

Turmoil in the Marketplace: What's Going on With Municipals?

By Annette Thau

Since last summer, defaults of sub-prime mortgages have given rise to a series of crises in the credit markets, whose ripples spread to sectors that, at first glance, would seem far removed from mortgages.

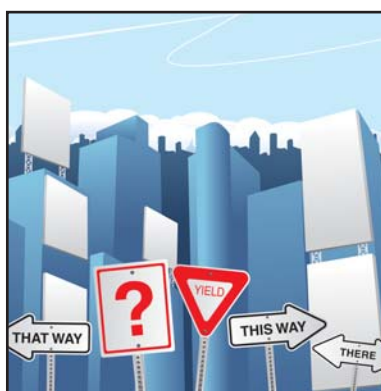
Among those sectors is the municipal bond market (munis, for short). In particular, the financial losses incurred by bond insurance firms—firms that guarantee municipal bonds—placed the entire municipal bond market under a cloud.

There has not been much clarity about exactly how the problems of the bond insurers affect the bonds under guarantee.

Subsequent stories about problems in arcane corners of the muni market, such as failures of auctions for auction-rate bonds, further depressed the market.

Given all the confusion, I thought it might be useful to write an article about the weakness in the muni market and bond insurance. But after I started writing, a funny thing happened: During the two weeks of February 18 to February 29, the weakness in the muni market turned into a rout. That market crashed: The week of February 23 to February 29 was, by some measures, the worst week in the municipal bond market since 1993.

Equally remarkable, however, was the fact that major financial dailies published almost no news about this crash. If you had money invested in a municipal bond fund, your fund declined by anywhere between 4% and 10% for that two-week period, without any explanation about why this



was happening, or even the fact that it was happening.

This article will try to shed some light on the factors that have plagued the muni bond market since last summer.

- First, it will outline the problems of the bond insurers and how they affect both holders and issuers of munis.
- Second, it will briefly discuss the crash of February and the failures in the auction-rate securities market.
- Finally, it will review some steps you can take to protect your municipal bond portfolio.

Bond Insurance 101

Municipal bond insurance is a relatively recent product, which had its inception in the late 1980s. Bond insurance was an ingenious product. What made it really clever is the fact that default rates of municipal bonds are extremely low—the lowest of any debt instrument next to Treasuries.

Within the industry, insurance has always been viewed primarily as a marketing tool: Even though insured bonds were rated AAA, they have always traded like AA bonds.

On the other hand, municipal bonds are the one sector of the credit markets that is dominated by individual investors, who purchase approximately two-thirds of all municipal bonds.

The main attraction of munis is that income from the bonds is exempt from federal taxes, and in the case of bonds issued in the state where purchasers reside exempt from state

and city taxes. But because these bonds are issued for periods of as long as 30 years, credit quality—i.e., the ability of the issuer to pay interest payments when due, and to repay principal when the bond matures—is of paramount concern to many investors.

Few investors try to evaluate credit quality on their own. Most rely on the ratings of the three major rating agencies: Moody's, S&P, and Fitch. The scale runs from AAA for the highest credit quality (the issuer is so financially solid that no matter what scenario you can imagine, the issuer can pay) to various investment-grade ratings denoting lower financial strength, all the way down likelihood of default—that is, inability to pay. Note that certain fiduciaries are not allowed to hold debt that is not rated at least investment grade. Finally, bear in mind that issuers pay a fee in order to be rated. Because of this cost, some issuers obtain only one rating, or occasionally none.

Enter the bond insurance firms. In return for a fee, the insurer guarantees that in the event the issuer is unable to pay interest when due—or principal at the bond's maturity—the insurer will step in and pay.

Initially, and until a few months ago, the bond insurers were strongly capitalized and the major firms (MBIA, AMBAC, FGIC, FSA) were rated AAA. (Some smaller insurers had lower ratings.) Consequently, the AAA rating was extended to the bonds under guarantee. As some wags put it, this was a way of making lemonade out of lemons: Bonds that would have received investment-grade ratings, or possibly lower, were now rated AAA.

