

THE UNITED STATES SECURITIES AND EXCHANGE COMMISSION

MEETING OF THE  
SECURITIES AND EXCHANGE COMMISSION  
FIXED INCOME MARKET STRUCTURE ADVISORY COMMITTEE

Via WebEx Video Teleconference

Monday, June 1, 2020

9:30 a.m.

U.S. Securities and Exchange Commission

100 F Street, NE

Washington, D.C.

1 PARTICIPANTS:  
 2  
 3 FIMSAC Members:  
 4 Michael Heaney, Committee Chairman  
 5 Dan Allen  
 6 Giedre Ball  
 7 Horace Carter  
 8 Gilbert Garcia  
 9 Tom Gira  
 10 Larry Harris  
 11 Mark Kim  
 12 Ananth Madhavan  
 13 Lynn Martin  
 14 Amy McGarrity  
 15 Richard McVey  
 16 Lee Olesky  
 17 Suzanne Shank  
 18 Larry Tabb  
 19 Sonali Theisen  
 20 Kumar Venkataraman  
 21 Elisse Walter  
 22 Brad Wings  
 23 Mihir Worah  
 24  
 25

1 PARTICIPANTS(CONT.):  
 2  
 3 SEC:  
 4  
 5 Chairman Jay Clayton  
 6 Commissioner Hester Peirce  
 7 Commissioner Elad Roisman  
 8 Commissioner Allison Lee  
 9 Elizabeth Baird  
 10 Amy Edwards  
 11 Tim Husson  
 12 Jessica Kane  
 13 S.P. Kothari  
 14 Rebecca Olsen  
 15 Brett Redfearn  
 16 John Roeser  
 17 Dave Shillman  
 18 Sarah ten Siethoff  
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1 PROCEEDINGS  
 2 MR. HEANEY: Thank you all for joining us today  
 3 for the SEC's Fixed Income Market Structure Advisory  
 4 Committee meeting. I can confirm that we have a quorum and  
 5 will call the meeting to order.  
 6 For the record, in addition to me, the following  
 7 FIMSAC members are in attendance: Dan Allen, Giedre Ball,  
 8 Horace Carter, Gilbert Garcia, Tom Gira, Larry Harris, Mark  
 9 Kim, Scott Krohn, Ananth Madhavan, Lynn Martin, Amy  
 10 McGarrity, Richard McVey, Lee Olesky, Suzanne Shank, Larry  
 11 Tabb, Sonali Theisen, Kumar Venkataraman, Elisse Walter,  
 12 Rachel Wilson, Brad Wings, and Mihir Worah.  
 13 Before we begin moving through our agenda, I want  
 14 to remind all participants in today's meeting to be mindful  
 15 of when your line is muted and unmuted. Please make sure to  
 16 mute your line when you're not speaking and remember to  
 17 unmute your line when you're called upon to speak.  
 18 I will begin by welcoming the Chairman and the  
 19 Commissioners to today's FIMSAC meeting and ask Chairman  
 20 Clayton for his opening remarks.  
 21 CHAIRMAN CLAYTON: Thank you, Michael. And good  
 22 morning, everyone. I want to thank you for joining us  
 23 virtually today and I am glad we are able to meet.  
 24 I would like to welcome Mark Kim of the MSRB as  
 25 our newest member of the committee. And I want to thank

1 former MSRB designated representative John Bagley for his  
2 meaningful contributions to this committee.

3 I want to begin today by noting my appreciation  
4 for the work of the committee and the commitment of its  
5 members. Your excellent service, thoughtful deliberation  
6 and recommendations have placed the Commission in a better  
7 place to meet the current market challenges.

8 With this exceptional service and current market  
9 conditions in mind, and after consultation with my fellow  
10 commissioners, Committee Chairman Michael Haney, Trading and  
11 Markets Director Brett Redfearn and other members of the  
12 Commission Staff, I am making a request today. I request  
13 that the FIMSAC be extended to March 1, 2021, with a  
14 specific mandate -- let me note that this is a narrow  
15 mandate -- to first bring the current work of the  
16 subcommittees, including the matters discussed today, to  
17 satisfactory completion. And second, to continue to assist  
18 the Commission with our ongoing efforts to monitor and, as  
19 necessarily appropriate, respond to the effects of the  
20 COVID-19 pandemic on our fixed income markets.

21 Now let me be clear with each member of the  
22 committee. I recognize that you have many personal and  
23 professional obligations and that those competing  
24 considerations have been amplified by recent events. I  
25 would also recognize that you have already given us more

1 than we've asked and more than could reasonably be expected,  
2 particularly from volunteer service. So if you choose not  
3 to extend your service into early 2021, I completely,  
4 completely understand. I also want you to know that I am  
5 not looking for an answer today. I would like you to take  
6 your time and work with Michael and each other to make  
7 individual and collective decisions that make sense for each  
8 of you and then come back to us.

9 So with that, let me turn a bit to today's agenda.  
10 We have five panels and presentations, including  
11 recommendations from the Technology and Electronic Trading  
12 Subcommittee, the Credit Rating Subcommittee, and the  
13 Municipal Securities Transparency Subcommittee. Today's  
14 discussion includes the topic of bond pricing services and I  
15 am eager to hear how these services are used, including by  
16 bond funds, and how these services have performed in various  
17 market segments during our recent bout of market volatility.  
18 I am also looking forward to new insight and commentary on,  
19 one, transparency in the corporate bond block trade market;  
20 and, two, the committee's recommendation on internal fund  
21 crosses. I understand that you will also consider a multi-  
22 pronged recommendation on credit rating. For various  
23 reasons, including the emergence of new areas of focus as a  
24 result of the general and sector-specific effects of  
25 COVID-19, it is important that we consider potential policy

1 approaches in this area with rigor and pragmatism.

2 I note here that globally, there is a renewed  
3 regulatory interest in the influence of rating agencies on  
4 market structure and market function in times of volatility  
5 and broad economic stress. For example, along with the  
6 Financial Stability Board and the International Organization  
7 of Securities Commissioners, the Commission's recently  
8 established market monitoring group is analyzing the  
9 potential risks and downstream effects of investment  
10 strategies and mandates that mechanically react to credit  
11 ratings, directly or through index tracking. I hope that  
12 your views and recommendations will complement our work and  
13 the work of the FSB and IOSCO in this area.

14 To be clear, issues in this area are not easy.  
15 Recent events have again demonstrated the importance of  
16 ratings to investors and issuers. For example, there are  
17 few diversified investors who have the resources to perform  
18 a rigorous, sector-by-sector, much less an issuer-by-issuer  
19 analysis of the corporate credit markets in a month's time.  
20 Yet many investors and other market participants, including  
21 market and potential regulators, have benefitted from this  
22 type of work performed by our credit rating agencies.

23 Recent events also have amplified longstanding  
24 questions around, one, alignment of interest; two, ratings-  
25 based balance sheet structuring by issuers; and, three,

1 investor overreliance on particular ratings. Note that the  
2 last two items are related. If investors over-reward  
3 certain types of ratings, issuers are incentivized to pursue  
4 capital structures that capture those rewards. My view is  
5 we must strive to advance the statutory goals of fostering  
6 accountability, transparency and competition, and mitigating  
7 potential conflicts of interest without diminishing the  
8 market-wide benefits of and also recognizing the inherent  
9 risks and limitations of unchecked reliance on the ratings  
10 services currently provided.

11 Finally, I understand that you will consider a  
12 recommendation on municipal securities pretrade  
13 transparency. As the recommendation states, this is not a  
14 new issue and I believe my views on transparency by issuers,  
15 investment advisers and retail brokers are well known. Last  
16 month, I issued a statement with Director Rebecca Olsen of  
17 the Office of Municipal Securities on the importance of  
18 current disclosure in our municipal markets, particularly in  
19 light of the effects and uncertainties created by COVID-19.  
20 The municipal securities market is dominated by retail  
21 investors, and over the years we have intensified calls for  
22 municipal issuers to provide investors with more timely  
23 information and also generally raised awareness about the  
24 importance of investor access to current financial  
25 information. I look forward to hearing about specific ideas

1 you have to improve transparency in this space.  
 2 I close by thanking you all again for joining us  
 3 today. It's a tough day, but I'm glad you're here and we  
 4 want to hear from you. And I look forward in time, and take  
 5 your time, for my request that you continue to provide us  
 6 with your valuable insights into early 2021.  
 7 Michael, thank you. And I'm available for  
 8 questions as needed.  
 9 MR. HEANEY: Thank you, Chairman Clayton.  
 10 I will now turn it to Commissioner Peirce.  
 11 COMMISSIONER PEIRCE (as prepared due to audio  
 12 interruption): Thank you, Michael. I echo the Chairman's  
 13 appreciation for the committee's excellent work and request  
 14 that you all continue to serve for several more months. The  
 15 market events of the last several months have heightened the  
 16 Commission's need for your insights about the fixed income  
 17 markets. We have seen unique stress in the fixed income  
 18 markets and unprecedented interventions by the Federal  
 19 Reserve, including large purchases of exchange-traded funds  
 20 that invest in corporate bonds. My hope is that we can  
 21 learn from what we saw in those markets during the COVID-19  
 22 crisis to identify regulatory changes that will help the  
 23 fixed income markets function better during both normal  
 24 times and times of crisis.  
 25 I read with interest your subcommittees'

1 preliminary recommendations and look forward to the  
 2 discussions about them this morning. Your recommendation  
 3 with respect to NRSROs includes a disclaimer that "even with  
 4 the implementation of these recommendations, issues remain."  
 5 The regulatory history of NRSROs has been haunted by that  
 6 disclaimer. Getting bondholders to periodically ratify  
 7 NRSROs is an interesting idea, if perhaps difficult to  
 8 operationalize. The larger the field of competitors  
 9 offering credit rating services, the greater the impact such  
 10 a vote could have. To achieve more competition in this  
 11 area, we have to balance the benefits any new regulatory  
 12 requirements offer with the burdens they place on NRSROs,  
 13 particularly small ones. The recommendation with respect to  
 14 cross-trades under Investment Company Act Rule 17a-7 offers  
 15 some very practical suggestions for ensuring that fund  
 16 advisers can undertake transactions that benefit both funds  
 17 involved without fear that an enforcement action will  
 18 follow. Finally, the recommendation on municipal securities  
 19 is a timely reminder of the work we still have to do with  
 20 respect to transparency in this market -- a market that  
 21 experienced so much stress in recent months.  
 22 I look forward to the discussion on these  
 23 recommendations and the other panel discussions. Thank you.  
 24 MR. HEANEY: Thank you, Commissioner Peirce. I  
 25 would now like to turn to Commissioner Roisman for comments.

1 COMMISSIONER ROISMAN: Good morning, and thank  
 2 you, Michael, and thank you to all the FIMSAC members for  
 3 contributing your time today.  
 4 These last few months have presented new  
 5 challenges and demands, and I appreciate your continued  
 6 commitment to sharing your experience and expertise with us.  
 7 I would also like to join Michael and Chairman Clayton in  
 8 welcoming Mark Kim to the committee and thanking John Bagley  
 9 for his service.  
 10 As is typical with FIMSAC, you have a full agenda  
 11 ahead of you. Over the course of the day, the committee  
 12 will address many important topics that have been the  
 13 subject of your consideration for some time. Moreover, the  
 14 issues you will be discussing today have become all the more  
 15 timely in light of recent market conditions brought on by  
 16 the effects of the current pandemic.  
 17 I would like to offer a few thoughts that I hope  
 18 you will keep in mind as you move through today's agenda. I  
 19 have previously shared with you my keen interest in pursuing  
 20 opportunities to improve transparency in our fixed income  
 21 markets. I am glad that many of today's discussions will  
 22 touch upon important issues relating to both pretrade and  
 23 post-trade transparency. Transparency is a vital tool in  
 24 assuring that our markets are fair, competitive and  
 25 resilient.

1 This morning, your discussions will focus on the  
 2 role of important sources of pricing information in the  
 3 fixed income markets. In the course of these discussions, I  
 4 hope you will consider the effects of new drivers of price  
 5 formation, such as ETFs and portfolio trading. I have heard  
 6 from market participants that during the March volatility,  
 7 fixed income ETFs and portfolio trading, as well as credit  
 8 derivatives, played key roles in facilitating price  
 9 discovery and risk transfer. Nevertheless, I believe it is  
 10 worth considering their potential effects on price formation  
 11 in individual bonds.  
 12 For example, some questions to consider may be  
 13 what effect does portfolio trading have on the value of the  
 14 price information disseminated through TRACE? And how would  
 15 the wider display of firm indicative bids and offers for  
 16 individual bonds influence the determination of evaluated  
 17 prices that may be used to derive fixed income ETF net asset  
 18 values and portfolio trade prices?  
 19 Moving to the afternoon panels, you will return to  
 20 two previously discussed topics, post-trade transparency for  
 21 large size corporate bond trades and pretrade transparency  
 22 for municipal securities. Both are important issues that  
 23 have been debated for a long time and I think should be top  
 24 of mind for the Commission to address, hopefully in the near  
 25 future.

1 In thinking about the optimal regimes for pre- and  
2 post-trade transparency, we must be mindful that our  
3 corporate bond and municipal securities markets are not  
4 static. They are constantly evolving, albeit at paces that  
5 may be different relative to markets for other asset  
6 classes. For example, over the last 10 years, these markets  
7 have not only grown substantially in size but also feature  
8 new and diverse participants, new trading venues and new  
9 trading protocols.

10 I am interested in your perspectives on how we can  
11 pursue policies related to transparency that facilitate this  
12 continued evolution of the corporate and municipal bond  
13 securities markets through market-based innovations. Thank  
14 you all again for devoting your time to serve on this  
15 committee. I look forward to today's discussions and  
16 continuing to benefit from your thoughtful engagement.

17 MR. HEANEY: Thank you, Commissioner Roisman.

18 I will now turn to Commissioner Lee for her  
19 opening comments.

20 COMMISSIONER LEE: Thank you, Michael. And thanks  
21 to all the committee members and panelists for your time  
22 today. You have a full and ambitious agenda, so I am going  
23 to keep my remarks brief.

24 As you all know, fixed income markets play a  
25 central role in our financial markets. And the economic

1 turmoil from the COVID-19 crisis that we've seen in fixed  
2 income has only served to highlight the importance of your  
3 work. So I appreciate as well your consideration of an  
4 extension of your work through March 2021, and I echo the  
5 remarks of the Chair regarding your service to date. Also  
6 at some point, I hope to hear from you regarding any lessons  
7 learned from this crisis that may bear on the work that.

8 But for today, I appreciate the committee's  
9 attention regarding proposed changes to the dissemination of  
10 block trade information for corporate bonds. Transparency  
11 helps level the playing field in our market, decreasing  
12 information barriers, encouraging innovative business models  
13 and fostering competition. And transparency requirements  
14 should be calibrated to reduce negative impacts on the  
15 ability to conduct large trades in illiquid securities. But  
16 any proposal to limit transparency should be closely  
17 scrutinized to ensure that it's addressing an objectively  
18 demonstrated problem, and that the impact on competition has  
19 been carefully considered.

