# Municipal Bonds: Tax Free Income vs. Trustee Obligation Avoid Unwarranted Costs

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The Uniform Prudent Investor Act ("UPIA") imposes investment responsibilities on trustees that are still being considered and interpreted. It requires that trustees balance their investments to achieve a diversified return based upon the particular needs of the beneficiaries. It also requires that trustees incur only reasonable and appropriate costs. But the information needed to make those decisions varies from investment to investment. And while corporate trustees have access to that information, individual trustees often do not. This article examines the issues trustees need to consider when investing in municipal bonds. In particular, it looks at the costs associated with buying and selling those bonds.

#### I. Background: General Standards of Prudent Investment

To begin a discussion of the requirements for bond investments, an initial overview of the UPIA is important. Under Section 1 of the UPIA, the prudent investor rule is a "default rule" that may be expanded, restricted or eliminated by the trust terms. If the UPIA is not overridden, the trustee owes a duty to the beneficiaries of the trust to comply with the prudent investor rule. Section 2 sets forth the trustee's standard of care: a trustee "shall invest and manage trust assets as a prudent investor would, by considering the purposes, terms, distribution requirements, and other circumstances of the trust." The UPIA requires a trustee to consider particular needs of beneficiaries. Under Section 2(b), a trustee's investment choices are judged in the context of the trust portfolio as a whole and as a part of an overall strategy after evaluating risk and return objectives. In other words, a trustee must develop an overall investment strategy. Section 3 of the Prudent Investor Act states simply that a trustee shall diversify trust investments unless because of special circumstances the purposes of the trust are better served without diversifying. Such circumstances might include holding an undiversified block of lowbasis securities that, if sold, would generate significant tax cost, or retaining a family business.

The comments to Section 2 lists "factors affecting investment," which include tax considerations:

In a regime of pass-through taxation, it may be prudent for the trust to buy lower yielding tax-exempt securities for high-bracket taxpayers, whereas it would ordinarily be imprudent for the trustees of a charitable trust, whose income is tax exempt, to accept the lowered yields associated with tax-exempt securities.<sup>1</sup>

In formulating and implementing an investment strategy suitable to "the purposes, terms, distribution requirements, and other circumstances of the trust," the UPIA directs: "In investing and managing trust assets, a trustee may only incur costs that are appropriate and reasonable in relation to the assets, the purposes of the trust, and the skills of the trustee." The language of the statute suggests that trustees seeking to build portfolios of individual municipal bonds should investigate and weigh the costs of their bond purchases to mitigate unwarranted expenses.

Although many trustees of family trusts are commercial fiduciaries, often the office is held by family friends or relatives of the settlor or by a trusted adviser such as an accountant or attorney. In such instances, the trustee may not directly render investment management services but may rely on a commercial fiduciary's investment expertise in its capacity as co-trustee or, perhaps more commonly, on the guidance of a broker, financial adviser, investment consultant, or other purveyor of financial products and services. Where it appears appropriate to establish a position in municipal bonds, an unsophisticated trustee, lacking insight into the microstructure of the municipal bond marketplace, may rely on the legal requirement of 'Best Execution' to assure that the financial intermediary purchases the bond instruments at a reasonable price. This assumption is, perhaps, strengthened in the trust context because of the co-fiduciary's duty of strict loyalty or, because the trad-

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- <sup>1</sup> Uniform Prudent Investor Act § 2 (1992) comment.
- <sup>2</sup> Restatement (Third) of Trusts § 227 (1992).
- Uniform Prudent Investor Act § 7 (2002). The comment fur-

ther states: "Wasting beneficiaries' money is imprudent." *See also*, Uniform Trust Code § 805 (2005) and Luther J. Avery & Patrick J. Collins, *Managing Investment Expenses: Trustee Duty to Avoid Unreasonable or Inappropriate Costs*, 25 ACTEC NOTES 123 (1999).

ing account is custodied at a broker-affiliated trust company or because of the agent's or broker's common law duty to exercise care to preserve the interests of the principal. When securities are traded on a national exchange, it is the exchange itself that may monitor and enforce consumer protection regulations.<sup>4</sup> For example, the New York Stock Exchange requires members to execute orders at the best available prices. When securities are traded "over the counter," a self-regulatory agency such as the National Association of Securities Dealers [NASD] may shape the regulatory climate:

In any transaction for or with a customer, a member...shall use reasonable diligence to ascertain the best inner-dealer market for the subject security and buy or sell in such market so that the resultant price to the customer is as favorable as possible under prevailing market conditions.<sup>5</sup>

Confusingly, litigation of best execution issues often results in a finding that best execution does not necessarily mean that the customer buys the financial instrument at the most favorable price.<sup>6</sup> Rather, it means that the broker weighed a variety of factors including the need to process the order quickly, the need to mitigate market impact for large orders, the currently available information concerning market conditions, the need to preserve the anonymity of the buyer or seller, and similar factors.<sup>7</sup> For unsophisticated investors accustomed to purchasing stocks in their personal retail brokerage

accounts, best execution is often mistaken for buys and sells at the 'National Best Bid and Offer' ("NBBO") price, despite the availability of better prices in other trading venues. Thus, it is not surprising that many trustees and beneficiaries also uncritically accept that the transaction prices listed on monthly accounting statements reflect the financial intermediary's best efforts to mitigate unjustified execution costs.<sup>8</sup>

Although a large amount of research focuses on execution costs in the equity markets, there are few credible independent studies of trading costs in the municipal bond market. There is no centralized marketplace for municipal bond transactions. There is also no firmly established public price that is comparable to the bid/ask pre-trade transparency in the equity market; dealers are not under an obligation to broadcast bids and investors are forced to initiate a cumbersome search process. In addition, until very recently there has been poor post-trade transparency. Although a customer's account statement lists the bond's purchase price, coupon rate, maturity, and so forth, there was only a limited ability to ascertain whether, all else equal, the price paid by customer 'x' was higher or lower than the price paid by customer 'y.' The municipal bond marketplace has been characterized as one of the most opaque securities markets in the world. Unsurprisingly, the marketplace has thwarted the efforts of financial economists to penetrate its cost structure. This is an issue for trustees because they cannot readily discharge the duty to avoid unwarranted costs if such costs are difficult or impossible to measure in the first place.

- <sup>4</sup> The following discussion draws on Jonathan R. Macy & Maureen O'Hara, *Market Structure and Investor Needs*, Working Paper, Cornell University (May, 2003) which is a revised and updated version of Jonathan R. Macy & Maureen O'Hara, *The Law and Economics of Best Execution*, J. FINAN. INTERMEDIATION 6, 188-223 (1997).
  - <sup>5</sup> NASD RULE 2320(a) (2006).
- <sup>6</sup> In one remarkable case an SEC administrative law judge ruled that markups on municipal securities ranging from 1.87% to 5.64% were not excessive and did not violate the securities fraud laws [In the Matter of Mark David Anderson, Initial Decision Release No.203, Administrative Proceeding File No. 3-9499. Initial Decision April 30, 2002]. This ruling prompted a broker-dealer cease-and-desist proceeding [SEC Administrative Procedure File No. 3-9499 *In the Matter of Mark David Anderson* dated August 15, 2003. Full text available at http://ftp.sec.gov/litigation/opinions/33-8265.htm]. This hearing found that "Anderson charged excessive markups and markdowns in 96 transactions over several years, generating close to \$200,000 in illegal profits."
- <sup>7</sup> The Municipal Securities Rulemaking Board requires that "each broker, dealer, and municipal securities dealer…shall make a reasonable effort to obtain a price for the customer that is fair and

reasonable in relation to prevailing market conditions" [Rule G-18].