For the insurers, this was a dream product. As you would expect, the bond insurers screened bonds very carefully in order to insure only bonds that were unlikely to default.

As a result, until recently insurers suffered only minor losses and remained highly profitable. This seemed a win-win situation for issuers as well. The AAA rating enabled insured bonds to find a readier market. That rating, moreover, enabled certain fiduciaries to own the bonds. Also, insurance was relatively

inexpensive: The AAA rating resulted in lower interest costs; as insurance spread, its cost declined.

Bond insurance became so popular that at the beginning of 2007, well over 50% of all municipal bonds came to market with insurance.

Insurer Losses and the Muni Market

At their inception and for many years, bond insurers were “monoline”: that is, they insured municipal bonds only. But a few years ago, insurers extended their product to taxable bonds, many of them structured and complex.

Last summer, it became clear that some of this debt was tied to sub-prime mortgages and that losses in this sector would necessitate sizeable write downs. This would threaten their capital base and, therefore, their AAA rating.

The size of potential losses remains unknown, and efforts to “recapitalize” or bail out the insurance firms in order to save the AAA rating are ongoing. But the damage has been done: Several bond insurers have been downgraded.

On April 15, the Bond Buyer (the trade journal for municipal bonds) published a table showing the current ratings of bond insurance firms (shown in Table 1).

Several facts stand out:

- FGIC, once considered the firm with the strongest capital base, has been downgraded to barely investment grade or slightly below by different rating firms.
- AMBAC has also been downgraded by Fitch, but to AA.
- Importantly, most of the insurers are on “negative watch,” which means that the current rating is in peril.

No one knows whether any insurer will eventually remain AAA or not. If an investor owns municipal bonds, the most prudent assumption is that they will not.

The Impact on Investors

If that is the case, how concerned should investors be?

Since this crisis began, there have been warnings of dire consequences to the municipal bond market if insurers are downgraded: Munis would plummet in value, and projects financed by municipal bonds would be seriously compromised. However, these warnings vastly overstate the potential long-term problems faced by the muni market if and when downgrades occur.

Bear in mind that the financial difficulties of the bond insurers are related to defaults in their taxable bonds, not to munis. The likelihood of default for municipal bonds remains exceedingly low, regardless of their rating. Over the years, there have been a number of highly publicized defaults: Washington Public Power Supply System (more commonly known by its acronym, WPPSS), New York City and most recently, Orange County, Florida. These have had totally different causes, but they remain exceptions. (For more on ratings, see below.)

The most noticeable result if a bond insurance firm is downgraded is that the bonds it insured will also be downgraded. A recent article in the Bond Buyer explained how a rating agency (in this case Fitch) will rate the bonds insured by an insurer (in this case FGIC) after FGIC was downgraded to BBB (the lowest investment grade) by Fitch. Note that in the sentences below, the term “underlying rating” refers to the rating of issuers, based on their own claims-paying ability—that is, before any insurance. The article stated that:

- FGIC insured 19,402 munis. Of these, 5,871 (30%) had an underlying rating of AA. Fitch will continue to rate these AA, in spite of the downgrade of FGIC.
- Of the munis insured by FGIC, 13,316 (68%) had underlying ratings between AA and BBB (investment grade). These will now be rated based on their underlying rating.
- Only 215 munis (a bit over 1%) had underlying ratings below investment grade. These will now be rated at Fitch's current rating, that is, investment grade.

(Source: *The Bond Buyer*, April 15, 2008.)

