

Fixed Income and FINRA

An Abel Noser Fireside Chat

Alexander Sedgwick
Global Head of Fixed Income
Abel Noser Solutions
&

Ola Persson

Senior Vice President and Head of Transparency Services, FINRA

Transcribed from a Zoom video recorded on October 26, 2022.

Alexander Sedgwick:

Welcome everyone and thank you for joining us for another Abel Noser fixed income fireside chat. After our last discussion on transparency in Europe, we decided to follow up with a discussion on transparency in the U.S. And today we're lucky to have Ola Persson with us from FINRA.

Ola is the Senior Vice President and head of FINRA's Transparency Services department. He's responsible for all business, technology, and operational aspects related to FINRA's fixed income and equity trade reporting and quotation facilities. Ola joined FINRA in 2004, initially with responsibilities for FINRA's TRACE program. Prior to joining FINRA, Ola worked for ten years at Thompson Reuters, where he held a number of positions in the fixed income division. He holds a bachelor's degree in finance and statistics from the University of Stockholm, Sweden, and a master's degree in international business from Baruch College, City University of New York.

Thank you for joining us.

Ola Persson:

Thank you very much. Always good to see you, Alex.

Alexander Sedgwick:

Ola, you joined FINRA not long after the launch of TRACE. Could you tell us a little bit about the history of TRACE? When and why was it originally created?

Ola Persson:

Yes, absolutely. TRACE was initiated by the SEC in the late nineties when Arthur Levitt was chairman. I think they asked themselves why you couldn't see price information in fixed income instruments similar to how you could in equities. So, they directed the NASD at the time to create a database of transactions in corporate debt. It was geared toward creating a database both for regulatory purposes but also to find ways of introducing transparency. NASD (subsequently FINRA) started introducing transparency in the largest, most liquid investment grade issues and gradually worked down the credit curve. All transactions in publicly traded



corporate debt were ultimately made transparent in 2006.

Since then, we've expanded the program quite significantly. We added agency debentures in 2010. That was a much larger market than it is today; it has shrunk since. We added asset and mortgage-backed securities in 2011, which was a significant expansion of the program in scope and complexity. Then we added U.S. Treasuries in 2017.

It launched in July 2002; this summer was the twentieth anniversary.

Alexander Sedgwick:

That's right. When you think about the evolution of TRACE, and the fact that it really started with credit products and has moved through a wide variety of different asset classes within fixed income, ultimately now with Treasuries, can you talk about some of the benefits of the TRACE system from FINRA's perspective, including regulatory oversight, benefits to end investors, and of course, to the wider market and market participants?

Ola Persson:

Absolutely. I think there are three broader categories where we've seen significant benefits coming out of the program.

The first one, as you mentioned, is the audit trail. The TRACE data creates a foundation for an audit trail which is used by FINRA and other regulators to surveil the market and look for manipulation, fraud, or other customer harm or anything that impacts the integrity of the market. That's one of the foundational pillars of the TRACE data use.

Another benefit of TRACE is it has significantly increased our understanding of the market. It creates a foundation for policy development, both to understand how the market operates and formulate the policy, and also to be able to measure the impact of the policy.

The third benefit is the one that we spend the most time talking about, and that's the impact of transparency and how introducing transparency to the market has changed the dynamics. We like to point to independent academic studies for measuring the impact, and there are a number of them, but to highlight the key ones, it has lowered the bid-ask spread quite significantly and reduced trade execution costs for investors. The other pretty significant impact of TRACE is improved evaluation precision. There were studies that looked at different mutual funds holding the same corporate bond, and it found that the dispersion between the value of positions was significantly reduced with the introduction of TRACE. That obviously impacts the net asset value calculation for the mutual funds. So, there have been a number of areas where TRACE and having access to the data have been very beneficial, both to the regulatory community and the marketplace.

Having said that, we talk a lot about independent academic studies. You have seen the market for a long time, and from different perspectives. What is your sense of the impact?

Alexander Sedgwick:

I'm glad you brought up. For both bond valuations and then also bid-offer spreads, I think when



we look at TCA, probably the most important calculation we do is looking at one-way transaction costs.

