

Required fields are shown with yellow backgrounds and asterisks.

Page 1 of * <input type="text" value="78"/>	SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549 Form 19b-4	File No.* SR - <input type="text" value="2016"/> - * <input type="text" value="09"/> Amendment No. (req. for Amendments *) <input type="text"/>
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Filing by Municipal Securities Rulemaking Board  
Pursuant to Rule 19b-4 under the Securities Exchange Act of 1934

Initial * <input checked="" type="checkbox"/>	Amendment * <input type="checkbox"/>	Withdrawal <input type="checkbox"/>	Section 19(b)(2) * <input checked="" type="checkbox"/>	Section 19(b)(3)(A) * <input type="checkbox"/>	Section 19(b)(3)(B) * <input type="checkbox"/>
Pilot <input type="checkbox"/> Extension of Time Period for Commission Action * <input type="checkbox"/> Date Expires * <input type="text"/>			Rule <input type="checkbox"/> 19b-4(f)(1) <input type="checkbox"/> 19b-4(f)(4) <input type="checkbox"/> 19b-4(f)(2) <input type="checkbox"/> 19b-4(f)(5) <input type="checkbox"/> 19b-4(f)(3) <input type="checkbox"/> 19b-4(f)(6)		

Notice of proposed change pursuant to the Payment, Clearing, and Settlement Act of 2010 Section 806(e)(1) * <input type="checkbox"/> Section 806(e)(2) * <input type="checkbox"/>	Security-Based Swap Submission pursuant to the Securities Exchange Act of 1934 Section 3C(b)(2) * <input type="checkbox"/>
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Exhibit 2 Sent As Paper Document <input type="checkbox"/>	Exhibit 3 Sent As Paper Document <input type="checkbox"/>
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**Description**  
Provide a brief description of the action (limit 250 characters, required when Initial is checked \*).

**Contact Information**  
Provide the name, telephone number, and e-mail address of the person on the staff of the self-regulatory organization prepared to respond to questions and comments on the action.

First Name \*     Last Name \*   
 Title \*   
 E-mail \*   
 Telephone \*     Fax

**Signature**  
Pursuant to the requirements of the Securities Exchange Act of 1934,  
Municipal Securities Rulemaking Board  
has duly caused this filing to be signed on its behalf by the undersigned thereunto duly authorized.  
(Title \*)

Date       
 By    

(Name \*)

NOTE: Clicking the button at right will digitally sign and lock this form. A digital signature is as legally binding as a physical signature, and once signed, this form cannot be changed.

SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

For complete Form 19b-4 instructions please refer to the EFFF website.

**Form 19b-4 Information \***

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The self-regulatory organization must provide all required information, presented in a clear and comprehensible manner, to enable the public to provide meaningful comment on the proposal and for the Commission to determine whether the proposal is consistent with the Act and applicable rules and regulations under the Act.

**Exhibit 1 - Notice of Proposed Rule Change \***

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The Notice section of this Form 19b-4 must comply with the guidelines for publication in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers guidance on Federal Register publication requirements in the Federal Register Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO]-xx-xx). A material failure to comply with these guidelines will result in the proposed rule change being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3)

**Exhibit 1A- Notice of Proposed Rule Change, Security-Based Swap Submission, or Advance Notice by Clearing Agencies \***

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The Notice section of this Form 19b-4 must comply with the guidelines for publication in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers guidance on Federal Register publication requirements in the Federal Register Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO]-xx-xx). A material failure to comply with these guidelines will result in the proposed rule change, security-based swap submission, or advance notice being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3)

**Exhibit 2 - Notices, Written Comments, Transcripts, Other Communications**

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Exhibit Sent As Paper Document

Copies of notices, written comments, transcripts, other communications. If such documents cannot be filed electronically in accordance with Instruction F, they shall be filed in accordance with Instruction G.

**Exhibit 3 - Form, Report, or Questionnaire**

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Exhibit Sent As Paper Document

Copies of any form, report, or questionnaire that the self-regulatory organization proposes to use to help implement or operate the proposed rule change, or that is referred to by the proposed rule change.

**Exhibit 4 - Marked Copies**

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The full text shall be marked, in any convenient manner, to indicate additions to and deletions from the immediately preceding filing. The purpose of Exhibit 4 is to permit the staff to identify immediately the changes made from the text of the rule with which it has been working.

**Exhibit 5 - Proposed Rule Text**

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The self-regulatory organization may choose to attach as Exhibit 5 proposed changes to rule text in place of providing it in Item I and which may otherwise be more easily readable if provided separately from Form 19b-4. Exhibit 5 shall be considered part of the proposed rule change.

**Partial Amendment**

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If the self-regulatory organization is amending only part of the text of a lengthy proposed rule change, it may, with the Commission's permission, file only those portions of the text of the proposed rule change in which changes are being made if the filing (i.e. partial amendment) is clearly understandable on its face. Such partial amendment shall be clearly identified and marked to show deletions and additions.

## 1. Text of Proposed Rule Change

Pursuant to the provisions of Section 19(b)(1) of the Securities Exchange Act of 1934 (“Exchange Act” or “Act”),<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> the Municipal Securities Rulemaking Board (“MSRB” or “Board”) is filing with the Securities and Exchange Commission (“Commission” or “SEC”) a proposed rule change to the MSRB’s facility for the Real-Time Transaction Reporting System (“RTRS”) to establish an historical data product to provide institutions of higher education (“academic institutions”) with post-trade municipal securities transaction data collected through RTRS (“MSRB Academic Historical Transaction Data Product,” hereafter referred to as “RTRS Academic Data Product”) for purchase (“proposed rule change”). If approved by the Commission, the MSRB will announce the effective date of the proposed rule change in a regulatory notice to be published no later than 90 days following Commission approval. The effective date will be no later than 270 days following publication of the regulatory notice announcing Commission approval.

(a) The text of the proposed rule change is attached as Exhibit 5. Text proposed to be added is underlined.

(b) Not applicable.

(c) Not applicable.

## 2. Procedures of the Self-Regulatory Organization

The proposed rule change was approved by the Board at its January 27-28, 2016, meeting. Questions concerning this filing may be directed to Carl E. Tugberk, Assistant General Counsel, or Marcelo Vieira, Director of Research, at (202) 838-1500.

## 3. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

(a) Purpose

The MSRB is the federal regulatory entity with primary responsibility under the Exchange Act for rulemaking for the municipal securities market. Under the Exchange Act, the MSRB is charged with adopting rules with respect to transactions in municipal securities effected by brokers, dealers and municipal securities dealers (“dealers”) and the municipal advisory activities of municipal advisors.

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<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

In addition to developing its comprehensive body of rules governing the activities of dealers and municipal advisors, the MSRB has undertaken to create various market transparency products in furtherance of its statutory duties and its mission, which is, in part, to promote a fair and efficient municipal securities market through the collection and dissemination of market information. Historically, the MSRB has operated information systems to collect key disclosure documents and transaction data to create a central warehouse of information that made most of these documents and data available to the market—the Electronic Municipal Market Access (“EMMA<sup>®</sup>”)<sup>3</sup> website. The MSRB makes post-trade transaction data available to the general public through the EMMA website at no cost, and to data vendors, industry utilities and others on a subscription basis through a real-time data feed and on a delayed basis.

MSRB Rule G-14, on transaction reporting, requires dealers to report all executed transactions in municipal securities to RTRS within 15 minutes of the time of trade, with limited exceptions.<sup>4</sup> RTRS serves the dual objectives of price transparency and market surveillance. While a comprehensive database of transactions is needed for the surveillance function of RTRS, the MSRB does not believe that all information or transactions reported to RTRS are necessary to serve the transparency objective of the system and, therefore, such information does not qualify for public dissemination. Among other information, the executing broker symbol, which provides the identity of each dealer that executed a transaction reported to RTRS, is not publicly disseminated. The information facility for RTRS serves to outline the high-level parameters by which the MSRB operates the system.

While currently used by researchers from academic institutions (“academics”), through subscription services or in historical data sets, the RTRS data available on the EMMA website do not include any identifying information regarding the dealer reporting each transaction. Thus, the information disseminated from RTRS would not allow such an academic to attribute transactions to the dealers that facilitated them—even anonymously. As a result, some academics have asked whether the MSRB could make an enhanced version of RTRS trade data available that includes dealer identifiers. Further, on July 15, 2014, the MSRB published a Report on Secondary Market Trading in the Municipal Securities Market that utilized dealer identifiers to gain a better understanding of secondary market trading practices in the municipal securities market, including basic patterns of trading, pricing differentials associated with trading patterns and the impact of price transparency on pricing differentials. However, academics wishing to replicate the

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<sup>3</sup> EMMA<sup>®</sup> is a registered trademark of the MSRB.

<sup>4</sup> Transactions in securities without CUSIP numbers, transactions in municipal fund securities and certain inter-dealer securities movements not eligible for comparison through a clearing agency are the only transactions exempt from the reporting requirements of Rule G-14.

methodology employed in this report are unable to do so, as it relies, in part, on dealer identifiers.

In July 2015, in response to these requests from academics, the MSRB published a request for comment, proposing to create a new RTRS Academic Data Product that would include anonymized dealer identifiers (“draft proposal”).<sup>5</sup> In response to the Request for Comment, the MSRB received 13 comment letters, mostly supporting the draft proposal.<sup>6</sup> After carefully considering all of the comments received, the MSRB determined to file this proposed rule change to the RTRS facility to create the RTRS Academic Data Product, which would be made available only to academic institutions and would include the same transactions included in the current RTRS historical transaction data sets, with the exclusion of list offering price and takedown transactions, which can be used to identify primary market transactions.<sup>7</sup>

While the MSRB understands that anonymized dealer identifiers may be highly useful to academic institutions in connection with their research activities, the MSRB also recognizes that dealers may be concerned with the potential for reverse engineering of anonymized dealer identifiers to determine dealer identities. To address this issue, in addition to anonymizing dealer identifiers, the MSRB would take additional measures, including:

- providing unique data sets with different anonymized dealer identifiers to each academic;
- excluding list offering price and takedown transactions;
- explicitly requiring subscribers to agree that they will not attempt to reverse engineer the identity of any dealer;
- prohibiting the redistribution of the data in the RTRS Academic Data Product;
- requiring users to disclose each intended use of the data (including a description of each study being performed and the names of each individual who will have access to the data for the study);

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<sup>5</sup> MSRB Notice 2015-10 (July 16, 2015) (“Request for Comment”).

<sup>6</sup> See infra note 11.

<sup>7</sup> In addition, the MSRB intends to establish a fee for the RTRS Academic Data Product prior to the effective date of the proposed rule change. The fee will be established pursuant to a separate rule filing.

- requiring users to ensure that any data presented in work product be sufficiently aggregated so as to prevent reverse engineering of any dealer or transaction;
- requiring that the data be returned or destroyed if the agreement is terminated; and
- aging all the transactions included in the RTRS Academic Data Product for no less than 36 months.

The establishment of the RTRS Academic Data Product would add to the MSRB's current offering of data products and further the MSRB's mission to improve the transparency of the municipal securities market by facilitating access to municipal market data for academic institutions. While academic institutions currently have access to the post-trade municipal securities transaction data disseminated from RTRS, the RTRS Academic Data Product would improve the usefulness of this data by enabling academics to distinguish transactions executed by different dealers.

(b) Statutory Basis

Section 15B(b)(2) of the Exchange Act<sup>8</sup> provides that:

[T]he Board shall propose and adopt rules to effect the purposes of this title with respect to transactions in municipal securities effected by [dealers] and advice provided to or on behalf of municipal entities or obligated persons by [dealers] and municipal advisors with respect to municipal financial products, the issuance of municipal securities, and solicitations of municipal entities or obligated persons undertaken by [dealers] and municipal advisors.

Section 15B(b)(2)(C) of the Exchange Act,<sup>9</sup> provides that the MSRB's rules shall:

be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in municipal securities and municipal financial products, to remove impediments to and perfect the mechanism of a free and open market in municipal securities and municipal financial products, and, in general, to

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<sup>8</sup> 15 U.S.C. 78o-4(b)(2).

<sup>9</sup> 15 U.S.C. 78o-4(b)(2)(C).

protect investors, municipal entities, obligated persons, and the public interest.

The MSRB believes that the proposed rule change is consistent with Sections 15B(b)(2) and 15B(b)(2)(C) of the Exchange Act because it would prevent fraudulent and manipulative acts and practices, promote just and equitable principles of trade, and remove impediments to and perfect the mechanism of a free and open market in municipal securities. Specifically, the RTRS Academic Data Product would enable subscribers of the product to better understand the pricing of certain transactions, as well as how such transactions were executed, which should, in turn, facilitate higher quality research and analysis. Overall, the proposed rule change would contribute to the MSRB's continuing efforts to improve market transparency and to protect investors, municipal entities, obligated persons and the public interest.

#### **4. Self-Regulatory Organization's Statement on Burden on Competition**

Section 15B(b)(2)(C) of the Exchange Act<sup>10</sup> requires that MSRB rules not be designed to impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act. In determining whether these standards have been met, the MSRB was guided by the Board's Policy on the Use of Economic Analysis in MSRB Rulemaking. In accordance with this policy, the Board has evaluated the potential impacts on competition of the proposed rule change, including in comparison to reasonable alternative regulatory approaches, relative to the baseline. The MSRB also considered other economic impacts of the proposed rule change and has addressed comments relevant to these impacts in other sections of this document.

The MSRB believes that the availability of this data may further research, which could help the MSRB and other regulators: prevent fraudulent and manipulative acts and practices; facilitate transactions in municipal securities and municipal financial products; remove impediments to and perfect the mechanism of a free and open market in municipal securities and municipal financial products; and protect investors, municipal entities, obligated persons and the public interest.

The MSRB acknowledges the potential for reverse engineering of anonymized dealer identifiers to determine dealer identities and has taken a number of measures to reduce this risk and mitigate any potential impact. Given these measures and the aforementioned benefits, the MSRB does not believe that the proposed rule change will impose any additional burdens on competition, relative to the baseline, that are not necessary or appropriate in furtherance of the purposes of the Act.

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<sup>10</sup>

Id.

## 5. Self-Regulatory Organization’s Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others

The MSRB received 13 comment letters in response to the Request for Comment.<sup>11</sup> The comment letters are summarized below by topic, and the MSRB’s responses are provided.

### Support for the Proposed Rule Change

In response to the Request for Comment, several commenters expressed strong general support for the creation of the RTRS Academic Data Product. ABFM, AGFS, Bergstresser, Cusatis, Glassberg, NYU Stern and Ramsey believe it would improve the quality of academic research on, and contribute to enhanced transparency in, the municipal securities market. Further, Gifford opined that the draft proposal would allow for better cost-benefit analysis of public-private partnership projects that access the municipal securities market, and Coastal stated that trade data that would be made available by the draft proposal would contribute to academic research of the municipal securities market and that it should be supported. Finally, Harris strongly supports the RTRS Academic Data Product and commented that the draft proposal would “allow the MSRB to better regulate markets for the public good.”

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<sup>11</sup> See letters from: Robert Doty, American Governmental Financial Services (“AGFS”), dated August 24, 2015; Robert Kravchuck, *et al.*, Association for Budgeting and Financial Management (“ABFM”), dated September 13, 2015; Michael Nicholas, Chief Executive Officer, Bond Dealers of America (“BDA”), dated August 24, 2015; Daniel Bergstresser (“Bergstresser”), Associate Professor of Finance, Brandeis University, International Business School, dated September 14, 2015; Chris Melton, Executive Vice President, Coastal Securities (“Coastal”) dated August 5, 2015; Patrick J. Cusatis (“Cusatis”), Associate Professor of Finance, Penn State Harrisburg, School of Business Administration, dated September 10, 2015; Jonathan L. Gifford (“Gifford”), Professor and Director of Center for Transportation P3 Policy, George Mason University, dated September 1, 2015; Andrew Glassberg (“Glassberg”), dated August 17, 2015; Lawrence Harris (“Harris”), Professor of Finance and Business Economics, University of Southern California, Marshall School of Business, dated September 6, 2015; John Mousseau (“Mousseau”), dated July 29, 2015; Norman White *et al.*, New York University, Leonard N. Stern School of Business (“NYU Stern”), dated September 16, 2015; James R. Ramsey (“Ramsey”), President, University of Louisville, dated September 4, 2015; Sean Davy, Managing Director, Capital Markets Division, and David L. Cohen, Managing Director and Associate General Counsel, Municipal Securities Division, Securities Industry and Financial Markets Association (“SIFMA”), dated September 11, 2015.



