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Best execution in the municipal market

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Introduction

Two decades ago, municipal trading desks made multi-million dollar bets, not with information gleaned from rows of screens, but from insights rooted in years of market observations. Municipal bonds, unlike equities, did not trade on a quoted exchange. As a result, the municipal market has historically been viewed as relatively opaque with price discovery being more art than science.

Today, the municipal market is electronic and transparent. The transition from voice to electronic brokerage started in the 2000’s with the advent of electronic fixed income markets (electronic markets) and continues under the guidance of the Municipal Securities Rulemaking Board (MSRB).

In this issue of Financial Markets Insights, we provide market context to the MSRB’s 2016 mandate that “best execution,” a hallmark of the taxable fixed income and equity markets, becomes a staple for retail municipal bond investors. Our review includes:

- Current municipal price discovery methodologies; and
- Electronic markets’ regulatory compliance tools.

We conclude our municipal best execution review with a discussion of the importance of a broker-dealer’s policy and procedures relative to:

- Implementation Guidance on MSRB Rule G-18, on Best Execution; and
- Recent municipal enforcement actions.

Unique characteristics of municipal securities

Significant structural differences exist between the corporate and municipal bond markets. Municipal CUSIPs (Committee on Uniform Security Identification Procedures) outnumber corporate CUSIPs by 20-to-1. Half of all corporate CUSIPs do not trade on a given day, whereas 98.6% of municipal CUSIPS have no daily trades, making price discovery for municipals more challenging than for corporates.
Table 1: Municipal and corporate bond market comparison

<table>
<thead>
<tr>
<th>Factor</th>
<th>Corporate Debt Market</th>
<th>Municipal Debt Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Par Outstanding</td>
<td>$8.3 billion</td>
<td>$3.7 billion</td>
</tr>
<tr>
<td># of CUSIPs</td>
<td>55,000</td>
<td>1,100,000</td>
</tr>
<tr>
<td># of Issuers</td>
<td>5,500</td>
<td>55,000</td>
</tr>
<tr>
<td>Transaction Volume</td>
<td>41,307 daily trades</td>
<td>41,257 daily trades</td>
</tr>
<tr>
<td>Average Trade Size</td>
<td>$13,011</td>
<td>$13,038</td>
</tr>
<tr>
<td>Transaction Volume</td>
<td>$537.4 million</td>
<td>$537.9 million</td>
</tr>
<tr>
<td>Daily unique CUSIPs not trading (#)</td>
<td>26,903</td>
<td>1,084,783</td>
</tr>
<tr>
<td>Daily unique CUSIPs not trading (%)</td>
<td>48.9%</td>
<td>98.6%</td>
</tr>
</tbody>
</table>

MSRB Rule G-18

In June 2014, US Securities and Exchange Commission (SEC) Chairman Mary Jo White highlighted best execution in the municipal market as a priority initiative:

“… to assure that brokers are subject to meaningful obligations to achieve the best executions for investors in both the corporate and municipal bond transactions, we will be working with the MSRB in the coming months as they finalize a robust best execution rule for the municipal securities market and with FINRA and MSRB as they work together to provide practical guidance on how brokers might achieve best execution.”

MSRB Rule G-18 Best Execution, the first explicit best-execution rule for transactions in municipal securities, took effect on March 21, 2016. MSRB Rule G-18 is the municipal equivalent to FINRA Rule 5310 for Best Execution and Interpositioning in the taxable fixed income markets.

Recognizing the significant structural differences between the municipal and corporate debt markets, the MSRB adopted an order-processing standard for best execution of municipal customer orders. Specifically, MSRB Rule G-18 creates an “order-handling and transaction-execution” standard, not a “substantive pricing” standard, for municipal best execution. “Reasonable Diligence” is MSRB’s threshold test to determine whether bond pricing is as favorable as possible under prevailing market conditions.

“… as characteristic of any reasonableness standard, a failure to have actually obtained the most favorable price possible will not necessarily mean the dealer failed to use reasonable diligence under the circumstances.”

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4 The MSRB additionally states for other markets where best execution is a concept of execution quality, “… the standard in this context is similarly not a most-favorable-price standard.” MSRB Letter to the Securities and Exchange Commission: Response to Comments on SR-MSRB-2014-07, November 21, 2014, pp. 2–3.
MSRB Rule G-18 provides six factors to gauge a broker-dealer's reasonable diligence in ascertaining best execution for a municipal customer:

1. The character of the market including price, volatility, and relative liquidity;
2. Size and type of transaction;
3. Number of markets checked;
4. Information reviewed to determine the current market for subject security;
5. The accessibility of quotations; and
6. Terms and conditions of the customer’s inquiry or order, including transacted bids.