I think what's incredibly valuable about TRACE is the wide variety of inputs that can be used for an evaluated pricing service. You have quotes by market makers in the market. You have additional data that you're getting from electronic trading platforms. But I think having a consolidated tape of transactions, actual trades where the asset is clearing in the market with timestamps on it, and additionally, some characteristics associated with that asset, really give you some confidence that you've got a price you can begin to benchmark people against, or at the very least, build an evaluated pricing service off of.

One of the questions we always get from clients is: You're evaluating my trade against an evaluated price. Is TRACE a part of that calculation, or what's the role of TRACE in that evaluated price? So clearly, there's a hierarchy of the quality of pricing when people think about evaluating their own trading activity, and I think TRACE is a critical part of that.

I think the other thing that's valuable and not always widely talked about is the impact of TRACE in tracking market dynamics. For example, is there a lot of selling activity in the market versus buying activity on a particular day, or even in certain markets? What was the total trading activity for the entire day? Up until the inclusion of Treasuries into the TRACE feed, and some of the reporting that's now being done with the Treasury data, it was really difficult to come up with a reliable consistent number for daily activity in that market.

I think that's useful for investors when we're modeling costs. If you can put those costs in the context of high or low trading activity or one-way markets, it really helps investors understand if their execution is good within the market and in the context of the market on the day they traded. So again, I think those are the most important things that we see, or we take away from the TRACE feed, and its inclusion in evaluated pricing.

I have one other follow up question for you. I know we're going to touch on some other items such as NAV calculations later in the conversation. But you did mention an impact on policy, and I was wondering if you had an example of any policy decision that was impacted by TRACE and the insights that were gained from it.

Ola Persson:

Yes, absolutely. Every rulemaking we do, and when we put out a regulatory notice seeking comments, includes an impact assessment. In almost all cases related to TRACE, the impact assessment is based on TRACE data. There are a number of areas we can point to.

Portfolio trading is a good example given that's on the horizon. You can infer from the data, not knowing conclusively, how the practice has evolved over time. You can look at that and then come up with a policy that's responsive to the finding. Another one is the mark up disclosure requirements that FINRA put in place a couple of years ago. They heavily relied on TRACE data for the analysis. But almost every rulemaking on TRACE now includes an analysis of the data, what we currently see, and what we think the impact may be.



Alexander Sedgwick:

It's interesting because I was also talking with somebody recently about adding additional transparency to markets. I think what's unique and interesting about FINRA's approach is that it really takes place in two steps. You may have an asset class added to TRACE reporting that doesn't have disclosure out of the gate, but it's being studied before there's public dissemination, as opposed to just moving straight to collecting the data, and then full transparency. One thing that I'm interested in is how FINRA thinks about adding new asset classes to TRACE coverage and public dissemination.

Can you talk about that process and maybe some of the tradeoffs or considerations as you navigate adding different asset classes with varying levels of liquidity?

Ola Persson:

Absolutely. Given the benefits we see for the audit trail and for understanding the dynamics of the market, we've expanded TRACE to cover virtually all asset classes at this point. Municipals are obviously under the MSRB rule book, and we're about to add foreign sovereigns next year. But outside of those two it covers pretty much every asset class.

As you said, we like to start with collecting the information first because that brings a couple of benefits. One is, it allows the regulatory use right out of the gate. The other one is that it gives us a chance to study the market and think about how we may want to approach dissemination.

Generally speaking, with dissemination, after we decide on an approach, we tend to phase it in over time, starting with the more liquid products and giving participants a chance to adjust to a more transparent market. It also gives us a chance to monitor the impact.

Generally, we do not adopt a one size fits all approach here. We've taken a much more nuanced approach in securitized products. As you know, all the products are inherently very different, and have unique characteristics We are generally bias towards transparency, thinking transparency is good, but there are factors we look at that influence how we approach it. One key aspect is the breadth of market participation and the ability of participants to operate in the market without signaling their identity.

So we would look at different things. For example, how broad is the dealer participation? How concentrated is the customer base? Are there securities that are structured or tranches of securities structured specifically for individual customers? Because that could make it difficult for those customers to then trade out of those positions without signaling their strategy.