## **Risk of Reverse Engineering Trade Data**

In the Request for Comment, the MSRB recognized that dealers may be concerned with the potential for reverse engineering of anonymized dealer identifiers to determine dealer identities from the data provided by the RTRS Academic Data Product, and it proposed several measures to prevent and deter those that would try to reverse engineer the trade data. Several commenters addressed this issue and proposed modifications to the draft proposal for purposes of preventing reverse engineering.

### General Comments

BDA expressed concern that the draft proposal would allow reverse engineering of a dealer's trading/investment strategy and the requirements of the subscription agreement would not sufficiently protect dealers, thus, exposing them to an "unnecessary business risk." BDA further stated that data on municipal securities transactions that are currently available to the public for academic research "include a sufficient level of detail to support rigorous study." SIFMA also expressed concern that the proposed anonymization of dealer identifiers would not effectively protect dealer identities. Harris commented that use of the RTRS Academic Data Product may result in some reverse engineering, which may cause some level of harm to dealers, but he also stated that, while he believes engaging in reverse engineering would be inappropriate, it may "serve the public interest" by revealing "price differentials (known as markups by many) . . . to [dealers'] customers." ABFM commented that the planned terms of the subscription agreement intended to prevent reverse engineering would be a sufficient deterrent.

Since the inception of this rulemaking initiative, the MSRB has been acutely aware of the potential for reverse engineering the trade data that would be included in the RTRS Academic Data Product. Indeed, the MSRB acknowledges that the data provided in the RTRS Academic Data Product could be reverse engineered. However, the MSRB believes that the measures it would take—*e.g.*, anonymizing dealer identifiers, imposing liability on subscribers of the data for breaching the terms of the subscription agreement (which would, among other things, include a provision prohibiting reverse engineering), and limiting subscribers to academic institutions—, on balance, sufficiently reduce the risk of reverse engineering, and of harm resulting therefrom. Further, in response to the concerns raised by commenters, the MSRB is now proposing to: increase the aging requirement for the trade data from 24 to 36 months prior to its release; provide unique data sets with different anonymized dealer identifiers to each academic, which may both help guard against coordinated efforts at attempting reverse engineering dealer identities, as well as assist in identifying the source of conduct that violates the subscription agreement; exclude list offering price and take down transactions, which can be used to identify primary market transactions; require users to ensure the sufficient aggregation of any data presented in work product, which would protect against reverse engineering by readers of published works; and not include primary offering trades in the trade data. Overall, the MSRB has proposed numerous measures that should mitigate the risk of reverse engineering, and the residual risk is warranted by the benefits to the municipal

securities market that would result from creation of the RTRS Academic Data Product and greater transparency of dealer behavior. The MSRB may consider amending or discontinuing the RTRS Academic Data Product, as currently proposed, if future experience shows that anonymized dealer identifiers are reverse engineered by researchers.

### Aging Trade Data

As noted above, as part of the MSRB's effort to prevent and deter reverse engineering of dealer identities, the draft proposal required that the trade data made available to subscribers of the RTRS Academic Data Product would be for trades that were executed at least 24 months prior to the date that they were provided to the subscriber. SIFMA stated, in combination with other concerns about the draft proposal, that 24 months is too short of a time period to adequately protect against reverse engineering, and, instead, suggested that the MSRB age the trade data for 48 months. In contrast, ABFM believed 12 months, rather than 24, would be a sufficient time period to ensure that trades could not be reverse engineered, and Ramsey also suggested 12 months would be preferable to 24 months to ensure the data is timely. Harris argued that 24 months would be more than sufficient for aging the data to remove the usefulness of that data for the purpose of reverse engineering, in part, because he believes dealer positions change in no more than two months, and he also noted that as few as six or up to 12 months would be a better length of time because it would allay the concerns of dealers and allow for the "identifying [of] parasitic trading strategies as quickly as possible." Coastal believes 12 months would be too short a time period to sufficiently mitigate the reverse engineering risk but that 24 months would be appropriate and would not encumber research because, in its opinion, municipal securities market practices and conditions are "slow to evolve," making the data still relevant to academics studying market behavior.

Based on careful consideration of all of the diverse comments on this issue, the MSRB believes, at this time, that a 36-month period is appropriate to protect against, and mitigate the risk and potential harm from, any reverse engineering, while still providing useful trade data for academics to study.

### Grouped Versus Individual Dealer Identifiers

In the draft proposal, the MSRB proposed anonymizing identifiers for each individual dealer for the trade data made available through the RTRS Academic Data Product to protect against the potential of subscribers reverse engineering the data to determine dealer identities. A few commenters suggested alternative methods to anonymize dealer identities. Specifically, BDA stated that grouping dealers by size, as opposed to issuing individual anonymized identifiers, would better protect the trade data from reverse engineering if the MSRB does not plan on changing the dealer identifiers on a regular basis because, without periodic changes, it would become easier to identify dealers based on trading data over a long period of time. SIFMA similarly supported

making the trade data available through “groupings of comparable dealers,” arguing that the MSRB and FINRA should “adopt the peer group criteria used in MSRB and FINRA report cards to aggregate dealers into reportable groups.” Further, Coastal stated that, if dealers were not grouped by size, then reverse engineering would likely occur, while grouping by size would not substantially encumber research uses of the trade data. Coastal also argued that contracting with subscribers to prevent reverse engineering would not be effective, and BDA noted that any subscription agreement would not extend to readers of studies produced by subscribers.

In support of individual identifiers, Harris stated that the “empirical work [of academics] requires high quality data that can inform their analyses as to what dealers do. Dealer identities thus need to be revealed, at a minimum in anonymized form, so that academics can understand how dealer trading decisions relate to their previous trading decisions.” To this point, Harris stated that grouping dealers would likely provide better trade data than is currently available to academics, but that such grouped data would not provide academics with the information needed to understand specific dealer behavior. He stated, “[D]ealer decisions to offer, not offer, and take liquidity are made by individual dealers in response to their individual needs and inventory conditions. Groups of dealers acting in concert do not make these decisions. To better understand these decisions, you must see who is making them.” Additionally, Bergstresser argued that grouping dealers by size would substantially hinder the purpose of the RTRS Academic Data Product because it would reduce “the information content of the data [and] would negate the entire purpose of having (anonymized) dealer identities, which is to be able to identify round-trip transactions.” Similarly, Ramsey stated that anonymizing dealer identifiers would be reasonable if it allowed tracking unique trades, which groupings by size or volume would not, and ABFM commented that the potential beneficial research that could result from the RTRS Academic Data Product with individual dealer identifiers would likely be much greater than if “the dealer identifier is less precise (e.g., a categorical identifier based on dealer size or average daily trading volume).”

The MSRB believes, at this time, that it would better further the principal purpose of creating the RTRS Academic Data Product—namely, to foster detailed research and analysis of municipal securities trading—if the trade data identifies dealers individually rather than by group. The MSRB believes that grouping dealers would result in too great a reduction in the usefulness of the RTRS Academic Data Product, and, as previously mentioned, that the protections incorporated in the proposed rule change, including, but not limited to, the 36-month aging of the data, and terms planned to be included in the subscription agreement will, on balance, adequately mitigate the risk of reverse engineering without the grouping of dealers.

#### Primary Offering Data

As proposed in the Request for Comment, the RTRS Academic Data Product would make trade data available from transactions in both the primary and secondary markets. SIFMA believes that the potential for reverse engineering primary market trade

data is particularly acute because, in its view, the currently available public data that does not have dealer identifiers is already subject to reverse engineering. SIFMA recommended that, if made available on a dealer-by-dealer basis, the data provided by the RTRS Academic Data Product exclude primary trades from the data set and periodically scramble dealer identifiers.

The MSRB agrees with SIFMA regarding primary market trades, in light of trade data products currently offered by the MSRB to provide academics and other interested parties with information about the primary market for municipal securities. Therefore, the RTRS Academic Data Product would not include list offering price and takedown transactions, which can be used to identify primary market transactions.

### **Release of Full Trade Sizes in RTRS Academic Data Product**

Harris commented that the RTRS Academic Data Product should provide full trade sizes and that the utility of the RTRS Academic Data Product would be reduced if the trade data did not reveal the sizes of the largest trades.

The MSRB understands the potential issues academic researchers could encounter if the full size of trades is not included in the trade data, and, therefore, the proposed rule change would provide the full size of each trade that is included in the RTRS Academic Data Product.

### **Limiting RTRS Academic Data Product to Academic Institutions**

As proposed in the Request for Comment, the RTRS Academic Data Product would only be made available to academics in connection with their research activities. Commenters had differing views as to whether or not the subscriber base should be larger. First, Bergstresser suggested that the MSRB broaden the set of individuals who could have access to the RTRS Academic Data Product to include, for example, researchers associated with the Federal Reserve Board, individual Federal Reserve Banks, and other institutions such as the Brookings Institution, the American Enterprise Institute, and the Urban Institute. Bergstresser stated further that excluding researchers from such institutions would be “inappropriate and would hamper the progress of research on the municipal bond market.” Second, Harris stated that “[i]t would not be fair or in the public interest if interested industry groups could not replicate academic studies or produce their own” and that the RTRS Academic Data Product should be available to anyone. Harris added that the trade data needs to be made widely available so that academics can have a reasonable expectation that others will replicate, and potentially challenge, the research they conduct on the trade data. In contrast, Coastal argued that the availability of the RTRS Academic Data Product should be limited to academics to provide additional protection against reverse engineering of the trade data. ABFM affirmatively stated that it took no position on whether the data product should be limited to, or expanded beyond, academics, but stated that the MSRB should not base access to the RTRS Academic Data Product on the content, or results, of the requesting

researcher's previously published works. Similarly, Harris also stated that access to the RTRS Academic Data Product should not be made contingent on the resulting research produced. Finally, SIFMA stated that the RTRS Academic Data Product should be available to "[a]ny not-for-profit that has a separately identifiable Research Department and regularly publishes research reports" on the same terms that it would be available to academics, but only if other modifications suggested by SIFMA were made, such as anonymizing dealer identities by group and aging the data for 48 months.

The establishment of the RTRS Academic Data Product was conceived as a means of advancing a goal of the MSRB's Long-Range Plan for Market Transparency Products<sup>12</sup> by facilitating access to municipal market data for academics to conduct research on the municipal securities market. The MSRB believes that limiting the availability of the RTRS Academic Data Product to academic institutions will facilitate transparency, while not exposing the trade data to institutions or organizations that could have a more direct incentive to use the trade data for commercial purposes. The MSRB is committed to increasing market transparency and, in the future, after the use of the RTRS Academic Data Product has been observed, the MSRB may reconsider providing access to the data to a larger group of researchers. However, at this time, the MSRB believes that limiting the RTRS Academic Data Product to academic institutions helps address the concerns of dealers about the use of the data, while advancing the purpose of the product to foster academic research on the municipal securities market.

### **Pricing of the RTRS Academic Data Product**

As proposed in the Request for Comment, the RTRS Academic Data Product would be made available for a fee of \$500 per calendar-year data set (with a one-time initial set-up fee of \$500).<sup>13</sup> Harris commented that academics should either pay a reduced rate, when compared to the fee charged to industry participants and their various organizations and consultants, or be given access for free because, in his opinion, academics are often not paid to conduct their research while the public obtains a benefit from the research being conducted. ABFM believes the fee is reasonable.

As noted above, the MSRB intends to establish a fee for the RTRS Academic Data Product prior to the effective date of the proposed rule change. The fee will be

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<sup>12</sup> MSRB Long-Range Plan for Market Transparency Products (January 27, 2012), available at: <http://www.msrb.org/msrb1/pdfs/Long-Range-Plan.pdf>.

<sup>13</sup> The MSRB notes that the Request for Comment proposed the availability of the RTRS Academic Data Product in calendar-year data sets, but, as it does with other data products and as described above, the MSRB would make the RTRS Academic Data Product available on a rolling basis in one-year data sets.

established pursuant to a separate rule filing in which Harris' comment will be addressed.<sup>14</sup>

### **Subscription Agreement**

As part of the Request for Comment, the MSRB included a draft description of the subscription agreement into which recipients of the RTRS Academic Data Product ("Recipients") would be required to enter with the MSRB before access to the data would be granted ("Draft Agreement"). Some commenters requested clarification of, and others raised concerns about potential issues that could arise from, the terms of the Draft Agreement.

#### Liability for Breach of Draft Agreement

The MSRB included a liability provision in the Draft Agreement to, in part, deter and prevent reverse engineering and/or other misuse of the trade data provided by the RTRS Academic Data Product. Several commenters expressed concern regarding this provision that would hold Recipients "liable to the MSRB for any breach of the [Draft Agreement] resulting from the action/inaction of Recipient's internal users or any other individual or entity that accesses the [RTRS Academic Data Product] via Recipient or to whom Recipient provides any derivative works." In particular, ABFM commented that the inclusion of the provision would be overly burdensome for academic institutions and may preclude some from subscribing. ABFM further suggested, as an alternative, that liability be limited to two times the price paid by the Recipient for the data and that holding a Recipient liable to the extent described by the Draft Agreement would be unreasonable. Bergstresser, Cusatis and Ramsey expressed similar views, and each stated that the liability exposure could prevent an academic institution from signing the Draft Agreement and using the RTRS Academic Data Product. In contrast, Harris stated that the terms of the Draft Agreement generally were sufficient and not unduly restrictive.

#### Publication of Works Based on Data

In the Request for Comment, the MSRB asked whether academics would be opposed to including, as a term of the agreement, a requirement that a copy of all derivative works that rely on the RTRS Academic Data Product be provided to the MSRB upon publication. In response, Harris requested that the MSRB provide more specifics regarding what is meant by the term "publication" because, in his view, academics may have differing understandings of when works of research are considered "published." Harris further stated that, if academics are required to send published works to the MSRB, they should only be required to do so after the work is no longer described by its author as a "Working Draft—Not for Quotation—Subject to Change" and can be found via an internet search. ABFM stated that it believes that academics would not be

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<sup>14</sup> See supra note 7.

opposed to providing the MSRB with all published works relying on the data from the RTRS Academic Data Product, so long as the MSRB did not require the academic to share authorship of the work or the copyright of such works.

#### Permissible Use and Security of the Trade Data

SIFMA commented that the draft proposal did not state who at academic institutions would be able to access the trade data and requested that the MSRB modify the draft proposal to include “parameters around who may be considered an ‘Internal User’ or ‘Recipient/Licensee.’” In addition, SIFMA also suggested that the MSRB further limit “Authorized Use” to serve the purpose of research and to exclude any commercial use of the trade data. Overall, SIFMA expressed a concern that the creation of the RTRS Academic Data Product would lead to an inevitable data breach, revealing dealer trading and distribution strategies, which could have a negative impact on market liquidity. Similarly, BDA noted that nothing in the Draft Agreement would require academic institutions to have a minimum level of data security protections in place, making the data susceptible to theft.

The MSRB understands and appreciates the comments provided in response to the terms of the Draft Agreement presented in the Request for Comment. The MSRB included those terms and solicited comment on them primarily to determine whether to establish the RTRS Academic Data Product, and the subscription agreement into which academics and/or academic institutions would be required to enter (“Final Agreement”), and the terms thereof, have yet to be finalized. If the RTRS Academic Data Product is approved, the MSRB will, as it does for all of its subscription service agreements, conduct a thorough legal and risk analysis to ensure that it is adequately protected from possible breaches of the agreement, as well as consider the potential burdens placed on all parties to the agreement in light of the intended benefits. In performing this analysis, the MSRB will take all of the above comments into consideration.