20 I also want to commend you for taking on the  
21 challenging and complex issue of conflicts of interest in  
22 credit ratings. This is an issue that policymakers both in  
23 Congress and the SEC have struggled with for years. So I  
24 very much look forward to hearing about the discussion and  
25 potential recommendation today on this topic. And in

1 particular, I hope we will hear from committee members as to  
2 whether the proposal goes far enough in terms of helping to  
3 align the interests of credit rating agencies with those of  
4 investors.

5 So again, sincere thanks to all for lending us  
6 your time and your expertise in supporting our mission.  
7 Thank you.

8 MR. HEANEY: Thank you, Commissioner Lee.

9 Next, I will turn it over to Brett Redfearn,  
10 director of the Division of Trading and Markets, and the  
11 committee's designated federal officer, for opening  
12 comments. Brett.

13 MR. REDFEARN: Thank you, Michael. I would also  
14 like to welcome everyone to today's FIMSAC meeting.

15 Let me first briefly introduce my SEC colleagues  
16 who are with us in the Webex meeting today. Joining us from  
17 the Division of Trading and Markets, we have Elizabeth  
18 Baird, Lizzie Baird, one of our deputy directors; and Dave  
19 Shillman and John Roeser, associate directors in the Office  
20 of Market Supervisions. We also have Rebecca Olsen,  
21 director of the Office of Municipal Securities; Jessica  
22 Kane, director of the Office of Credit Ratings; Tim Husson  
23 and Sarah ten Siethoff, associate directors from the  
24 Division of Investment Management, and from DERA, the  
25 Division of Economic and Risk Analysis, we have S.P.

1 Kothari, SEC chief economist, and Amy Edwards, an assistant  
2 director.

3 Before we get started, I need to remind everyone  
4 that the views expressed during this meeting by SEC Staff  
5 are those of the speaker and do not necessarily reflect  
6 those of the Commission, any commissioners or any other  
7 members of the Staff.

8 This is the second meeting of 2020 and the tenth  
9 meeting of FIMSAC. I would like to begin by thanking all of  
10 our FIMSAC members for their continued efforts on this  
11 committee, especially in the face of these most challenging  
12 circumstances. This committee, like all of us, has had to  
13 attend first and foremost to the health and safety  
14 priorities of our families and loved ones, while also  
15 managing work and workload from remote locations. And this  
16 committee has managed to go above and beyond, volunteering  
17 their time to our fixed income markets while navigating this  
18 unprecedented market volatility and their respective jobs.

19 After the extraordinary events we have experienced  
20 over the past several months, I would be remiss if I did not  
21 include a few observations from my perspective as the  
22 director of Trading and Markets and the FIMSAC's designed  
23 federal officer. Clearly, the impact of COVID-19 pandemic  
24 on the functioning of the U.S. fixed income markets has been  
25 historically significant in terms of market liquidity and

1 trading activity. While the official sector response has  
2 been swift and unprecedented, including implementing several  
3 financing and asset purchasing facilities to support the  
4 functioning of markets for several fixed income asset  
5 classes, it is still too early to measure their full effects  
6 on market operation and our broader economy.

7 While our fixed income market structure has been  
8 tested in terms of price discovery, liquidity, trading  
9 volumes, clearing and settlement, thus far it seems we've  
10 largely risen to the challenge. Some key metrics show that  
11 our fixed income markets have significantly recovered from  
12 the peak stress conditions of March. For example,  
13 volatility indices, repo rates, bond ETF discounts to NAVs,  
14 bid-ask spreads, yield spreads. Nonetheless, we are still  
15 not yet back to pre-pandemic levels.

16 There cannot be a more important time for an  
17 advisory committee such as FIMSAC to provide the Commission  
18 with thoughtful, informed recommendations. You play a key  
19 role by helping the SEC better understand the strengths and  
20 weaknesses of our existing fixed income market structure.  
21 And now more than ever, these risks require our focus and  
22 our attention.

23 As stated earlier, Chairman Clayton has requested  
24 that FIMSAC be extended to March 2021. And my expectation  
25 is that we will have an opportunity to both bring the

1 current work of the committee to completion by that time and  
2 also this will provide us with an opportunity to further  
3 assess and respond to the effects of COVID-19 on our fixed  
4 income markets.

5 Today's agenda reflects your consideration of  
6 several items that have been key areas of focus for the  
7 committee and subcommittees for some time, which Michael  
8 will expand on shortly, and I am incredibly pleased at the  
9 progress that continues to be made.

10 Before wrapping up, I also want to reiterate the  
11 importance of the public's engagement. I want to thank  
12 today's outside panelists in particular for their  
13 involvement.

14 We also continue to encourage interested parties  
15 to submit comments on the work of the committee, including  
16 via the FIMSAC webpage on the SEC's website, which has  
17 proven a useful tool for the FIMSAC to gain additional  
18 insight into many of the issues it has considered.

19 I look forward to today's discussions and I would  
20 also like to just note quickly that certain remarks,  
21 including Commissioner Peirce's, will be posted publicly on  
22 the SEC website if the audio wasn't completely clear.

23 And with that, I will turn it back over to  
24 Michael. Michael.

25 MR. HEANEY: Thank you, Brett.

1 Before we get started, I just want to go slightly  
2 off script and also express my gratitude to the entire  
3 FIMSAC team. What we're enduring this health crisis and the  
4 related demands and changes in both our professional and  
5 personal lives, in and of itself, is a significant  
6 challenge. However, this group has not let up or lapsed for  
7 even a week. The hard work and dedication of the FIMSAC  
8 endeavors is truly amazing. Despite everyday obstacles we  
9 have been faced with, the majority of this committee  
10 continued to discuss, debate and work through important  
11 issues facing the fixed income markets, all with the goal of  
12 creating actionable ideas and recommendations to improve  
13 market structure, liquidity, transparency for both investors  
14 and issuers and related parties.

15 Thank you again for all that you're doing. It's  
16 truly significant achievements in normal times. I call it  
17 somewhat herculean given the situation we have all found  
18 ourselves.

19 Moving on to today's agenda, we have a full day.  
20 Two panel discussions this morning, two member discussions  
21 this afternoon, and two preliminary recommendations to  
22 consider.

23 This morning, the ETF and Bond Fund Subcommittee  
24 will host a panel to discuss the role of bond pricing  
25 services in our fixed income markets. This session will be

1 moderated by Kumar Venkataraman, and we're placed to have  
2 expert panelists joining us for this discussion.

3 The second panel of the morning will focus on a  
4 preliminary recommendation from the Technology and  
5 Electronic Trading Subcommittee regarding internal fund  
6 crosses. This panel will be moderated by Chairman Rick  
7 McVey. This topic was also discussed at the February  
8 meeting and, since then, the subcommittee has crafted a  
9 preliminary recommendation for consideration by the  
10 committee.

11 After a brief lunch break, we will start the  
12 afternoon session with a preliminary recommendation from the  
13 Credit Rating Subcommittee concerning issuer pay conflicts  
14 of interest in the payment model for credit ratings. The  
15 chair of the subcommittee, Amy McGarrity, will present the  
16 subcommittee's recommendation. Again, this is not a new  
17 topic for FIMSAC.

18 The committee has hosted several panels on this  
19 topic over the past few FIMSAC meetings and the subcommittee  
20 has focused on this issue over the course of many of their  
21 meetings. We have also had the benefit of public comment,  
22 submitted through the FIMSAC comment file, on this this  
23 critical topic. All of this work has led to our  
24 consideration of today's preliminary recommendation.

25 We will close the day with a panel discussion on

1 transparency and the market for block trades. Gilbert  
2 Garcia, chair of the Corporate Bond Transparency  
3 Subcommittee, will moderate the discussion among members of  
4 that subcommittee.

5 Finally, to manage today's discussion on this  
6 virtual platform, I want to emphasize our protocol for the  
7 day. As was crafted by the SEC team and sent out, you will  
8 see that this protocol will do everything it can to help  
9 avoid speaking over each other and keep some order to the  
10 meeting.

11 Each panel and agenda item today will include both  
12 a Q&A segment and a viewpoint segment, providing members  
13 with an opportunity to both ask questions and express views.  
14 If anyone would like to ask a question during a Q&A segment,  
15 please email me the question and if you would like to  
16 address the question to a particular panelist, please note  
17 that in the email. I will then pose your question to the  
18 appropriate person.

19 If you would like an opportunity to speak during  
20 the viewpoint segment concerning an agenda topic, please  
21 send me an email expressing an interest to speak and we will  
22 call on you similar to the way we do in the room itself.

23 Finally, I would like to remind everyone, please,  
24 to put your lines on mute until you are called upon, and  
25 then re-mute once you're done.

1 With that, let's dive right into our first panel.

2 Let me introduce Kumar Venkataraman, who will be  
3 moderating the panel. This is an interesting topic that was  
4 raised several months ago and one that, as you've heard from  
5 the commissioners, has keen interest by all.

6 Kumar, I will turn it over to you.

7 **ROLE OF BOND PRICING SERVICES**

8 **MR. VENKATARAMAN:** Thank you, Michael.

9 Good morning, Chairman Clayton, SEC Commissioners,  
10 SEC Staff, FIMSAC colleagues and panelists. Welcome to the  
11 very first FIMSAC panel presented via the Generation Z  
12 format for conferences and meetings. I would like to thank  
13 Michael and the SEC Staff for all their efforts in designing  
14 the format and best practices for the panel.

15 I am Kumar Venkataraman and I'll serve as the  
16 moderator of this panel on bond pricing services. As a  
17 brief introduction, I am a professor of finance at SMU's Cox  
18 School of Business, and I study the market structure of  
19 fixed income markets. I am also a member of the FIMSAC.

20 Bond pricing services play a very important role  
21 in fixed income markets. The vast majority of bonds do not  
22 trade regularly. Only about 20 percent of the corporate  
23 bonds trade on any given day. And about 40 percent of  
24 corporate bonds trade less than five days in a calendar  
25 year. In the case of municipal and structured bonds, the

1 transaction frequency is even lower than those observed for  
2 corporate bonds.

3 At the same time, these bonds are held in  
4 institutional portfolios and there is a growing demand from  
5 market participants for information on bond values for a  
6 variety of applications. Evaluated pricing services,  
7 broadly defined as rule-based pricing models that rely on  
8 TRACE, trade reports, indicative dealer quotes, firm bid-  
9 offers from executable markets and that use matrix pricing  
10 approach, merging data on benchmark yields, liquidity  
11 conditions, et cetera, have emerged to meet this growing  
12 need for high-quality pricing data.

13 A few notable examples of applications that use  
14 evaluated pricing are end-of-the-day marks of institutional  
15 portfolios used by, among others, mutual funds and  
16 custodians to calculate NAVs that interact with retail  
17 investors entering mutual funds. Continuous intraday evals  
18 used for index price calculations, which serve as benchmarks  
19 for ETFs and mutual funds, a topic that we covered on FIMSAC  
20 in November 2019 during our panel on index construction.  
21 Transactions cost analysis, best execution and performance  
22 attribution analysis, both of which rely on a benchmark  
23 price. And this application again ties to FIMSAC's  
24 recommendation today on internal fund crosses.

25 Given the importance of pricing services, the

1 objective broadly follows the train of thought that Chairman

2 Clayton expressed just a few minutes ago. Our objective is  
3 to understand how pricing services determine their evaluated  
4 prices, how market participants use these pricing services,  
5 how have pricing models performed during the COVID-19 high-  
6 volatility period in March and April of 2020, and finally  
7 discuss ideas or policy changes, including disclosures on  
8 quality and integrity of data sources that could improve  
9 evaluated pricing services.

10 Today, we have an excellent panel of experts to  
11 talk about these issues. And I am very grateful to the  
12 panelists for accepting my invitation.

13 Panelists, I request that, as I pose my questions,  
14 please first take a moment to introduce yourself.

15 My first question is for Mark Heckert, chief  
16 product officer of ICE Data Services.

17 Mark, can you tell us how your firm data mines  
18 evaluated prices? And related to this question, how does  
19 the evaluation process differ across fixed income asset  
20 classes such as treasuries, credit, munis, structured  
21 products, et cetera? And how do you manage the evaluation  
22 process during periods of elevated stress?

23 **MR. HECKERT:** Great. Thank you, Kumar.

24 So once again, my name is Mark Heckert. I am the  
25 chief product officer for ICE Data Services. I have been

1 around the valuation process through my work for  
2 approximately 20 years. So through the great financial  
3 crisis through today, we have certainly seen a lot in  
4 financial markets.

5 In terms of what a pricing service does and how  
6 does it do it, we provide valuations on approximately 2.8  
7 million securities. That includes 1.4 million in the asset-  
8 backed and mortgage-backed sectors, one million  
9 approximately in municipal bond -- U.S. municipal bond  
10 sector, another 400,000 across government agencies and  
11 global corporates. That's a very wide data set, as you can  
12 tell. So how do we do that?

13 The important point is what Kumar raised, is there  
14 is a low percentage of any given bond that is trading on any  
15 day. So the whole process is about understanding the issue,  
16 knowing the bond's terms and conditions so you can  
17 understand the cash flow structure. When you understand the  
18 cash flow structure, you can then look at what pricing  
19 calculators do you have to allow you to enable you to  
20 calculate that cash flow structure? What market data do you  
21 capture to inform that process? And what is your pricing  
22 methodology that puts that together?

23 Our pricing methodology is a two-way approach. As  
24 Kumar mentioned, we have a rules-based process we use to  
25 help us select the market data to help us correlate bonds to

1 transparency than that for trading.

2 So we have to develop a robust network of how we  
3 collect data. We interact with certainly public -- publicly  
4 available trades is a gold standard of data. We interact  
5 with trading platforms in order to consume the exhaust that  
6 they might produce as part of their trading, bid-offer data,  
7 for example, published on trading platforms. Dealers may  
8 choose to send us the data. The way they would do so is by  
9 sending us the same information they would send to their buy  
10 side clients, the trading counterparties. They would  
11 include us or c.c. us on the dealer runs, so to speak, and  
12 that's a great source of information pretrade. And the buy  
13 side itself, we're very active in working with our buy side  
14 customers for them to provide us information. And they very  
15 frequently provide us trade data, especially in those darker  
16 segments of the marketplace that have lesser amount of trade  
17 transparency to them.