8 Trade confirmations show "net trades" often without disclosing commissions or markups. In some cases, unsophisticated investors may believe that they are buying (selling) municipal bonds at no cost. Costs, however, are embodied in the yield reductions that occur because the investor's purchase price is higher than the "reoffering" price at which the broker-dealer buys. The "tombstone" yield listed in financial newspapers is rarely available to the retail public. Recently, several states have taken steps to help municipal bond buyers. For example, California State Treasurer, Bill Lockyer announced a new program for individual California bond investors: "The State will give individual investors the opportunity to place orders to buy bonds before other investors. To qualify for participation in this early order period, an investor must be a California resident and must buy bonds with the intention of holding them long-term." In a nutshell, the investor must open an account at a brokerage firm "participating in the bond sale." If an investor has an account at the XYZ brokerage company and that company does not participate in the bond sale, the benefits of the program may be unavailable. This arrangement may be cumbersome if it requires investors to open accounts at multiple brokerage companies.

#### II. Recent Academic Research

In recent years, there has been a welcome attempt on the part of regulatory agencies to bring increased transparency to the municipal bond market. Municipal bond brokers and dealers must register with the Municipal Securities Rulemaking Board (the "MSRB") and must report certain threshold information to the MSRB for each trade. Additionally, investors can now access helpful post-trade information (including comparative pricing information) at an online system sponsored by the Bond Market Association. Data from these databases and from other sources is useful for studying costs of buying and selling individual municipal bonds. This article summarizes five studies published over the period 2001 through 2006.

### A. Study 1: Institutional Costs in the Insurance Industry

The first study estimates and compares trading costs in the U.S. Treasury bond market, the U.S. corporate bond market, and the municipal bond market.<sup>10</sup> The authors obtained data for municipal bonds from the records compiled by Capital Access International ("CAI"). CAI extracts information provided by the National Association of Insurance Commissioners from the Schedule D yearly filings by member insurance companies. Thus, the study focuses on a somewhat narrow set of institutional trades (a bond must have a buy and a sell transaction on the same day) occurring in the municipal bond market over the period January 1, 1995 through December 31, 1997. The three-year sample consists of 3,168 municipal bond trades. The authors estimated the bid/ask spread as the difference between a bond's mean daily selling price and its mean daily buying price. Additionally, they calculated the spread for bonds that trade on two consecutive days and on five consecutive days. The following table reports the estimated spreads for various municipal bond credit ratings:

Credit Rating	Mean Bid-Ask Spread per \$100 Par Value	Standard Deviation	
AAA	23 basis points	43 basis points	
AA	23 basis points	42 basis points	
Α	22 basis points	40 basis points	
Below A3	24 basis points	29 basis points	

The overall mean spread in the municipal bond market was 23 basis points during the period under evaluation. The authors fit a regression equation model to the data and estimate that the critical determinants of the spread are time-to-maturity, volume, and credit rating. They conclude that for institutional traders in the insurance industry, "municipal bonds have higher bidask spreads compared to the Treasury market, even after adjusting for credit risk and other bond characteristics."

# B. Study 2: Deconstructing Institutional and Retail Trading Costs

Given the limitations of their data source, the first study is of primary interest to large institutional municipal bond traders. However, the majority of trades occur at the retail level for amounts less than \$100,000. Therefore, our second study of this market looks at those smaller trades and estimates that the bid-ask spread for retail-sized trades exceeds 2%. The authors estimate the effective spread by averaging buy and sell price differentials for bonds that trade on the same day. The sample under investigation is approximately 630,000 transactions for approximately 103,000 individual municipal issues during the month of May 2000. The following table highlights the significant cost differences paid by retail and institutional buyers of municipal bonds:

Bond Rating	Mean Bid-Ask Spread Retail	Standard Deviation	Mean Bid-Ask Spread Institutional	Standard Deviation
Aaa	2.49%	1.72%	0.82%	1.08%
Aa	2.19%	1.62%	0.63%	0.78%
Α	2.40%	1.66%	0.84%	0.45%
Baa	2.95%	2.01%	0.91%	1.18%
Junk	3.43%	2.24%	1.48%	1.62%

<sup>&</sup>lt;sup>9</sup> http://www.investinginbonds.com/muni\_bond\_prices.htm. Information on municipal bond prices is published in *The Bond Buyer* daily newspaper and, since 1935, by Standard and Poor's in *The Blue List of Current Municipal Offerings*. Municipal bond information is also disseminated by the Bloomberg news service.

(November 7, 2001).