Table 1. Insurer Ratings as of April 14, 2008

Insurer	Moody's Investors Service	Standard & Poor's	Fitch Ratings
AMBAC Assurance	Aaa negative outlook	AAA negative outlook	AA negative outlook
Assured Guaranty (AGC)	Aaa stable outlook	AAA stable outlook	AAA stable outlook
CIFG Assurance North America	A1 stable outlook	A+ negative outlook	A- negative outlook
Financial Guaranty Insurance (FGIC)	Baa3 on review for possible downgrade	BB negative outlook	BBB negative outlook
Financial Security Assurance (FSA)	Aaa stable outlook	AAA stable outlook	AAA stable outlook
MBIA Insurance	Aaa negative outlook	AAA negative outlook	AA negative outlook
Radian Asset Assurance	Aa3 negative outlook	AA negative watch	A+ on evolving watch
XL Capital Assurance	A3 on review for possible downgrade	A- negative watch	BB negative outlook
ACA Financial Guaranty	not rated	CCC developing watch	not rated
Berkshire Hathaway Assurance	(Aaa for secondary market insurance)	AAA stable outlook	not rated

Source: *The Bond Buyer*, April 15, 2008.

This example is useful for a number of reasons. Let us assume that the portfolio of FGIC is representative of that of other bond insurance firms.

First, note that by far the greatest number of bonds FGIC insured were investment grade (approximately one-third AA and two-thirds investment grade) and, therefore, unlikely to default with or without insurance. Only 1% were below investment grade.

Clearly, downgrades of FGIC, and the consequent downgrades of the bonds it insured, may result in some price declines for those bonds. But again, note that bonds rated AAA based on insurance have always traded like AA bonds. Therefore, for bonds that will continue to be rated AA, there should be no decline. For bonds rated investment grade (A or BB, depending on the rating agency), the price decline theoretically should approximate what would happen when any bond is downgraded from AA to A. Under normal

circumstances, that should be at most 2% or 3%. Note that in the above example, only about 1% of all the bonds insured by FGIC, which were rated below investment grade, might experience a more significant decline.

You should also keep in mind that that these declines are of concern mainly if you want to sell a bond before maturity. If, on the other hand, you hold individual bonds to maturity, you will receive full face value.

What about the affect of any downgrades on issuers?

Interest costs for issuers rated investment grade or barely above may be somewhat higher than they would be if the bonds were insured. But issuers would save by not having to pay for insurance.

Following this analysis, you may wonder why the problems of bond insurers have so depressed the muni market.

One reason is that the drumbeat of

stories about bond insurers may have caused investors to fear that the financial problems of the insurers would cause a major decline either in the credit quality or in the value of their bonds.

Note also that uncertainty about the eventual ratings of the bond insurers creates a parallel uncertainty about the underlying ratings of issuers. This makes it difficult to price any insured bond, and at the current time insured bonds constitute an enormous chunk of all munis outstanding. As a result, the price of many bonds is trading down to the underlying rating, or even lower.

A final question is why the market remains fixated on the losses of bond insurance firms.

The answer is that potential downgrades of insurance firms may have a significant impact on the balance sheets of banks. Some of the corporate debt guaranteed by bond insurers is owned by major money center banks. Banks are required to carry this debt on their

balance sheet at market value—that is, to mark these securities to market on a daily basis. And at the present time, it is impossible to accurately value much of the debt tied to sub-prime mortgages. Further downgrades of bond insurers would add to bank losses and exacerbate the problems of the banks.

Muni Ratings Under Fire

The problems of the bond insurers have already had a significant impact on issuers, many of whom are beginning to question the value of bond insurance. For the first three months of this year, only about 26% of bonds that have come to market have been insured, compared to more than 50% prior to this quarter.

A related development is that the rating scales used to rate municipal bonds have themselves come under fire.

The scales used to rate munis use the same letter symbols as those used to rate corporate debt. They are the familiar letter symbols ranging from AAA for the highest credit quality, through investment grade, and all the way to junk, likely to default or in default.

The natural implication is that, for any given rating, the risk of default is comparable for municipal and for corporate bonds. For example, a municipal bond rated A has the same risk of default as a corporate bond rated A, and so on.