As noted above, given the potential risk of the trade data included in the RTRS Academic Data Product being reverse engineered, the MSRB believes the subscription agreement will be an important complement to the measures included in the proposal to mitigate that risk. As such, the MSRB expects that the Final Agreement will include a liability provision substantially similar to the one included in the Draft Agreement to deter and prevent reverse engineering and other potential breaches of the agreement. The MSRB also expects that the Final Agreement will include a definition of “publication” to provide clarity to academics on what work product to provide to the MSRB and when, and will not require any form of joint authorship with the MSRB. Finally, the MSRB expects that the Final Agreement will define “Internal User” to clarify to whom access to the data may be provided and require reasonable security measures to protect the data from unauthorized access by controlling how they are used, accessed, processed, stored and/or transmitted.

**6. Extension of Time Period for Commission Action**

The MSRB declines to consent to an extension of the time period specified in Section 19(b)(2)<sup>15</sup> or Section 19(b)(7)(D)<sup>16</sup> of the Act.

**7. Basis for Summary Effectiveness Pursuant to Section 19(b)(3) or for Accelerated Effectiveness Pursuant to Section 19(b)(2) or Section 19(b)(7)(D)**

Not applicable.

**8. Proposed Rule Change Based on Rules of Another Self-Regulatory Organization or of the Commission**

Not applicable.

**9. Security-Based Swap Submissions Filed Pursuant to Section 3C of the Act**

Not applicable.

**10. Advance Notices Filed Pursuant to Section 806(e) of the Payment, Clearing and Settlement Supervisions Act**

Not applicable.

**11. Exhibits**

Exhibit 1 Completed Notice of Proposed Rule Change for Publication in the Federal Register

Exhibit 2 Notice Requesting Comment and Comment Letters

Exhibit 5 Text of Proposed Rule Change

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<sup>15</sup> 15 U.S.C. 78s(b)(2).

<sup>16</sup> 15 U.S.C. 78s(b)(7)(D).



SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-\_\_\_\_\_; File No. SR-MSRB-2016-09)

Self-Regulatory Organizations; Municipal Securities Rulemaking Board; Notice of Filing of a Proposed Rule Change to Establish the MSRB Academic Historical Transaction Data Product

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (the “Exchange Act” or “Act”)<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> notice is hereby given that on \_\_\_\_\_ the Municipal Securities Rulemaking Board (the “MSRB” or “Board”) filed with the Securities and Exchange Commission (the “SEC” or “Commission”) the proposed rule change as described in Items I, II, and III below, which Items have been prepared by the MSRB. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization’s Statement of the Terms of Substance of the Proposed Rule Change

The MSRB filed with the Commission a proposed rule change to the MSRB’s facility for the Real-Time Transaction Reporting System (“RTRS”) to establish an historical data product to provide institutions of higher education (“academic institutions”) with post-trade municipal securities transaction data collected through RTRS (“MSRB Academic Historical Transaction Data Product,” hereafter referred to as “RTRS Academic Data Product”) for purchase (“proposed rule change”). If approved by the Commission, the MSRB will announce the effective date of the proposed rule change in a regulatory notice to be published no later than 90 days following Commission approval. The effective date will be no later than 270 days following publication of the regulatory notice announcing Commission approval.

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<sup>1</sup> 15 U.S.C. 78s(b)(i).

<sup>2</sup> 17 CFR 240.19b-4.

The text of the proposed rule change is available on the MSRB's website at [www.msrb.org/Rules-and-Interpretations/SEC-Filings/2016-Filings.aspx](http://www.msrb.org/Rules-and-Interpretations/SEC-Filings/2016-Filings.aspx), at the MSRB's principal office, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the MSRB included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The MSRB has prepared summaries, set forth in Sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The MSRB is the federal regulatory entity with primary responsibility under the Exchange Act for rulemaking for the municipal securities market. Under the Exchange Act, the MSRB is charged with adopting rules with respect to transactions in municipal securities effected by brokers, dealers and municipal securities dealers ("dealers") and the municipal advisory activities of municipal advisors.

In addition to developing its comprehensive body of rules governing the activities of dealers and municipal advisors, the MSRB has undertaken to create various market transparency products in furtherance of its statutory duties and its mission, which is, in part, to promote a fair and efficient municipal securities market through the collection and dissemination of market information. Historically, the MSRB has operated information systems to collect key disclosure documents and transaction data to create a central warehouse of information that made most of

these documents and data available to the market—the Electronic Municipal Market Access (“EMMA<sup>®</sup>”)<sup>3</sup> website. The MSRB makes post-trade transaction data available to the general public through the EMMA website at no cost, and to data vendors, industry utilities and others on a subscription basis through a real-time data feed and on a delayed basis.

MSRB Rule G-14, on transaction reporting, requires dealers to report all executed transactions in municipal securities to RTRS within 15 minutes of the time of trade, with limited exceptions.<sup>4</sup> RTRS serves the dual objectives of price transparency and market surveillance. While a comprehensive database of transactions is needed for the surveillance function of RTRS, the MSRB does not believe that all information or transactions reported to RTRS are necessary to serve the transparency objective of the system and, therefore, such information does not qualify for public dissemination. Among other information, the executing broker symbol, which provides the identity of each dealer that executed a transaction reported to RTRS, is not publicly disseminated. The information facility for RTRS serves to outline the high-level parameters by which the MSRB operates the system.

While currently used by researchers from academic institutions (“academics”), through subscription services or in historical data sets, the RTRS data available on the EMMA website do not include any identifying information regarding the dealer reporting each transaction. Thus, the information disseminated from RTRS would not allow such an academic to attribute transactions to the dealers that facilitated them—even anonymously. As a result, some academics have asked whether the MSRB could make an enhanced version of RTRS trade data available that includes

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<sup>3</sup> EMMA<sup>®</sup> is a registered trademark of the MSRB.

<sup>4</sup> Transactions in securities without CUSIP numbers, transactions in municipal fund securities and certain inter-dealer securities movements not eligible for comparison through a clearing agency are the only transactions exempt from the reporting requirements of Rule G-14.

dealer identifiers. Further, on July 15, 2014, the MSRB published a Report on Secondary Market Trading in the Municipal Securities Market that utilized dealer identifiers to gain a better understanding of secondary market trading practices in the municipal securities market, including basic patterns of trading, pricing differentials associated with trading patterns and the impact of price transparency on pricing differentials. However, academics wishing to replicate the methodology employed in this report are unable to do so, as it relies, in part, on dealer identifiers.

In July 2015, in response to these requests from academics, the MSRB published a request for comment, proposing to create a new RTRS Academic Data Product that would include anonymized dealer identifiers (“draft proposal”).<sup>5</sup> In response to the Request for Comment, the MSRB received 13 comment letters, mostly supporting the draft proposal.<sup>6</sup> After carefully considering all of the comments received, the MSRB determined to file this proposed rule change to the RTRS facility to create the RTRS Academic Data Product, which would be made available only to academic institutions and would include the same transactions included in the current RTRS historical transaction data sets, with the exclusion of list offering price and takedown transactions, which can be used to identify primary market transactions.<sup>7</sup>

While the MSRB understands that anonymized dealer identifiers may be highly useful to academic institutions in connection with their research activities, the MSRB also recognizes that dealers may be concerned with the potential for reverse engineering of anonymized dealer

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<sup>5</sup> MSRB Notice 2015-10 (July 16, 2015) (“Request for Comment”).

<sup>6</sup> See infra note 11.

<sup>7</sup> In addition, the MSRB intends to establish a fee for the RTRS Academic Data Product prior to the effective date of the proposed rule change. The fee will be established pursuant to a separate rule filing.

identifiers to determine dealer identities. To address this issue, in addition to anonymizing dealer identifiers, the MSRB would take additional measures, including:

- providing unique data sets with different anonymized dealer identifiers to each academic;
- excluding list offering price and takedown transactions;
- explicitly requiring subscribers to agree that they will not attempt to reverse engineer the identity of any dealer;
- prohibiting the redistribution of the data in the RTRS Academic Data Product;
- requiring users to disclose each intended use of the data (including a description of each study being performed and the names of each individual who will have access to the data for the study);
- requiring users to ensure that any data presented in work product be sufficiently aggregated so as to prevent reverse engineering of any dealer or transaction;
- requiring that the data be returned or destroyed if the agreement is terminated; and
- aging all the transactions included in the RTRS Academic Data Product for no less than 36 months.

The establishment of the RTRS Academic Data Product would add to the MSRB's current offering of data products and further the MSRB's mission to improve the transparency of the municipal securities market by facilitating access to municipal market data for academic institutions. While academic institutions currently have access to the post-trade municipal securities transaction data disseminated from RTRS, the RTRS Academic Data Product would improve the usefulness of this data by enabling academics to distinguish transactions executed by different dealers.

## 2. Statutory Basis

Section 15B(b)(2) of the Exchange Act<sup>8</sup> provides that:

[T]he Board shall propose and adopt rules to effect the purposes of this title with respect to transactions in municipal securities effected by [dealers] and advice provided to or on behalf of municipal entities or obligated persons by [dealers] and municipal advisors with respect to municipal financial products, the issuance of municipal securities, and solicitations of municipal entities or obligated persons undertaken by [dealers] and municipal advisors.

Section 15B(b)(2)(C) of the Exchange Act,<sup>9</sup> provides that the MSRB's rules shall:

be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in municipal securities and municipal financial products, to remove impediments to and perfect the mechanism of a free and open market in municipal securities and municipal financial products, and, in general, to protect investors, municipal entities, obligated persons, and the public interest.

The MSRB believes that the proposed rule change is consistent with Sections 15B(b)(2) and 15B(b)(2)(C) of the Exchange Act because it would prevent fraudulent and manipulative acts and practices, promote just and equitable principles of trade, and remove impediments to and perfect the mechanism of a free and open market in municipal securities. Specifically, the RTRS Academic Data Product would enable subscribers of the product to better understand the pricing of certain transactions, as well as how such transactions were executed, which should, in turn, facilitate higher quality research and analysis. Overall, the proposed rule change would contribute to the MSRB's continuing efforts to improve market transparency and to protect investors, municipal entities, obligated persons and the public interest.

B. Self-Regulatory Organization's Statement on Burden on Competition

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<sup>8</sup> 15 U.S.C. 78o-4(b)(2).

<sup>9</sup> 15 U.S.C. 78o-4(b)(2)(C).

Section 15B(b)(2)(C) of the Exchange Act<sup>10</sup> requires that MSRB rules not be designed to impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act. In determining whether these standards have been met, the MSRB was guided by the Board's Policy on the Use of Economic Analysis in MSRB Rulemaking. In accordance with this policy, the Board has evaluated the potential impacts on competition of the proposed rule change, including in comparison to reasonable alternative regulatory approaches, relative to the baseline. The MSRB also considered other economic impacts of the proposed rule change and has addressed comments relevant to these impacts in other sections of this document.

The MSRB believes that the availability of this data may further research, which could help the MSRB and other regulators: prevent fraudulent and manipulative acts and practices; facilitate transactions in municipal securities and municipal financial products; remove impediments to and perfect the mechanism of a free and open market in municipal securities and municipal financial products; and protect investors, municipal entities, obligated persons and the public interest.

The MSRB acknowledges the potential for reverse engineering of anonymized dealer identifiers to determine dealer identities and has taken a number of measures to reduce this risk and mitigate any potential impact. Given these measures and the aforementioned benefits, the MSRB does not believe that the proposed rule change will impose any additional burdens on competition, relative to the baseline, that are not necessary or appropriate in furtherance of the purposes of the Act.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others

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<sup>10</sup> Id.

The MSRB received 13 comment letters in response to the Request for Comment.<sup>11</sup> The comment letters are summarized below by topic, and the MSRB's responses are provided.

#### Support for the Proposed Rule Change

In response to the Request for Comment, several commenters expressed strong general support for the creation of the RTRS Academic Data Product. ABFM, AGFS, Bergstresser, Cusatis, Glassberg, NYU Stern and Ramsey believe it would improve the quality of academic research on, and contribute to enhanced transparency in, the municipal securities market. Further, Gifford opined that the draft proposal would allow for better cost-benefit analysis of public-private partnership projects that access the municipal securities market, and Coastal stated that trade data that would be made available by the draft proposal would contribute to academic research of the municipal securities market and that it should be supported. Finally, Harris strongly supports the RTRS Academic Data Product and commented that the draft proposal would “allow the MSRB to better regulate markets for the public good.”

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<sup>11</sup> See letters from: Robert Doty, American Governmental Financial Services (“AGFS”), dated August 24, 2015; Robert Kravchuck, *et al.*, Association for Budgeting and Financial Management (“ABFM”), dated September 13, 2015; Michael Nicholas, Chief Executive Officer, Bond Dealers of America (“BDA”), dated August 24, 2015; Daniel Bergstresser (“Bergstresser”), Associate Professor of Finance, Brandeis University, International Business School, dated September 14, 2015; Chris Melton, Executive Vice President, Coastal Securities (“Coastal”) dated August 5, 2015; Patrick J. Cusatis (“Cusatis”), Associate Professor of Finance, Penn State Harrisburg, School of Business Administration, dated September 10, 2015; Jonathan L. Gifford (“Gifford”), Professor and Director of Center for Transportation P3 Policy, George Mason University, dated September 1, 2015; Andrew Glassberg (“Glassberg”), dated August 17, 2015; Lawrence Harris (“Harris”), Professor of Finance and Business Economics, University of Southern California, Marshall School of Business, dated September 6, 2015; John Mousseau (“Mousseau”), dated July 29, 2015; Norman White *et al.*, New York University, Leonard N. Stern School of Business (“NYU Stern”), dated September 16, 2015; James R. Ramsey (“Ramsey”), President, University of Louisville, dated September 4, 2015; Sean Davy, Managing Director, Capital Markets Division, and David L. Cohen, Managing Director and Associate General Counsel, Municipal Securities Division, Securities Industry and Financial Markets Association (“SIFMA”), dated September 11, 2015.



### Risk of Reverse Engineering Trade Data

In the Request for Comment, the MSRB recognized that dealers may be concerned with the potential for reverse engineering of anonymized dealer identifiers to determine dealer identities from the data provided by the RTRS Academic Data Product, and it proposed several measures to prevent and deter those that would try to reverse engineer the trade data. Several commenters addressed this issue and proposed modifications to the draft proposal for purposes of preventing reverse engineering.

### General Comments

BDA expressed concern that the draft proposal would allow reverse engineering of a dealer's trading/investment strategy and the requirements of the subscription agreement would not sufficiently protect dealers, thus, exposing them to an "unnecessary business risk." BDA further stated that data on municipal securities transactions that are currently available to the public for academic research "include a sufficient level of detail to support rigorous study." SIFMA also expressed concern that the proposed anonymization of dealer identifiers would not effectively protect dealer identities. Harris commented that use of the RTRS Academic Data Product may result in some reverse engineering, which may cause some level of harm to dealers, but he also stated that, while he believes engaging in reverse engineering would be inappropriate, it may "serve the public interest" by revealing "price differentials (known as markups by many) . . . to [dealers'] customers." ABFM commented that the planned terms of the subscription agreement intended to prevent reverse engineering would be a sufficient deterrent.

Since the inception of this rulemaking initiative, the MSRB has been acutely aware of the potential for reverse engineering the trade data that would be included in the RTRS Academic Data Product. Indeed, the MSRB acknowledges that the data provided in the RTRS Academic

Data Product could be reverse engineered. However, the MSRB believes that the measures it would take—e.g., anonymizing dealer identifiers, imposing liability on subscribers of the data for breaching the terms of the subscription agreement (which would, among other things, include a provision prohibiting reverse engineering), and limiting subscribers to academic institutions—, on balance, sufficiently reduce the risk of reverse engineering, and of harm resulting therefrom. Further, in response to the concerns raised by commenters, the MSRB is now proposing to: increase the aging requirement for the trade data from 24 to 36 months prior to its release; provide unique data sets with different anonymized dealer identifiers to each academic, which may both help guard against coordinated efforts at attempting reverse engineering dealer identities, as well as assist in identifying the source of conduct that violates the subscription agreement; exclude list offering price and take down transactions, which can be used to identify primary market transactions; require users to ensure the sufficient aggregation of any data presented in work product, which would protect against reverse engineering by readers of published works; and not include primary offering trades in the trade data. Overall, the MSRB has proposed numerous measures that should mitigate the risk of reverse engineering, and the residual risk is warranted by the benefits to the municipal securities market that would result from creation of the RTRS Academic Data Product and greater transparency of dealer behavior. The MSRB may consider amending or discontinuing the RTRS Academic Data Product, as currently proposed, if future experience shows that anonymized dealer identifiers are reverse engineered by researchers.