<sup>&</sup>lt;sup>10</sup> Sugato Chakravarty & Asani Sarkar, A Comparison of Trading Costs in the U.S. Corporate, Municipal and Treasury Bond Markets, Working Paper, Federal Reserve Bank of New York

<sup>&</sup>lt;sup>11</sup> Gwangheon Hong & Arthur Warga, *Municipal Marketability*, THE JOURNAL OF FIXED INCOME, 86 (September 2004).

The authors consider several measures of the effective spread (average within the day, closest in time, closest in price). Each measure defines the effective spread as  $\frac{[P_{CB} - P_{CS}] \ 00}{[P_{CB} - P_{CS}] \ / \ 2}$  where P<sub>CB</sub> and P<sub>CS</sub> are Prices for buys and sells respectively.

The overall mean spread for retail trades is 2.46%; for institutional trades the spread is only 0.79%. Interestingly, bond credit enhancements (insurance) does not result in lower spread costs: "...the average bidask spread of uninsured Aaa issues is 1.64%, while that of insured Aaa issues is 2.27%. Insurability does not guarantee true equal credit, which is reflected by the fact that insured issues of equal rating are treated as riskier from the dealer's perspective."

The authors fit a regression model in an attempt to discover which explanatory variables are most influential in explaining the size of the bid-ask They find that five variables exhibit explanatory importance: (1) time-to-maturity; (2) trade volume; (3) bond coupon rate; (4) bond call provisions; and (5) bond pre-funding provisions. When municipal bond trades are decomposed into institutional and retail transactions, the "...bid-ask spreads associated with retail-sized trades are on average three to five times as high as those found in the institutional market." This should send an alert to trustees regarding the potentially high costs of acquiring tax-free income. A 'back-of-the envelope' calculation indicates that a 2% markup on a purchase of a 4% coupon municipal bond with a 5-year maturity means that the trustee cedes approximately three months' interest (or 5% of the expected total yield) to acquire the instrument and, assuming a symmetrical spread, another 5% if the instrument is sold prior to its maturity.

# C. Study 3: Retail Municipal Bond Trade Costs are More Expensive Than Equity Trading

A second study appearing in 2004 also addresses the differences between municipal bond trading costs faced by institutional trades and those faced by retail customers. This study concludes that "...municipal bond trades are significantly more expensive than equivalent sized equity trades."13 Unlike former studies of 'matched' daily trades, this study focuses on trade sequences in which dealers purchase bonds, often in large blocks, and then sell them to customers, often in smaller amounts. The data sample, drawn largely from the MSRB database, covers the period November 1999 through October 2000. The authors estimate parameter values for econometric models in which the proxy amount of a retail trade is \$20,000 (median value of trades less than \$100,000) and the proxy amount of an institutional trade is \$200,000 (median value of trades greater than \$100,000). The cost estimation models explore the influences of trading frequency, credit quality, bond complexity (call features, pre-funding status, insurance guarantees, etc.), issue size, time since issuance ("seasoned" vs. "unseasoned" bonds), and time to maturity. A time-series model estimates pricing for trade sequences. A cross-sectional model estimates how transaction costs vary depending on bond types and characteristics such as size and issue date.

Unlike models of equity trade costs, the estimated municipal bond transaction costs under the time-series model decrease with trade size. One possible explanation is that larger buyers generally negotiate better prices than smaller retail customers. Overall, the model estimates that "...the average round-trip transaction cost for a representative retail order size of 20,000 dollars is 1.98 percent of price (98.7Bps x 2), while the average round-trip cost for a representative institutional order size of 200,000 dollars is only 0.98 percent (49.1Bps x 2)." The magnitude of this discrepancy is also of interest to regulators who seek to assure that customers receive best execution. The authors attribute institutional/retail cost differences to the lack of transparency within the muni-bond market ("bond dealers do not post firm bid and ask quotes") and to the fact that institutional traders have informational advantages over retail customers who trade less frequently. They rule out dealer inventory control as a plausible explanation for the spread differential. Inventory control is a critical factor in quote-driven equity market trading. According to the authors, "effective spreads in equity markets for retail sized trades average less than 40 basis points in contrast to the 198 basis points that we estimate for municipal bonds of 20,000 dollars.... The only credible explanation for the cost difference is the different market structures, and the most important difference is transparency."