18 So between all of those data types, we have to do  
19 the job of correlation. So, for example, in the mortgage-  
20 backed market, one has to look at the nature of the  
21 borrower. One has to look at, if it's a collateralized  
22 mortgage obligation as opposed to a straight passthrough,  
23 what tranche is the bond. One has to understand how similar  
24 tranches are behaving. One has to understand what's  
25 happening to prepayments in the mortgage world. And one has

1 one another. And then we have a team of analysts,  
2 evaluators, who operate that process. The team we hire is a  
3 combination of seasoned veterans that are typically former  
4 portfolio managers, former traders, former structurers, as  
5 well as teams that we've grown in house. So we have younger  
6 data science types that we bring in that have a fresher set  
7 of knowledge that enable us to look at the data sets. And  
8 then we have those with market experience that are applying  
9 their expertise to the process. And through that, we can  
10 analyze the data, continue to test ourselves and improve the  
11 rules and improve the methodology that we're using.

12 This differs dramatically across asset class to  
13 asset class, as Kumar reference. Whereas corporate bonds  
14 have a relatively high percentage of bonds that trade, at  
15 least high by other asset class standards, municipal bonds  
16 may not trade -- any given municipal bond may not trade for  
17 extensive periods of time. Securitized instruments are the  
18 same or very similar as well. And then there is the trick  
19 that in different jurisdictions, whereas the U.S. has a  
20 relatively robust post-trade transparency regime, there is  
21 much less so. MiFID II, for example, delays the bulk of  
22 data that one is seeing until 30 days post the transaction.  
23 Thirty days past the transaction is certainly not quickly  
24 enough to price a bond at that moment, although it's useful  
25 for calibration. Other regimes may have even lesser

1 to have a robust prepayment model, especially in markets  
2 like this, and deal with how do prepayments sometimes change  
3 quickly.

4 And in the municipal bond marketplace, it's a  
5 different animal. You have to understand, for example, is  
6 it a general obligation bond, or is this a bond that has a  
7 revenue stream that backs that. What's happening to that  
8 revenue stream?

9 In the corporate market, it's a different animal  
10 once again. Whether it's a high-yield bond or a high-grade  
11 bond is an important consideration. With a high-grade bond  
12 or an investment-grade bond, you may have a number of bonds  
13 that are from the same issuer. And it becomes more readily  
14 available to look at some of those liquid bonds on the  
15 issuer and help interpolate to the less liquid bonds. By  
16 contrast, a high-yield issuer might have only one or two  
17 bonds outstanding and that high-yield debt might be more  
18 idiosyncratic, so one really wants to find direct observable  
19 data for that, for that marketplace.

20 In addition to all of that direct bond data, we  
21 look at broad market data as well. We try to understand --  
22 for example, our analysts do look at the ETF marketplace to  
23 understand how that's moving and to see if some of that  
24 movement should be applied to the underlying bonds.

25 But the whole idea, as you can see, is how do we

1 take this sparse data -- first of all, gather as much data  
2 as possible. But even so, take this sparse data and  
3 extrapolate to those 2.7 million bonds that we evaluate  
4 every day.

5 Kumar, on your last point about evaluating during  
6 times of stress, we're very pleased that some of the  
7 investments we made prior to this issue, really on the back  
8 of the great financial crisis. So for example, out of those  
9 2.8 million bonds, we have the vast majority of them that  
10 are pricing in what we call our continuous evaluated  
11 pricing. This means we're pricing them in a ticking fashion  
12 all business day long. What's great about doing that,  
13 rather than having some end-of-day crunch to try to piece  
14 together what happened, you're actually valuing the bond  
15 throughout the day, and that enables you to make a lot of  
16 important decisions about what different data points mean.

17 So, for example, in a market like we saw in March,  
18 there's a phenomenon of distressed transactions. You have  
19 to try to ascertain is a transaction that occurred orderly  
20 or not. And if -- and make a determination as to whether  
21 that represents a fair value or not.

22 Our job is trying to represent it's our good faith  
23 opinion as to where a bond would trade in an orderly market  
24 with willing participants. So we have to suss out during  
25 times of crisis what's orderly and what's not. And that's

1 one of our key points.

2 During fast-moving markets, we are very pleased we  
3 have some technology in place to help us look at that  
4 earlier in the day, and it's an important piece. But we're  
5 extremely happy we have the expertise of our analysts as  
6 well to think about how do I understand what type of  
7 transactions are occurring and how -- understand how to  
8 extrapolate that or not extrapolate that. And then how do I  
9 work with my stakeholders, my buy side customers, my sell  
10 side customers, the other firms that I work with, to get  
11 their interpretation of the markets as well? Being  
12 connected to stakeholders is important any time, but  
13 especially now.

14 MR. VENKATARAMAN: Thank you, Mark.

15 Following up on that, how did the evaluated  
16 process perform during March and April of this year? And  
17 related to this, how does a pricing service assess the  
18 performance of its models? Are evaluated prices meant to  
19 match trades at some point? Or should they be more  
20 representative of fair value or something else?

21 MR. HECKERT: Sure, sure. The COVID crisis and  
22 its impact on fixed income markets was especially pronounced  
23 in this area. The great financial crisis, as troubling as  
24 it was, was somewhat slower moving. It took place over  
25 months that we saw the gradual degradation of mortgage bond

1 performance and then the participants that were involved  
2 with those mortgage bonds, and then the impact spread from  
3 there.

4 With the COVID-19 crisis, we first of all, which  
5 was observable to most, we've had dramatic volatility, we  
6 had very quick-moving markets. But exacerbating the  
7 challenge was the widening of bid-offer spreads. High-yield  
8 bid-offer spreads moved up or moved out five times what they  
9 were before the crisis. We saw the same phenomena happen in  
10 all of fixed income markets, bid-offer spreads widened  
11 dramatically.

12 What does that mean? That means there's greater  
13 uncertainty. And that greater uncertainty was demonstrated,  
14 for example, in the trade data.

15 We saw tremendous diversity of trades, trades that  
16 were trading percentage points in yield apart from one  
17 another for very similar credits on the same day. When  
18 that's happen, that's just in mid-March, the market did not  
19 have a strong consensus on where valuation was.

20 So if bid-offer spreads are points wide, if trades  
21 are trading percentage points of yield apart for very  
22 similar credits, that strongly suggests a breakdown in  
23 consensus.

24 What does a valuation firm do, is we're providing  
25 in a way a point estimate during that process. If a bid-

1 offer spread is 10 points wide and we're providing an  
2 evaluation, we still have to give a single bid and a single  
3 offer in our evaluation process. So what do we do about  
4 that? How do we help our customers through it? We provide  
5 them information, for example, on what we believe the  
6 liquidity of a given bond to be.

7 We also give them information on the dispersion of  
8 trades we see around a point estimate. Now, this metadata  
9 can help our clients interpret the information they receive.  
10 Furthermore, what we made sure to do during the crisis is we  
11 made sure our business-as-usual communication practice with  
12 our customers worked.

13 One of the most important feedback loops is what  
14 we call the challenge process. So buy side firms, sell side  
15 firms, what have you, will submit an inquiry saying we saw  
16 some market data that we think is in contradiction to your  
17 evaluation. ICE, what do you think about that? And it's  
18 our job to respond to them with our understanding.

19 While our challenges, for example, for investment-  
20 grade corporate bonds in the first couple weeks of March  
21 were 10 times higher than they were in the February period,  
22 we were still able to answer 90 percent of those within a  
23 24-hour time window. We wanted to make sure that we were  
24 seeing all this response our customers were giving us. So  
25 that was a very important measure for us, and can we still

1 have the right feedback with our customers?  
 2 We also were engaged very closely with our  
 3 customers understanding what they see in the markets on a  
 4 macro level. For example, on a Saturday afternoon in March,  
 5 I was on the phone with the chief investment officer from an  
 6 asset manager and my team was on and we were sharing what we  
 7 thought was going on in commercial mortgage-backed  
 8 securities. Commercial mortgage-backed securities, as you  
 9 might imagine, were especially challenged during this time  
 10 period.

11 You might have seen trades previously in the  
 12 nineties or eighties for paper; now we are seeing trades at  
 13 six. And we were trying to understand those trades at six,  
 14 are those fire sales, liquidity events? So we would go to  
 15 multiple participants to understand what did they think  
 16 about the posture of a seller. And in many cases, those  
 17 were -- they were liquidity-driven sales. And we could find  
 18 other data, other sales that would certainly not support  
 19 that 90 level, but we could provide valuations that weren't  
 20 at six.

21 Our process is all about back testing. So we look  
 22 at how we -- for example, how do our bid-offer spreads  
 23 compare to trade implied bid-offer spreads. We look at how  
 24 do our absolute levels compare to trade levels. This is the  
 25 kind of analysis that we look at.

1 But back to the point of a breakdown in consensus,  
 2 if you look at the U.S. corporate bond universe, in a more  
 3 typical market, putting valuations aside, if you think about  
 4 it, it's generally a slow-moving market. Trades can predict  
 5 trades.

6 If you look at a bond that trades consecutively,  
 7 90 percent of the time it will be within a half a percent of  
 8 the last trade. And that was the case in February, for  
 9 example. If you go to mid-March, that number of being  
 10 within half a percent from trade to trade in the same bond  
 11 dropped to 35 percent. So that breakdown in consensus is  
 12 the challenge.

13 What I encourage my team to do is strong  
 14 communication, strong analysis, strong data review, and  
 15 applying that knowledge quickly. For example, bid-offer  
 16 spreads, we adjusted bid-offer spreads more quickly than we  
 17 ever have in the history of our valuation process because we  
 18 needed to do so to maintain the degree of robustness that we  
 19 wanted to for our valuations.

20 MR. VENKATARAMAN: Thank you, Mark. That is very  
 21 helpful in understanding how you manage a difficult process  
 22 during stress conditions.

23 I'll now turn to our next panelist, Ananth  
 24 Madhavan, global head of research, ETFs and index  
 25 investments at Blackrock. Ananth is a member of the FIMSAC

1 and he also chairs the ETF and Bond Funds Subcommittee,  
 2 which is hosting this panel.

3 Ananth, in the fall of 2019, your subcommittee  
 4 submitted a report about pricing and liquidity of bond ETFs  
 5 and mutual funds in stressed markets, and the impact of  
 6 these funds on underlying bonds (audio dropout) volatility  
 7 (audio dropout). Can you share the report's key points  
 8 (audio dropout.)

9 MR. MADHAVAN: Yes. Thank you, Kumar. The  
 10 subcommittee's report highlighted several facts about ETFs  
 11 and bond ETFs in particular, including that they had been  
 12 tested in times of stress such as the great financial crisis  
 13 in 2009, and the taper tantrum of summer 2013. Obviously,  
 14 you know, a decade ago, there were many fewer bond ETFs than  
 15 there are today. So we cautioned that some of the empirical  
 16 evidence was limited. But we did note that bond ETFs trade  
 17 on organized exchanges with pre- and post-trade  
 18 transparency, and that in those times of market stress, they  
 19 had acted as vehicles of price discovery, often indicating  
 20 where the markets were truly trading in these stressful  
 21 times.

22 So what did we see in the unprecedented volatility  
 23 of March? What we saw was trading very much consistent with  
 24 those observations. ETFs traded well, with bid-offer  
 25 spreads that were, while elevated, still relatively low and,

1 in most cases, tighter than the spreads in the underlying  
 2 bonds. Further, the ETFs act as stress relievers in the  
 3 sense that they allowed for buyers and sellers to alter  
 4 their exposures, basically netting off their ownership of  
 5 the funds quickly and efficiently.

6 And then, consistent with the observations of the  
 7 stressed markets report, we saw that ETFs did act as  
 8 vehicles of price discovery. So in the critical week of  
 9 March 23 to March 27, for example, our high-yield bond ETF  
 10 traded over 168,000 times a day, while the fund's largest  
 11 five holdings traded an average of only 25 times a day. We  
 12 also saw this in treasuries and, in civil bonds and  
 13 investment-grade bonds.

14 MR. VENKATARAMAN: Thanks, Ananth. The next  
 15 question is how does Blackrock use integrated pricing data  
 16 and (audio dropout) during March and April of 2020 (audio  
 17 dropout) from pricing services. We also saw significant  
 18 (audio dropout) reversal in both ETF and NAV prices (audio  
 19 dropout). So can you help us understand why so many ETFs  
 20 traded at a discount to their underlying portfolio values?  
 21 And if the (audio dropout) pricing discrepancies (audio  
 22 dropout)?

23 MR. MADHAVAN: Yes, thanks. So I think a first  
 24 point -- let me take this in reverse order and let me talk a  
 25 little bit about the premiums and discounts that we saw in

1 March and then talk a little bit about how Blackrock uses  
2 evaluated pricing data.

3 So as noted in our stressed markets reports, in  
4 times of increased volatility, ETF prices can deviate from  
5 the fund's net asset value. And it's important to  
6 understand that the net asset value is calculated once a day  
7 using actual trades of bonds that actively traded that day,  
8 on market quotations and fair value estimates for bonds that  
9 are traded infrequently. The other thing is that the end-  
10 of-day NAV is typically available to market participants  
11 only after the close.

12 So that points to the need for producing and  
13 disseminating intraday estimates of intrinsic value so  
14 investors better understand their true premiums and  
15 discounts when trading. You know, beyond the evaluated  
16 pricing services that we just heard about, Blackrock has  
17 built, you know, an intrinsic value model. It's very  
18 transparent. We've published a methodology. We calculate  
19 an intraday NAV based on each bond's yield curve and a  
20 credit spread adjustment, and we aggregate out for 1,000-odd  
21 bonds in a bond ETF and cash and create an intraday NAV.

22 And in the context of your question, what we've  
23 found in March and April was that obviously when the ETF is  
24 a vehicle of price discovery, the ETF is moving much faster  
25 than the underlying NAVs. The ETF is where the market

1 really is. As I said, a high-yield ETF, we had 168,000  
2 transactions a day. Okay? So it is moving very quickly, it  
3 is reflective of where buyers and sellers are actually  
4 exchanging value and agreeing in a very transparent market  
5 on the bond fund's value.

6 What we saw then is there are premiums and  
7 discounts to the stated NAV. But that often reflects the  
8 fact that NAV is slow to adjust, may reflect some staleness,  
9 may not fully capture the market conditions even that we  
10 have seen in the volatility.

11 So if the ETF is acting as a vehicle of price  
12 discovery, the ETF is necessarily going to be where the  
13 market is. And there are going to be premiums and discounts  
14 to the stated NAV. In reality, the premiums and discounts  
15 to the computed intraday intrinsic values are actually much  
16 smaller, which is suggestive that the market is actually  
17 quite efficient.

18 So getting back to your initial question of how  
19 does Blackrock use these evaluated pricing data, we use it  
20 to give guidance to clients. So clients are interested in  
21 where the bond funds really are trading and want to sort of  
22 make sure they understand that large deviations from NAV,  
23 either premiums or discounts, may not be actual. So we use  
24 it for -- for giving guidance to clients. We also use it  
25 for internal market surveillance purposes, just to make sure

1 that we are understanding where the ecosystem is and, you  
2 know, where there may be stress points. So it's both  
3 internal and external.

4 MR. VENKATARAMAN: Thank you, Ananth.  
5 Our next panelist is Derek Hafer, managing  
6 director and head of U.S. investment-grade and credit  
7 trading at Citi.