#### Aging Trade Data

As noted above, as part of the MSRB's effort to prevent and deter reverse engineering of dealer identities, the draft proposal required that the trade data made available to subscribers of

the RTRS Academic Data Product would be for trades that were executed at least 24 months prior to the date that they were provided to the subscriber. SIFMA stated, in combination with other concerns about the draft proposal, that 24 months is too short of a time period to adequately protect against reverse engineering, and, instead, suggested that the MSRB age the trade data for 48 months. In contrast, ABFM believed 12 months, rather than 24, would be a sufficient time period to ensure that trades could not be reverse engineered, and Ramsey also suggested 12 months would be preferable to 24 months to ensure the data is timely. Harris argued that 24 months would be more than sufficient for aging the data to remove the usefulness of that data for the purpose of reverse engineering, in part, because he believes dealer positions change in no more than two months, and he also noted that as few as six or up to 12 months would be a better length of time because it would allay the concerns of dealers and allow for the “identifying [of] parasitic trading strategies as quickly as possible.” Coastal believes 12 months would be too short a time period to sufficiently mitigate the reverse engineering risk but that 24 months would be appropriate and would not encumber research because, in its opinion, municipal securities market practices and conditions are “slow to evolve,” making the data still relevant to academics studying market behavior.

Based on careful consideration of all of the diverse comments on this issue, the MSRB believes, at this time, that a 36-month period is appropriate to protect against, and mitigate the risk and potential harm from, any reverse engineering, while still providing useful trade data for academics to study.

#### Grouped Versus Individual Dealer Identifiers

In the draft proposal, the MSRB proposed anonymizing identifiers for each individual dealer for the trade data made available through the RTRS Academic Data Product to protect

against the potential of subscribers reverse engineering the data to determine dealer identities. A few commenters suggested alternative methods to anonymize dealer identities. Specifically, BDA stated that grouping dealers by size, as opposed to issuing individual anonymized identifiers, would better protect the trade data from reverse engineering if the MSRB does not plan on changing the dealer identifiers on a regular basis because, without periodic changes, it would become easier to identify dealers based on trading data over a long period of time. SIFMA similarly supported making the trade data available through “groupings of comparable dealers,” arguing that the MSRB and FINRA should “adopt the peer group criteria used in MSRB and FINRA report cards to aggregate dealers into reportable groups.” Further, Coastal stated that, if dealers were not grouped by size, then reverse engineering would likely occur, while grouping by size would not substantially encumber research uses of the trade data. Coastal also argued that contracting with subscribers to prevent reverse engineering would not be effective, and BDA noted that any subscription agreement would not extend to readers of studies produced by subscribers.

In support of individual identifiers, Harris stated that the “empirical work [of academics] requires high quality data that can inform their analyses as to what dealers do. Dealer identities thus need to be revealed, at a minimum in anonymized form, so that academics can understand how dealer trading decisions relate to their previous trading decisions.” To this point, Harris stated that grouping dealers would likely provide better trade data than is currently available to academics, but that such grouped data would not provide academics with the information needed to understand specific dealer behavior. He stated, “[D]ealer decisions to offer, not offer, and take liquidity are made by individual dealers in response to their individual needs and inventory conditions. Groups of dealers acting in concert do not make these decisions. To better understand

these decisions, you must see who is making them.” Additionally, Bergstresser argued that grouping dealers by size would substantially hinder the purpose of the RTRS Academic Data Product because it would reduce “the information content of the data [and] would negate the entire purpose of having (anonymized) dealer identities, which is to be able to identify round-trip transactions.” Similarly, Ramsey stated that anonymizing dealer identifiers would be reasonable if it allowed tracking unique trades, which groupings by size or volume would not, and ABFM commented that the potential beneficial research that could result from the RTRS Academic Data Product with individual dealer identifiers would likely be much greater than if “the dealer identifier is less precise (e.g., a categorical identifier based on dealer size or average daily trading volume).”

The MSRB believes, at this time, that it would better further the principal purpose of creating the RTRS Academic Data Product—namely, to foster detailed research and analysis of municipal securities trading—if the trade data identifies dealers individually rather than by group. The MSRB believes that grouping dealers would result in too great a reduction in the usefulness of the RTRS Academic Data Product, and, as previously mentioned, that the protections incorporated in the proposed rule change, including, but not limited to, the 36-month aging of the data, and terms planned to be included in the subscription agreement will, on balance, adequately mitigate the risk of reverse engineering without the grouping of dealers.

#### Primary Offering Data

As proposed in the Request for Comment, the RTRS Academic Data Product would make trade data available from transactions in both the primary and secondary markets. SIFMA believes that the potential for reverse engineering primary market trade data is particularly acute because, in its view, the currently available public data that does not have dealer identifiers is

already subject to reverse engineering. SIFMA recommended that, if made available on a dealer-by-dealer basis, the data provided by the RTRS Academic Data Product exclude primary trades from the data set and periodically scramble dealer identifiers.

The MSRB agrees with SIFMA regarding primary market trades, in light of trade data products currently offered by the MSRB to provide academics and other interested parties with information about the primary market for municipal securities. Therefore, the RTRS Academic Data Product would not include list offering price and takedown transactions, which can be used to identify primary market transactions.

#### Release of Full Trade Sizes in RTRS Academic Data Product

Harris commented that the RTRS Academic Data Product should provide full trade sizes and that the utility of the RTRS Academic Data Product would be reduced if the trade data did not reveal the sizes of the largest trades.

The MSRB understands the potential issues academic researchers could encounter if the full size of trades is not included in the trade data, and, therefore, the proposed rule change would provide the full size of each trade that is included in the RTRS Academic Data Product.

#### Limiting RTRS Academic Data Product to Academic Institutions

As proposed in the Request for Comment, the RTRS Academic Data Product would only be made available to academics in connection with their research activities. Commenters had differing views as to whether or not the subscriber base should be larger. First, Bergstresser suggested that the MSRB broaden the set of individuals who could have access to the RTRS Academic Data Product to include, for example, researchers associated with the Federal Reserve Board, individual Federal Reserve Banks, and other institutions such as the Brookings Institution, the American Enterprise Institute, and the Urban Institute. Bergstresser stated further

that excluding researchers from such institutions would be “inappropriate and would hamper the progress of research on the municipal bond market.” Second, Harris stated that “[i]t would not be fair or in the public interest if interested industry groups could not replicate academic studies or produce their own” and that the RTRS Academic Data Product should be available to anyone. Harris added that the trade data needs to be made widely available so that academics can have a reasonable expectation that others will replicate, and potentially challenge, the research they conduct on the trade data. In contrast, Coastal argued that the availability of the RTRS Academic Data Product should be limited to academics to provide additional protection against reverse engineering of the trade data. ABFM affirmatively stated that it took no position on whether the data product should be limited to, or expanded beyond, academics, but stated that the MSRB should not base access to the RTRS Academic Data Product on the content, or results, of the requesting researcher’s previously published works. Similarly, Harris also stated that access to the RTRS Academic Data Product should not be made contingent on the resulting research produced. Finally, SIFMA stated that the RTRS Academic Data Product should be available to “[a]ny not-for-profit that has a separately identifiable Research Department and regularly publishes research reports” on the same terms that it would be available to academics, but only if other modifications suggested by SIFMA were made, such as anonymizing dealer identities by group and aging the data for 48 months.

The establishment of the RTRS Academic Data Product was conceived as a means of advancing a goal of the MSRB’s Long-Range Plan for Market Transparency Products<sup>12</sup> by facilitating access to municipal market data for academics to conduct research on the municipal securities market. The MSRB believes that limiting the availability of the RTRS Academic Data

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<sup>12</sup> MSRB Long-Range Plan for Market Transparency Products (January 27, 2012), available at: <http://www.msrb.org/msrb1/pdfs/Long-Range-Plan.pdf>.

Product to academic institutions will facilitate transparency, while not exposing the trade data to institutions or organizations that could have a more direct incentive to use the trade data for commercial purposes. The MSRB is committed to increasing market transparency and, in the future, after the use of the RTRS Academic Data Product has been observed, the MSRB may reconsider providing access to the data to a larger group of researchers. However, at this time, the MSRB believes that limiting the RTRS Academic Data Product to academic institutions helps address the concerns of dealers about the use of the data, while advancing the purpose of the product to foster academic research on the municipal securities market.

#### Pricing of the RTRS Academic Data Product

As proposed in the Request for Comment, the RTRS Academic Data Product would be made available for a fee of \$500 per calendar-year data set (with a one-time initial set-up fee of \$500).<sup>13</sup> Harris commented that academics should either pay a reduced rate, when compared to the fee charged to industry participants and their various organizations and consultants, or be given access for free because, in his opinion, academics are often not paid to conduct their research while the public obtains a benefit from the research being conducted. ABFM believes the fee is reasonable.

As noted above, the MSRB intends to establish a fee for the RTRS Academic Data Product prior to the effective date of the proposed rule change. The fee will be established pursuant to a separate rule filing in which Harris' comment will be addressed.<sup>14</sup>

#### Subscription Agreement

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<sup>13</sup> The MSRB notes that the Request for Comment proposed the availability of the RTRS Academic Data Product in calendar-year data sets, but, as it does with other data products and as described above, the MSRB would make the RTRS Academic Data Product available on a rolling basis in one-year data sets.

<sup>14</sup> See supra note 7.



As part of the Request for Comment, the MSRB included a draft description of the subscription agreement into which recipients of the RTRS Academic Data Product (“Recipients”) would be required to enter with the MSRB before access to the data would be granted (“Draft Agreement”). Some commenters requested clarification of, and others raised concerns about potential issues that could arise from, the terms of the Draft Agreement.

#### Liability for Breach of Draft Agreement

The MSRB included a liability provision in the Draft Agreement to, in part, deter and prevent reverse engineering and/or other misuse of the trade data provided by the RTRS Academic Data Product. Several commenters expressed concern regarding this provision that would hold Recipients “liable to the MSRB for any breach of the [Draft Agreement] resulting from the action/inaction of Recipient’s internal users or any other individual or entity that accesses the [RTRS Academic Data Product] via Recipient or to whom Recipient provides any derivative works.” In particular, ABFM commented that the inclusion of the provision would be overly burdensome for academic institutions and may preclude some from subscribing. ABFM further suggested, as an alternative, that liability be limited to two times the price paid by the Recipient for the data and that holding a Recipient liable to the extent described by the Draft Agreement would be unreasonable. Bergstresser, Cusatis and Ramsey expressed similar views, and each stated that the liability exposure could prevent an academic institution from signing the Draft Agreement and using the RTRS Academic Data Product. In contrast, Harris stated that the terms of the Draft Agreement generally were sufficient and not unduly restrictive.

#### Publication of Works Based on Data

In the Request for Comment, the MSRB asked whether academics would be opposed to including, as a term of the agreement, a requirement that a copy of all derivative works that rely

on the RTRS Academic Data Product be provided to the MSRB upon publication. In response, Harris requested that the MSRB provide more specifics regarding what is meant by the term “publication” because, in his view, academics may have differing understandings of when works of research are considered “published.” Harris further stated that, if academics are required to send published works to the MSRB, they should only be required to do so after the work is no longer described by its author as a “Working Draft—Not for Quotation—Subject to Change” and can be found via an internet search. ABFM stated that it believes that academics would not be opposed to providing the MSRB with all published works relying on the data from the RTRS Academic Data Product, so long as the MSRB did not require the academic to share authorship of the work or the copyright of such works.

#### Permissible Use and Security of the Trade Data

SIFMA commented that the draft proposal did not state who at academic institutions would be able to access the trade data and requested that the MSRB modify the draft proposal to include “parameters around who may be considered an ‘Internal User’ or ‘Recipient/Licensee.’” In addition, SIFMA also suggested that the MSRB further limit “Authorized Use” to serve the purpose of research and to exclude any commercial use of the trade data. Overall, SIFMA expressed a concern that the creation of the RTRS Academic Data Product would lead to an inevitable data breach, revealing dealer trading and distribution strategies, which could have a negative impact on market liquidity. Similarly, BDA noted that nothing in the Draft Agreement would require academic institutions to have a minimum level of data security protections in place, making the data susceptible to theft.

The MSRB understands and appreciates the comments provided in response to the terms of the Draft Agreement presented in the Request for Comment. The MSRB included those terms

and solicited comment on them primarily to determine whether to establish the RTRS Academic Data Product, and the subscription agreement into which academics and/or academic institutions would be required to enter (“Final Agreement”), and the terms thereof, have yet to be finalized. If the RTRS Academic Data Product is approved, the MSRB will, as it does for all of its subscription service agreements, conduct a thorough legal and risk analysis to ensure that it is adequately protected from possible breaches of the agreement, as well as consider the potential burdens placed on all parties to the agreement in light of the intended benefits. In performing this analysis, the MSRB will take all of the above comments into consideration.

As noted above, given the potential risk of the trade data included in the RTRS Academic Data Product being reverse engineered, the MSRB believes the subscription agreement will be an important complement to the measures included in the proposal to mitigate that risk. As such, the MSRB expects that the Final Agreement will include a liability provision substantially similar to the one included in the Draft Agreement to deter and prevent reverse engineering and other potential breaches of the agreement. The MSRB also expects that the Final Agreement will include a definition of “publication” to provide clarity to academics on what work product to provide to the MSRB and when, and will not require any form of joint authorship with the MSRB. Finally, the MSRB expects that the Final Agreement will define “Internal User” to clarify to whom access to the data may be provided and require reasonable security measures to protect the data from unauthorized access by controlling how they are used, accessed, processed, stored and/or transmitted.

### III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Within 45 days of the date of publication of this notice in the Federal Register or within such longer period of up to 90 days (i) as the Commission may designate if it finds such longer

period to be appropriate and publishes its reasons for so finding or (ii) as to which the self-regulatory organization consents, the Commission will:

- (A) by order approve or disapprove such proposed rule change, or
- (B) institute proceedings to determine whether the proposed rule change should be disapproved.

#### IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

##### Electronic comments:

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an e-mail to [rule-comments@sec.gov](mailto:rule-comments@sec.gov). Please include File Number SR-MSRB-2016-09 on the subject line.

##### Paper comments:

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549.

All submissions should refer to File Number SR-MSRB-2016-09. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet website (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be

withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street, NE, Washington, DC 20549 on official business days between the hours of 10:00 am and 3:00 pm. Copies of the filing also will be available for inspection and copying at the principal office of the MSRB. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-MSRB-2016-09 and should be submitted on or before [insert date 21 days from publication in the Federal Register].

For the Commission, pursuant to delegated authority.<sup>15</sup>

Secretary

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<sup>15</sup> 17 CFR 200.30-3(a)(12).



# Regulatory Notice

2015-10

**Publication Date**  
July 16, 2015

**Stakeholders**  
Municipal Securities  
Dealers, Municipal  
Advisors, Issuers,  
Investors, General  
Public

**Notice Type**  
Request for Comment

**Comment Deadline**  
September 14, 2015

**Category**  
Market Transparency

## Request for Comment on Establishment of an Academic Historical Trade Data Product

### Overview

The Municipal Securities Rulemaking Board (MSRB) is requesting comment on establishing a historical data product to provide institutions of higher education with post-trade municipal securities transaction data collected through the MSRB's Real-time Transaction Reporting System (RTRS) ("RTRS Academic Data Product"). The establishment of the RTRS Academic Data Product would advance a goal of the MSRB's [Long-Range Plan for Market Transparency Products](#) (January 27, 2012) by facilitating access to municipal market data for academics. While academics currently utilize the post-trade municipal securities transaction data disseminated from RTRS, the RTRS Academic Data Product would improve the usefulness of this data by enabling academics to distinguish transactions executed by a particular broker, dealer or municipal securities dealer ("dealer"). The MSRB and the Financial Industry Regulatory Authority (FINRA) have been engaged in ongoing dialogue to support a coordinated approach in this area. FINRA is also publishing a notice soliciting comment on a similar proposal that would apply to other areas of the fixed income market.<sup>1</sup>

Comments on the MSRB's proposal should be submitted no later than September 14, 2015 and may be submitted in electronic or paper form. [Comments may be submitted electronically by clicking here.](#) Comments submitted in paper form should be sent to Ronald W. Smith, Corporate Secretary, Municipal Securities Rulemaking Board, 1900 Duke Street, Suite 600, Alexandria, VA 22314. All comments will be available for public inspection on the MSRB's website.<sup>2</sup>

<sup>1</sup> [FINRA Regulatory Notice 15-26 \(July 2015\).](#)

<sup>2</sup> Comments are posted on the MSRB website without change. Personal identifying information such as name, address, telephone number, or email address will not be edited from submissions. Therefore, commenters should submit only information that they wish to make available publicly.