In fact, the risk of default for municipals is significantly lower than that of taxable debt of any type, excepting Treasuries.

The rating scales for municipal bonds are arrived at by comparing the financial strength of issuers of municipal bonds to each other. If municipal bond ratings were based on actual default experience, then the ratings of municipal bonds would be significantly higher.

A 2007 study by Moody's, for example, pointed out that bonds rated barely investment grade had default rates that were actually lower than AAA corporate bonds. The same study

pointed out that whereas the general obligation bonds of only nine states are rated AAA, if municipals were rated on the same scale as corporates, every state would be rated AAA. Even more striking, perhaps: Approximately 50% of all municipal bonds would be rated AAA (ironically, that is about the same percentage as the bonds that are insured—and this further underlines the fact that insurance is basically a cosmetic product).

Recently, calls have come from a number of sources for a “unified” or “global” rating scale. Such a scale would result in significantly higher ratings for municipals. A corollary is that a revised scale would, in most cases, eliminate the perception that bond insurance adds significantly to credit quality.

In fact, at a recent hearing, Barney Frank, chairman of the House Financial Services Committee, accused the rating agencies of being responsible for the creation of the bond insurance industry, and therefore of costing taxpayers millions of dollars. The treasurer of the state of California, Bill Lockyer, led 17 other state treasurers in calling on the rating agencies to revise their rating scales. Similar calls have come from veteran observers of municipal bonds.

At the present time, the rating agencies are still grappling with how they would handle ratings in the event more insurers are downgraded. Moody's, for example, has stated it would publish the underlying rating, but for an additional fee. To date, also, the rating agencies have only begun to respond to calls to revise their rating scales. One possibility is that the rating agencies may issue two separate ratings, one based on a “global” scale, and one based on the traditional scale. Again, this may involve additional fees.

Ratings have been big business for the rating agencies and change will be slow. But ratings of munis are definitely in flux.

The Crash of February 18–29

I am discussing this episode partly

because it has received so little notice from the media. In fact, one appropriate subhead for this section could be: The week the muni market crashed—and nobody noticed.

First, let's review what happened. The municipal market was depressed from the summer of 2007 forward.

It remained depressed through January.

But between February 18 and 29, the bottom fell out. The week ending February 29 was particularly stunning. During that week, municipal yields rose almost 50 basis points. For those two weeks, except for bond funds with the very shortest maturities, municipal bond funds declined by anywhere between 4% and 10%.

Declines of this magnitude simply do not occur over such a short period of time in the municipal bond market.

Yet during these two weeks, not a single article about these declines appeared either in the Wall Street Journal or in the New York Times.

Finally, Barron's published two articles over the weekend indicating that munis had suffered steep losses and were at “fire sale” prices. On Monday, the Wall Street Journal followed with an article characterizing munis as being at the values of a lifetime.

This crash was remarkable for a number of reasons. The first is that it happened at the same time that the Treasury market had a huge rally, caused both by the Federal Reserve cutting interest rates at the short end, and a massive flight-to-quality buying of Treasuries at the longer end.

In fact, if you own municipal bond funds, you may have wondered why your bond fund was tanking at a time interest rates were declining. Normally interest rates in the municipal bond market follow Treasuries. But in February, a massive disconnect occurred between the two markets. The muni market went into a tailspin while Treasuries were rallying.

Even more remarkable, however, was that yields of high-quality munis reached ratios to Treasuries that were totally unprecedented.

Let's explain.

Because munis are exempt from federal taxes, the first cut in deciding if they are attractive is the ratio of yields of high-quality munis to Treasuries of the same maturity. That ratio is not a constant. Since the Bush tax cuts, with lower tax rates, the ratio of long muni (15 to 30 years) yields to long Treasury yields has been somewhere between 85% to 90%.

