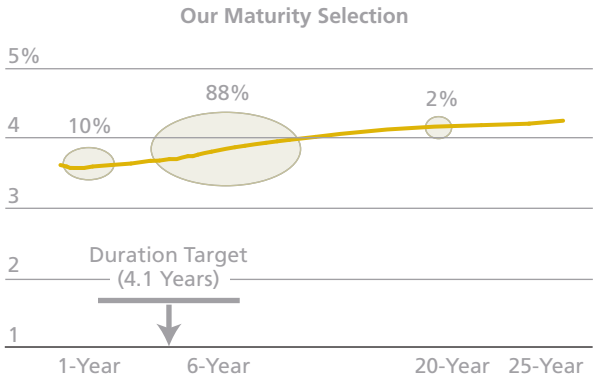
the lower-rated or longer-term bonds saw their prices plummet. The dramatic change in the yield curve and the increased demand for high-quality bonds reflected the switch in investor sentiment from greed to fear.

The Calm Before the Storm

Back in the spring of 2007, it was clear that market risk was absent from many investors' minds—they weren't demanding much more yield for holding long bonds. We determined that the modest additional yield being offered by long-term bonds was not sufficient compensation for the mounting risk that these bonds' prices could fall; when income and price return were both considered, our calculations indicated our investors would be best served if we concentrated holdings in the intermediate-maturity range, resulting in a four-year duration overall (*Display 2*).

Display 2

In early 2007 we concentrated the maturity structure of our portfolios



As of March 31, 2007
Source: Municipal Market Data Corp. and AllianceBernstein

Our analysis of credit quality revealed a similar story. By March 2007, credit spreads had become extremely compressed, meaning the premium being offered to take on the extra

Bonds in Brief

Bonds can present a complex landscape for investors, as their returns are influenced by so many factors. Here, we recap the key drivers that affect bonds' performance.

Interest rates: When interest rates rise, the prices of bonds that are outstanding fall, as the income they generate will be less than that from a new bond issued at the higher interest rate. The bond's price needs to fall as a way of compensating buyers for its lower income versus the new bond.

Duration: A measure of how much a bond's price will change for every 1% change in the interest rate. Expressed in years and mathematically computed, the longer a bond's duration, the greater its price change will be when interest rates change.

Yield: There are several measures of "yield" in bonds. We'll focus for simplicity on "yield-to-maturity": This is the internal rate of return of the bond investment, assuming the bond is held until maturity and that income is reinvested at a constant rate.

Credit quality: Third-party agencies rate the creditworthiness of each bond; bonds with higher credit quality are deemed safer in terms of the issuer's ability to make its interest payments and return the full value of the bond to the buyer upon the bond's maturity. Bond prices move up or down in line with credit-rating changes up or down.

Maturity: The length of time until a bond matures and the issuer pays back the face value of the bond. Long maturity bonds, typically those with maturities of 10 or more years, are riskier than bonds with lesser maturities in that their price moves are greater, owing to interest rate changes or credit downgrades. As compensation for this added risk, long bonds typically offer higher yields than bonds with shorter maturities. ■

risk of lower-quality BBB bonds versus the highest-quality AAA bonds was almost non-existent. In fact, an increase of only 0.08 in the yield of BBB bonds translated into a drop in prices that more than offset the benefit of higher income over one year.

With virtually no incentive to move down in credit quality, we chose to hold primarily very high-credit-quality bonds in our portfolio. The only BBB bonds we bought were those that our credit team determined were likely to be upgraded by the rating agencies or were stable and scheduled to mature soon.

We didn't make these portfolio decisions in response to a premonition about the subprime crisis: We made them based on our ongoing research and disciplined approach to investing. An intensive assessment of the after-tax total expected return (including yield and likely price movements) versus the risks led to our deep conviction about how to design the portfolio to ensure it played its three roles well: income, stability, and incremental return.

The Market Awakens to Risk

In July 2007, the scope of the subprime mortgage crisis began to sink in. As investors became increasingly aware of the potential risks, both the yield curve and credit spreads began moving. The markets convulsed as nervous investors sold risky assets and bought the safest investments they could find. US Treasuries were the prime beneficiary of investors' flight to safety, especially short-term bonds, whose yields fell significantly more than those of long bonds.