Receive emails about MSRB  
regulatory notices.

Questions about this notice may be directed to Justin R. Pica, Director, Product Management - Market Transparency, at 703-797-6716, or Marcelo Vieira, Director of Research, at 703-797-6607.

## Background

MSRB Rule G-14, on transaction reporting, requires dealers to report all executed transactions in municipal securities to RTRS within 15 minutes of the time of trade, with limited exceptions.<sup>3</sup> RTRS serves the dual objectives of price transparency and market surveillance. While a comprehensive database of transactions is needed for the surveillance function of RTRS, not all information or transactions reported to RTRS are necessary to serve the transparency objective of the system and therefore do not qualify for public dissemination. Among other things, the executing broker symbol (EBS) that provides the identity of each dealer that executed a transaction reported to RTRS is not publicly disseminated.

The MSRB makes post-trade transaction data available to the general public through the [Electronic Municipal Market Access \(EMMA®\) website](#)<sup>4</sup> at no cost. MSRB also makes the same transaction data displayed on the EMMA website available on a subscription basis through a real-time data feed and on a delayed basis.<sup>5</sup> Further, MSRB offers for purchase historical transaction data, available in one-year data sets for transaction data that is at least 20 business days old.<sup>6</sup>

## RTRS Academic Data Product

The MSRB periodically receives requests from academics for enhanced historical MSRB trade data. While the RTRS data available on the EMMA website, through subscription services or in historical data sets is used by academic researchers today, it does not include any identifying information

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<sup>3</sup> Transactions in securities without CUSIP numbers, transactions in municipal fund securities and certain inter-dealer securities movements not eligible for comparison through a clearing agency are the only transactions exempt from the reporting requirements of Rule G-14.

<sup>4</sup> EMMA is a registered trademark of the MSRB.

<sup>5</sup> A subscription to the real-time data feed is \$11,000 per year and the comprehensive, or delayed, service is \$5,500 per year.

<sup>6</sup> Historical data is offered for purchase at \$2,500 per calendar year plus a one-time set-up fee of \$2,000 for new purchasers, unless the purchaser is a current subscriber to an MSRB subscription service.

regarding the dealer reporting each transaction. Thus, where a researcher wishes to tie transactions to dealers – even anonymously – the information disseminated from RTRS would not allow for this type of observation. As a result, some academics have asked whether the MSRB could make available an enhanced version of RTRS data that includes dealer identifiers. Further, on July 15, 2014, the MSRB published a [Report on Secondary Market Trading in the Municipal Securities Market](#) that utilized dealer identifiers to gain a better understanding of secondary market trading practices in the municipal securities market, including basic patterns of trading, pricing differentials associated with trading patterns and the impact of price transparency on pricing differentials. Academics wishing to replicate the methodology employed in this report are unable to do so as it relies on dealer identifiers.

In response to these requests from academics, the MSRB is proposing to create a new RTRS Academic Data Product that would include anonymized dealer identifiers. The RTRS Academic Data Product would be made available only to institutions of higher education and would include the same transactions included in the current RTRS historical transaction data sets. The RTRS Academic Data Product would be made available for a fee of \$500 per calendar-year data set (with a one-time initial set-up fee of \$500). The MSRB customarily waives all fees associated with an MSRB subscription service or historical data product purchase for institutions of higher education. However, due to the additional legal and operational effort required for the MSRB to offer the RTRS Academic Data Product, the MSRB believes that the \$500 fee per data set and \$500 one-time initial set-up fee is appropriate to help defray these costs.

While the MSRB understands that anonymized dealer identifiers may be highly useful to academics in connection with their research activities, the MSRB also recognizes that dealers may be concerned regarding the potential for reverse engineering of anonymized dealer identifiers to determine dealer identities. To address this issue, in addition to anonymizing dealer identifiers, the MSRB proposes to take further measures to allay such concerns, including to: (1) explicitly require subscribers to agree that they will not attempt to reverse engineer the identity of any dealer; (2) prohibit the redistribution of the data in the RTRS Academic Data Product; (3) require users to disclose each intended use of the data (including a description of each study being performed and the names of each individual who will have access to the data for the study); and (4) require that the data be returned or destroyed if the agreement is terminated. Select key terms intended to be included in the agreement to safeguard the data are outlined below. In addition, the transactions included in the RTRS Academic Data Product will be aged no less than 24 months.



## Economic Analysis

### ***The need for the RTRS Academic Data Product***

As discussed above, the MSRB has received requests from academics for enhanced historical MSRB data that includes dealer identifiers. The MSRB believes supporting academic research is consistent with its statutory mandates. The MSRB further believes that the RTRS Academic Data Product would improve the ability for academics to conduct research on the municipal securities market, including on issues related to intermediation costs, dealer participation and liquidity. Further, as noted above, the RTRS Academic Data Product would facilitate replication of the methodology employed in the MSRB July 15, 2014 [Report on Secondary Market Trading in the Municipal Securities Market](#).

### ***Relevant baselines against which the likely economic impact of the establishment of RTRS Academic Data Product can be considered***

The relevant baseline is the current RTRS facility that does not specify the availability of a historical trade data product for academics that includes identifying information regarding the dealer reporting each transaction.

### ***Identifying and evaluating reasonable alternative regulatory approaches***

The MSRB recognizes that there are alternatives to the approach proposed. The MSRB could take no action and continue to provide to academics only the information currently available to trade data subscribers. Alternatively, the MSRB could produce the new data product with the dealer identifiers as reported to the MSRB rather than anonymizing the dealer identifiers. This approach would likely yield greater benefits to researchers but could result in more negative impacts on market participants. Finally, the MSRB could produce the new data product as proposed, but under different terms. For example, the MSRB could issue the product on a longer or shorter delay or impose different terms on users.

### ***Assessing the benefits and costs of the establishment of the RTRS Academic Data Product***

While the proposed RTRS Academic Data Product with anonymized dealer identifiers may promote academic research on dealer behaviors, it also may raise concerns regarding the potential for reverse engineering of dealer identities. The MSRB will explore this issue further using available data and information obtained through the comment process.

## Request for Comment

The MSRB requests comment on all aspects of the proposal and specifically requests comment concerning the following issues.

- What public, issuer and investor protection benefits might arise from the availability of the RTRS Academic Data Product?
- The MSRB proposes that the RTRS Academic Data Product only include trade data that is aged no less than 24 months. Is this delay an appropriate period of time to allay concerns regarding potential reverse engineering of dealer identities? If not, what other delay period would be appropriate to address these concerns while still providing data that is timely enough to be useful for market research purposes?
- Would a shorter delay period, such as 12 months, be appropriate to enhance the timeliness of the data for research purposes while still minimizing the risk and potential impact of reverse engineering of dealer identifiers?
- Are there alternative ways of anonymizing dealer identities in the RTRS Academic Data Product? Are there groupings of dealers based on dealer characteristics (*e.g.*, size of dealer) that could be used to identify the type of dealer that executed each transaction? Are there behavioral groupings that may be utilized (*e.g.*, average daily trading volume) How would this approach be preferable to anonymizing dealer identifiers in retaining the usefulness of the data to academics while presenting fewer concerns regarding reverse engineering of dealer identifiers?
- The MSRB intends to limit the availability of the RTRS Academic Data Product to academics currently associated with an institution of higher education in connection with their research activities. Is this an appropriate limitation? If not, please provide alternatives and explain how the alternatives would address concerns regarding reverse engineering of dealer identifiers. Should a data product containing anonymized dealer identifiers be made available more broadly to researchers, even if not part of an institution of higher education (*e.g.*, industry groups, non-profit organizations or research-oriented for-profit companies)? Would a broader subscriber base increase the likelihood that dealers or other market participants may obtain the data for competitive reasons?
- Are the key terms of the agreement below sufficient in striking the appropriate balance between protecting dealer interests and facilitating academic research? Should the MSRB include any additional restrictions on the use of the data? Are any terms in the

agreement unduly restrictive such that they may potentially hinder research? Would academics be opposed to including as a term of the agreement that a copy of all derivative works that rely on the RTRS Academic Data Product be provided to the MSRB upon publication?

- How would dealers, or other market participants, be impacted if dealer identifiers were reverse engineered? Are there data or other evidence, including studies or research, that support estimates of these impacts?

July 16, 2015

\* \* \* \* \*

## Text of Draft Amendments<sup>7</sup>

### RTRS Facility

No change.

### Price Dissemination by RTRS

No change.

\* \* \* \* \*

### MSRB Real-Time Transaction Data Subscription Service

No change.

### MSRB Comprehensive Transaction Data Subscription Service

No change.

\* \* \* \* \*

### MSRB Historical Transaction Data Product

No change.

\* \* \* \* \*

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<sup>7</sup> Underlining indicates new language.

### **MSRB Academic Historical Transaction Data Product**

The MSRB offers an Academic Historical Transaction Data Product, which consists of the same transaction information as is provided by the MSRB Historical Transaction Data Product with the exception that it also includes anonymized dealer identifiers. The Academic Historical Transaction Data Product may be obtained only by institutions of higher education in one calendar year data sets for \$500 per calendar year for data that is aged no less than 24 months. No smaller data sets will be available. The Academic Historical Transaction Data Product will be made available on CD-ROM<sup>1</sup>, pursuant to the terms of the Academic Historical Transaction Data Product Agreement, which must be executed prior to delivery of the Academic Historical Transaction Data Product.<sup>2</sup> A one-time initial set-up fee of \$500 will be charged for the Academic Historical Transaction Data Product, unless the requestor is a prior recipient of a historical data product or current subscriber to an MSRB Subscription Service, including the MSRB Real-Time Transaction Data Subscription Service, Comprehensive Transaction Data Subscription Service, Short-Term Obligation Rate Transparency Subscription Service, Primary Market Disclosure Subscription Service or Continuing Disclosure Subscription Service.<sup>3</sup>

- <sup>1</sup> As technology evolves, or if the volume of information included in the Academic Historical Transaction Data Product increases, the MSRB may in the future decide to use a different medium for delivering the Academic Historical Transaction Data Product.
- <sup>2</sup> Institutions of higher education shall be required to execute and shall be subject to the terms of an agreement to be entered into with the MSRB, which shall include proprietary and intellectual property rights of third parties in information provided by such third parties that is made available through the product.
- <sup>3</sup> Any applicable fees do not include sales tax as required by Virginia state law. The fee for each calendar year data set represents a one-time charge and will not include any future additions or enhancements that may be added to the data.

\* \* \* \* \*

### **RTRS ACADEMIC DATA PRODUCT AGREEMENT**

The MSRB would create a new agreement for recipients of the RTRS Academic Data Product generally based on the [MSRB Historical Data Product Purchase Agreement and Order Schedule](#). Selected key terms below would be incorporated into this new agreement that institutions of higher education would be required to execute in order to obtain the RTRS Academic Data Product. Some of these key terms may be modified in the final version of the agreement, and provisions of the current MSRB Historical Data Product Purchase Agreement and Order Schedule may be revised. Capitalized terms shall be defined as set forth in the agreement.

## Authorized Use

- Except as otherwise provided in the agreement, Recipient is granted a world-wide, non-transferable, non-exclusive, non-assignable, limited right and license to use the Academic Historical Transaction Data Product in accordance with the agreement and its attachments, and to create and publish derivative works.
- Authorized use is limited to accessing, receiving, using, processing, manipulating and storing the Academic Historical Transaction Data Product and creating and publishing derivative works in accordance with the agreement and attachments. Recipient is prohibited from disseminating the Academic Historical Transaction Data Product or any Data contained therein to third parties.
- Recipient must submit to the MSRB a new attachment to the agreement for each new intended use of the Academic Historical Transaction Data Product by Recipient. Any use of the Data, by a Recipient or its Internal Users, unless expressly described in this agreement, is prohibited.
- Internal Users of Recipient listed on a separate attachment to the agreement are authorized to use the specifically identified Academic Historical Transaction Data Product in accordance with the terms and conditions of the agreement and its attachments. Recipient represents and warrants that each of those individuals listed in the attachment fall within the definition of Internal Users set out in the agreement.
- Recipient remains liable to the MSRB for any breach of the agreement resulting from the action/inaction of Recipient's Internal Users or any other individual or entity that accesses the Academic Historical Transaction Data Product via Recipient or to whom Recipient provides any derivative works.
- If Recipient learns of any Unauthorized Use of the Data, it shall immediately provide the MSRB with written notice of the Unauthorized Use, and shall assist the MSRB in investigating, halting and prosecuting, if necessary, any such Unauthorized Use. If the MSRB so elects, Recipient shall assign and shall ensure that its agents assign all right, title and interest in and to any suit, including its subject matter, of or concerning the Data or which otherwise arises out of or is related to the agreement, to the MSRB.
- The MSRB reserves the right to monitor and review the activities of Recipient to ensure that no Unauthorized Use of the Data occurs. Recipient agrees to cooperate with the MSRB, and use reasonable efforts to obtain the cooperation of its Internal Users with the MSRB, at Recipient's cost, in any such review. In the event that the MSRB identifies any Unauthorized Use, Recipient shall, upon notice from the MSRB, immediately cease all such use and confirm in writing to the MSRB that such use has been terminated. At such time when the Unauthorized Use, in the sole, reasonable judgment of the MSRB, has been cured, the MSRB *may* grant Recipient permission to resume using Academic Historical Transaction Data Product and disseminating the Derivative Data.

This remedy is in addition to and not in place of any other remedy the MSRB may have as a matter of law or equity.

### Restrictions and Redistribution

- As the Data includes masked identification of the MSRB registrant executing the trade, Recipient will not attempt to reverse engineer or take any other measures, nor will it assist any other person or entity in taking any measures, to discover the true identity of any MSRB registrant at any time. If Recipient or its Internal User breaches this term, the agreement will be subject to immediate termination by the MSRB and immediate return of the Academic Historical Transaction Data Product. Additionally, Recipient shall be subject to any additional damages suffered by any MSRB registrant executing the trade as a result of having its' identification revealed as well as any damages incurred by the MSRB as a result thereof.
- Recipient shall not redistribute or otherwise make available the Academic Historical Transaction Data Product or any Data comprising the Academic Historical Transaction Data Product to any other individual or entity with the exception of the Internal Users listed in the attachment to the agreement and shall use commercially reasonable measures to cause Recipient's Service to be configured and operated in such a manner as to protect the Data. Such measures may include, but not be limited to, the use of user IDs and passwords and other forms of entitlements to gain access to the Data. Additionally, Recipient shall administer reasonable security procedures in the place(s) where Recipient's Service and the Data are used, accessed, processed, stored or transmitted in order to ensure that the Academic Historical Transaction Data Product remains, at all times, secure from unauthorized access or interference and to prevent the Academic Historical Transaction Data Product from being accessed or taken from or in any way communicated, divulged or published except through authorized channels of transmission or reception.
- If Recipient is a Public University, terms to protect the Data from the law of the Public University's resident State involving information disclosure shall be applicable.

### Publication of Derivative Works

- All Data results included in any draft or final version provided to or made available in any way whatsoever, to any third party, shall be sufficiently aggregated to ensure that no third party can identify any specific MSRB registrant, or reverse engineer any specific transaction. Recipient shall inform all of its Internal Users to act accordingly and shall take reasonable measures to ensure their compliance. **Any disclosure of the identity of any MSRB registrant, whether willful or accidental, is considered a material breach of the agreement and will result in immediate Termination of the agreement for cause and subject the Recipient to any and all damages which are incurred and can be proven by any identified MSRB registrant and/or the MSRB.**

## Termination

Immediately upon conclusion or termination of the agreement for any reason, Recipient shall, without additional cost to or demand from the MSRB, return to the MSRB in an orderly and expeditious manner or destroy all information, records, documentation, data and other property supplied to Recipient by and for the MSRB, and shall certify in writing that it has done so.