These six factors comprise a non-exhaustive list to determine reasonable diligence for order-handling and execution. The MSRB deems no single factor as a determinant.\textsuperscript{6,7,8}

**Comparable bonds**

Since the vast majority of municipal CUSIPs trade infrequently, broker-dealers place a high reliance on comparable bonds (comparables) when handling customer orders. Broker-dealers commonly use comparables as pricing proxies for municipal CUSIPs that lack market quotations.

The MSRB identifies a number of “similar” factors potentially relevant to comparable municipal securities, including:

- Issuer, sector, and geographic region;
- Source of repayment and credit rating;
- Coupon, maturity, and redemption features; and
- Tax status.\textsuperscript{9}

**Municipal Price Discovery**

**Live and executable inventory**

The introduction of electronic markets in 2000 was a seminal event for municipal price discovery and transparency.\textsuperscript{10} For the first time, electronic markets afforded broker-dealers access to live and executable inventory, beyond their firm’s municipal holdings. Access to electronic markets’ co-mingled inventory pools provide broker-dealers a set of comparables with real-time pricing. Broker-dealers routinely search electronic markets’ inventory to obtain real-time comparable pricing.

\begin{itemize}
  \item MSRB Rule G-18, p. 1.
  \item During “Extreme Market Conditions” the MSRB states the treatment of customer orders “must remain fair, consistent, and reasonable.” If a broker-dealer’s order handling practice is different due to extreme conditions, the difference in practice must be disclosed to the customer. \textit{See supra} note 3 at 5.
  \item MSRB Rule G-18 is not a compensation standard. MSRB Rule G-30 Prices and Commissions promulgates guidance on the reasonableness of the compensation a broker-dealer receives on a transaction. \textit{See supra} note 3 at 11.
  \item BondDesk Group and The MuniCenter both launched in 2000 and remain the leading electronic markets for municipal securities. Author Bradley Wendt was President and co-founder of BondDesk Group, which introduced best execution practices to electronic retail fixed income.
\end{itemize}
Search screens allow broker-dealers to refine their comparable analysis according to a multitude of pricing factors, including: calls, income sources (e.g., revenue, general obligation) use of proceeds, quantity, price, and yield. Real-time inventory available for display in an electronic market routinely exceeds 40,000 unique municipal CUSIPs.

**Using EMMA for pricing comparables**

The MSRB created Electronic Municipal Market Access (EMMA) in 2005 as the official repository for municipal issuer disclosure and trade data. MSRB’s real-time trade portal provides a “ticker” for the municipal market. EMMA’s robust inquiry tool provides access to detailed trade histories for all municipal CUSIPs. A recreation of the EMMA daily transaction screen is shown in Figure 1.

Figure 1: EMMA daily transaction screen for CUSIP 13063CYP9 – State of California General Obligation

<table>
<thead>
<tr>
<th>Trade Date</th>
<th>High/Low Price (%)</th>
<th>High/Low Yield (%)</th>
<th>Trade Count</th>
<th>Total Trade Amount ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/05/2015</td>
<td>100.578 / 97.641</td>
<td>3.554 / 3.305</td>
<td>69</td>
<td>20,360,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trade Date</th>
<th>Settlement Date</th>
<th>Price (%)</th>
<th>Yield (%)</th>
<th>Trade Amount ($)</th>
<th>Trade Type</th>
<th>Special Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/05/2015</td>
<td>11/10/2015</td>
<td>99.025</td>
<td>3.403</td>
<td>10,000</td>
<td>Customer bought</td>
<td></td>
</tr>
<tr>
<td>11/05/2015</td>
<td>11/10/2015</td>
<td>98.25</td>
<td>3.507</td>
<td>25,000</td>
<td>Inter-dealer trade</td>
<td></td>
</tr>
<tr>
<td>11/05/2015</td>
<td>11/10/2015</td>
<td>99.25</td>
<td>3.431</td>
<td>25,000</td>
<td>Customer bought</td>
<td></td>
</tr>
</tbody>
</table>

**Electronic markets regulatory compliance tools**

**Depth of market for specific municipal bonds**

An electronic market’s aggregated, multi-dealer inventory may report different prices for the same CUSIP. An electronic market’s “quote montage” reveals the depth of the market for a specified CUSIP by prioritizing the inventory from multiple dealers by price. An illustrative quote montage is shown in Table 2. The quote montage empowers the broker-dealer to handle and execute the customer order at the best available price or series of prices.

