
MUNICIPAL BOND PRICING AND LIQUIDITY

Lawrence E. Harris and Michael S. Piwowar recently released a study on municipal bond pricing. Mr. Harris is Chief Economist of the U.S. Securities and Exchange Commission. Mr. Piwowar is a Visiting Academic Scholar in the SEC Office of Economic Analysis. Here are the study's important findings:

1. Trading costs for individuals who buy/sell municipal bonds are twice as high as they are for institutional investors.
2. Small trades in municipals are "substantially more expensive than large trades".
3. Unlike equities, municipal bond transaction costs decrease with trade size and do not depend significantly on trade frequency
4. On average, individuals investing \$20,000 in municipal bonds paid transaction costs equal to about 2% of the bond's price.
5. Actively traded bonds are as expensive to trade, and sometimes more so, than infrequently traded bonds.
6. Bond liquidity increases with credit quality and decreases with instrument complexity, time to maturity and time since issuance
7. The difference in transaction costs between superior quality and other investment grade bonds is negligible, but the difference between these two classes and speculative issues show that high yield municipals are more than twice as costly to trade.
8. Average trade costs are lowest for bonds issued in states with a high level of outstanding debt.
9. Bond transactions costs are greater in states where the benefit of holding in-state issues is highest.
10. Revenue bonds account for 66% of the sample's total value traded; general obligation bonds account for most of the balance. The median trade size of all trades smaller than \$100,000 is \$20,000. Non-rated issues comprise only 13% of the total value traded in the sample. Large bond issues (greater than \$10mm) account for 60% of total value traded. Small issues (less than \$1mm) account for 4% of total value traded and only 9% of the total number of trades.

The issues raised in this study are concerns we have discussed and addressed for a long period of time. We are happy to read the results of the report and we believe it is important for us to respond and comment. We will address the "industry perspective" first and then detail the "Bernardi perspective" that enables us to obtain good price execution.

COMMENTS REGARDING THE REPORT

The report separately estimates the average transaction costs as a function of trade size for over 167,000 bonds from a one-year sample of all U.S. municipal bond trades.

The original sample contains 7,024,678 transaction records for over 463,000 different securities, representing \$2.6 trillion total dollar volume. The study then applied a series of security characteristics and transaction filters to arrive at a final sample consisting of 167,851 bonds representing 5,399,283 trades and \$832 billion total dollar volume.¹

The report's findings are useful to our clients, but should be closely analyzed before rushing to a judgment. Many of the findings are valid; many are questionable in our opinion. The authors themselves recognize shortcomings of their study when they state, "...Instead, we estimated transaction costs using an econometric model. The second problem is due to the scarcity of data for many bonds. Since our econometric model does not benefit from information in contemporaneous observable benchmark prices, our results are less precise than they would be if such information were available."²

It is important to note that the report is based upon dated information. The findings are based upon municipal bond transactions dating from November 1999 through October 2000. We believe a report based upon current data would not be as negative to the industry.

Trade reporting and transparency in the municipal market have improved markedly in the past four years. Today, regulations require municipal securities dealers to report all customer and interdealer transactions by midnight of trade date. The Municipal Securities Rulemaking Board (MSRB) compiles this data and disseminates it the next day. (You can view the day's prices at websites like www.investinginbonds.com)

Because of this improvement in price reporting, we believe a similar study completed today would find a reduction in the average costs cited in the report.

Furthermore, starting in January 2005 municipal bond brokers and dealers will report all trades to the MSRB within 15 minutes of trade rather than at the end of day, as is now the case. "Real time" price dissemination is not far behind. Investors will be able to immediately make current price comparisons with trades conducted during any given market day.

Clearly, there are a minority of bond brokers and dealers who continue to "overcharge" retail investors. In our opinion, as price reporting times are lowered and the level of transparency is raised, these firms will find it increasingly difficult to mistreat investors.

¹ Municipal Bond Liquidity, Lawrence E. Harris, Michael S. Piwowar, February 9, 2004

² IBID

RULE AND ITS INTERPRETATION

NASD Rule 2440 (Fair prices and commissions) states: “if a member buys for his own account from a customer, or sells for his own account to his customer, he shall buy or sell at a price which is fair, taking into consideration all relevant circumstances, including market conditions with respect to the security, the transaction expense involved, and the fact the member is entitled to a profit.”

This rule governs all municipal bond transactions and all bond dealers and brokers are obligated to follow it. The rule does not define “fair price” and, because bonds are not homogeneous, leaves interpretation to member firms. The municipal market is unique in many respects. There are thousands upon thousands of different issuers and over 1,000,000 different municipal securities existing. These issues trade differently and consequently profit margins vary.

We recognize **and we believe** a 2% average “mark up” is excessive. It is inconsistent with our mission statement that pledges to serve our clients in a “forthright manner” and “our endeavor to achieve superior performance for their portfolios”. A 2% average “mark up” would negate and make a sham of these efforts.

Also, it is very important to note that our goal is to offer fair and reasonable pricing on **ALL** transactions; we do not “average out” profit margins. Every trade is viewed as a separate and distinct transaction; as it should be.