The results of the cross-sectional regression model suggest that both institutional and retail customers pay approximately \$0.50 per \$1,000 of par value for clearance and settlement costs. Not surprisingly, higher rated bonds cost less to trade than bonds with lower credit ratings. Likewise, newly issued bonds are less expensive than seasoned bonds, and bonds with longer time to maturity are less expensive than short-maturity bonds. The overall regression parameter estimates suggest that transaction costs are negatively associated with the bond's credit rating but positively associated with the bond's complexity. This holds true even for bonds with credit enhancements from other financial institutions.

versity of Southern California (May 18, 2004). The study is published in 61 JOURNAL OF FINANCE 1361-1397 (2006).

<sup>&</sup>lt;sup>13</sup> Lawrence E. Harris & Michael S. Piwowar, *Secondary Trading Costs in the Municipal Bond Market*, Working Paper, Uni-

#### D. Study 4: Costs, Market Microstructure, and Monopoly Power

A further extension of research into market structure and into the nature of transactions within the U.S. municipal bond marketplace appeared in 2006. The authors examine sample data from the MSRB for every municipal bond transaction by registered broker-dealers between May 1, 2000 and January 10, 2004 (approximately 26 million trades). <sup>14</sup> The study concludes:

- 1. Municipal bonds trade in decentralized markets in which information is costly to gather. This type of market enables financial intermediaries the opportunity to extract monopoly rents or to cross-subsidize one group of customers by charging higher transaction costs to other groups; and
- 2. Despite the fact that broker-dealers incur greater risk on larger trades, they earn lower than average profits on these trades. The higher than average profit earned on smaller, less risky trades suggests that dealers exercise substantial market power when servicing the needs of this market segment.

The study notes that between 10,000 and 15,000 separate municipal bond issues are brought to the marketplace each year. Each issue may consist of 10 to 30 separate bonds with different maturity dates. As of 2004, in addition to mutual funds, these bonds are held by individual retail investors (33%), insurance companies (12%), and private trusts (5%). Many owners manage bond positions on a buy-and-hold basis. Therefore, individual municipal bonds trade infrequently. For political reasons, small regional firms are the underwriters for many municipal issues thus contributing to the fragmented state of the marketplace.

The authors used a first-in-first-out rule to match dealer purchases and sales of municipal bond inventory to subsequent purchases and sales to customers. The estimated round-trip transaction costs correspond to dealer profits. Rather than employing an econometric model to explain empirical data, the study advances a theoretical model that deconstructs trading costs into (1) dealer costs, and (2) dealer market power. The

model's parameters are functions of observable variables, which are estimated by a mathematical approach known as a stochastic frontier model. This model estimates a dealers' cost frontier, which is the cost of providing dealer services in a perfectly competitive marketplace (costs = dealer reservation prices). Deviations (statistically, "error terms") from this efficient cost frontier reflect the distribution of sellers' reservation prices and dealer market power.

Several data characteristics are noteworthy. The distribution of error terms is highly skewed and has a much higher standard deviation (forecasted "efficient market" mean equals zero) for smaller trades. Furthermore, empirical investigation of dealer costs indicates that the following items are of importance: (1) liquidity of the bond and the market segment in which the bond trades; (2) trade size; (3) interest rate conditions; and (4) expectations regarding how the trade will be processed. However, the actual profits to the dealers are substantially higher than the costs attributed to facilitating the trade; this profit is higher for small and medium sized trades. Most of the traded municipal bonds carry the top credit rating. As the authors point out, "the insured bonds are virtually perfect substitutes with each other from the standpoint of credit risk." This makes the great discrepancy in transaction costs between institutional and small retail buyers difficult to explain in terms other than dealer monopoly power flowing from asymmetric information. It is as if the "law of one price" no longer holds true!