Occasionally, however, the ratios spike. There have been a few periods when the ratio of muni yields to that of Treasuries has reached close to 100%. At such times, given their tax advantage, munis are amazing bargains. Such times generally don't last very long because so-called cross-over buyers swoop in and buy up munis.

At the beginning of February, the ratios were high—around 95%, which meant munis were cheap. But by February 29, they spiked to levels that were totally unprecedented: 115% to 135% of Treasuries at every point along the yield curve.

In fact, those ratios were the reason that after February 29, munis were being described variously as “values of a lifetime” and at “fire sale” prices. The shortest-term municipal bond was yielding 3%, while two-year Treasuries were at 1.6%. High-quality 30-year munis were yielding between 5.25% and 6% (for someone in a 28% tax bracket, this is equivalent to a taxable yield of 7.3% to 8.3%), while 30-year Treasuries were at 4.4%.

What caused the crash?

That is still not entirely clear. The daily articles concerning the municipal market in the Bond Buyer spoke of steep losses. But no one seemed to know who was selling or why no one was buying.

First, let me stress that the two-week crash in the muni market was a liquidity crisis: There were too many sellers and no buyers. It was in no way due to credit quality concerns.

Several factors seem to have converged to cause a perfect storm. One was the failure of auctions for auction-rate securities, which seems to have caused a crisis of confidence (see related article

on pages 10-11).

Another was that some institutional players (funds, fiduciaries) may have had to dump bonds whose ratings had fallen below the allowable threshold.

The biggest factor, however, seems to have been that a number of hedge funds dumped billions of munis. The munis were being sold to unwind complex strategies or to meet margin calls. However, the important point is that hedge funds were selling munis because those were the good stuff in their portfolios. They were being sold at fire sale prices because during those two weeks the large institutional players, such as the banks or the hedge funds, had no money to buy.

The Current Muni Market

Are munis still at fire sale prices?

The answer is no. Munis are still cheap, but not as cheap as they were. Some muni yields remain at ratios close to 100% of Treasuries, but pricing varies widely across maturities and ratings. Pricing of bonds, particularly insured bonds, is chaotic because a lot of uncertainty remains pertaining to where ratings will wind up. On many days, moreover, the muni market still seems disconnected from the Treasury market, whether the Treasury market is going up or down.

How quickly will the situation return to “normal”?

No one can tell.

The problems caused by auction-rate failures will take a long time to unwind. The problems of the bond insurers are far from over, and this will continue to affect ratings of insured muni bonds (and prices) for an indefinite future.

Also remember that, even though munis remain cheap to Treasuries on a relative basis, that does not mean that all munis are still a good buy. This is particularly true for munis with long maturities, which are the most sensitive to changes in interest rates.

Remember that this is a dynamic situation. A number of factors may cause munis to remain weak. For

example, a weakening economy or a recession may cause budgets of issuers of munis to come under stress. On the other hand, if tax rates go up, that will make munis more attractive.

Any number of factors may be perceived as inflationary and this would cause Treasury yields to rise, particularly for longer maturities, and munis to follow.

Conclusion

How should you proceed if you own or if you are planning to invest in munis?

- First, let's re-emphasize: If you own individual bonds, whether or not they are insured, the great majority of munis are safe, and default is unlikely. Of course, I am talking here about credit risk only; interest rate risk remains.
- Shopping for munis that are priced fairly is always a hassle. [For more information on how to price municipals, see my article “Cutting Through the Bond Market Fog When Shopping for Munis” in the May 2006 issue of the *AAIL Journal*.] It is particularly difficult at the current time because pricing is chaotic and inconsistent across the board. The changing ratings of the bond insurers are one reason. Another is that the market remains depressed. But all munis are not cheap—you need to check prices CUSIP by CUSIP.
- If you own individual municipal bonds, or if you are purchasing individual municipal bonds, with ratings tied to insurance, find out the underlying rating of the bonds. That rating is available on Bloomberg professional screens, and any broker can tell you what it is. If you have access to the Internet and were relying on the information on InvestingInBonds.com, the rating listed next to the bond, if it is insured, is the rating of the insurer. You need to find out the **underlying** rating—that is, the rating of the issuer without the in-

Auction-Rate Bond Failures

Failures of auction-rate securities have been mentioned so often in connection with the February muni declines that I thought it useful to include at least some basic information about this obscure corner of the muni market.