Key Concepts

> Fallout from the subprime crisis caused significant dislocations in the municipal bond market over the last year

> As risk entered the market, the shape of the yield curve changed dramatically—moving from flat to normal

> Thanks to the high average credit quality of our portfolios' holdings and their concentration around a four-year duration, our portfolios outperformed

> As the market shifted, we took advantage of opportunities to increase yield by adding high-yielding auction-rate securities and lower-rated but solid bonds

In the first quarter of 2008, a new series of shocks emanating from the subprime crisis hit the municipal bond market head-on. Bond insurers had long been a part of the municipal bond market landscape. By guaranteeing timely interest and principal payments from a bond whose underlying credit rating may have been only A or BBB, they assured the bond's higher AAA rating. For this insurance to have value, the investors counted on insurers remaining AAA rated. But insurers ran into problems when they expanded beyond the municipal bond market to subprime debt and that debt went sour. Suddenly the insurers were being downgraded—along with many of the bonds they'd insured (*Display 3, following page*).

Display 3

Bond insurers' ratings have declined

	Ratings of Bond Insurers*	
	Mar 07 Outlook	Mar 08 Outlook
Ambac	AAA stable	AA negative
FGIC	AAA stable	BB negative
FSA	AAA stable	AAA stable
MBIA	AAA stable	AAA negative
XLCA	AAA stable	BB negative

*As of March 2007, all three rating agencies gave the same ratings. March 2008 data (as of March 31) reflect the lowest rating assigned by one of the three rating agencies.

Source: Fitch Ratings, Moody's Investor Services, and Standard & Poor's

By March 2008, due to the subprime crisis and exacerbated by the downgrading of bond insurers, the difference in yield offered by high-quality investment-grade municipal bonds versus those of lower quality had widened sharply (*Display 4*).

Display 4

The subprime crisis caused municipal bond credit spreads to widen sharply

Through March 31, 2008; 10-year municipal securities

Source: Municipal Market Data Corp.

Assessing Insured Bonds' Risks

Insured bonds are structured assets with two parts—the insurance and the underlying credit of the issuer. In evaluating an insured bond for inclusion in a portfolio, Bernstein has always used our credit research to separately evaluate the insurer and the underlying bond.

In 2007, our analysis indicated that buying insured bonds whose underlying issuer was poorly rated didn't offer enough of a yield benefit versus those where the underlying issuer was highly rated, so we bought bonds of municipalities with solid underlying credit; insurance was not a material part of the instrument. As a result, the underlying credit rating of our insured holdings averaged a very high AA-/A+. When the bond-insurer storm hit, we knew that even if the insurance were completely stripped away, the value of our insured-bond holdings would not change materially. Thus, the downgrades did not significantly affect our portfolios. We further insulated our portfolios from exposure to any single insurer by virtue of strict portfolio construction guidelines that assured our portfolios were well diversified by bond insurer.

Where Risk Does Bring Reward

Unusual dislocations in the municipal bond market continued through the first quarter of 2008, including problems in auction-rate securities, troubles with variable-rate demand notes, and margin calls on leveraged municipal portfolios. Again, navigating these developments required intensive analysis, which uncovered some real opportunities.

Consider the municipal auction-rate market. Historically, these securities have been viewed as near-cash equivalents with interest rates that reset at some predetermined frequency, usually seven, 28, or 35 days, when an auction is held. Investors in these securities place bids indicating how much they want to buy and the yield they require. Once all the bids are in, the auction agent fills the lowest-rate bids first, then the next highest, and so on, until all the bids are filled. The rate at which the last bid is filled is called the clearing rate, and all the bidders receive that rate until the next auction. If there are insufficient bids for all the securities up for auction, the auction "fails" and the holders retain all the bonds at a maximum interest rate specified in each bond's indenture—the written agreement between a bond issuer and bondholders—until the next auction. Each bond indenture is different, and the maximum rate is based either on a formula typically tied to some short-term index (which results in a relatively low maximum rate) or on a specific fixed rate, which is usually quite high, 12% or 15%.