Even when we see those situations, however, we do try to find ways of increasing insight into the market activity. Very often that is through publishing aggregated information. As I said, we have examples of this throughout. Even if you look at corporates, we make the distinction between investment grade and high yield for the purpose of this dissemination tab, for example. But in securitized products, we have a range of different dissemination protocols, because there you have some very specific products that are structured and trade very differently. We try to take a cautious and a nuanced approach and measure the impact of the dissemination.

Alexander Sedgwick:



Even the aggregated data can be very useful. If you have a sense of whether you're dealing with trading activity on a low or high liquidity day, that can be useful at least from a TCA standpoint. I think whether it's trade level or aggregated data, it certainly can be additive.

We referenced the discussions in Europe earlier, and regulators in Europe are working to create a consolidated tape. In many of the conversations, data quality is an issue that frequently surfaces. In fact, I was reading today that ESMA is not going to perform their quarterly liquidity assessment for non-equity instruments due to some data quality issues. Just to make it a topical conversation, I'm curious. . . Can you talk a little bit about the processes that FINRA uses to ensure high data quality from the TRACE data?

Ola Persson:

Absolutely. Data quality, as you point out, is obviously critical for all the use cases that we just talked about. Whether it's for audit trail use or external investors, or professional use or retail investors to use. We have four levels of validation that we that we work with.

The first one is obviously on the front end as we take the trade in. That validation ensures that the format is accurate, that all the required fields are populated, etc. It also performs a reasonableness test on price levels. That front end validation is a little bit of a tradeoff between making sure we get data to the tape quickly, but keep bad data out. So, we don't want to set the parameters too tight on the front end.

In the second level, we have a separate program that runs within our operations team that checks for tighter price tolerances, but also validates other pieces of the trade report. It looks, for example, at volume, and it compares the traded volume to how much is outstanding in the security. And so it performs a second level validation. When we find outliers there, our operations team works directly with the firms to try to get those resolved or confirmed so that indeed, they are accurate.

The third level is in our market regulation team. They do the trade reporting compliance surveillance, among other types of surveillance, and they can look over longer periods of time. They can also better look across participants and do more of a nuanced analysis of both within a firm (how information is supplied) but also how certain information is applied across (for example, how are modifiers used), if they are used consistently between different firms, etc. There's always a bit of nuance in some of those interpretations.

The fourth level validation we have is really in our role as regulators and is examining our member firms. We have examination teams that go onsite and look at the books and records of the firm, and they can confirm that the transactions recorded by the firm were indeed reported completely and consistently to TRACE.

Those are the four levels that ensure that the data we have ultimately is of high quality.

Alex Sedgwick:

That's really helpful. One of the things that is important and is in the DNA of any analytics provider is QA (Quality Assurance). Having that multi-level process really does ensure that you're getting high quality data on both sides.



Thinking about us and our role as an analytics company, and the wide variety of uses within TRACE; you think about, for example, traders looking at it to see where the prevailing market price might be, or where the last trade is. And you think about that happening across multiple asset classes, but also compliance groups, trade surveillance groups, risk and quantitative teams. There are so many different use cases for the TRACE data. For any one analytics company to try to do it all would be challenging, to say the least, if not for just trying to understand the nuances of each individual asset class.

You have this wide variety of analytics vendors that have grown up around TRACE and are taking part in the TRACE ecosystem. I was wondering if you could talk about how FINRA has worked with those analytics providers, how they think about this commercial ecosystem that's built up around TRACE, and how you work with that vendor community to ensure not only broad distribution, to both professional and retail users.

Ola Persson:

Yes. As you know, this is near and dear to my heart, since before I joined FINRA I spent a lot of time on market data and market data distribution. As you just mentioned, TRACE is valuable data for a range of constituents – everything from retail investors to sell side professional investors, institutional investors, etc. It has a lot of different users, and it's very difficult for FINRA to serve all customers with their unique requirements, both in terms of how to reach them, deliver the data in the context and format they need, provide the value add that they need, support them, etc.