The market for auction-rate bonds includes both taxable and tax-exempt instruments. These are long-term bonds, maturing in 10 to 30 years, most rated AAA, that have a floating rate of interest. Unlike conventional bonds, the interest rate is not fixed but rather reset periodically. The mechanism for changing the interest rate on these bonds is auctions held periodically (from seven to 28 days) by the bond underwriter. The auctions have an additional function, which is to match buyers and sellers. These are so-called Dutch auctions, which mean that the interest rate is reset at the lowest rate that results in a sale of all the bonds.

These auctions are not a new phenomenon: They have been going on successfully for 20 years or so.

Municipal auction-rate bonds had two categories of clients: large institutional clients and high net worth individual investors that were managing cash; and closed-end funds, that were using auction-rate bonds to issue preferred stocks, which are used as leverage to boost the dividend interest of the closed-end fund common shareholders.

The attraction of these bonds to issuers is that they can raise money at short-term rates, and presumably at a lower cost than would be the case if the bonds were financed at longer-term fixed rates, assuming a normal upward sloping yield curve.

Investors in these bonds believed that the bonds were highly liquid—that they could sell the bonds at any upcoming auction, and therefore that the bonds were equivalent to cash. But in the meantime, they would be earning rates that were somewhat higher than money market rates. Because of the reset, the bonds were always priced at face value.

What if there were not enough bids for the auction to be complete?

In that case, the bond prospectuses stipulated that the would-be sellers would be unable to sell their bonds, but in that event a predetermined penalty rate was to be paid by the issuers.

However, it is likely that many of the buyers were not aware of this fact. That may be due, in part, to the fact that since these auctions began, in order to make sure auctions did not fail, the agents conducting the auction (usually large banks or brokers) stepped in and bought enough bonds so that the auction was successful. It is also possible that the risk of auction failures was not fully disclosed.

As far back as 2006, problems began cropping up in the auction-rate market. Auditing firms had issued a ruling that auction-rate securities could not be classified as “cash,” and some institutional investors began exiting the market. These auctions, however, were quite lucrative to the auction agents, who both underwrote the instruments and conducted the auctions. In order to expand potential buyers, the minimum investment was lowered from \$250,000 to \$25,000, which attracted individual investors. Auction-rate bonds continued to be sold as highly liquid, almost money market equivalents.

But the picture changed dramatically in 2008.

In late January, an auction failed because the auction agent failed to step in and buy bonds. Suddenly, there were only sellers and no buyers. Subsequently, auction failures became widespread as other banks, faced with mounting losses

insurance. For bonds with short-term maturities, investment-grade ratings are acceptable. But the longer the maturity, the higher the underlying rating you should require. Given the uncertainty concerning bond insurers, at the current time, I would not pay up for bond insurance.

- If you require the highest credit safety, try to find AAA “naturals”—e.g., states currently rated AAA or pre-refunded bonds.
- Many financial advisers recommend laddering. But buying short-term to intermediate-term bonds (five

to 15 years) remains my preferred strategy. Note that at the current time, bonds in that maturity range with high-quality ratings are not cheap.

If you own municipal bonds through mutual funds, you have probably been through a roller coaster. How should you proceed?

- First, with any bond fund, credit safety is far less of a concern than for individual bonds because any fund is diversified. This is the case even if you are investing in so-called “high-yield” bond funds that pur-

chase lower-quality credits. Once again, remember that credit safety is much higher for munis than for corporates. Moreover, the problems of bond insurers seem not to have caused larger declines to insured bond funds than to general funds.