Newly issued bonds are purchased by broker-dealer syndicates and distributed to customers primarily during the first 90 days. The volume of buy and sell transactions for seasoned bonds are roughly equal. Dealers, however, tend to buy larger blocks and then sell these off in small pieces to buyers; dollar amounts of sales of seasoned bonds are approximately one-third the size of buys. These statistics indicate that, for seasoned bonds, the dealers' role is primarily that of an intermediary between customers rather than as a sales organization to customers. From March 1998 to May 1999, 71% of the outstanding municipal bond issues failed to trade. This is a highly illiquid market.

Estimated dealer markups are modified for yield curve movements by adjusting prices by the delta in the Lehman Brothers Municipal Bond Index for bonds of various maturities. The median (50th percentile) markup for round-trip transactions is between 1.3% and 2%. During the period under evaluation, the medi-

(April 20, 2006). The study is published in 20 The Review of Financial Studies 275-314 (2007).

<sup>&</sup>lt;sup>14</sup> Green, Richard C., Hollifield, Burton & Schurhoff, Norman, *Financial Intermediation and the Costs of Trading in an Opaque Market*, Working Paper, Carnegie Mellon University

an municipal bond yield equaled 5%. Thus, the process of transferring a bond from one owner to another involved a sacrifice of approximately several months' return to the dealer supplying intermediation services. However, this is not the whole story. The average markup decreases as trade size increases and, the authors report, "markups are negative or zero for institutionally sized trades of over \$500,000.... The finding may also suggest cross-subsidization, since, in equilibrium, dealers must be covering the costs and overhead of their municipal bond trading operations elsewhere, either in trades with other customer types or through other services to the same customers." The extent of transaction cost skew exhibited by the distribution of trades is even more surprising in that a significant number of smaller trades occur at realized spreads in excess of 5%, a cost factor equal to almost an entire year's average municipal bond yield. Trustees purchasing small municipal bond positions for taxable private trusts need to be aware that, in the authors' opinion, "...relative to the norms of fairness and reasonableness cited in SEC opinions and NASD complaints, there are substantial numbers of trades that occur at high spreads..."

#### E. Study 5: The Uninformed Investor— How Much Money is Left on the Table?

Green, Hollifield, and Schurhoff have recently completed a second study, this one analyzing the dispersion in municipal bond transactions costs.<sup>15</sup> This is an extension of their earlier research with special attention to the transaction costs paid by retail investors for acquisition of new issue bonds. The sample data covers 190,300 transactions for municipal bonds issued from February 2000 through August 2003. The authors point out that the "offering price" of the bonds is the price received by the issuer from the underwriter. The "reoffering price" is the price at which the bonds are sold the public at the time of their primary offering. A bond's yield is computed using the reoffering price, and the difference between the offering and reoffering prices represents the underwriter's spread. Many institutional buyers purchase municipal bonds at or close to the reoffering price. More surprisingly, many smaller retail-sized purchases are also made at or close to the reoffering price. However, a large number of small retail orders incur execution costs well above the most favorable price. The authors conclude that "some small buyers know the bonds have recently been issued, and know the reoffering yield, which serves as a natural focal point in negotiating with broker-dealers. Others do not."

The data show a bimodal distribution of prices with informed institutional and retail investors achieving favorable trade terms and uninformed investors paying exorbitant costs: "the price dispersion is economically significant. For bonds with high levels of retail participation, prices vary by five percent or more, which is roughly the annual yield on a municipal bond during the sample period." On average, the effective spread over both institutional municipal bond traders and retail trades may not be particularly onerous. Trustees, however, should take special precautions to see that they are purchasing bonds with yields close to the reoffering price. The authors develop a measure of "money left on the table," which they define as the surplus accruing to broker dealers from extracting economic rents from uninformed investors. Thus, the 'money on the table' measure also estimates the cost of remaining uninformed:

[C]ustomers who are informed about an upcoming or recent issue, and about the reoffering price, can ask their broker to fill an order for that particular bond at the reoffering price, or close to it. Other customers, who simply wish to purchase a municipal bond with certain characteristics, may be quoted very different prices when their brokers contact their firm's retail trading desk.