Table 2: Quote montage reflects a broker-dealer seeking $1.0 million of CUSIP 13063CYP9. The customer order is bifurcated into two unique executions: $700,000 from Dealer 1 and $300,000 from Dealer 2. The two executions create a melded yield of 3.36%, with 70% of the customer order filled at 3.38% and 30% of the customer order filled at 3.30%.

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11 EMMA pricing is real-time, subject to a 15-minute delay. EMMA website: Service of MSRB, 2014.

12 See EMMA website, accessed March 18, 2016

http://emma.msrb.org/SecurityDetails/TradeActivity/A8068C26A3190BC2CE4160A4D1DB267CA

13 The Table 2 quote montage reflects a broker-dealer seeking $1.0 million of CUSIP 13063CYP9. The customer order is bifurcated into two unique executions: $700,000 from Dealer 1 and $300,000 from Dealer 2. The two executions create a melded yield of 3.36%, with 70% of the customer order filled at 3.38% and 30% of the customer order filled at 3.30%.
Table 2: Quote montage for CUSIP: 13063CYP9

<table>
<thead>
<tr>
<th>CUSIP: 13063CYP9 State of California Tax-Exempt Various Purpose General Obligation Refunding Bonds (CA)</th>
<th>Dealer</th>
<th>Quantity</th>
<th>Yield</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dealer 1</td>
<td>$700,000</td>
<td>3.38%</td>
<td>100.00</td>
<td></td>
</tr>
<tr>
<td>Dealer 2</td>
<td>$300,000</td>
<td>3.30%</td>
<td>101.00</td>
<td></td>
</tr>
<tr>
<td>Dealer 3</td>
<td>$1,000,000</td>
<td>3.26%</td>
<td>101.50</td>
<td></td>
</tr>
<tr>
<td>Dealer 4</td>
<td>$10,000</td>
<td>3.22%</td>
<td>102.00</td>
<td></td>
</tr>
</tbody>
</table>

Source: EMMA

Mark-up matrix for broker-dealer compliance

Electronic markets provide a “mark-up matrix” as a compliance safeguard to prevent excessive customer mark-ups. The parameters for the mark-up matrix are set by the broker-dealer and establish the maximum customer charges for bond sales and typically include credit rating and maturity:14

Table 3: Mark-up matrix driven by credit rating and maturity

<table>
<thead>
<tr>
<th>Bond Credit Rating</th>
<th>Maturity (years)</th>
<th>Registered Rep Mark-up</th>
<th>Desk Mark-up</th>
<th>Total Mark-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aaa</td>
<td>1 – 10</td>
<td>.25%</td>
<td>+</td>
<td>.12% =</td>
</tr>
<tr>
<td>Aaa</td>
<td>11 – 20</td>
<td>.50%</td>
<td>+</td>
<td>.25% =</td>
</tr>
<tr>
<td>A</td>
<td>1 – 10</td>
<td>.50%</td>
<td>+</td>
<td>.25% =</td>
</tr>
<tr>
<td>A</td>
<td>11 – 20</td>
<td>.75%</td>
<td>+</td>
<td>.50% =</td>
</tr>
</tbody>
</table>

Source: Author’s analysis

Table 3 shows an illustrative mark-up matrix whereby the broker-dealer restricts to 1.25% the total maximum fee a customer can be charged for a municipal bond with a single-A credit rating and a maturity of 11 to 20 years. The mark-up matrix limits the registered representative and trading desk’s customer fees to 0.75% and 0.50% respectively.15

Broker-dealer policies and procedures for municipal bonds

MSRB Implementation Guidance for Rule G-18

On November 20, 2015, the MSRB published “Implementation Guidance” for broker-dealers to enact policies and procedures for best execution of municipal bonds.16 The MSRB closely coordinated the guidance with FINRA, which published best execution implementation guidance for the corporate bond

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14 Retail municipal customers are typically assessed separate mark-ups by the broker-dealer’s registered representative and trading desk. The mark-up matrix consolidates all internal mark-ups, allowing the broker-dealer to report a total mark-up for the customer transaction. Total mark-up is the fee paid by the customer and is subject to regulatory review.

15 The broker-dealer’s compliance group typically provides material input on the mark-up matrix pricing parameters.

16 The MSRB’s Implementation Guidance uses a question and answer format to augment several topics reviewed in MSRB Rule G-18 Supplementary Material, including: 1) Failure to obtain most favorable pricing; 2) Inadequate broker-dealer resources; and 3) Transacting municipal securities with limited pricing information.
market.\textsuperscript{17} MSRB and FINRA’s collective goal is for consistency in order handling and transaction-execution unless differentiation is needed due to structural differences in the municipal and corporate bond markets.\textsuperscript{18}

The MSRB suggests that broker-dealers include in written policy and procedures “\textit{how and when}” their trading desks:

- Expose retail order flow to third parties, and
- Show external bids and offers to retail customers.