- As usual, if investing new money, invest in conservatively managed funds, with low expenses and no loads.
- If you are risk averse, given all the uncertainties surrounding the municipal bond market, stick to bond funds with maturities that are

in their other portfolios, refused to add auction-rate bonds to their declining balance sheets.

As stipulated in the prospectus, when an auction fails, holders of auction-rate bonds are paid a penalty rate stipulated in the contract for these bonds. However, their holdings are suddenly frozen until the final maturity date of the bonds. In effect, what they have thought of as the equivalent of cash suddenly becomes long-term bonds. (Even worse, some of the bonds issued by closed-end funds are perpetuals!) Neither the issuers, nor the auction agents running the auctions, are in any way obligated to redeem the bonds until the final maturity date.

For investors who currently hold auction-rate bonds, and who would like to cash out, whether they hold munis or taxable bonds, the immediate picture is cloudy. Interests of issuers of auction bonds vary widely and those will dictate whether or not they attempt to enable holders of auction-rate instruments to cash out.

One avenue available to issuers of municipals is that they can call the bonds and refinance them at fixed rates. Issuers who are paying high penalty rates clearly have an incentive to refinance. But if the penalty rate is low, it may still be cheaper to continue to pay the penalty rate than to redeem the paper and reissue it at higher fixed rates.

For closed-end funds, which used auction-rate bonds to issue preferred shares, the situation is more complex. The interests of the holders of the closed-end fund preferred shares and those of the common shareholders of the fund conflict. The closed-end funds used auction-rate bonds as a way to obtain cheap financing to create leverage. One option available to the closed-end funds is to redeem the auction-rate bonds and find an alternative vehicle (a bank loan, for example) for issuing new preferred shares. But to the extent that refinancing the preferred is more expensive than the auction-rate bonds, this creates a conflict of interest because liquidating the auction-rate paper translates into lower income for the common shareholders. The really bad news for holders of preferred shares is that, in some instances, the penalty rates are so low that it is cheaper to keep on paying them than to find an alternative vehicle to create leverage.

Nonetheless, there are ongoing efforts to create some liquidity. Several brokers are allowing clients to take out loans, using the auction-rate bonds as collateral (unfortunately, at rates higher than the interest they are getting!). Several firms are also trying to develop methods of repacking auction-rate bonds in order to make them eligible for purchase by money market funds. But this avenue involves legal and regulatory complexities and will take time to work out.

A totally different approach involves the attempt to create a secondary market for the frozen auction-rate bonds. This, too, is proving difficult—holders of these instruments want to sell at face value. But given the current lack of liquidity, potential buyers want to buy at a significant discount, perhaps 10 to 20%. So far, there have been few reports of actual trades occurring.

One additional note: Andrew Cuomo, the attorney general of the state of New York, is opening an investigation to determine whether irregularities were committed by auction agents in selling the bonds—for example, whether risks were fully disclosed, and whether some customers were allowed to cash out while others were not. Regulators in other states may follow suit.

short—three years or less.

- Well-managed muni money market funds are currently still yielding about 2%, but bear in mind that if the Federal Reserve continues to lower interest rates, and the

yield ratios of munis to Treasuries normalize, then yields of muni money market funds will decline significantly.

One personal note: I invest in both individual municipal bonds and

municipal bond funds. My portfolio of individual bonds (premium bonds, high ratings, maturities under 10 years) declined much less in value than did the bond funds during the last two weeks in February. ▲

Annette Thau, Ph.D., is author of "The Bond Book: Everything Investors Need to Know About Treasuries, Municipals, GNMA's, Corporates, Zeros, Bond Funds, Money Market Funds, and More" (copyright 2001, published by McGraw-Hill; \$29.95). She has spoken to AAIL chapters in different parts of the country about bonds and bond funds. Ms. Thau is a former municipal bond analyst for Chase Manhattan Bank. She also until recently was a visiting scholar at the Columbia University Graduate School of Business.

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