8 Derek, based on Mark's remarks that pricing  
9 services rely on data generated by -- or the trade reports  
10 that are largely submitted by dealers as well as dealer run  
11 data, can you tell us how dealers generated pricing data?

12 MR. HAFER: Of course. Good morning, Kumar,  
13 members of the committee and the SEC. Thank you again for  
14 inviting me to join the panel today.

15 As a sell-side market maker, there are a variety  
16 of uses for third party pricing services, similar to those  
17 which Mark and Ananth have touched on. First and foremost,  
18 from a financial controls perspective, we use third party  
19 pricing to run comparative analytics versus our own internal  
20 marks on a monthly basis. So as a trader, to caveat this  
21 and to get a better understanding, my assumption is that  
22 these third party data points are first generated with tier  
23 one data, such as the actual TRACE prints data that Mark  
24 mentioned, and then filled in with rel val matrices. So we  
25 understand there is some potential room for order in all

1 these sources.

2 This process, referred to internally at our end  
3 simply as price verification, allows desk and business heads  
4 to compare their system bond and derivative position pricing  
5 against external sources to evaluate the extent as to how  
6 their risk is marked, whether conservatively or  
7 aggressively, and then true those up in the month-end  
8 process. We generate a variance, which is the differential  
9 in market value terms on a position level between our in-  
10 house mark and an aggregation of the third party vendors.  
11 And what we frequently find is that, on a CUSIP by CUSIP  
12 basis, for example, is that across the various third party  
13 price sources, there can be enough discrepancy that on a  
14 less observable line item, we often have to kick out the  
15 large outliers in order to best generate a reasonable  
16 comparison. As volatility increases, and this isn't really  
17 a surprise, the dispersion in the different third party  
18 marks on the same instrument goes up, forcing more of a  
19 manual evaluation process on our side.

20 The other key use of third party price on the sell  
21 side is more in its realtime application, which Ananth  
22 touched on. It is one of the elements that we include as we  
23 evaluate our won intraday pricing, so in the runs and quotes  
24 that we disseminate to the marketplace, versus those of the  
25 pricing services. The nuance here is twofold. First, as

1 opposed to the monthly price verification process, this has  
 2 evaluated all of the line items, so it is everything that we  
 3 send a price out on, rather than just the lines that we have  
 4 positions in. And, second, we're looking at it more on a  
 5 ticking basis, again as Ananth mentioned, rather than as a  
 6 static snapshot. However, what that actually does is lend  
 7 to a new set of problems, because as most CUSIPs do not  
 8 trade with observable frequency on a given trading day.  
 9 What this does, however, for us is serve as a bit of a  
 10 sanity check on the prices that we're sending to the market,  
 11 as we have a team of, say, 15 senior traders pricing north  
 12 of 10,000 corporate CUSIPs in realtime.

13 Incrementally, when I think about it on an index  
 14 level, it allows me to evaluate some semblance of that  
 15 intraday NAV or intrinsic value of an ETF like LTD, for  
 16 example, where I can see both that third party NAV  
 17 comparatively against my own internal system levels.

18 MR. VENKATARAMAN: Thanks, Derek. So, based on  
 19 what you say, it appears that there is an information  
 20 feedback loop here from dealer prices on runs through  
 21 pricing services. And then it comes back to the dealers to  
 22 evaluate the prices. And given this feedback loop, the  
 23 quality of data that's provided by dealers can have a big  
 24 impact on the quality of evaluated prices.

25 So can you tell us about what are the market

1 smaller number of on-the-run issuers and bonds at a lower  
 2 frequency while dealers attempt to determine where the  
 3 benchmark risk clears. So as these observable data points  
 4 are fewer and further between, it's increasingly difficult  
 5 to build the matrices of where the universe of off-the-run  
 6 bonds should be priced and quoted, as there tends to be such  
 7 a large premium attached to both the liquidity profile and  
 8 the bond prices as a percentage are.

9 To support this with some data, in U.S. investment  
 10 grade, when we look at observations over the last three  
 11 years on prints over 500,000, so these seasoned CUSIPs or  
 12 CUSIPs that are over a year old since issuance went from  
 13 trading at roughly 60 percent of total TRACE count to as low  
 14 as 35 percent of total daily trades counted in mid-April  
 15 2020. In times of volatility like this, what I find is that  
 16 you'll potentially see a once or twice daily set of full  
 17 off-the-run prices sent out that happen to correlate to that  
 18 precise moment in time. But then you can become  
 19 significantly disjointed throughout a trading session as the  
 20 benchmark funds move fairly violently.

21 I think this is a very important point to really  
 22 understand. From the perspective of a sell-side dealer,  
 23 particularly during these periods of volatility, we always  
 24 ask that customers refresh two-sided or one-sided price when  
 25 engaging, as there is a very real chance that the last run

1 conditions that impact the quality of a dealer quote, for  
 2 example? How did bid-ask spreads and quoting activity  
 3 change during March and April of this year? And do your  
 4 prices line up with evaluated price?

5 MR. HAFER: Of course. So the volatility and  
 6 price velocity that we've experienced in the market over the  
 7 past few months has been something that I think as we've all  
 8 seen and read matched that of the financial crisis. Mark  
 9 touched on that. As a result of the extreme dislocation, we  
 10 observed a period where price discovery was paramount. And  
 11 as the market attempted to quantify new risk factors,  
 12 valuations and transaction costs among a multitude of other  
 13 factors on a subsector, and ultimately at a bond and issuer  
 14 level.

15 So driven by this increase in volatility, bid-  
 16 offer spreads expanded dramatically as the market attempted  
 17 to reprice clearing levels. Average bid-offer within  
 18 investment grade expanded three to four times. Mark  
 19 mentioned that high yield expanded to five X on the  
 20 executable markets portion, so while the overall number of  
 21 executable markets actually set via runs declined  
 22 dramatically.

23 What you tend to observe in periods like this is  
 24 that there's a prolonged price discovery phase, where the  
 25 dissemination of dealers' runs and quotes tend to be on a

1 sent out, whether it was an hour old or six hours old, has a  
 2 very real possibility to be a stale price based on the  
 3 velocity of the on-the-run benchmark.

4 MR. VENKATARAMAN: Thanks, Derek.

5 Our next panelist is Chris White, CEO, BondCliQ, a  
 6 platform that consolidates (audio dropout) and shares being  
 7 consolidated (audio dropout).

8 Chris, can you explain why dealers can care about  
 9 (audio dropout) supply liquidity and, further, what patterns  
 10 in liquidations you've observed on your platform during the  
 11 COVID-19 stress period?

12 MR. WHITE: Certainly, Kumar. And I'll take these  
 13 questions one by one. But first, I wanted to thank the  
 14 committee for inviting me back. I believe I participated in  
 15 the 2017 or '18 FIMSAC meeting on price transparency. And I  
 16 want to get right into the topic. I think the comments from  
 17 Commissioner Elad Roisman at the beginning of the panel or  
 18 at the beginning of the session, talking about the need for  
 19 better clarity on the price formation process for individual  
 20 bonds is really at the heart of the matter.

21 I would say that the reason why dealers should  
 22 care about getting access to pretrade data is based on  
 23 exactly what Derek just said in his excellent responses to  
 24 your question. I just wrote down some of the things that he  
 25 mentioned, probably didn't write them down fast enough. But

1 he mentioned how dealers don't have enough observable data  
2 points, especially in times of stress, to be able to provide  
3 liquidity. That's exactly what we are looking to address  
4 with our system. We're the only centralized pricing system  
5 that allows dealers to see the observable markets of other  
6 dealers, with some restrictions and protocols in place, of  
7 course. This provides the extra data points that allow  
8 dealers to hopefully provide more consistent institutional  
9 liquidity.

10 But today, in 2020, we're at the end of or still  
11 in the process of a 12-year cycle in which the outstanding  
12 size of the market has been growing rapidly. We've all seen  
13 also that, in 2020, we've already surpassed the outstanding  
14 issuance for all of 2019. So this growing market is  
15 something that we've been experiencing for quite some time.  
16 So there's a larger market for dealers to cover from a  
17 market making standpoint. That's why they need greater  
18 pretrade data, access to pretrade data.

19 We also are aware that the composition of what  
20 bonds are coming to market has permanently changed the  
21 structure of the corporate bond market. Today, about 44  
22 percent of the market is comprised of BBB-rated debt, which  
23 we all know is the riskiest investment-grade debt in the  
24 market. So now there is a riskier market for dealers to  
25 cover.

1 We are also quite aware as an industry over the  
2 past 12 years that, due to regulatory mandates, market maker  
3 balance sheets have been restricted, so dealers are not able  
4 to hold the amount of inventory for the amount of time that  
5 they have been previously accustomed to.

6 And then finally, and I think that this is  
7 something that we've heard in some previous FIMSAC  
8 discussions, buy side institutions have become a lot more  
9 sophisticated at aggregating information from multiple  
10 dealers in the marketplace. And this has been happening for  
11 the past six or seven years. So market makers are really on  
12 the wrong side of a growing information asymmetry gap when  
13 it comes to pretrade data.

14 Never in history has the U.S. corporate bond  
15 market been bigger or riskier. So dealers care about  
16 pretrade institutional corporate bond data today because  
17 access to this information is vital to their ability to  
18 consistently provide secondary liquidity while accelerating  
19 balance sheet velocity and reducing trading errors.

20 MR. VENKATARAMAN: Thank you, Chris. So you have  
21 explained how centralized pricing data helps leaders. Can  
22 you explain how centralized pricing data can include  
23 evaluated prices in other areas of the market? And are  
24 there any changes you would advocate, to include data  
25 quality for pricing bonds?

1 MR. WHITE: Sure. And I do just want to point out  
2 to everyone listening that we did provide summary slides  
3 that are up on the SEC website. Thank you for posting them.

4 But first, let's get into the liquidity aspect.  
5 Because I think that the lack of organized pricing data in  
6 the corporate bond market has been negatively impacting  
7 liquidity. And this is exacerbated in times of stress. So  
8 in theory, access to pretrade market information for market  
9 makers allows them to supply more liquidity because pricing  
10 information allows dealers to calculate the true risks for  
11 supplying liquidity, which improves their ability to stand  
12 up to markets. Without pretrade information, dealers are  
13 being asked to make risk decisions with limited information,  
14 so they are reluctant to trade bonds that are not highly  
15 active.

16 Again, I'll reference what, you know, Derek had  
17 mentioned. When customers are engaging him and his traders,  
18 he's asking them to refresh their market or to reveal what  
19 market they are referencing because it's possible that that  
20 market is no longer relevant for the time they're trying to  
21 do the trade. Again, this is directly the result of not  
22 having access to organized pretrade data. If dealers had  
23 access to that data, they would know where the relevant  
24 market is almost at all times.

25 Also in terms of the liquidity provision,

1 organized pretrade information allows dealers to know the  
2 context of the market. This improves their ability to make  
3 accurate markets that reflect their true intentions.  
4 Without pretrade information, dealers are unable to  
5 effectively adjust their prices to reduce balance sheet  
6 positions consistently. In other words, if a dealer is long  
7 a large position of corporate bonds, they're often missing  
8 the data points that would allow them to consistently  
9 maintain a competitive offer that could attract order flow  
10 from a willing buyer. If you have something to sell you  
11 want to know where the market is so you can consistently  
12 have an offer that might attract an order from a customer.  
13 That's how balance sheet turnover starts to accelerate in a  
14 market that is much larger with a lot less balance sheet.

15 And then finally, access to pretrade data allows  
16 dealers to interpolate markets for less actively traded  
17 bonds because quote data can be used when transactions are  
18 infrequent or nonexistent in a given bond. We've heard that  
19 several times from the previous panelists. We've heard, you  
20 know, people talk about how the ETFs are providing price  
21 discovery and how there are other ways that they are  
22 interpolating what the price of a bond is. Well, if the  
23 pretrade data was organized in the first place, it would  
24 make it a lot easier to figure out where a bond should trade  
25 and dealers could start focusing on providing liquidity in a

1 larger universe of CUSIPs in the marketplace because they  
2 would have more observable data points to do so.

3 If the corporate bond market making community  
4 could be given appropriate access to institutional pretrade  
5 data, their ability to provide deeper liquidity in a larger  
6 scope of bonds at a reasonable transaction cost would  
7 gradually improve over time. There is no doubt in my mind  
8 about that.

9 But to your last question or at least a portion of  
10 your last question, Kumar, you asked how does this impact  
11 evaluated pricing. The direct impact on evaluated pricing  
12 is as follows. The evaluated pricing services are obviously  
13 incredibly sophisticated and are being relied on by multiple  
14 buy side institutions, as well as sell side institutions, as  
15 Derek mentioned, to handle very important vital functions  
16 like valuation.

17 We see ourselves as being able to provide higher  
18 quality source data to the evaluated pricing services, not  
19 as a competitive product. If the evaluated pricing services  
20 had, you know, curated pretrade information that was  
21 organized and objective and improved in quality, then their  
22 ability to not only accurately calculate where bonds should  
23 be valued that are actively traded, that would improve. But  
24 also bonds that are not very actively traded, because  
25 there's more robust source data that could help them.

1 You know, as you heard Mark mention, in March,  
2 during the prolonged period of stress and volatility, they  
3 had 10 times the number of questions that they usually get  
4 around the soundness or the accuracy of their evaluated  
5 pricing in corporate bonds. This is not because their  
6 service broke down; it's because the underlying source data  
7 that they rely on for calculating the prices or the  
8 evaluated prices broke down.

9 We think that we can help with what's been  
10 mentioned. I love this. Somebody said a breakdown in  
11 consensus. BondCliQ is designed to actually reduce the  
12 breakdowns in consensus to actually create better, market-  
13 driven consensus pricing. We think from a structural  
14 standpoint, if you're asking about recommendations going  
15 forward, the centralized pricing approach is what we  
16 recommend to improving the overall quality of data. Dealers  
17 must see markets in order to improve the accuracy of their  
18 markets and the reliability of their markets. Without more  
19 data points from the dealers as we've heard already on this  
20 panel, I think it would be very challenging to continue to  
21 support a market that is growing in size and risk with  
22 limited balance sheet, if we don't improve data access for  
23 dealers.

24 MR. VENKATARAMAN: Thank you, Chris.

25 Our next speaker is Terry Hendershott, professor

1 of finance at U.C. Berkeley, who has written important  
2 articles on equity and fixed income markets.

3 So, Terry, Chris has made a case for centralized  
4 pricing in bond markets. What evidence do we have on  
5 benefits of pretrade transparency? Will centralized pricing  
6 have -- are these benefits for dealers? And will the  
7 dealers improve the outcome for buy side and also (audio  
8 dropout) evaluated prices, as argued by Chris? And if  
9 everyone benefits from centralized pricing, then why don't  
10 we see it?

