

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"¹ (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

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



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.

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.

• 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?

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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.

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• *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