Examination of trade cost patterns for retailsized trades indicates that if a customer purchases a \$10,000 bond on the first day of the issue's trading, the customer should expect to pay a markup of 70 basis points. However, if the customer does not buy the bond at reoffering + 70bp, it indicates that the customer is uninformed. In that case, for the same \$10,000 bond purchase, the customer should expect a yield reduction equal to a 180-basis point markup. The study traces the evolution of markups over time, and concludes that prices for small traders do not reflect prices that are expected in a "classically efficient, well-functioning financial market." Dealer markups are drawn from two distinct distributions. One distribution shows purchase prices close to the reoffering price and with relatively low standard deviations; the second shows a much greater distrib-

<sup>&</sup>lt;sup>15</sup> Green, Richard C., Hollifield, Burton & Schurhoff, Norman, *Dealer Intermediation and Price Behavior in the Aftermarket* for New Bond Issues, Working Paper, Carnegie Mellon University

<sup>(</sup>October 17, 2006). The paper will appear in a forthcoming edition of JOURNAL OF FINANCIAL ECONOMICS.

ution in prices. This is the set of transactions between brokers and uninformed retail customers. Given the significant profits that can be extracted from this customer set, "retail brokers and other intermediaries who serve retail customers have minimal incentives to educate existing customers about alternative sources of information."

#### **III. Conclusion**

The Restatement (Third) of Trusts provides that "the duty to avoid unwarranted costs is given increased emphasis in the prudent investor rule.... this emphasis reflects the availability and continuing emergence of modern investment products, not only with significantly varied characteristics but also with similar products being offered with significantly differing costs."16

To a great extent, objective academic research suggests that the uninformed segment of the municipal bond marketplace is cross subsidizing institutional buyers. Trustees should recognize that tax-free income might be very costly and that if the trustee lacks the information to negotiate effectively with the broker, the "no commission" municipal bond trades may be far more expensive than comparably sized investments in stocks.17

At minimum, the trustee should ascertain and document a municipal bond's reoffering price as well as the extent to which the broker-dealer's markup (or, for a sale from the trust to the broker, the markdown) diminishes the yield. For noncallable municipal bonds, the relevant value is the yield to maturity; for callable municipal bonds, the relevant value is yield to call. Whether trustees have a duty to disclose this information to beneficiaries is an interesting and, as yet, unsettled question. For example, Uniform Trust Code ("UTC") §813(a), Duty to Inform and Report, states, "a trustee shall keep the qualified beneficiaries of the trust reasonably informed about the administration of the trust and of the material facts necessary for them to protect their interests." The UTC Comment on subsection (a) elaborates: "this may include a duty to communicate to a qualified beneficiary information about the administration of the trust that is reasonably necessary to enable the beneficiary to enforce the beneficiary's rights and to prevent or redress a breach of trust." Adequate disclosure seems especially important when the trustee is a commercial fiduciary affiliated with a broker-dealer or when the trustee, or any party of interest in the transaction, receives "soft-dollar" or "payment for order flow" compensation.

Most of the written polemic surrounding the municipal bond fund vs. individual municipal bond debate occurred prior to these recent studies. While this debate will continue to remain unresolved, all other things being equal, the new academic evidence on transaction costs seems to be favorable for bond fund advocates. Mutual funds or separately managed accounts offer trustees a vehicle through which they can participate in the municipal bond marketplace on institutional trade cost terms. Not all mutual funds are created equal, however, and trustees should document that their fund selections are prudent and suitable.

system compared the execution price MS & Co. received from the Street to the National Best Offer ("Best Offer") at the time of the comparison. If the execution price was less than the Best Offer, MS & Co. passed the execution to the customer at the best offer price and MS & Co. retained the difference between the execution price and the Best Offer." SEC Administrative Proceeding File No. 3-12631 (May 9, 2007).

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<sup>&</sup>lt;sup>16</sup> Restatement (Third) of Trusts §227 (1992).

<sup>&</sup>lt;sup>17</sup> Trustees should also be aware of hidden markups in equity transactions. For example, the SEC recently settled fraud charges against Morgan Stanley for failure to provide best execution to certain retail orders for OTC traded securities. In this case, the SEC alleges "After December 10, 2001, MS & Co. did not pass along Street Executions to certain retail customers.... the market-making