11 MR. HENDERSHOTT: So (audio dropout) the committee  
12 and the Commission for asking me to participate. As an  
13 academic, I will provide some guidance, but I will also ask  
14 some questions that would be valuable to have answered.

15 So in general, it's easy to think that  
16 transparency is good. When I wrote my first academic paper  
17 on transparency, I was reviewing academic literature and I  
18 was somewhat surprised that the evidence on transparency's  
19 benefit is mixed. There are papers showing more pretrade  
20 transparency in increases the bid-ask spread. I think  
21 Ananth may even have such a paper. And others showing that  
22 more pretrade transparency reduced the bid-ask spread. So I  
23 would say that the consensus on transparency's impact is not  
24 so clear and could well depend upon the setting.

25 So here are some questions that I would think

1 would be important to answer in the context we're talking  
2 about today. So large institutions already get broad access  
3 to quotes. So how would they benefit from centralized  
4 pricing if they're already seeing quotes?

5 And so as Chris was raising, well, if dealers can  
6 see others' quotes, will they compete more intensely? For  
7 example, will reduction in their uncertainty help them  
8 compete more intensely and provide better liquidity? Or  
9 alternatively, could dealers seeing each other's prices  
10 cause them to compete less intensely?

11 You know, in a prior market for equities that was  
12 quotation based where it was transparent, there were  
13 allegations about the dealers' anticompetitive behavior on  
14 Nasdaq in the 1990s. While there's not necessarily any  
15 reason to believe that that would happen here, it's an  
16 important thing to consider as a possibility.

17 So moving on from the larger institutions, smaller  
18 institutions and individuals have less information. And so  
19 it's easier to see how they could directly benefit from  
20 seeing more quotes. But part of the question is, well, why  
21 don't they have greater access to quotes today. If dealers  
22 were required to quote to everyone, would they provide the  
23 same quotes that they do today?

24 In general, if producing an accurate quote  
25 requires effort, especially in less liquid securities, which

1 we've heard from the other panelists, so if the dealers  
2 aren't rewarded for producing quotes and possibly others can  
3 free ride on the information in their quotes, if their  
4 quotes are more transparent, will they still put as much  
5 effort into them and quote the same prices if there's more  
6 transparency?

7 MR. VENKATARAMAN: Thanks, Terry. You raise many  
8 interesting questions that we can debate in our Q&A session.  
9 I have one more question for you.

10 Pricing services rely on many sources of data.  
11 Mark talked about it and Derek talked about it. Tier one  
12 data, bid-offer from the markets, tier three data, indicated  
13 runs and so on.

14 Will additional disclosures on quality and  
15 integrity of data be useful? For example, what if pricing  
16 services provide an evaluated price and a confidence  
17 interval around the price? There are some applications  
18 where data quality should matter and are there other  
19 applications where disclosures are less useful?

20 MR. HENDERSHOTT: So market data is used for  
21 different reasons by different customers. So it's certainly  
22 possible that some institutions would prefer not to trade  
23 when prices are sufficiently uncertain. However, you know,  
24 if institutions are unwilling to trade in stressful market  
25 conditions, this may be bad for their investors who need

1 And we heard earlier from ICE that some customers are asking  
2 for that and it is being provided to them. So I guess  
3 there's a question of is this sort of information already  
4 being provided to customers or should it be provided more  
5 widely?

6 You know, if it's costly or not that useful, then  
7 it would make sense not to provide it. Or if some customers  
8 wouldn't use it, they wouldn't have a need for it.

9 So in terms of an example of where trading at a  
10 more uncertain price might not be as problematic is if a  
11 fund company is doing an internal cross where they're in  
12 some sense on both sides of the trade, they're looking for a  
13 fair price to trade at and uncertainty may be less  
14 important. It's really the situations where trading is  
15 occurring between parties with very different incentives or  
16 information that additional disclosure would be important.

17 MR. VENKATARAMAN: Thank you, Terry. And I want  
18 to thank all the panelists. This concludes the initial  
19 panel discussion. I will now turn the meeting over to  
20 Michael, the chair of FIMSAC, who will moderate the Q&A  
21 segment. Michael, back to you.

22 MR. HEANEY: Thank you, Kumar.  
23 Chris, I know you had a follow-up comment. I'm  
24 willing to just go to you first before we go to the  
25 questions. And I know you wanted to respond.

1 access to funds.

2 In equity markets, we often halt trading to allow  
3 uncertainty to resolve. However, because bonds trade less  
4 frequently than stocks, bond market trading halts might need  
5 to be much longer than 15 minutes, and this could be costly.

6 Rather than stopping trading, another possibility  
7 is for institutions to charge their customers a fee, and  
8 this is related, it could be either be explicit or through a  
9 bid-ask spread, for transacting when prices are uncertain.  
10 This allows some customers to still be served but could  
11 protect other customers from being taken advantage of.

12 And so the one thing you could think about in  
13 terms of taking advantage of, as Ananth was highlighting, if  
14 NAVs and traded prices in ETFs diverge, and it could well be  
15 the case that the same thing is the true values for mutual  
16 funds and NAVs are diverging. If some customers are aware  
17 of this and others aren't, you could get something like the  
18 late trading phenomenon we saw in mutual funds, which is  
19 where people who know prices are inaccurate systematically  
20 could choose to execute against NAV when they know it's  
21 mispriced.

22 So in terms of market data providers, more  
23 generally, we need to think through what their incentives  
24 are relative to their customers. So would the customers  
25 find confidence intervals around evaluated prices valuable?

1 MR. WHITE: Oh, thanks so much. And, Terry, I  
2 think your question on what are the incentives for dealers  
3 is actually at the heart of how we get to a marketplace that  
4 has better quality pricing data. As we all know, primary  
5 dealers -- or dealers are the primary providers of corporate  
6 bond data. And in order for them to provide this  
7 information consistently and competitively, I think a couple  
8 of things need to be made, you know, available to the  
9 dealers.

10 One, there has to be some protection of the  
11 proprietary information. So we have a protocol in which the  
12 dealers only show markets to other dealers when there's  
13 already a consensus of pricing and a lot of dealers  
14 participating. So if a dealer is the only one quoting a  
15 bond, that is not visible to other dealers. So to your  
16 point on why would they put their information out there, got  
17 to have the right protocol to protect them.

18 Two, we think a very, very critical aspect of  
19 dealers making better prices is if order flow starts to be  
20 directly linked to the quality of your pricing. Dealers are  
21 all focused on being able to attract buy side institutions  
22 to engage them so they can turn over their inventory.  
23 That's pretty much the name of the game in all market  
24 making. And so if there was a better connection between the  
25 quality of my price and the competitiveness of my price and

1 my ability to actually encourage customers to engage me, you  
2 would see dealers consistently making markets and accurately  
3 making markets because it allows them to turn over their  
4 book.

5 And then finally, I do think just like any  
6 business, the dealers must have some sort of economic  
7 incentive for their pricing information. We all know that  
8 dealer pricing data is very valuable. It is literally the  
9 part of every single pretrade pricing product that's out  
10 there, has some contribution from the dealers. But to my  
11 knowledge, except for our initiative, nobody has a  
12 compensation model that allows the dealers to be paid for  
13 the information that they produce. And I think that this is  
14 critically important because if we look at other markets  
15 outside of the corporate bond space, we see the dealers  
16 consistently providing pricing information and then  
17 consistently having to pay exorbitant prices just to access  
18 the data that they helped the market create.

19 We think there needs to be better balance here.  
20 And if you can bring that structure to the market, as we've  
21 done, you're going to be able to attract dealers who see  
22 what's happening, where the market, because of size and  
23 risk, requires broker access to pretrade, but the  
24 appropriate application of transparency is critical to  
25 getting it right in the corporate bond space.

1 Thanks, Terry. And thank you, David -- oh,  
2 Michael, sorry.

3 MR. HEANEY: I would just go back and see if  
4 anyone wanted to respond to that before I go to FIMSAC  
5 questions. If there's anything else to add.

6 Okay. The first question is from Gilbert Garcia.  
7 The question is -- and it's for the panel as a whole.

8 Do the models differentiate between odd lots and  
9 round lots? What is that threshold, if so?

10 MR. HECKERT: I guess I could start on this  
11 question. Yes, trade size is an important consideration for  
12 -- with the valuation process. Although that has changed  
13 dramatically over the years.

14 If one were to go back several years ago, there  
15 was a more clear delineation between odd lot and round lot.  
16 And actually, at some point, there were two different types  
17 of market participants interacting in those markets.

18 The way trading protocols have advanced, though,  
19 increasingly, institutional players are trading in smaller  
20 sizes. So a lower and lower trade threshold can provide  
21 meaningful information for the valuation process when trying  
22 to assess where an institutional participant could trade.  
23 So whereas we talk about in the corporate bond market  
24 numbers like a million-dollar trade or above was valuable  
25 for the valuation process when at an institutional

1 participant, we can look at trades down to 500K, down to  
2 250,000 in investment grade, for example.

3 And in municipal bond markets, there was always a  
4 requirement to look at smaller trades. For example, there  
5 are bond issues which have less than a million outstanding,  
6 so you will never see a 1 million trade in those issues. So  
7 you have to look in proportion to the overall issuance of  
8 that bond to best understand.

9 So there is good variation across market segments.  
10 But I think the key trend we've seen in both the corporate  
11 and municipal areas is a driving down in trade size over the  
12 years.

13 MR. HEANEY: Thank you very much. Any other  
14 thoughts on that question or I'll move to the next?

15 MR. WHITE: Michael, a quick thought here. I  
16 think it's important to note that while 85 percent of the  
17 tickets in the corporate bond market are less than 1 million  
18 in size when we look at transaction data, it only accounts  
19 for roughly between 15 to 20 percent of the trading volume  
20 in the marketplace. This puts a real premium on the pricing  
21 data for the institutional market, where there are very few  
22 trades relative to the odd lot market. But it obviously  
23 generates the majority of the volume on a daily basis.

24 So where we think there needs to be further  
25 examination is how are odd lot prices being used to

1 determine the valuations for block positions? Because when  
2 you're using a lot of odd lot data to make a determination  
3 as to where to trade a block, you may be providing a false  
4 sense of where the market is for someone who really wants to  
5 understand where it would need to liquidate. And I don't  
6 think mechanically it's possible to liquidate at some of the  
7 levels -- a block at some of the levels that are being  
8 indicated by odd lot markets. So it really takes a clear  
9 distinction on what data set you're using if you're going to  
10 be evaluating a block position in terms of its true value in  
11 the marketplace.

12 MR. HEANEY: Thank you, Chris.

13 I'm going to turn to a question from Larry Harris  
14 and he has asked it of Terry.

15 Displaying quotes when there is no reward to doing  
16 so very likely reduces the quantity and quality of the  
17 quotes. Do you expect that a rule against trading through  
18 firm quotes would improve dealer quotes? What is the role  
19 of pretrade price transparency on price competition amongst  
20 dealers and other traders?

21 MR. HENDERSHOTT: Well, there is a lot in that  
22 question, I guess, as I might expect from Larry.

23 I mean, it's true. So the question about having  
24 firm quotes is an interesting one because, I mean, in -- in  
25 these bonds that trade so infrequently, having firm quotes

1 all the time could well imagine that people would have to  
 2 place them fairly wide because they may be getting stale all  
 3 the time.  
 4 Now, Larry's point about trade through rules is a  
 5 good one, that people who are willing to provide firm quotes  
 6 continuously, having trades occur at worse prices than what  
 7 they're providing doesn't -- it's not clear how that's  
 8 helping anyone in the market. But there's a question of how  
 9 do you actually determine whether or not a quote is firm and  
 10 how would we think about, you know, both disseminating firm  
 11 quotes and enforcing that they're not traded through? And I  
 12 know Larry has done some work on this. But trying to set up  
 13 the robust mechanism for monitoring and policing may be a  
 14 fair amount of work but may be worth considering.  
 15 MR. HEANEY: Thank you, Terry.  
 16 Other questions? I have not received any others.  
 17 In which case, I will go to the viewpoint portion of this  
 18 and I will turn it over to Sonali.  
 19 MS. THEISEN: Great. Thanks very much, Michael,  
 20 and Ananth and Kumar for hosting today's panel. And thank  
 21 you so much to the panelists. I think it's really important  
 22 to continue to raise awareness about the evolving and  
 23 increasingly meaningful role that bond pricing services are  
 24 playing in our markets.  
 25 I would just add, you know, to some of the

1 comments that Derek had made. You know, we had examined a  
 2 date in mid-April for a key high yield index. And we found  
 3 that just shy of 10 percent of those bonds for contacts,  
 4 just shy of 10 percent of those bonds, the very next print  
 5 in the morning of over a million size was more than five  
 6 points away from the prior close of major pricing service.  
 7 And that average difference at the time for the portfolio  
 8 was less than a point, .91 points. And the value of the  
 9 difference was 1.81 points. Right?  
 10 So this really illustrates that it really masked  
 11 differences in sectors such as energy and real estate, where  
 12 the absolute difference was four-plus points. But on a  
 13 bond-by-bond level, as Derek mentioned, despite, you know,  
 14 the best efforts, the reality is that the pricing services  
 15 in times of volatility or stress, you know, on a bond-by-  
 16 bond level cannot be accurate when pricing large, large  
 17 swaths of CUSIPs.  
 18 I also think that, you know, we've observed things  
 19 like the most liquid cash equivalent ETFs moving to -- away  
 20 from cash settle during the volatility to physical settle.  
 21 And still now sort of having the option to physical settle.  
 22 Which again tells us that despite, you know, the industry's  
 23 best efforts, that in times of volatility, in times of  
 24 stress, we should certainly expect that on a CUSIP-by-CUSIP  
 25 level, there may be meaningful differences the less liquid

1 an instrument is or the most volatile.  
 2 And I would just like to emphasize that I think,  
 3 you know, away from this discussion, I really hope -- I  
 4 think this is a topic that we've brought up quite a number  
 5 of times in the past, that given the market's increasing  
 6 dependence on these services, we should really explore what  
 7 is the right regulatory framework to provide support to  
 8 ensuring that the quotes are well understood by the market.  
 9 And, you know, I think there was some discussion today  
 10 around, you know, when are they meaningful, when are they  
 11 reliable and at what level. But, you know, I'm not so  
 12 fussed on, you know, at this point I think we should do  
 13 analysis, whether it's IOSCO compliance, whether it's  
 14 investment adviser registration, or it's something entirely  
 15 new. I do feel strongly that it's important for us to  
 16 ensure that there's robust and consistent best practices and  
 17 oversight with the pricing services. And then also the  
 18 appropriate amount of investor education as to how  
 19 dependable those prices should be in different contexts and  
 20 in different environments.  
 21 And so I spent a lot of time just, you know,  
 22 thinking about how we can proactively safeguard the markets  
 23 from unnecessary risks. And I'm especially sensitive to  
 24 this topic, you know, as a member of the Federal Reserve's  
 25 Alternate Reference Rate Committee and all the work that's

1 being done around LIBOR. And I think that more than one  
 2 pricing service that I've spoken with has been constructive  
 3 on this idea that there should be some sort of consistent --  
 4 consistent framework, particularly given, just again going  
 5 back to the many thousands -- I think, you know, there were  
 6 some very good comments made early on -- versus the many  
 7 thousands of instruments that are being priced. And just  
 8 even identifying, you know, in these markets, this is the  
 9 general framework. This is when we're using, you know,  
 10 direct trades. This is, on average, the number of derived  
 11 prices, et cetera. But there needs to be, I think, more  
 12 illustration that's transparent to the market as to the  
 13 nature and the reliability. And then overall, a consistent  
 14 framework.  
 15 So I really encourage us within FIMSAC to take  
 16 this matter up more meaningfully and proactively. I think  
 17 this is, you know, foundational to our mandate to think  
 18 ahead to the issues or topics that may come up and be an  
 19 issue later in the marketplace.  
 20 And as I've said many times, you know, this  
 21 dependence on third party pricing has led to a lot of  
 22 innovation and really good things for the market. But it's  
 23 also a relatively new phenomenon and we should create sort  
 24 of the right foundation and the right house for how these  
 25 things should be viewed before we have an issue. So thank

1 you.