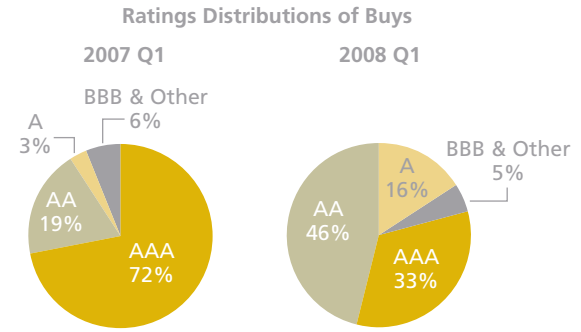
Capital-constrained investment banks abandoned the municipal auction-rate market in mid-February of 2008, causing these auctions to fail at record levels. As a result, tax-exempt yields on these securities were as high as 15%. We carefully evaluated the underlying credit quality of each issuer and the terms of each issue's auction, seeking to determine whether the yields were a function of true risk or of undue risk aversion.

Based on our analysis, we determined that those securities with high fixed maximum rates were attractive, while those with formula-based rates were not. When many of the auction-rate securities we first bought failed, they did so at very high rates, such as 15%. And, because their rates could jump to 15%, these securities attracted new investors, significantly reducing the risk of future failed auctions. Thus, we took advantage of the risk aversion of money market investors to add high-yielding auction-rate securities to our portfolios.

A second opportunity was in bonds with lower credit quality. Having avoided the negative impact of the downgrades in bond quality on our portfolios, we worked to exploit the downgrades to our advantage. With spreads on investment-grade municipals having widened sharply since July 2007, significant extra yield was available for going down in credit quality from AAA to BBB. Plus, the number of bonds being insured had fallen from 50% of new issuance over the last few years to only 25%—so the supply of lower-rated bonds on the market was greater. Many of these bonds were quite solid, and we took advantage of this singular opportunity to earn extra yield in our portfolios. A comparison of our buys in the first quarter of 2008 versus 2007 shows a significant increase—more than double—in bonds with credit ratings of less than AAA (*Display 5*).

Display 5

We found opportunities in downgraded bonds



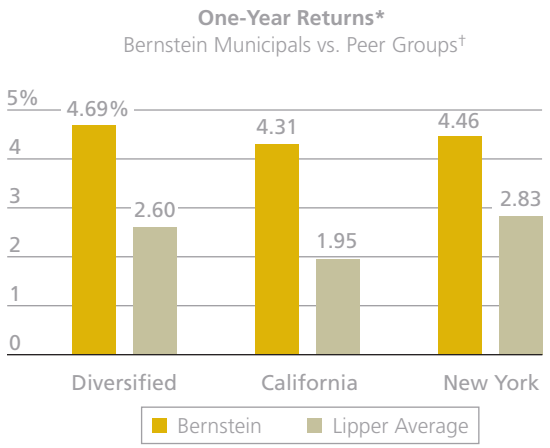
Source: AllianceBernstein

The Power of Active Bond Management

This period of extreme volatility in the usually earthbound municipal bond market provides a useful lens for examining how our research and the application of our long-term investing paradigm work to protect and build client portfolios. In this fast-moving environment, returns on our intermediate-duration municipal bond portfolios were among the best in their peer groups for the one-year period ending March 31, 2008 (*Display 6*).

Display 6

Our active management delivered in a turbulent time



Past performance is no guarantee of future results.
*Through March 31, 2008
†Bernstein Intermediate portfolios versus their Lipper peer group averages
Source: Lipper and AllianceBernstein

Bernstein commits substantial resources to active bond management: tracking the constantly shifting mix of risk and opportunity in the marketplace; assessing and monitoring the soundness of every bond we buy; and securing the best prices for the bonds we buy and sell. At the core of our operation is an established Bernstein strength: rigorous research. Our goal as active bond managers is to use research to identify values in the marketplace created by changes in price.

The advantages of active management are clear: It took only six months to move from one of the flattest yield curves in history to one with a normal shape and for credit spreads to move from an all-time low to more attractive levels. Thus, our concentrated maturity structure and high-credit-quality stance paid off. By optimizing our portfolios to avoid the pitfalls of this environment while taking advantage of its opportunities, we were able to create value for our clients. ■