On the other hand, this is one of the things the vendors are really good at. They understand the customer and a specific customer base. They talk to them and understand what they need. They provide the content in a format that's useful for that customer. This has been a very symbiotic relationship where FINRA has the role of collecting and aggregating this data that we uniquely can access in the capacity of regulating the broker-dealer community. The vendors have been given an opportunity to integrate that data and work with their customers to deliver it in the content and format they need it in, whether it's file deliveries, or integrating it to desktop displays, and also drive value-add on top of that.

This has given the vendors an opportunity to deepen their ties with the customer, increase the value that they deliver to that customer. It has been a great relationship, and I think it has worked really well. And I think the evidence is that every data vendor and every electronic trading platform today covers any corporate TRACE data. So, it has been a very effective model to reach specific user groups, from retail investors to institutional investors to the sell side community. And then, as you mentioned, there is a lot of additional work in terms of evaluated pricing, risk analysis, etc.

We think that's worked really well. You also have seen this industry from many perspectives. What's your experience with this?

Alex Sedgwick:

That's a great question. I break it down by market participant. When I think about, for example,



the buy side, number one is going to be ensuring best execution. It's a critical data point for evaluating trades and trading costs. That's certainly an important piece. Gauging liquidity is also important. I think about it as a critical component of liquidity metrics. When you're thinking about how to put a liquidity evaluation on a particular bond, it's very useful, and has secondary knock on effects, because that's going to impact decisions on the desk, such as whether to include that bond in a portfolio trade. I think there's a direct line that you can draw from the data you're getting from TRACE to some of the execution decisions being made on the desk once that data is combined with other important data sets.

We talked about evaluated pricing and the importance of integrating it into your framework for putting a price on bonds. I think what's interesting there is when you're thinking about second level impacts, number one is that's valuable from a best execution perspective, but also in many cases those prices, particularly the end of day prices, are where many mutual funds are striking NAV. We often think about all these use cases in the context of a professional environment; people who day in and day out are trading in the markets. But those NAV prices are where retail is getting in and out of their bond funds. And so I think that's critically important to have those prices as accurate as possible, and to the extent that TRACE is an important component in arriving at that daily price, that's absolutely critical for the retail investor.

Again, some of the more sophisticated approaches are using it to look at individual bonds, buying and selling activity, and then adjusting execution costs and how we evaluate them based on the direction of the market and the intensity of that direction. Are you trading in and out of a momentum market? A lot of that is metrics that you would see in equity TCA that are just now moving into fixed income TCA. I think that's important because the trade off with TCA is you want to be able to provide consistent measures across different asset classes, particularly as those metrics and reports move higher and higher up within the organization. However, you always need to make sure that you're respecting the market conventions and the experience of traders on the desk, trading in particular markets. So again, I think that being able to use TRACE to make calculations and identify trading activity very similar to what we see in other markets is incredibly useful.

We are close to time here, so I'll ask you if there's anything else you wanted to discuss that we didn't touch on.

Ola Persson:

We always love to talk about TRACE, and in general, when you look at it, it's interesting. We now have two decades of records, and we can see how the markets have changed, and we can study the markets through the ups and downs. When TRACE started, I think we were at four trillion in the corporate debt market, and now it's ten trillion. We saw twenty-five thousand trades a day then and now we see close to one-hundred thousand trades per day. It's interesting to have the record and see the value add that's been created on top of this over the last two decades. Not to mention the introduction of securitized products, and now, having access to Treasuries and publishing the aggregate Treasury data. It has been a really interesting evolution. I have no doubt that it's going to continue, even if it has been two decades. There's much more left to be done.



Alex Sedgwick:

Certainly. On the corporate side, the ability to have started TRACE at a time where you were also able to capture data throughout the credit crisis in 2008 provides an invaluable record of what a major event looks like within the data; even more recently, something like the COVID dislocation, this is incredibly useful. We continue to talk about risk and about quantitative teams, but I think having those events in the data and available is very helpful.

Ola Persson: Thank you very much for inviting me. I very much appreciate it.

Alex Sedgwick: Of course. It's great talking to you, and we thank you very much for your time today. We want to thank everybody who was able to watch this and tune in, and we look forward to doing another one again soon.

For more information about Abel Noser Solutions, go to <u>www.abelnoser.com</u> or contact <u>info@abelnoser.com</u>.

Content Disclaimer