2 MR. HEANEY: Thank you, Sonali. Let me turn it

3 back to Kumar, who would like to make a comment.

4 MR. VENKATARAMAN: Thanks, Michael. This is a

5 question for Ananth or Terry, or anybody else on the panel.

6 But perhaps Ananth is the one to start.

7 Let's consider a bond ETF and a mutual fund with

8 both a similar or identical portfolio. Now suppose during

9 the March and April of 2020, we observed that the ETF is

10 trading at a discount to the NAV, perhaps indicating that

11 the NAV price is reacting too slowly.

12 So this means that some investors who bought the

13 mutual fund essentially overpaid while those investors

14 selling the fund received more for their sale than they

15 should have. And the situation becomes, equally problematic

16 in -- markets when these pricing differences can be large.

17 So my question is will retail investors be better

18 protected if mutual funds all purchases and redemptions

19 under -- markets when the NAV price is a little unclear, the

20 valuations are unclear? Or will the lack of daily fund

21 liquidity impose a new higher cost on investment?

22 MR. MADHAVAN: Thanks, Kumar. It's a very good,

23 deep question. I will just say that, in general, I'm

24 certainly of a belief that we keep markets open and we allow

25 investors to exit or enter positions, irrespective of the

1 type of wrapper that we're dealing with. So in the context

2 of a mutual fund, obviously, if we were to suspend

3 redemptions or subscriptions in times of market stress, that

4 might actually create a situation akin to a bank run, where

5 investors, fearing they may not be able to liquidate their

6 positions, start, you know, moving cash out of their funds

7 earlier, exacerbating liquidity. So my general feeling is

8 that suspending redemptions or subscriptions is not the way

9 to go.

10 I will say that, you know, in the thoughtful

11 comments of many of the panelists on your session, the

12 evaluated pricing is the way to go, where we continually

13 improve the ability to price bond portfolios. And I think

14 to Sonali's point, obviously at an individual CUSIP level,

15 it is very difficult to price a bond that may not have

16 traded in a week. But at the portfolio level, if you're

17 talking about a fund that maybe as 1,200 constituents, it

18 becomes much easier to aggregate that and to have an

19 accurate pricing, even if the pricing methodology is

20 relatively transparent and simple, as I think we've

21 demonstrated in the past.

22 So I would say that the evaluated pricing schemes

23 are the way to go, where we continually strive to improve

24 the bond portfolio valuations and come up with better

25 estimates of intrinsic value.

1 MR. HEANEY: Thank you.

2 Mark, did you have another comment, Mark Heckert,

3 that you wanted to make?

4 MR. HECKERT: Sure, sure. In terms of talking

5 about the consistency of approach when looking at pricing

6 services, it is worth noting that ICE data, pricing and

7 reference data, which is the entity that provides

8 valuations, is a registered investment adviser. I'm not

9 aware if the other pricing vendors have that status, but ICE

10 Data does.

11 MR. HEANEY: Thank you. Let me turn to a question

12 from S.P. Kothari, chief economist and director of the

13 Division of Economics and Risk Analysis. He's asking it

14 generally to the panel.

15 In periods of volatility, often we observe

16 premiums or discounts of ETFs to NAVs. In falling markets,

17 discounts seem more prevalent among ETFs with underlying

18 illiquid and sometimes liquid bonds. For example, for the

19 week through March 20, Blackrock's iShares iBoxx investment-

20 grade corporate bond ETF LQD closed at a 5 percent discount

21 to its NAV. Why do we observe such large discounts in

22 falling markets? Why don't the bond pricing services get

23 closer to zero discount? If uncertainty and illiquidity are

24 the challenge, why is it that the bond pricing services do

25 not over- as well as under-shoot? That is, why are prices

1 from bond pricing services biased?

2 So let me open that up to the panel.

3 MR. HECKERT: Sure. Perhaps I can start on that

4 point.

5 If were to look at ETFs more broadly during the

6 dislocation, all asset class ETFs had some level of premium

7 and discount. Even large-cap U.S. ETFs observed premiums

8 and discounts. On an absolute level, those were

9 dramatically smaller than fixed income premium discounts,

10 both relative to their prior performance. Before the

11 crisis, even equity premium discounts gapped out

12 tremendously.

13 But there is a good point there. The ETF and the

14 underlying are two separate markets even for large-cap

15 equities. They are certainly two separate markets for ETFs

16 and U.S. corporate bonds, and certainly two different

17 markets for ETFs and high-yield municipal bonds, which is

18 where we saw some of the strongest evidence of premium or

19 discount.

20 And I do want to help the group understand though,

21 this wasn't one directional. We saw premiums and discounts

22 in fixed income ETFs. And there was -- there were two

23 different markets operating at two different speeds. But

24 there wasn't a clear directional bias in one direction or

25 another during this -- during this situation.

1 MR. HEANEY: Any other viewpoints?  
 2 MR. HENDERSHOTT: Well, I thought some of the work  
 3 that Ananth had done before, and he probably hasn't  
 4 replicated it for recent vents, but in general, it seemed  
 5 that NAVs lagged transaction prices. Which is not  
 6 surprising, given that people who are actually quoting  
 7 traded prices need to make sure they're accurate.  
 8 So it does seem that the pricing services in  
 9 particular in falling markets have historically been not  
 10 able to keep up as well as the markets that are really  
 11 trading. So I would be interested to know why Ananth's  
 12 prior work -- if ICE doesn't think that's still correct, why  
 13 is that? And S.P. really raised the question of showing  
 14 systematically for at least one important ETF there was  
 15 consistent under-shooting.  
 16 MR. MADHAVAN: Well, let me just jump in there,  
 17 Terry. So, you know, we are in the process of updating some  
 18 of the research that I think you were alluding to from a few  
 19 years back, which showed that NAVs tend to track -- you  
 20 know, in other words, past NAV returns predict future NAV  
 21 returns, meaning that there is clearly some staleness.  
 22 That's not true of ETF price returns. So, in other words,  
 23 the ETF is, to Mark's comment, a separate market. You know,  
 24 it acts like an efficient market. The NAV is very much more  
 25 like an appraisal-based evaluation and tends to move more

1 slowly and adjust.  
 2 And again, to the previous comments, we did see  
 3 both premiums and discounts. We tended to see premiums when  
 4 the market was moving up and discounts when the market was  
 5 moving down.  
 6 I think, you know, this is something again where  
 7 my feeling is, we can probably improve the NAV pricing, you  
 8 know, with more efforts. So Gilbert suggested trade size as  
 9 an indicator. I mean, there are many other things that we  
 10 could use to come in with more efficient pricing for bond  
 11 funds.  
 12 MR. HEANEY: Thank you.  
 13 I wanted to just take the opportunity to turn to  
 14 Chairman Clayton or any of the commissioners if they had any  
 15 comments or questions for the panel before we close out.  
 16 Brett or any of the other SEC Staff?  
 17 Okay, thank you, Kumar, for moderating the panel.  
 18 I also want to thank the panelists for joining us today.  
 19 Very insightful. Certainly a great way for us to kick off  
 20 the FIMSAC meeting today. But thank you very much for your  
 21 time.  
 22 We are going to take a short break. Will the  
 23 FIMSAC members please stay on, remain on Webex, keep your  
 24 lines muted, and we will reconvene at 11:30 for our next  
 25 panel. Thank you very much.

1 (Recess.)  
 2 MR. HEANEY: All right, I would like to call the  
 3 meeting back to order, if I can. And just prior to going  
 4 to the second panel, let me just make a couple of  
 5 corrections.  
 6 For the minutes, I had noted that Scott Krohn and  
 7 Rachel Wilson had joined the meeting. They have not  
 8 participated in the meeting, so I would like to make that  
 9 correction.  
 10 In addition, the final agenda item does not end on  
 11 the block trading discussion, but we do have a  
 12 recommendation regarding pretrade transparency in the  
 13 municipal securities market and subcommittee chairperson  
 14 Lynn Martin will be running that recommendation to close out  
 15 the meeting.  
 16 So those are the two corrections.  
 17 RECOMMENDATION REGARDING INTERNAL FUND CROSSES  
 18 MR. HEANEY: And at this point, I would like to  
 19 turn it over to Rick McVey, chairman of the Electronic  
 20 Trading and Technology Subcommittee, for our second panel.  
 21 We will be considering a recommendation.  
 22 And I will turn it to Rick to start the panel and  
 23 then move to the recommendation. Rick.  
 24 MR. McVEY: Good morning. And thank you, Michael.  
 25 The Technology and E-Trading Subcommittee is

1 pleased to put forward this recommendation regarding  
 2 modernizing Rule 17a-7 under the 1940 Act. I will start  
 3 with a brief overview of the recommendation and then  
 4 introduce our panel for the Q&A discussion. I would like to  
 5 thank all members of the Technology and E-Trading  
 6 Subcommittee for the many hours of work and discussion that  
 7 went into this recommendation. We also heard from outside  
 8 industry representatives from the investment management  
 9 industry, legal advisers, data providers and dealers.  
 10 Following many meetings and extensive  
 11 deliberations, the Technology and E-Trading Subcommittee  
 12 unanimously approved this current recommendation to FIMSAC.  
 13 We believe that modernizing fund manager rules for crossing  
 14 could unlock new liquidity in fixed income markets and  
 15 reduce transaction costs for retail and other investors in  
 16 fixed income funds.  
 17 Let me provide some brief background on the  
 18 current rules before turning to our panel. The subcommittee  
 19 was concerned with certain aspects of Rule 17a-7 of the '40  
 20 Act that governs the ability of investment advisers to sell  
 21 a fixed income security from the account of one of the  
 22 adviser's clients to the account of a different client,  
 23 known as a cross trade. Advisers face significant  
 24 challenges because the conditions of Rule 17a-7 make it  
 25 difficult to cross fixed income securities.

1 Two of the biggest issues are that Rule 17a-7 only  
 2 allows for customary transfer fees for cross trades and does  
 3 not specifically allow for transaction fees with dealers or  
 4 electronic trading venues. Rule 17a-7 requires that a fixed  
 5 income security should be executed at the independent  
 6 current market price, which is currently defined as the  
 7 average of the highest current independent bid and lowest  
 8 current independent offer determined on the basis of  
 9 reasonable inquiry. The current rule has led advisers to  
 10 attempt to get three indicative bids and three indicative  
 11 offers from dealers before crossing a bond when they believe  
 12 the cross is permissible.

13 The subcommittee's recommendation addresses each  
 14 of the above issues. First, we recommend that the SEC make  
 15 it clear that custodial fees and the fees of electronic  
 16 trading platforms or dealers are permissible in connection  
 17 with effecting cross trades involving funds.

18 Second, the subcommittee recommends that the SEC  
 19 allow other methods of ensuring that a fair price is  
 20 obtained for cross trades involving fixed income securities,  
 21 other than by seeking multiple indicative bids and offers.

22 In addition, the recommendation sets out two ways  
 23 to establish the fair value of the cross trading. First,  
 24 using independent pricing sources, such as regulatory trade  
 25 tapes, aggregated dealer runs, independent pricing services

1 or trading venue data services, provided that the adviser is  
 2 not relieved of its fiduciary duty to achieve best execution  
 3 for both clients on account of using a third party source;  
 4 or alternatively, an electronic trading platform that has  
 5 functionality to achieve fair pricing of cross trades,  
 6 including a competitive RFQ process whereby an adviser can  
 7 initiate a market-wide bid or offer wanted in competition on  
 8 behalf of one fund and anonymously respond to the request in  
 9 competition on behalf of the second fund with which the  
 10 adviser wants to cross the bond.

11 The recommendation then suggests multiple  
 12 safeguards and oversight mechanisms that the subcommittee  
 13 believes should be in place if advisers are allowed to  
 14 establish fair value in these ways, including regulatory  
 15 trade reporting for all internal cross trades where it  
 16 exists, such as FINRA TRACE or MSRB EMMA; limiting the use  
 17 of independent pricing sources to establish fair pricing for  
 18 internal crossing to level one and level two assets; regular  
 19 investment management fund board review and oversight and  
 20 policies and procedures for the selection and use of  
 21 independent pricing sources and trading platforms.

22 Now, let me turn to our panel for the meeting  
 23 today. And I would like to start by thanking all of them  
 24 for their participation in our meeting.

25 First, we have Nora Jordan, partner and head of

1 the investment management group at Davis Polk and Wardwell.  
 2 Lance Dial is managing director and counsel from Wellington  
 3 Management. Ed Chidsey is partner and head of information  
 4 services at IHS Markit. And Brian Brennan is head of fixed  
 5 income and derivatives for KeyBanc Capital Markets.

6 Let me start with Nora. And if you wouldn't mind,  
 7 Nora, could you please provide a brief overview of the  
 8 current SEC rules for investment manager internal cross  
 9 trades and the obstacles they impose on the industry?

10 Nora, are you there? You might be still muted.

11 MS. JORDAN: Sorry about that. Yes, before we  
 12 talk about registered investment companies, which is our  
 13 focus today, I thought it would be worth talking about what  
 14 happens when an adviser wants to cross institutional  
 15 clients, they want to cross a hedge fund with a separate  
 16 account or an institutional client. And when that happens,  
 17 there's a body of law that says basically four things have  
 18 to happen. One, the adviser has to make sure that it's  
 19 consistent with its fiduciary duty to do the trade. Two,  
 20 they have to make sure there's best execution. Three, they  
 21 have to make sure that the adviser is not getting any kind  
 22 of fee in connection with the cross. They can get their  
 23 management fee but nothing extra for doing the cross. And  
 24 four, if they are an affiliate, then they have to get  
 25 consent from the client. And we're not going to talk about

1 that today. We're not talking about any kind of trades  
 2 involving affiliates of the adviser.