**ALPHABETICAL LIST OF COMMENT LETTERS ON MSRB NOTICE 2015-10  
(JULY 16, 2016)**

1. American Governmental Financial Services: E-mail from Robert Doty dated August 24, 2015
2. Andrew Glassberg: E-mail dated August 17, 2015
3. Association for Budgeting and Financial Management: Letter from Robert Kravchuk, Chair, et al., dated September 13, 2015
4. Bond Dealers of America: Letter from Michael Nicholas, Chief Executive Officer, dated August 24, 2015
5. Brandeis University: Letter from Daniel Bergstresser, Associate Professor of Finance, dated September 14, 2015
6. Coastal Securities: E-mail from Chris Melton, Executive Vice President, dated August 5, 2015
7. George Mason University: Letter from Jonathan L. Gifford, Professor and Director of Center for Transportation P3 Policy, dated September 1, 2015
8. John Mousseau: E-mail dated July 29, 2015
9. Larry Harris: Letter dated September 6, 2015
10. New York University: Letter from Norman White, Clinical Professor, et al., dated September 16, 2015
11. Pennsylvania State University: Letter from Patrick J. Cusatis, Associate Professor of Finance, dated September 10, 2015
12. Securities Industry and Financial Markets Association: Letter from Sean Davy, Managing Director, Capital Markets Division, and David L. Cohen, Managing Director and Associate General Counsel, Municipal Securities Division, dated September 11, 2015
13. University of Louisville: Letter from James R. Ramsey, President, dated September 4, 2015



**From:** Robert Doty [<mailto:robert.doty@agfs.com>]  
**Sent:** Monday, August 24, 2015 1:14 PM  
**To:** Lynnette Kelly; Robert Fippinger  
**Subject:** Support Data Proposal

Lynnette and Robert,

I am uncertain as to how I should submit this brief comment on a Board proposal, so I am sending it to you.

I wish to express my strong support for the Board's proposal to release data to researchers in the municipal securities market.

The market suffers from the current level of careful examination and analysis, much of which is due to the lack of reliable data. The Board's proposal will be an important step in the direction of remedying that problem.

Robert Doty



**AGFS CONTACT INFORMATION:**

**Email:** [robert.doty@agfs.com](mailto:robert.doty@agfs.com)

**Telephone:** (916) 761-3432

**Website:** [www.agfs.com](http://www.agfs.com)

839 Bestgate Road  
Annapolis, MD 21401

## Comment on Notice 2015-10

from Andrew Glassberg,

on Monday, August 17, 2015

Comment:

I support the proposal to make MSRB market data available with identifiers for trading firms (but without the specific name of the firm.)

As someone who both teaches and researches in local government budgeting and finance, this innovation would be quite helpful. It would enable faculty and the students we supervise to examine data to see if firms matter in execution, etc.

Removing the specific firm name would effectively protect firm privacy, but allow academic examination of an important question in public finance.



Ronald W. Smith, Corporate Secretary  
Municipal Securities Rulemaking Board  
1900 Duke Street, Suite 600  
Alexandria, VA 22314

September 13, 2015

Dear Mr. Smith:

We are writing you on behalf of the Association for Budgeting and Financial Management ([ABFM](#)), a section of the American Society for Public Administration (ASPA), which has over 500 members and is dedicated to research on state and local government budgeting and financial management. ABFM's annual conference regularly features research on debt financing and management generally, and the municipal securities market specifically. In addition, the association's flagship journal, [Public Budgeting & Finance](#), regularly publishes peer-reviewed research on these topics.

ABFM strongly supports the establishment of the academic historical trade product described in MSRB Regulatory Notice 2015-10. The Real-time Transaction Reporting System (RTRS) Academic Data Product would advance the MSRB's goal of enhancing market transparency by facilitating research on municipal finance. In particular, it would enable researchers to account for the identity of the dealer who executed a transaction (via an anonymized dealer identifier), which means they (researchers) would be able to more precisely control for factors that may influence the outcomes of transactions in the municipal securities market. The practical consequence is that the RTRS Academic Data Product would potentially improve the validity and reliability of empirical research on the municipal securities market. The potential is high that the research would then be more useful to the public, issuers, and investors, in addition to the academic community. The potential is much lower, however, if the dealer identifier is less precise (e.g., a categorical identifier based on dealer size or average daily trading volume). Given the marginal expense the MSRB would bear to make the RTRS Academic Data Product available, we believe the proposed one-time set-up fee of \$500 and additional \$500 fee per dataset is reasonable. In addition, we support the MSRB's provisions to keep dealers' identities anonymous. In order to facilitate timely research, however, we believe a data embargo period of 12 months would be more appropriate than the proposed period of 24 months. An embargo period of 12 months is sufficient to ensure that dealer identities are not reverse engineered. Moreover, the proposed penalties for reverse engineering dealer identities are sufficiently severe to dissuade users of the data from attempting to do so.

While we do not speak for the whole of the academic community, we do not believe academics would be opposed to providing the MSRB a copy of all published works that rely on the RTRS

Academic Data Product as a term of the agreement to use the database. It is paramount, however, that the MSRB not seek to share in the authorship or copyright of such works. In addition, it would be inappropriate of the MSRB to decide which researchers may access the RTRS Academic Data Product on the basis of where they have published or may publish works that rely on the database. It also would be inappropriate of the MSRB to base its access decisions on the content of researchers' previously published works. All of these protections are essential to academic freedom, independent research, and publication in peer-reviewed journals. Independent and replicable research on the municipal securities market, meanwhile, can make the market fairer and more efficient, much as it has in the case of research on corporate securities.

We are particularly concerned about one provision of the proposed RTRS Academic Data Product Agreement:

*Recipient remains liable to the MSRB for any breach of the agreement resulting from the action/inaction of Recipient's Internal Users or any other individual or entity that accesses the Academic Historical Transaction Data Product via Recipient or to whom Recipient provides any derivative works.*

Our first concern is that it is extremely unlikely a university would allow a user of the data to enter into an agreement under which the user has unlimited liability to the MSRB should the user breach the data agreement. This provision would, in effect, render access to the data impossible. Universities might consider allowing users to enter into a data agreement with the MSRB if the liability were limited to perhaps two times the price of the dataset in the event that the user were found negligent of the agreement.

Our second concern is that it is unreasonable to hold a recipient of the data liable for any action or inaction on the part of someone to whom the recipient provides any derivative works. Sharing derivative works with a wide range of individuals is an essential function of scholarship and academic freedom. The data recipient cannot police another person's actions, let alone the actions of perhaps hundreds of people.

Finally, we do not take a position on whether the RTRS Academic Data Product should be made available to researchers who lack an association with an institution of higher education.

Thank you very much for the opportunity to comment on the proposed RTRS Academic Data Product.

Sincerely,

Robert Kravchuk	Indiana University	ABFM Chair
Carolyn Bourdeaux	Georgia State University	ABFM Chair-Elect
Daniel L. Smith	New York University	ABFM Vice Chair
Meagan Jordan	Old Dominion University	ABFM Secretary/Archivist
Benjamin Clark	Cleveland State University	
Douglas Carr	Oakland University	
Dwight Denison	University of Kentucky	

Merl Hackbart	University of Kentucky
Kenneth Kriz	Wichita State University
Martin Luby	DePaul University
Clifford McCue	Florida Atlantic University
Zachary Mohr	University of North Carolina at Charlotte
Michael Peddle	Northern Illinois University
Michah Rothbart	New York University
Meg Streams	Tennessee State University
David Swindell	Arizona State University



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202.204.7900  
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August 24, 2015

**Submitted Electronically**

Ronald W. Smith  
Corporate Secretary  
Municipal Securities Rulemaking Board  
1900 Duke Street, Suite 600  
Alexandria, VA 22314

**RE: MSRB Regulatory Notice 2015-10: Request for Comment on Establishment of an Academic Historical Trade Data Product**

Dear Mr. Smith:

On behalf of the Bond Dealers of America (“BDA”), I am pleased to submit this letter in response to the Municipal Securities Rulemaking Board’s Regulatory Notice 2015-10, requesting comment on a new RTRS academic data product. BDA is the only Washington, DC based group representing the interests of middle-market securities dealers and banks focused on the United States fixed income markets and we welcome this opportunity to present our comments on this Notice.

BDA supports initiatives to increase market transparency and investor education that do not create additional business risks for dealers. However, BDA does not support the proposal described in Regulatory Notice 2015-10, to create a new academic data product.

***BDA does not support the proposed academic data set, which would expose dealers to new business risks***

BDA appreciates the value of rigorous academic study of the fixed-income markets. However, BDA believes the proposed new academic data set would expose dealers to unnecessary business risks. The benefits of creating an academic data set, which would include masked dealer-specific identifiers, on a 24-month delay basis, are not outweighed by the business risks to dealers associated with reverse engineering of dealer identities, dealer trading strategies, and dealer inventories.

BDA believes that currently available data sets include a sufficient level of detail to support rigorous study. The inclusion of a dealer-specific identifier in the data set would open dealers to myriad risks related to their trading strategies and business models.

It is for this reason that MSRB has so far chosen to exclude a dealer identifier in its publicly disseminated information and available data sets. BDA sees no compelling reason to halt that practice and urges MSRB to continue to protect dealer identities and trading strategies.

The fact that the proposal does not describe the intent to create a process to change the masked dealer identifiers, for each dealer, on a regular basis is problematic. Without changing the masked identifier, it will become much easier to identify a specific dealer based on its trading data over a longer period of time. A superior method would be to group dealers into multiple groups based on size, which would allow MSRB to reduce the risk of dealer identification.

***BDA does not believe the risks to dealers associated with the academic data set proposal can be meaningfully reduced by the use of the proposed contract***

Furthermore, the value of the proposed agreement which outlines the restrictions that will apply to the authorized academic data set purchasers do not adequately protect dealers. The academic studies will be detailed descriptions and analyses of the dealer-specific transactions based on the data set. The contractual agreement to not attempt to reverse engineer a dealer's identity will not extend to readers of the studies. There may be specific contexts in which it may be easy for the reader of a study to identify a dealer based on an especially large percentage of trading volume in a security that the dealer has recently underwritten or due to other trading patterns in specific securities. Furthermore, nothing in the contract requires the academic institution to have a minimum required level of data security protections in place. Therefore, the valuable dealer-specific data would not be adequately protected from theft. In short, the contract does little to prevent the results it is designed to achieve—the protection of dealer identities.

In conclusion, BDA does not believe there is a compelling reason to put dealer identities at risk. While BDA supports transparency and investor education, it cannot support the academic data set proposed in Regulatory Notice 2015-10, which puts dealer businesses at risk.

Thank you again for the opportunity to submit these comments.

Sincerely,

A handwritten signature in blue ink that reads "Michael Nicholas". The signature is fluid and cursive, with the first name being more prominent.

Michael Nicholas  
Chief Executive Officer



# Brandeis University

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## INTERNATIONAL BUSINESS SCHOOL

Ronald W. Smith, Corporate Secretary  
Municipal Securities Rulemaking Board  
1900 Duke Street, Suite 600  
Alexandria, VA 22314

Re: **MSRB Regulatory Notice 2015-10, Request for Comment on Establishment of an Academic Historical Trade Data Product**

September 14, 2015

Dear Mr. Smith:

On July 16, 2015, the MSRB published a request for comment on the establishment of an academic historical trade data product. I am writing to offer a handful of comments in response to your request.

My name is Daniel Bergstresser, and I am an Associate Professor of Finance at Brandeis International Business School. I also serve as Area Head for the finance faculty at Brandeis. My research focuses on municipal finance and on the impact of taxation, regulation, and market structure on financial markets. This research has been published in the *Journal of Law and Economics*, the *Journal of Financial Economics*, the *Quarterly Journal of Economics*, the *Review of Financial Studies*, the *Municipal Finance Journal*, and the *Journal of Public Economics*.

To start with, I am strongly in favor of the proposed academic trade data product. Releasing data that would allow academic researchers to distinguish transactions made by particular dealers would enhance the quality of academic research on the municipal market. In the medium to longer run, releasing these data would also serve the public interest, by helping to make the municipal market function more efficiently for buyers and sellers of municipal bonds. A key principle that governs the progress of science is that scholars should have the opportunity to test and replicate each other's research. Making data widely available, and to a wide range of different teams of researchers, is an important part of how research on this market will move forward. In this and in other markets, academic research has served the public interest by helping markets connect buyers and sellers more efficiently.

I have a handful of specific comments that I would like to make in response to your request. First, your request for comment asks about potentially using groupings of dealers based on dealer characteristics as a way of reducing the possibility for the reverse engineering of dealer identities. In my opinion, aggregating information in this way, or otherwise reducing the information content of the data, would negate the entire purpose of having (anonymized) dealer identities, which is to be able to identify



round-trip transactions. For that reason, I would recommend that the academic data product include individual trades linked to specific (anonymized) dealer identities.

Your request for comment also asks about limiting the availability of the RTRS Academic Data product to academics currently associated with an institution of higher education. I would encourage the MSRB to broaden the set of scholars with access to the new product. Scholarly research on the municipal market may also be conducted by high-quality researchers who are associated with the Federal Reserve Board, individual Federal Reserve Banks, and by other institutions such as the Brookings Institution, the American Enterprise Institute, and the Urban Institute. Excluding these researchers from the community of scholars with access to the new data product would be inappropriate and would hamper the progress of research on the municipal bond market.

I am also very concerned about the unlimited damages provision in the proposed MSRB agreement. I believe that such an agreement will prevent many academic researchers from being able to access these data. I would propose placing a damages limit that would be sufficiently high to deter unauthorized use of the data, but not so high that it places the data out of reach for most scholars.

It is also obvious that any unauthorized reverse-engineering of dealer identities would be evident to the editors and referees of any serious academic journal into which a hypothetical rule-violating scholar might attempt to place their research. Given the good faith of the MSRB in making these data available to scholars, and the fact that unauthorized use of the data would threaten wide availability of these and other data vital for academic research, my forecast would be that any scholar who attempted to publish or distribute work based on unauthorized reverse-engineering of dealer identities would become something of a pariah in the research community. When it comes to reverse-engineering dealer identities, I don't believe that it is the community of scholars that should worry the MSRB.

But I do think that the MSRB, in its hope to deter the dissemination of dealer identities matched to trades, is probably swimming against the tide of history and technology. It's hard for me to imagine that these data will not eventually find its way into the light, one way or another. It would probably be productive for the MSRB to prepare for a world where data matching trades to dealers are widely available and the barriers to using these data are much lower than they are today.

With best regards

A handwritten signature in cursive script that reads "Daniel Bergstresser". The ink is dark and the signature is fluid and legible.

Daniel Bergstresser

## Comment on Notice 2015-10

from Chris Melton,

on Wednesday, August 5, 2015

Comment:

I would like to thank the Board for the opportunity to comment on the proposal to disseminate further RTRS data at the request of certain academics. I believe in following the “mushroom” principle (“do not eat anything the sun kills”) when it comes to generic trade data (and most other things) and am generally in favor of the proposal. Although I have my doubts as to the results produced by academic research related to the municipal market, providing raw data to contribute to research driven analysis should be something that receives universal support. That being said, I would like to respond to two questions raised in the Request for Comment.

First, no matter the efforts made to prevent reverse engineering to determine dealer identities, one can most assuredly count on that happening if individual dealer identifiers are utilized. I do not believe that you can “contract” your way out of that risk. Grouping dealers by size or behavior as an alternative suggested in the Request for Comment should allow academics to achieve their goals without creating the specter of published trades “by dealer”. Restricting the distribution to active academics should further mitigate this risk. I would think the Board would need to envision a considerable academic benefit in the use of individual identifiers as opposed to “group” identifiers as proposed in the alternative before approving the distribution of the data on that basis.