HERE IS SOME PRACTICAL ADVICE

1. To avoid higher per bond transaction costs, do not sell/buy in smaller increments (\$5000-\$20,000). When considering a new investment, accumulate funds in a money market and delay your commitment until you have \$25,000, or more, available. This will go a long way to reducing transaction costs. Generally, essential service revenue and general obligation bonds will have lower costs.
2. Eliminate redundant middlemen. The more layers between the individual investor selling/buying and the ultimate investor buying/selling, the more costly the trade.
3. When selling a bond, deal with a knowledgeable bond dealer who has the expertise and the market contacts to find the best bidding source for the issue you want to sell.

Ask the dealer to explain the process the firm has in place to sell your bonds. Does it sound efficient? How will the dealer demonstrate that the price you sell at is a good market price? Are you confident the dealer will spend adequate resources and time on your behalf scouring the market for a good market price?

Example: If you have a New Mexico issue to sell, the dealer you hire to complete that trade needs to be in contact with dealers who regularly trade the issue. A call to a New York broker for bids isn't necessarily going to find the best bid on that bond. Your bond manager needs to understand this.

4. Invest in quality issues. Do not buy individual issue speculative quality municipal bonds. Not only is your principal and interest at risk, but if you sell before maturity the transaction costs are exorbitant. Buy a high yield no load fund if you want exposure to this sector.
5. Avoid over concentration of the portfolio with “in-state” issues simply to avoid state income tax liability.

FROM OUR PERSPECTIVE

In preparation for this presentation, we reviewed all Bernardi Securities, Inc. secondary market municipal bond transactions in the fourth quarter of 2003. The average spread or "mark up" was .582% (\$5.82 per bond or \$582 per \$100,000 invested). This is far below the 2% average cited in the report.

Assume we are managing a \$1,000,000 bond portfolio with a laddered (staggered) maturity structure spread over 10 years. Let us also assume 15% of the portfolio is turned over each year. (\$100,000 matures and reinvested and another \$50,000 sold and reinvested in a value-added swap of some sort).

Applying the average Bernardi 4th quarter 2003 spread to this example, the client would have paid \$873.00/year. This translates into an annual cost of less than 10 basis points. Furthermore, if there are no bonds maturing and no value added swaps transacted, there are no costs charged against the portfolio.

Compare the above with bond fund costs. The average bond fund, for example, charged approximately 97 basis points in 2003. The Vanguard municipal bond funds, known for their low fees, annually deduct 19 basis points for management fees. These are ongoing annual costs.

While the SEC's "fair and reasonable profit" interpretation might allow us to charge more, this is not the driving force propelling a "fair trade". What is important is performance. It is about performance. And in order for us to out-perform "the market", we must keep up-front costs low. This low cost philosophy enhances our performance. It enables us to compete. It enables us to speak openly about our profit philosophy. It makes us a good firm with whom to do business.

BUT ITS MORE THAN LOW TRANSACTION COST

Low cost alone does not ensure superior performance. Someone can charge you little (or nothing) and still deliver a below market yielding bond (or bond fund) to you. There are plenty of low cost/no load bond funds available that deliver below average returns. One need only study the fund performance records year after year to find a plethora of non-performing funds and bond investment advisors.

So, how do we do it? We have no secret formula. We are committed to dealing with our clients in a forthright manner and we constantly endeavor to achieve superior performance for our client portfolios.

In order to help us accomplish these goals, we have a **process** in place that works to ensure good yields, fair pricing and low transaction costs in the delivery of bonds to our customers. The procedure has been in place for years. It is a course of action that is regularly reviewed and, when needed, adjusted or improved. All of our employees conduct business according to this operational business plan serving our managed accounts.

Part of the plan includes a strict bond portfolio management process. We meet with our client and obtain a client approved written strategy outlined for each managed portfolio (*Confidential Investor Profile Policy Statement*). We review these instructions with the client on a regular basis.

Investments made adhere to the investment plan. Investments made must have a yield that exceeds a comparable market index. The client is made aware of the “bogey”: the index being used for yield comparison purposes. Secondly, the investments made are compared to similar issues also available in the current market place.

Our portfolio managers are always aware of the minimum yield required and are always shopping the market to find better yields. They know these yields must exceed the market averages at the time the transaction is made. We cannot achieve this goal if “mark ups” are excessive. The two are incompatible.

There is also an internal process followed when we sell a client’s bond. When we sell your bonds our goal is to go directly to the source and eliminate as many middleman brokers as feasible. This process helps ensure that the client is paid fairly for the bond being sold. This process has saved our clients a significant amount of money over the years. (A copy of the Bernardi “sell” procedure is available upon request)

In conclusion:

1. Our average spread is well below market averages cited in the study.
2. Our portfolio management process helps us outperform the market averages.
3. Low turnover of portfolios helps us outperform the market averages.
4. All of our trading, sales and portfolio management personnel follow written instructions as to procedures and goals.

This is the Bernardi process that serves you so well. Thank you for your continued confidence.

We welcome your comments and questions. Please call us.

Sincerely,

Ronald P. Bernardi
President
Bernardi Securities, Inc.
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