3 And there are a variety of ways that institutional  
 4 clients comply with these requirements, how they get best  
 5 execution. And two of the ways are ways Rick talked about.  
 6 One, they get an independent pricing service to help them  
 7 with the price. Or, two, they go to an electronic trading  
 8 network that allows for some kind of safeguards to make sure  
 9 the price is safe.

10 Now, the problem is that all works for  
 11 institutional requirements. All those requirements have to  
 12 be met with respect to registered investment companies. The  
 13 Advisers Act still applies. So they have to get best  
 14 execution, it has to be consistent with fiduciary duty and  
 15 the like. But now there's a whole new body of law, the '40  
 16 Act, the Investment Company Act of 1940, which applies to  
 17 trades involving registered investment companies.

18 As a starting point, the Investment Company Act  
 19 has this provision 17a, which says you're not allowed to  
 20 cross trades with registered investment companies. Now, the  
 21 SEC put forth Rule 17a-7, in an attempt to be helpful on  
 22 this, and it has been somewhat helpful, that does allow  
 23 cross trades when you have a registered investment company.  
 24 But it has certain requirements that don't work very well  
 25 for fixed income securities. They work pretty well for

1 equity.

2 The problem when you have a fixed income security

3 is that Rule 17a-7 has two requirements in particular that

4 are a problem. One, it says that no brokerage commission

5 can be paid, no other remuneration can be paid, except for

6 "customary transfer fees." There's no wording on what that

7 means. So if it's not a fee being charged by a transfer

8 agent, it's a little unclear whether you can charge it. So

9 that means that if the adviser calls the custodian and says

10 I'd like you to move security one from client A to client B,

11 that custodian is going to charge something. That's not

12 clear that's allowed. So most people won't do that trade

13 because it's not clear it's allowed.

14 Second, you can't go to an electronic trading

15 network because they're not going to do a cross trade for

16 free either. Even though it's seemingly quite small as

17 compared to a brokerage fee, it's not clear it's allowed.

18 So those two requirements create an issue in terms

19 of the customary transfer fee. But the second kind of big

20 issue under 17a-7 is one that Rick mentioned, in that the

21 rule says that the adviser has to use the average of the

22 highest current independent bid and lowest current

23 independent offer, and they have to determine those based on

24 reasonable inquiry.

25 And there is some wording on what reasonable

1 inquiry means. About 30 years ago in the context of

2 municipal securities, there was a no-action letter, where

3 the SEC said, well, I think reasonable inquiry means you

4 need to get three independent pricing services to give you a

5 price, or you need to get three independent bids, or you can

6 do a combination, but you've got to have three. And that

7 was in the context, again, of municipal securities. About

8 maybe three years after that, the SEC actually issued a new

9 no-action letter that said, okay, if it's an independent

10 pricing service, you only need one independent pricing

11 service. So that was all great.

12 The problem is, it's all in the context of

13 municipal securities. And so what we're left with when

14 we're trying to have a registered investment company cross a

15 fixed income security, it's almost impossible to do because

16 of these interpretations, and it's a highly regulated area

17 and advisers are not willing to jump to conclusions about

18 what these interpretations are. So we need some guidance

19 from the SEC on how we can do these cross trades when

20 registered investment companies are involved.

21 MR. McVEY: Great. Thank you, Nora.

22 And Lance, maybe I can turn to you to discuss how

23 you and your colleagues at Wellington think about the actual

24 costs as well as opportunity costs incurred by your fund

25 investors due to the inability to conduct internal cross

1 trades today.

2 MR. DIAL: Sure, happy to go into that. Just a

3 quick sound check and just make sure I can be heard before I

4 go into a brilliant monologue that gets lost forever.

5 MR. McVEY: It sounds loud and clear.

6 MR. DIAL: Perfect. So first off, I'll just agree

7 with the general sentiment that the revisions proposed here

8 to 17a-7 we believe will increase liquidity and reduce

9 transaction costs for our clients.

10 Even though we're dealing with the 1940 Act

11 specifically, we at Wellington, as many other investment

12 advisers, will apply common cross trading procedures for all

13 of our clients. So we at this point hold all our clients'

14 accounts to the 17a-7 standards. So loosening these will

15 allow us to apply the cross trading standards to invoke our

16 investment company accounts and our institutional accounts.

17 And so that's why this is especially important.

18 As far as actually implementing this and thinking

19 about the costs, first off, I will say that we can do cross

20 trades, as Nora mentioned, but it is very difficult for all

21 the reasons that were discussed.

22 For example, broker quotes can be hard to come by.

23 Sometimes we'll have lack of time to get the broker quotes

24 that we need when executing the order. Other times, the

25 brokers will not have their own time to commit to doing what

1 they would view as a pricing exercise. We currently use

2 them to trade securities and give us price indications on

3 securities that we are looking to transact with them, and

4 we've actually had them come back and say, hey, do you want

5 us to spend time on this, this pricing exercise over here,

6 or actually on working the order that you're trying to do on

7 this other side? So there's a limited amount of time they

8 can use for these purposes.

9 Other times, we see one-sided markets where

10 there's lots of bids, lots of offers. And then other times,

11 there's just a general reticence to commit balance sheet on

12 a basis where they don't know where it's going to end up.

13 And finally, we also see volume issues.

14 Sometimes, it's a cross trade where we have a liquidation of

15 a client account and we're trying to cross over 100 CUSIPs

16 at once. And that is just untenable to try and get three

17 broker quotes on each side for all 100 CUSIPs.

18 So this overlay of having us go to get the broker

19 quotes really does impede our ability to use crosses. And

20 there's three sorts of costs that I think our clients incur.

21 There's the cost in spreads, there's a market impact cost,

22 and then there's a cost in opportunity cost.

23 With respect to spreads, when you cross, you cross

24 the securities at a mid-price, as opposed to a bid and an

25 offer. And based on analysis we did back in February before

1 the world changed, we estimated that that cost savings  
2 amongst our clients would have represented over the prior  
3 year anywhere, depending on the assumptions you make,  
4 between \$1.4- to \$3.2 million in bid-ask spreads that our  
5 clients would not have to pay.

6 The market events in March exacerbated that, as we  
7 saw spreads blow out to about three times the normal  
8 volumes, volumes up 55 percent, and we saw many times when  
9 we were in the market on both sides as clients were moving  
10 and repositioning their portfolios in response to the market  
11 events. There, our conservative estimate from our trading  
12 desk is that the -- the cost savings could have been more  
13 than \$10-, more than \$15 million in trading spreads that we  
14 could have recaptured for clients, were we able to cross in  
15 an efficient manner.

16 Another source of costs that we experience now is  
17 market impact. We are a large asset manager and we tend to  
18 move in large blocks. And large blocks tend to move  
19 markets. If we have ready buyers and sellers in the size  
20 within Wellington, we can capture those trades at an  
21 appropriate price without being subject to that market loss.  
22 So you have an ability there.

23 Finally, there's opportunity costs. There's two  
24 types of opportunity costs that we deal with. One is the  
25 timing of liquidity. If we're able to cross when we have

1 ready buyers and sellers within our firm, we have immediate  
2 access to that liquidity and that means we can quickly  
3 capture the alpha that our portfolio managers are intending  
4 to use. Also, there's the larger opportunity cost in the  
5 sense that sometimes when we sell a security that we're  
6 trying to buy on the other end, we lose that to the market,  
7 and we don't get it back. And that's a cost because our  
8 analysts spend a great deal of time researching all of the  
9 names that our clients are invested in and they have  
10 specifically picked certain issuers, tenors or other  
11 specific securities to match the risk profile we're trying  
12 to achieve. And when we lose a name and are unable to  
13 replace it, we have to do that research again and we end up  
14 giving our clients what we believe to be a suboptimal  
15 portfolio, as we give them a silver medal, if you will.

16 So those are the costs that we have. And as far  
17 as the fees, that is also a challenge. We have been able to  
18 use broker-assisted crosses to help our clients cross and  
19 meet each other in the market. Because it is an operational  
20 challenge to settle the trades when you are dealing with  
21 multiple clients with different custodians. And so it's  
22 only a matter of time until that becomes a service that we  
23 have to pay for. And so getting that second element of the  
24 customary transfer fee to include a nominal charge from  
25 brokers or crossing networks is very important to the future

1 of the crossing platforms.

2 So with that, I'll pause, and we'll continue on.

3 MR. McVEY: Thanks, Lance.

4 Ed, the next question for you is following on on  
5 the prior panel discussion on advancements in pricing  
6 services. And the subcommittee spent an extensive amount of  
7 time with ensuring safeguards for both clients in a cross  
8 trade and the dependence on data services that are now  
9 available that were not there when the guidance of three  
10 dealer indicative quotes came into effect.

11 I was hoping you could describe in your own  
12 thoughts how the pricing services at IHS Markit have come  
13 along in the last seven to 10 years for independent pricing  
14 and what inputs are available to you to determine those  
15 prices.

16 MR. CHIDSEY: Sure. Thanks, Rick.

17 So we've definitely come a long way. I think as  
18 you look at the volume of data available to us and other  
19 pricing providers it has rapidly expanded over the past  
20 decade. And when you look at that, combined with the  
21 technology that's now available, it enables a wide range of  
22 high-quality prices be delivered on an intraday basis.

23 This combination of data, technology and people  
24 allow us to deliver prices today on more than two and a half  
25 million bonds multiple times throughout the day. And that

1 covers the corporate and sovereign universe, the municipal  
2 universe and the securitized bond universe as well.

3 In terms of data inputs, we use trade prices,  
4 obviously, where available, through sources like TRACE and  
5 EMMA. Trade prices obviously are a critical input but,  
6 without getting into the details, the prices do need to be  
7 vetted through robust logic to include, exclude and, in some  
8 cases, demerit trades based on a variety of factors.

9 So for us, you know, augmenting these trade prices  
10 with the broad access that we have to bond quotes, sourced  
11 directly from both sell side and buy side firms and hundreds  
12 of firms across the globe, is a critical input to us. So,  
13 as an example, on a daily basis, we parse approximately 1.4  
14 million quote messages in realtime. That obviously varies  
15 day to day and month to month. But on average, you know,  
16 1.4 to 1.5 messages. There's redundancy in that number, so  
17 this really equates to roughly 260,000 messages or unique  
18 messages and includes 4.8 million unique prices on a daily  
19 basis. This is across asset classes, but the vast majority  
20 of those 4.8 million relate to corporate and sovereign  
21 bonds, where we see about 3.9 million unique prices. And  
22 that covers, you know, roughly 50,000 bonds each day, or  
23 unique bonds.

24 So what we then do is we stream prices on this  
25 universe throughout the day. And then we use this data to

1 build curves and evaluate a much broader universe. You  
2 know, corporate and sovereigns alone, that's about 200,000  
3 bonds. So some of these have far fewer than three dealer  
4 quotes, some have many more. But ultimately, our objective  
5 is that the price for any bond that we put out represents  
6 its fair market value at that point in time.

7 And one final point to note is on transparency.  
8 And I think this builds on some of the comments and  
9 discussions that occurred earlier. I think Sonali from Bank  
10 of America talking about sort of disclosures related to  
11 inputs on methodologies. We don't simply provide a price;  
12 we provide a tremendous amount of transparency behind the  
13 price. It highlights what data sources were used, what  
14 pricing methodologies were used for each and every bond. So  
15 there's a lot of information that customers can use. And it  
16 gives them a high degree of confidence in the quality of  
17 prices that we provide.

18 MR. McVEY: Great, thank you.

19 And Brian, from the dealer's perspective, how do  
20 you think about investor cross trades, both in their current  
21 form, as well as potential new models like the ones  
22 described in the recommendation?

23 MR. BRENNAN: Thanks, Rick. Thanks for having me  
24 on today's panel.

25 You know, cross trades are a part of the business

1 But at times, I think Lance talked about it a  
2 little bit, that the asset manager is not just crossing one  
3 security. You know, that asset manager is looking to cross  
4 a number of securities, a list of securities. And this  
5 takes a lot of time away from the trading desk. Not all  
6 trading desks are built the same. Some trading desks may  
7 have a certain person that tries to execute these trades.  
8 But at smaller regional desks such as KeyBanc, you know,  
9 this can take time, and time away from other, you know, more  
10 lucrative, more -- of processing, you know, the normal flow  
11 and trading activity that we see, and can constrain the desk  
12 a little bit.

13 So, you know, we've always viewed the crossing  
14 trade at KeyBanc Capital Markets, at our dealer, as an  
15 accommodation. We take it seriously.

16 But in regards to the advancements and the rule,  
17 certain -- the rule is somewhat antiquated in a way. There  
18 have been such positive market changes around some of the  
19 things that have led to better liquidity, more transparency,  
20 enhanced better price executions across all types of  
21 securities, whether it's investment-grade credit, high  
22 yield, structured products, munis. The amount of data in  
23 the fixed income markets today can lead to, you know, I  
24 think, better price execution. We've seen that.  
25 Everybody's talked about it.

1 that the dealer, you know, provides for an accommodation  
2 certainly to all asset managers. When they're, you know,  
3 doing a cross trade, they're, you know, changing principal  
4 ownership of the security. That's very important for a  
5 number of reasons. But at the end of the day, you know,  
6 these asset managers, you know, feel that that security has  
7 value for, you know, whatever reason for some of their other  
8 funds. Like Lance was saying, you know, maybe it's the  
9 credit or the individual company or the rating or the  
10 structural aspects of the certain security.

11 So the asset manager will, you know, attempt to  
12 try to cross these trades in today's market through the  
13 dealer community. And the dealer community takes these  
14 trades very seriously. You know, for us at KeyBanc Capital  
15 Markets, you know, we have a checklist that we need to  
16 establish, number one, that there is principal ownership  
17 change. You know, this is done through the use of  
18 subaccounts. That the actual transaction price, the price  
19 selected, is set by the trader, not by a salesperson or not  
20 by the asset manager but the trader himself. And that  
21 trader needs to stand up for that price and be willing to  
22 transact at that level. And third that the trade gets  
23 posted, and it gets posted to, you know, the regulatory  
24 reporting vehicles, TRACE and EMMA. So those are important  
25 to the dealer community.

1 Between the regulatory reporting systems, TRACE  
2 and EMMA, you know, Ed was describing what they go through  
3 at IHS Markit. It's exceptional, you know, what they do in  
4 regards to demonstrating price and accuracy. IDC, ICE, you  
5 know, BVAL, CP Plus from, you know, market access, Rick, JP  
6 Morgan has a pricing service. So there's a plethora.  
7 There's a number of pricing services.

8 Yet on top of that, you know, the regulatory  
9 report engine, the third party pricing service, data from e-  
10 trading platforms, you know, these services are good and  
11 they can provide certainly an in-the-ballpark kind of  
12 execution context.