Secondly, the benefit of reducing the age of the data from a minimum of 24 months to 12 months outweighs the increased potential risk of reverse engineering dealer identity. Utilizing individual anonymous identifiers presents a far greater risk of dealer identity discovery than using one year old data. One of the issues with the SEC’s Report on the Municipal Market published in 2012 was the staleness of the data. It is important to the accuracy of any academic conclusion related to current conditions to have data that is as fresh as reasonably possible. Although the municipal market is notoriously slow to evolve (and there are a number of good reasons for this), trading patterns and practices can change over a period of one to two years. Consequently, shortening the time frame during which the data is not released should improve the results obtained by academics studying market behavior.

Increasing the availability and accuracy of research related to market activity should benefit all market participants. Thank you again for the opportunity to provide comment on this issue.

Chris Melton  
Executive Vice President  
Coastal Securities



Center for Transportation Public-Private Partnership Policy  
3351 Fairfax Drive, MS 3B1  
Arlington, VA 22201  
USA

September 1, 2015

Ms. Jennifer Al. Galloway  
Chief Communicating Officer,  
Municipal Securities Rulemaking Board  
1900 Duke Street Suite 600  
Alexandria, VA 22314

Subject: Notice 2015-10 Proposal on Data Products to Support Academic Research on Municipal Market Trading Practices

Dear Sir or Madam,

My name is Jonathan L. Gifford and I am submitting this comment as the Director of George Mason University's Center for Transportation Public-Private Partnership Policy. This comment is regarding Notice 2015-10 on a proposed data product for academic researchers on historic municipal market trades, focusing on Private Activity Bonds and Revenue Bonds issued to finance infrastructure public-private partnerships (P3s).

Academics and critics mostly agree that efforts to evaluate and communicate the true benefits and costs of P3 projects have been undermined by limited project information due to its proprietary nature. P3s are notoriously complex, and unfortunately policy debates are often distracted by misunderstanding and lack of knowledge on key participants. Little is known about the secondary market for P3 project bonds in terms of the characteristics of investors, effects of procuring agencies' P3 policies, and potential impact of changes to project environments.

The proposed data product for academic institutions would enable researchers to conduct such analyses, the outcomes of which will provide insights for policy makers to make sound decisions on their infrastructure investments. Most importantly, the proposed product will benefit the public in terms of understanding the nature and magnitude of outcomes with regard to P3 policy and projects. As an academic who is involved in the policy debate of P3s, I support the proposal for the benefit of the public, and I strongly believe that its realization will be a significant step for MSRB to advance its objectives.

I would be more than happy to respond to any questions you may have.

Thank you for the opportunity to comment on this proposed rule.

Sincerely,

A handwritten signature in black ink, appearing to read "Jonathan L. Gifford". The signature is written in a cursive style with a large, stylized initial "J".

Jonathan L. Gifford

Professor and Director of Center for Transportation P3 Policy  
School of Policy, Government, and International Affairs  
George Mason University  
[jgifford@gmu.edu](mailto:jgifford@gmu.edu)/703.993.2275  
p3policy.gmu.edu

## **Comment on Notice 2015-10**

from John Mousseau,

on Wednesday, July 29, 2015

Comment:

just some notes. its a good idea. it will also make the muni market more attractive to incoming professionals.

Ronald W. Smith, Corporate Secretary  
Municipal Securities Rulemaking Board  
1900 Duke Street, Suite 600  
Alexandria, VA 22314

Re: MSRB Regulatory Notice 2015-10

September 6, 2015

Dear Mr. Smith:

I am writing you to comment on the establishment of an academic historical trade data product, as requested in MSRB Regulatory Notice 2015-10.

I am a leading academic researcher in market microstructure, and I have conducted previous studies of trading in municipal securities. The most notable of which, "Secondary Trading Costs in the Municipal Bond Market"<sup>1</sup> (with Michael Piwowar, current SEC commissioner), contributed substantially to the resolution of the debate about whether RTRS data should be made public. I hold the Fred V. Keenan Chair in Finance at the USC Marshall School of Business, and I am a former Chief Economist of the U.S. Securities and Exchange Commission.

I also am the lead independent director of Interactive Brokers (IB), a registered broker-dealer that conducts an agency-only brokerage business in municipal securities. I write today in my own name only. IB did not ask me to comment on this proposal, it has not reviewed or approved my comments, and my expected responsibilities at IB do not include commenting on proposals such as these. My comments represent my opinions only and not those of IB or anyone affiliated with the firm.

I am strongly in favor of the proposed product. Familiar as I am with the regulatory process, I have organized my main comments around your specific questions to simplify the work of the Board's staff.

Before turning to these questions, note that the proposed product is in some respects similar to the Enhanced TRACE product now produced by FINRA. FINRA's product does not identify dealers anonymously or otherwise, but it does provide full trade sizes and other information not provided in the real time product, albeit with an 18 month embargo. The Enhanced TRACE product is widely accepted, and thus provides some limited precedence for the

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<sup>1</sup> *Journal of Finance*, Volume 61, Issue 3, pages 1361-1397, June 2006.



Ronald Smith

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proposed enhanced RTRS product. Although not mentioned in the release, I believe that the enhanced RTRS product also should provide full trade sizes. The importance of many of my arguments below would be reduced if the data did not fully reveal the sizes of the largest trades.

- *What public, issuer and investor protection benefits might arise from the availability of the RTRS Academic Data Product?*

Dealers play an integral role in the provision of liquidity to the public in municipal securities. Given the huge number of different issues, they will likely remain vitally important in these markets even when electronic venues become substantially more important than they presently are. Understanding better how dealers profit in these markets, and perhaps more importantly, when and how they lose in these markets, will allow the MSRB to better regulate the markets for the public good.

The academic community provides high quality information about these markets through research studies that academic researchers conduct with the expectation that their work will be subject to strenuous peer review and that other researchers will likely find their mistakes. These researchers generally do not represent industry interests. Instead, they primarily are concerned about better understanding markets for the purpose of improving public policy. Those who produce studies with important results also improve their job security.

Their empirical work requires high quality data that can inform their analyses as to what dealers do. Dealer identities thus need to be revealed, at a minimum in anonymized form, so that academics can understand how dealer trading decisions relate to their previous trading decisions. The data need to be widely enough available that academics can have a reasonable expectation that others will replicate their work, and thus keep them honest.

The production of information about liquidity will lead to better policy decisions by the MSRB. Liquidity ultimately will be enhanced, which will benefit investors directly through lower transaction costs, and issuers through higher offering prices. (Investors pay more for securities that they believe that they can sell at low cost when they want to sell them.) Dealers will benefit because greater investor confidence and lower transaction costs both substantially increase trading volumes, as the NASDAQ experience over the last 30 years has so clearly shown.

- *The MSRB proposes that the RTRS Academic Data Product only include trade data that is aged no less than 24 months. Is this delay an appropriate period of time to allay concerns regarding potential reverse engineering of dealer identities? If not, what other delay period would be appropriate to address these concerns while still providing data that is timely enough to be useful for market research purposes?*

Concerns about reverse engineering of dealer identities are three-fold.

Ronald Smith

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First, dealers do not want other traders to know their large positions. With respect to this concern, a delay of 24 months is more than sufficient to ensure that that information about dealer positions—whether associated with known dealers or simply with an anonymized dealer—would be useless to other traders. For this issue, a delay of two months should be more than enough because most dealer positions turn over within a week and almost certainly within two months. (By the way, the aging distribution of positions would be much more precisely known if academics had access to the proposed enhanced data product.)

The second concern regards the reverse engineering of trading strategies. With respect to this concern, I note that general dealing strategies were already well known before biblical times. Dealers of course are always trying to fine tune their strategies, but most innovations are generally well known, and often are suggested by academic research. Dealers largely acquire their advantages through superior information acquisition and processing and through personal relationships with customers, and not through clever trading strategies. Reverse engineering cannot reveal much information about the origins of these advantages. A period of 24 months is more than enough time to allay these concerns—12 months would be more than sufficient.

I note further that the public has an interest in knowing what trading strategies traders use. The MSRB needs to identify parasitic trading strategies that hurt investors and ultimately issuers. The academic community often has been instrumental in identifying such strategies before regulators were aware of them.

The MSRB must weigh protecting the proprietary interests of dealers in their strategies against the potential that some traders may be engaged in parasitic strategies. The latter concern suggests that the data be made available quickly to academics and possibly others so that any actionable discoveries that they make can be addressed quickly before investors lose too much money.

The third concern involves the identification of price differentials. I discuss this issue in detail below.

*• Would a shorter delay period, such as 12 months, be appropriate to enhance the timeliness of the data for research purposes while still minimizing the risk and potential impact of reverse engineering of dealer identifiers?*

Yes. See my comments on the previous question. I think that six months would be optimal given the issues discussed above. In particular, I do not think that much value can be inferred from reverse engineering dealer strategies, and I am concerned about identifying parasitic trading strategies as quickly as possible. Many dealers surely will disagree with my characterization of the value of their proprietary strategies, but my experience working for a large high frequency trader suggests otherwise. The main value-added is in the trading systems and not in the strategy.



Ronald Smith

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*• Are there alternative ways of anonymizing dealer identities in the RTRS Academic Data Product? Are there groupings of dealers based on dealer characteristics (e.g., size of dealer) that could be used to identify the type of dealer that executed each transaction? Are there behavioral groupings that may be utilized (e.g., average daily trading volume) How would this approach be preferable to anonymizing dealer identifiers in retaining the usefulness of the data to academics while presenting fewer concerns regarding reverse engineering of dealer identifiers?*

These approaches would provide better data than are presently available, but they will not allow academics to understand specific dealer behavior. Dealer decisions to offer, not offer, and take liquidity are made by individual dealers in response to their individual needs and inventory conditions. Groups of dealers acting in concert do not make these decisions. To best understand these decisions, you must see who is making them.

*• The MSRB intends to limit the availability of the RTRS Academic Data Product to academics currently associated with an institution of higher education in connection with their research activities. Is this an appropriate limitation? If not, please provide alternatives and explain how the alternatives would address concerns regarding reverse engineering of dealer identifiers. Should a data product containing anonymized dealer identifiers be made available more broadly to researchers, even if not part of an institution of higher education (e.g., industry groups, non-profit organizations or research-oriented for-profit companies)? Would a broader subscriber base increase the likelihood that dealers or other market participants may obtain the data for competitive reasons?*

The public interest is best served by a free exchange of ideas, even when some proponents have strong interests or biases. Academics, while presumed to act in the public interest in the name of science, may have hidden agendas. It would not be fair or in the public interest if interested industry groups could not replicate academic studies or produce their own. The data should be available to everyone.

However, the pricing need not be uniform. In contrast to industry participants and their various organizations and consultants, academics are not paid for their specific research projects, and they do not benefit from the trading profits that their research may produce or protect. Given the external benefits that their research provide to the public, the public interest is best served by providing these data to them at reduced rates, or even for free.

*• Are the key terms of the agreement below sufficient in striking the appropriate balance between protecting dealer interests and facilitating academic research? Should the MSRB include any additional restrictions on the use of the data? Are any terms in the agreement unduly restrictive such that they may potentially hinder research? Would academics be opposed to including as a term of the agreement that a copy of all derivative works that rely on the RTRS Academic Data Product be provided to the MSRB upon publication?*

Ronald Smith

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In general, I find the key terms of the proposed agreement to be sufficient and not unduly restrictive. However, I concur with specific concerns about these issues that I understand will be expressed by the Association for Budgeting and Finance Management (ABFM) in their comment letter.

I also very strongly endorse the ABFM position on academic freedom. The data must be made available to everyone without regard to concerns about the results that they may want or will obtain.

Finally, I think that the MSRB should be more specific about the term “upon publication.” Many academics would interpret this term to mean formal publication in a journal, periodical, or book. Others would interpret this term to mean dissemination to the public, which could include posting to services such as the Social Science Research Network, presentations at academic conferences, or emailing to broad groups of people.

As the regulator of these markets, and as the custodian for these data, the MSRB should never be caught unaware of important new research findings, whether correct or erroneous. Accordingly, I suggest that the wording be made specific to reflect availability to the general public as opposed to formal publication in a journal, periodical, or book. If a search engine can find a paper on the web, it should be deemed published for the purpose of this proposed restriction.

In one respect, however, this proposal is problematic. Researchers often present their studies in academic seminars and conferences before they are willing to disseminate them to the public at large. At these meetings, they often receive feedback that allows them to improve their studies and to correct their errors. Unfortunately, the organizers of these meetings often put these papers on the web where search engines can discover them. The MSRB should require that papers so distributed be marked on the title page “Working Draft—Not for Quotation—Subject to Change.” When the researcher removes this mark—which they generally must do before submission for formal publication, the researcher should be required to send the paper to the MSRB.

The MSRB should also encourage (but not require) researchers to send early drafts of their studies to the MSRB where staff with industry knowledge can help them correct errors that they do not recognize. The MSRB should encourage such submissions by quickly turning them around. The staff responses should include text that reminds the researcher that the staff comments represent the views of the staff member only, and not necessarily those of the Board or of any of its other staff members.

The researcher should be required to note at the bottom of any study deriving from the usage of these data that the results do not reflect to views or positions of the Board or if its staff.

Ronald Smith

Page 6

• *How would dealers, or other market participants, be impacted if dealer identifiers were reverse engineered? Are there data or other evidence, including studies or research, that support estimates of these impacts?*

The most important danger that dealers face is that their price differentials (known as markups by many) could be revealed to their customers. The customers might be concerned about the size of these price differentials, or that they are not receiving the most favorable differentials offered by the dealer. Dealers would be hurt by this information, but their customers would benefit from it.

When securities trade net, price differentials play the role of commissions, especially for riskless principal transactions. The two are perfect substitutes for each other, except that customers always know what commissions they will pay before they trade, but they presently almost never know what price differentials they will pay before the trade is arranged (and generally also afterwards). I believe that it is in the public interest for customers to know this information, and I strongly encourage the MSRB to address this issue through specific rulemaking.

It would not be appropriate for researchers to reveal average or specific price differentials by reverse engineering dealer identifiers when the users of these data are bound not to do so. It likewise would not be appropriate for dealers to do the reverse engineering to determine what their competitors are doing when the users of these data are bound not to do so. But the MSRB clearly, and appropriately, recognizes that the dissemination of the proposed data product may lead to its improper usage.

The usage that I describe concerning the identification of differentials by reverse engineered dealer identities would be improper, but I strongly believe that it would be in the public interest. Accordingly, while I strongly believe that it would be inappropriate for anyone to do this reverse engineering, I am not concerned about the impact, which I believe would be positive for the markets. To reiterate—I do not encourage anyone to do such reverse engineering, rather I would condemn it. But I strongly encourage the MSRB to address this issue, and quickly before the class action bar does so.

Thank you very much for the opportunity to comment on the proposed product. If I can be of any further service to the Board, please do not hesitate to contact me.

Sincerely,



Larry Harris  
Fred V. Keenan Chair in Finance



DEPARTMENT OF INFORMATION, OPERATIONS, &  
MANAGEMENT SCIENCES

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NORMAN WHITE  
CLINICAL PROFESSOR  
Department of Information, Operations and  
Management Science  
Faculty Director, Stern Center for Research Computing

Municipal Securities Rulemaking Board  
September 16, 2015

Dear Sirs,

The undersigned are writing you in support of the proposal to allow researchers access to anonymous dealer identifiers in the RTRS data. Access to these identifiers would allow more transparency in a market that is virtually opaque to outsiders. Current RTRS data only allows a researcher to “guess” at paired trades, by looking at the time stamp of the trades, and whether they were dealer-dealer, dealer-customer, customer-dealer. The MSRB report on Secondary Market Trading in the Municipal Securities Market from July 2014 gives an indication of the type of research that can be done if one can (anonymously) identify the dealers involved in a trade. However, this report, as comprehensive as it is, just touches the surface of the type of research that could be done, especially if one includes other non-RTRS data about the securities involved, or if one starts looking at the different type of securities, issuing municipality/state, liquidity of security, social network of the dealers, ...

The downsides of releasing this data seem very small, as opposed to the dramatically increased transparency it would give to a market that is currently very difficult to analyze, due to the number and type of securities involved, the long maturities involved, and the large number of dealers.