The MSRB cites the availability of “\textit{electronic networks}” as potentially playing a growing role in ascertaining the best market for municipal customer transactions.\textsuperscript{19}

**Mandatory annual review**

Acknowledging the lack of centralized exchange, the MSRB supports an expansive view of the term “market.” MSRB Rule G-18 defines the municipal market as a variety of venues including electronic markets, broker’s broker market, and broker-dealers acting as principal.\textsuperscript{20}

MSRB Rule G-18 requires broker-dealers to review at least annually, policies and procedures for determining the best available market for customer transactions. Additionally, the annual review must assess whether existing policy and procedures are “\textit{reasonably designed}” to achieve best execution in light of:

- Changes in market structure;
- New entrants;
- Newly available pre-and post-trade data; and
- New technology.

MSRB Rule G-18 obligates broker-dealers to “\textit{promptly}” modify any policy and procedures deemed deficient during the periodic review.\textsuperscript{21}

**Recent municipal enforcement actions**

Broker-dealer enacted policies and procedures were central to several 2015 regulatory enforcement actions involving municipal securities:

- The SEC permitted over 50 broker-dealers to “\textit{self-report}” instances in which the official statement for municipal underwritings contained “\textit{materially inaccurate statements}.” In addition to fines, broker-dealers were required to retain an independent consultant to conduct a review of the

\textsuperscript{17} MSRB Rule G-18 provides broker-dealers with an implementation lead-time of 120 days. Due to technology requirements, SIFMA in a comment letter to the MSRB recommended a minimum “\textit{lead time}” of six months, with one year being preferable.

\textsuperscript{18} See supra note 3 at 1.

\textsuperscript{19} See supra note 3 at 8.

\textsuperscript{20} See MSRB, Rule G-18 Best Execution, Upcoming changes, December 7, 2015.

\textsuperscript{21} Ibid.
broker-dealer’s policies and procedures as they relate to municipal securities underwriting due diligence.  

- A national broker-dealer settled charges with the SEC that the former head of the firm’s municipal underwriting desk overcharged customers in municipal new issues. The SEC cited the broker-dealer’s failure to establish policies and procedures that would be expected to prevent and detect multiple SEC and MSRB rule violations in connection with municipal underwriting activities.

- FINRA entered a settlement with a member broker-dealer, for inadequate systems and procedures relating to the sale of Puerto Rico municipal bonds. The broker-dealer’s alleged rule violations cited by FINRA included the lack of procedures to undertake a systematic review of customer accounts.

The SEC, MSRB, and FINRA have declared best execution as an important regulatory requirement for the municipal bond market. Core to a broker-dealer’s successful implementation of a best execution standard for retail accounts is the development, implementation, documentation, and monitoring of thoughtful policies and procedures for municipal order-handling and transaction-execution.

**About the Author**

**Bradley Wendt** has over 25 years of experience as a senior practitioner in fixed income capital markets, regulatory compliance, best execution practices, wealth management, electronic trading, credit, bond insurance, and securities pricing. Mr. Wendt created and ran Goldman Sachs’ Municipal Capital Markets Group and managed internal compliance, suitability and mark-up procedures for all Goldman Sachs’ municipal derivative products. He co-founded and served as President and senior broker-dealer officer at BondDesk Group, the leading electronic trading platform for retail fixed income, averaging over 20,000 transactions per day.

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23 Edward Jones consented to the SEC order without admitting or denying the findings that the firm willfully violated MSRB and SEC rules and paid a civil money penalty in the amount of $15.0 million to the SEC, of which $1.5 million was transferred to the MSRB. See SEC Administrative Proceeding File No. 3-16751: In the Matter of Edward D. Jones & Co.

24 FINRA cited violations include MSRB Rule G-27: Supervision which requires in part: “Each dealer shall adopt, maintain and enforce written supervisory procedures reasonably designed to ensure that the conduct of the municipal securities activities of the dealer and its associated persons are in compliance as required … [by] this rule.”

25 In resolving the matter, Santander Securities paid restitution of $4.3 million and a fine of $2.0 million. FINRA Letter of Acceptance, Waiver and Consent No. 2014041355501 executed on September 18, 2015.
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