Yours truly,

Norman White

Alexander Lungqvist

Professor of Finance, Director Salomon Center for the Study of Financial Markets, Stern School of Business

Joel Hasbrouck

Kenneth G. Langone Professor of Business Administration and Professor of Finance, Stern School of Business

David Yermack

Professor of Finance, Department Chair, Stern School of Business

Christine Cuny

Assistant Professor of Accounting, Stern School of Business



Ronald W. Smith, Corporate Secretary  
Municipal Securities Rulemaking Board  
1900 Duke Street, Suite 600  
Alexandria, VA 22314

September 10, 2015

Dear Mr. Smith,

I am currently an Associate Professor of Finance at the Pennsylvania State University – Harrisburg. Before joining Penn State, I worked 10 years in the public finance market. I was a public finance investment banker at Lehman Brothers for 5 years. I also ran proprietary municipal bond portfolios at Corestates Bank, First Union National Bank, and Tucker Anthony.

My research interests are primarily focused on municipal bonds and municipal market trading. I have published articles related to the municipal market in several journals including *Municipal Finance Journal* and *The Journal of Futures Markets*.

I strongly support the Real-time Transaction Reporting System (RTRS) Academic Data Product described in MSRB Regulatory Notice 2015-10. I believe that there is need for such a product and that its existence would greatly advance research in the municipal bond market. An increase in municipal bond research will likely increase the transparency and liquidity of the municipal market.

In conversations with library representatives at Penn State, they expressed that the cost is reasonable for such a valuable data set. They do, however, have reservations about the following provision, as outlined in the RTRS Academic Data Product Agreement:

“Recipient remains liable to the MSRB for any breach of the agreement resulting from the action/inaction of Recipient’s Internal Users or any other individual or entity that accesses the Academic Historical Transaction Data Product via Recipient or to whom Recipient provides any derivative works.”

Representatives of the Penn State library system have told me that this language would likely prevent Penn State from participating in the RTRS Academic Data Product Agreement.

Thank you for the opportunity to comment.

Sincerely,

Patrick J. Cusatis, Ph.D., CFA  
Associate Professor of Finance



September 11, 2015

Marcia E. Asquith  
Office of the Corporate Secretary  
Financial Industry Regulatory Authority  
1735 K Street, NW  
Washington, DC 20006-1506

Ronald W. Smith  
Corporate Secretary  
Municipal Securities Rulemaking Board  
1900 Duke Street  
Alexandria, VA 22314

Re: **FINRA Regulatory Notice 15-26,  
FINRA Requests Comment on a New Academic  
TRACE Data Product**

**MSRB Regulatory Notice 2015-10,  
Request for Comment on Establishment of an  
Academic Historical Trade Data Product**

Dear Ms. Asquith and Mr. Smith:

The Securities Industry and Financial Markets Association (“SIFMA”)<sup>1</sup> appreciates the opportunity to comment on the Financial Industry Regulatory Authority’s (“FINRA’s”) Regulatory Notice 15-26 and the Municipal Securities Rulemaking Board’s (“MSRB”) Regulatory Notice 2015-10 (together the “Proposals”). In response to requests from certain parties, the MSRB and FINRA are proposing to create new Real-time Transaction Reporting System (“RTRS”) and Trade Reporting and Compliance Engine (“TRACE”) Academic Data Products that would include anonymized dealer identifiers. The RTRS and TRACE Academic Data Products would be made available only to institutions of higher education and would include the same transactions included in the current historical transaction data sets. The MSRB and FINRA propose to take measures to allay concerns regarding the potential for reverse engineering of anonymized dealer identifiers to determine dealer identities by: (1) explicitly requiring subscribers to agree that they will not attempt to reverse engineer the identity of any dealer; (2) prohibiting the redistribution of the data in the RTRS Academic Data Product and TRACE Academic Data Product; (3) requiring users

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<sup>1</sup> SIFMA is the voice of the U.S. securities industry, representing the broker-dealers, banks and asset managers whose 889,000 employees provide access to the capital markets, raising over \$2.4 trillion for businesses and municipalities in the U.S., serving clients with over \$16 trillion in assets and managing more than \$62 trillion in assets for individual and institutional clients including mutual funds and retirement plans. SIFMA, with offices in New York and Washington, D.C., is the U.S. regional member of the Global Financial Markets Association (GFMA). For more information, visit <http://www.sifma.org>.

to disclose each intended use of the data (including a description of each study being performed and the names of each individual who will have access to the data for the study); and (4) requiring that the data be returned or destroyed if the agreement is terminated. The transactions included in the RTRS and TRACE Academic Data Products will be aged no less than 24 months.

SIFMA continues to support the MSRB's and FINRA's efforts to improve market transparency to investors and promote regulatory efficiency. To this end, we suggest certain modifications to the Proposals.

### **I. Access to data by Regulators**

SIFMA believes it is important to note in the context of the Proposals that regulators have real time access to RTRS data and TRACE Data, including dealer identifiers, for market surveillance and enforcement purposes. We agree with the MSRB and FINRA that not all information or transactions reported to RTRS and TRACE are necessary to serve the transparency objective of the system and therefore do not qualify for public dissemination. Among other things, information that provides the identity of each dealer that executed a transaction reported to RTRS and TRACE is not publicly disseminated.

### **II. Anonymizing Dealer Identities and Reverse Engineering**

SIFMA is concerned that the Proposals to use anonymized dealer identifiers to make available the RTRS data and TRACE data do not effectively protect dealers' identities. Given the unique trading structure of certain firms, (i.e., some firms will always demonstrate back-to-back trades followed by a trade with a customer), it likely will not be difficult to reverse engineer to determine certain dealer identities. A preferable approach would be to make available the RTRS data and TRACE data through groupings of comparable dealers. SIFMA suggests that the MSRB and FINRA adopt the peer group criteria used in MSRB and FINRA report cards to aggregate dealers into reportable groups. This would allow academics to track trading patterns and pricing in the secondary market, while alleviating concerns over reverse engineering. We are particularly concerned about making primary markets (P1) data available in the Academic Historical Data Product, as seems to be envisioned, given the ready ability to reverse engineer dealer identities from public information. If the MSRB and FINRA insist on making the data available on a dealer-by-dealer basis, we would propose excluding primary (P1) trades from the data set and a periodic scrambling of the dealer identity number in order to minimize the risk of reverse engineering.

The potential impact of reverse engineering could be significant. Dealer trading strategies may be deciphered through reverse engineering of MPIDs and reviewing trading patterns and practices. If dealer trading strategies are publicly known they may significantly impact a dealer's ability to provide the market with liquidity. Additionally, reverse engineering of dealer MPIDs may also lead to the potential reverse engineering of specific client transactions. The disclosure of any client specific information may reveal

confidential business information and the confidentiality of such information isn't necessarily removed by the passage of time.

### **III. Scope of Internal Users and Authorized Use**

The proposal contains no standard around who at the academic institutions may access the RTRS data and TRACE data. SIFMA suggests that the MSRB and FINRA amend the Proposals to include parameters around who may be considered an "Internal User" or "Recipient/Licensee". SIFMA also suggests that the MSRB and FINRA further limit "Authorized Use" to serve the purpose of research and to exclude any commercial purposes. Including such limitations will better ensure that the data is accessible by the appropriate network of users and for the purposes envisioned by the Proposals. These measures will also decrease the likelihood of data misuse and reverse engineering of dealer identities.

### **IV. Likelihood of Data Breaches**

Recent headlines<sup>2</sup> have been filled with reports of various types of data breaches<sup>3</sup> on systems likely far more secure than any system an academic researcher would use to store or transmit the data. Despite the well-intentioned safeguards and restrictions proposed by the MSRB and FINRA, SIFMA believes that data breaches are inevitable. This can have a negative impact on market liquidity (i.e. revealing dealer trading and distribution strategies).

### **III. Aging of Data**

SIFMA believes that if the MSRB and FINRA move forward with the Proposals, the risks to data breaches and reverse engineering can be mitigated sufficiently by an aging period of no less than four years. We believe this timeframe appropriately balances the concerns raised above with researchers' desire to have access to the data with anonymized dealer identifiers.

### **IV. Users of Data**

SIFMA believes the Proposals limitation on providing the RTRS and TRACE Academic Data Products to "academics currently associated with an institution of higher education in connection with their research activities" may be too limiting and unnecessarily restrictive. If the MSRB and FINRA adequately address the data security and reverse engineering concerns outlined above by using peer group criteria and aging the data for no less than four years, SIFMA believes there is value in providing the RTRS and TRACE Academic Data Product to a wider, yet controlled, group of users in connection

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<sup>2</sup> See breach list compiled by the Identity Theft Resource Center ("ITRC"). This list is a compilation of data breaches confirmed by various media sources and/or notification lists from state governmental agencies <http://www.idtheftcenter.org/ITRC-Surveys-Studies/2015databreaches.html>.

<sup>3</sup> Data breaches occur due to a variety of reasons including accidental; employee error, negligence, or improper disposal; hacking, skimming, or phishing; insider theft; physical theft; or subcontractor/third party theft.



with their research activities and would support an expanded user group accordingly. There are many organizations engaged in research activities not associated with an institution of higher learning.<sup>4</sup> Any not-for-profit that has a separately identifiable Research Department and regularly publishes research reports should have access to the RTRS and TRACE Academic Data Products on the same terms as academics currently associated with an institution of higher education in connection with their research activities. However, SIFMA would not support expansion of the user group under the construct of the current Proposals.

## V. Conclusion

SIFMA sincerely appreciates this opportunity to comment upon the Proposals. SIFMA believes that by implementing the above modifications, the Proposals will provide investors with additional informative market information.

If you have any questions, please do not hesitate to contact the undersigned.

Respectfully submitted,




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<sup>4</sup> For example “think tanks” such as The Brookings Institution (<http://www.brookings.edu/research#trade/topics/>), Cato Institute (<http://www.cato.org/research>), Pew Research Center (<http://www.pewresearch.org/>), Urban Institution’s Housing Finance Policy Center (<http://www.urban.org/policy-centers/housing-finance-policy-center>). Additionally, certain trade associations (both finance and non finance-related) regularly publish research reports. Examples include, Aerospace Industries Association ([http://www.aia-aerospace.org/research\\_reports/](http://www.aia-aerospace.org/research_reports/)), American Public Transportation Association (<http://www.apta.com/resources/reportsandpublications/Pages/default.aspx>), American Bankers Association (<http://www.aba.com/Tools/Research/Pages/default.aspx>), American Council of Life Insurers (<https://www.acli.com/Tools/Pages/Publications%20Guest.aspx>), Investment Company Institute (<https://www.ici.org/research>), International Swaps and Derivatives Association, Inc. ( <https://www2.isda.org/functional-areas/research/>), and SIFMA (<http://www.sifma.org/research/>).

cc:

***Municipal Securities Rulemaking Board***

Lynnette Kelly, Executive Director

Michael Post, General Counsel, Regulatory Affairs

***Financial Industry Regulatory Authority***

Robert Colby, Chief Legal Officer

Steve Joachim, Executive Vice President, Transparency Services



The **Courage** to Question Convention.  
The **Passion** to Break New Ground.  
The **Insight** to Champion Community.  
The **Imagination** to Pursue the Undiscovered.  
The **Will** to Achieve Greatness.  
The **Promise** of a Limitless Future.  
The **People** to Bring It to Life.  
**It's Happening Here.**

September 4, 2015

Mr. Ronald W. Smith  
Corporate Secretary  
Municipal Securities Rulemaking Board  
1900 Duke Street, Suite 600  
Alexandria, Virginia 22314

Dear Mr. Smith:

I am pleased to submit this letter in response to the Municipal Securities Rulemaking Board's request for comments on establishment of an academic historical trade data product. This new product will advance market transparency, investor education, and issuer understanding of the trading of their bonds.

My interest stems from a background of municipal bond research, service as a chief financial officer of several universities as well as the Commonwealth of Kentucky, and now the President of a public research university with almost \$250 million in municipal bonds outstanding.

The opportunities afforded by the proposed new academic data product are consistent with the goal of university research which is to increase fundamental knowledge and understanding. Moreover, it is consistent with the mission of the Municipal Securities Rulemaking Board to promote a fair and efficient market. The Securities and Exchange Commission, and its own Investor Advocate, has commented on the need to improve transparency in the municipal market. As we know from the scholarly work in corporate finance, basic research can lead to improvements in market practices.

Universities are laboratories of basic research, but that fundamental work rests upon the availability of timely quality data. The MSRB has greatly contributed to the development of a robust research community on municipal securities. I applaud the proposed new academic historical trade data product for the opportunity it offers university researchers to explore the microstructure of the secondary market for municipal securities in more detail that heretofore possible.

The current historical trading data available from the MSRB does not allow university researchers to track round-trip trades (e.g., customer-to-dealer-to-customer), thus negating rigorous study. The proposed new academic data product would anonymize dealer identifiers which is a reasonable middle ground if it allows tracking unique trades (not groupings by size or volume).

Scientific inquiry is based on the ability to replicate the results of research. It is impossible to achieve this fundamental goal if the data remains off-limits to academic research. Even with the proposed new academic product and its plan to anonymize dealer identifiers, university researchers will be unable to replicate the work you published in the July 2014 "Report on Secondary Market Trading in the Municipal Securities Market" that used dealer identifiers. A related issue regarding replication of research arises if later research calls into question the original research product. The original dataset must be available to permit replication under the same restrictions as before. The MSRB agreement should not be viewed as a (short) time limited agreement.

Timely data is critical. The proposed 24 month delay for release of the data seems excessive and counter to the goal of promoting fair and efficient market practices. A 12 month delay would be reasonable.

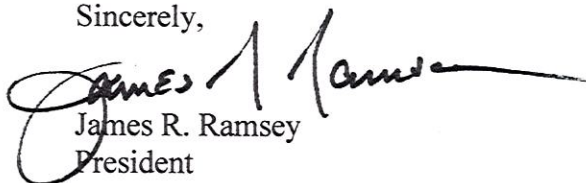
Research universities are used to strict accountability for handling proprietary (and even highly classified national security) data. We expect it and set up strong internal controls. State universities have to adhere to state law which almost always prohibits us from indemnifying other parties. The unlimited damages provision of the proposed MSRB-university agreement is likely to render the proposed academic product out of the legal reach of university researchers. I encourage a provision that limits damages to that university's state legal limitation.

Providing copies of published work is reasonable. Academic freedom would not consider reasonable any requirement for advance screening of a university researcher's scholarly product.

In conclusion, I support the availability of the proposed new academic historical trade data product. It will advance a fair and efficient municipal market, milestones of the statutory responsibilities of the Municipal Securities Rulemaking Board and the Securities and Exchange Commission.

Thank you for the opportunity to submit these comments.

Sincerely,

  
James R. Ramsey  
President

**RTRS Facility**

No change.

**Price Dissemination by RTRS**

No change.

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**MSRB Real-Time Transaction Data Subscription Service**

No change.

**MSRB Comprehensive Transaction Data Subscription Service**

No change.

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**MSRB Historical Transaction Data Product**

No change.

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**MSRB Academic Historical Transaction Data Product**

The MSRB offers an Academic Historical Transaction Data Product, which consists of the same transaction information as is provided by the MSRB Historical Transaction Data Product with the exception that it also includes anonymized dealer identifiers. The Academic Historical Transaction Data Product may be obtained only by institutions of higher education in one-year data sets for data that are aged no less than 36 months. Each requestor will receive a unique data set with different anonymized dealer identifiers. No smaller data sets will be available. The Academic Historical Transaction Data Product will be made available on CD-ROM,<sup>1</sup> pursuant to the terms of the Academic Historical Transaction Data Product Agreement, which must be executed prior to delivery of the Academic Historical Transaction Data Product.<sup>2</sup>

<sup>1</sup> As technology evolves, or if the volume of information included in the Academic Historical Transaction Data Product increases, the MSRB may in the future use a different medium that is equally effective for delivering the Academic Historical Transaction Data Product.

<sup>2</sup> Institutions of higher education shall be required to execute and shall be subject to the terms of the Academic Historical Transaction Data Product Agreement to be entered into with the MSRB, which shall address proprietary and intellectual property rights of third parties in information provided by such third parties that is made available through the Academic Historical Transaction Data Product.