13 So the pricing information is certainly, you know,  
14 at the fingertips of the asset managers, no question. The  
15 regulatory data and third party data is there. The depth of  
16 the market is a question I would bring into the discussion  
17 at some point for the regulators to decide. Because an odd  
18 lot certainly trades a little different than a round lot.  
19 Maybe more analysis around that is certainly kind of  
20 necessary.

21 And then the other mechanism you talked about,  
22 Rick, was, you know, an RFQ process through, you know, the  
23 e-trading platforms. An asset manager can simply submit a  
24 request for bid. And then he can also be the best bid. And  
25 that's another way to demonstrate.

1 The only thing I think, Rick, that comes to my  
2 mind and that is a concern is that, you know, the dealers  
3 report trades. The market values transparency and, you  
4 know, every trade matters. And, you know, when you change  
5 principal ownership of a trade, that is a trade, and it  
6 needs to be reported, and there need to be some guard rails  
7 around, you know, the asset managers if modifications to how  
8 the rule is implemented.

9 So those are kind of my take on this rule and  
10 moving forward to modifications on the rule.

11 MR. McVEY: Great. Thanks, Brian. And that last  
12 point was one that was seriously considered by the  
13 subcommittee and led to the recommendation that all internal  
14 cross trades do come with the requirement for regulatory  
15 trade reporting, so that they're visible not just by the  
16 regulators but by all market participants as a change in  
17 ownership for that asset.

18 And Nora, maybe I can turn back to you. You and  
19 your colleagues at Davis Polk cover many and advise many  
20 investment managers. I wonder if you could provide a  
21 summary of their viewpoints on rule modernization, and  
22 especially comment on some of the safeguards that we put  
23 into the recommendation to ensure a fair price for both  
24 clients involved in the trade.

25 MS. JORDAN: Sure. I think this will definitely

1 internal cross trades, boards will ask about them. But  
2 that's a process that the SEC frequently uses, and advisers  
3 use and will be comfortable with.

4 On only allowing level one and level two assets,  
5 probably they'd prefer to have flexibility, but I don't  
6 think they're going to have a problem with it. I don't see  
7 them crossing very illiquid securities without significant  
8 safeguards. They -- our clients worry very much about  
9 making sure they have a record that prices are fair to both  
10 sides. And if it's a level three security, they would have  
11 a hard time getting that record. And so I don't think  
12 they're going to have a problem with that either.

13 On the public disclosure of the price, I don't  
14 think so. I don't think they're going to have a problem  
15 with that. I think it will be important to see how that  
16 gets implemented. Of course, advisers are not subject to  
17 TRACE, they're not FINRA members. So if it was going to  
18 require an adviser to hook up to some kind of TRACE system  
19 that they're not already hooked up to, maybe a big adviser  
20 won't mind that but a small adviser, it might be an issue.  
21 I have a feeling that that's not what is going to happen.  
22 The SEC will look at this and figure, well, the broker can  
23 report to TRACE or some third party can report to TRACE, or  
24 there could be a mechanism to publicly report the trade some  
25 other way. And so in concept, I think even that issue the

1 be welcomed by all advisers. I think, you know, in  
2 connection with this exercise, we've actually talked to a  
3 number of large advisers and they definitely support it.  
4 But over the years, cross trades is something I get calls  
5 about. And so I know it will be well received in concept if  
6 they're getting more relief.

7 I think the independent pricing service has  
8 already been approved for municipal securities and they're  
9 used to that. So I think that will definitely be welcomed  
10 for non-munis. The idea of using an electronic trading  
11 network I know will be popular, again because they can do  
12 that for nonregistered investment companies.

13 And for firms like Wellington, and there are other  
14 advisers like this, too, who take the most restrictive rules  
15 that apply and apply them across the board, it's going to  
16 give more flexibility for all their clients, not just for  
17 registered funds. And for the ones who do have different  
18 rules, it will put them on a level playing field.

19 On the safeguards or what we call conditions, I  
20 think most of them will be well received. I don't know  
21 about all of them. I mean, the fact that you have to go to  
22 the board, not an issue. That will be totally streamlined,  
23 they are very used to that. They have quarterly meetings  
24 with their boards. They always report affiliated  
25 transactions. Boards ask about them. If there are lots of

1 adviser will not have a problem with; it will just be the  
2 detail of how it's implemented. So I think advisers will be  
3 in favor of this overall.

4 MR. McVEY: Great. Thanks, Nora.

5 And Lance, maybe you can follow on that from your  
6 perspective, to comment on the safeguards, and then are they  
7 practical solutions for an investment manager like  
8 Wellington to implement? And do you think that we're on the  
9 right track in terms of providing safeguards that work for  
10 the benefit of both clients involved in the trade?

11 MR. DIAL: Sure. In sum, I think we're entirely  
12 on track. If you go back to the concerns that led to 17a  
13 and the Investment Company Act and the reason cross trading  
14 is an issue, is because cross trading has built in conflicts  
15 of interest, especially where an adviser could direct one  
16 client to purchase from someone else and another client to  
17 buy at a price they determine. The conflicts of interest  
18 are just inherent; that should be prohibited. So one of the  
19 big conflicts is making up the price.

20 We resolved that here both in existing 17a-7 and  
21 in this recommendation by requiring that price to be  
22 independent. That's something that we -- we use independent  
23 pricing vendors today for many things, so that is a  
24 recommendation we can certainly take.

25 We are also providing some standards for oversight

1 of pricing vendors and making sure that they are  
2 independent. You know, saying that advisers should back  
3 test those pricing vendors. It's not much different than  
4 what we've seen in the recent valuation proposal that these  
5 pricing vendors and the output that they give is good and a  
6 reasonable reflection of market prices.

7 Then we talk about, okay, is the cross trade  
8 itself, assuming you have a good price that is independent  
9 and eliminate that conflict, how do we know that the cross  
10 trade itself is good for both clients? Therein comes the  
11 best execution analysis that we're requiring. We're saying  
12 that the cross trade shouldn't just be blindly taking the  
13 vendor price but rather evaluated against all other options  
14 that a client should have and determine that that is the  
15 best execution for both the buying and the selling funds.  
16 So we address that conflict as well.

17 And then finally, you have the generic oversight  
18 issues. Is the trade itself appropriate for the client? Or  
19 is this element of investment adviser overreaching? That is  
20 a challenge. And, frankly, this is an area that's not that  
21 well developed within 17a-7 as it exists today. So how do  
22 we know that the buying fund is purchasing for reasons that  
23 are associated with its investment program and not just  
24 because the adviser is misusing that relationship to have  
25 the buying fund -- park that security with the buying fund

1 for a time.

2 And I think some of the recommendations here go  
3 directly to those concerns. We have heightened oversight  
4 and surveillance. We have suggestions that there will be  
5 reviews for unusual trades. And these reports will be  
6 included in the reports that go to fund boards. We're  
7 having documentation of the rationale for trades.

8 But also importantly, I think the idea of public  
9 reporting through TRACE or some similar mechanism gives an  
10 opportunity for some realtime surveillance, both just  
11 generally in the market and with the SEC as the primary  
12 regulator to see if anything is amiss there. And I think  
13 having that layer of transparency on these trades will lead  
14 itself to ensure that there isn't this investment adviser  
15 overreaching. And so I think we'll actually end up in a  
16 world where we're able to cross more at better prices and  
17 better protecting the interests of fund shareholders. So I  
18 do feel very strongly this recommendation meets the goals.

19 MR. McVEY: Great. Thank you, Lance.

20 And Ed, let me turn it back to you and one of the  
21 topics that the subcommittee spent considerable time on is  
22 whether the pricing services are accurate enough down to the  
23 individual bond level, as opposed to portfolio trading  
24 levels or even NAV levels, end of day. And maybe you can  
25 describe your thoughts and experience around the accuracy of

1 these services and even reflect on the recent months when  
2 volatility has been elevated and what you've been able to do  
3 to ensure the accuracy at the individual bond level.

4 MR. CHIDSEY: Yeah, so I think I guess generally,  
5 you know, back to the earlier questions, when you look at  
6 the range of price inputs that we source combined with the  
7 technology we used to qualify the data, it allows us to  
8 flexibly calibrate parameters as and when needed, and I'll  
9 speak to that in a little bit, and then manage our  
10 waterfalls, it gives us high confidence in the overall  
11 process that we use and overall data that we have to price  
12 bonds.

13 And again, it's not just data and technology but  
14 the evaluator expertise that's embedded as well, and that  
15 comes into play, you know, importantly through times of  
16 volatility as well.

17 And as a final check, we continually back test our  
18 prices against available traded prices. So we run monthly  
19 trade studies where we compare our prices to both the last  
20 trade as well as the next trade. And this demonstrates that  
21 our prices track very closely to the traded market.

22 And then, in addition to NAV, you know, our prices  
23 are used throughout the ecosystem, whether it's NAV, rick,  
24 portfolio management processes. And continually tested,  
25 challenged, reviewed by hundreds of firms on an ongoing

1 basis, you know, throughout the day. So it gives us a high  
2 degree of confidence, you know, again, similar to other  
3 vendors, that what we've created, it's specifically designed  
4 to produce a price that reflects fair market value, as I  
5 said earlier, and really, you know, utilizing a wide range  
6 of inputs to be able to defend that.

7 As it relates to, you know, the recent volatility,  
8 you know, certainly those first couple of days of the crisis  
9 in particular were challenging, I think, for all of us on  
10 many levels. As a pricing vendor, we certainly saw volume  
11 and volatility that we hadn't seen in many years, if ever,  
12 so specifically from a fixed income perspective. But what  
13 we were able to do through, again, through the process that  
14 we had set up, the volume of data that we see, the  
15 parameters that we have, the guard rails we have in place,  
16 and the technology that we use, is to calibrate, you know,  
17 some of those parameters to ensure that we were reacting to  
18 what we were seeing.

19 So, you know, looking at things like how we bucket  
20 and cohort different bonds to price the broader universe,  
21 and recognizing that things are correlated on a much more  
22 general basis when things are moving together in that  
23 manner, so we are able to create cohorts that reflect that  
24 level of correlation, we're able to widen the sort of scope  
25 of the parameters and the gates that we put up in terms of

1 prices coming into the process. Where, you know, on a  
 2 typical day, if you saw a price that looks wildly off  
 3 market, you may consider it an off-market price. But in  
 4 times of volatility, things that otherwise seem to be off  
 5 market are, in fact, on -- you know, within the market or at  
 6 the market. And being able to calculate and change those  
 7 parameters quickly so that we take in a wider array of data  
 8 so that we can react to that, utilize it in our pricing  
 9 processes, and then calibrate it throughout the day. And  
 10 especially during those days of the crisis, the early days  
 11 of the crisis, you know, modify our parameters.

12 And I think what we saw is there were definitely  
 13 challenges in those first couple of days. But, you know, as  
 14 the days went on, especially even toward the second half of  
 15 that first week when things really went crazy, we were able  
 16 to really bring our prices and our processes to a point  
 17 where we felt a high degree of confidence in the prices and  
 18 the quality of prices that we were putting out. And we were  
 19 confident that they were reflecting, you know, the traded  
 20 market and fair market value in general.

21 MR. McVEY: Great. Thank you. And I think on top  
 22 of that, it was important to the subcommittee to ensure that  
 23 the asset managers still took responsibility for the  
 24 crossing price that they were utilizing for internal  
 25 crosses. So the data that you have available is

1 for any dealer. Where things trade demonstrates kind of the  
 2 momentum of the market and many other things that the  
 3 trading desks need to be profitable. The competitiveness of  
 4 the market has only been -- has advanced significantly. You  
 5 have the bulge dealers and then you have the regional  
 6 players such as myself and other -- many regional players  
 7 that provide liquidity. Not only to the Wellingtons and  
 8 PIMCOs and the Blackrocks and the State Streets, but other  
 9 asset managers. And they might not have the same resources  
 10 as Lance and some of the others. So the tape is very  
 11 important.

12 And that's why when I said if the guard rails that  
 13 are put in place for asset managers at the end of the day  
 14 through the modification of this rule require them to go to  
 15 the tape and post everything, I think most dealers would be  
 16 in favor of some modification to the rule.

17 MR. McVEY: Great. Thanks, Brian.

18 And before we start the general Q&A, I would just  
 19 like to offer an opportunity to any of the panelists to make  
 20 any other points that you haven't been able to make or you  
 21 think are relevant, or any other comments.

22 (No response.)

23 MR. McVEY: Okay, good.

24 Well, as we open up Q&A, I wanted to give Sonali  
 25 Theisen a chance to share her perspective from the large

1 dramatically different than it would have been 10 or 15  
 2 years ago. And that, combined with the investment manager  
 3 responsibility around best ex we thought was the right  
 4 safeguard around these trades.

5 MR. CHIDSEY: Absolutely.

6 MR. McVEY: Brian, maybe you can talk a little bit  
 7 more about the dealer's perspective on trade reporting in  
 8 particular and how important it is for you to be able to see  
 9 risk transfer taking place in any way, including internal  
 10 crosses, so that you can measure market turnover in the  
 11 market overall, or specific issuers or securities, and also  
 12 to know where risk transfer is taking place, even if it  
 13 comes from internal crosses.

14 MR. BRENNAN: Thank you, Rick. First, I would  
 15 just like to follow with what Ed was saying just about the  
 16 pricing services and how much they have improved. Our focus  
 17 products have been investment-grade credit, government  
 18 agencies, municipals, as well as the more liquid structured  
 19 products. And we rely on them heavily to demonstrate that  
 20 end-of-the-month pricing and, you know, we're in line with  
 21 where the market is. And we've seen vast improvements there  
 22 in the pricing services, and we rely on them, especially at  
 23 month end, to determine where we are. So I would say very  
 24 good information there and very reliable.

25 In regards to post trade, that's the holy grail

1 dealer community. Sonali was very actively involved in the  
 2 discussion and she and her colleagues were extremely  
 3 thoughtful about the suggestions that were being made and  
 4 ultimately came to support the recommendation. So, Sonali,  
 5 if you wouldn't mind, maybe you could kick off.

6 MS. THEISEN: Sure, I'd be happy to. Thank you,  
 7 Rick, and thank you to all of the panelists. I think that  
 8 was a really important discussion.

9 So, yes, as Rick mentioned, we deliberated this  
 10 recommendation extensively and I think we got to a much  
 11 better point with it as a result, which I'm pleased to see.  
 12 You know, I think the topic itself is a very important one,  
 13 of course, to our clients. And we want to ensure that there  
 14 is a mechanism by which clients can cross trades effectively  
 15 and efficiently.

16 So the discussion, I don't think, within the  
 17 subcommittee was ever about whether, you know, this made  
 18 sense sort of conceptually. It was more about what are the  
 19 appropriate safeguards and deterrents to bad behavior, et  
 20 cetera. I do think that we've gotten to, as I said, the  
 21 right spot.

22 As I mentioned in the comments on the prior panel,  
 23 you know, I don't believe that it's appropriate to solely  
 24 rely on a third party pricing service at the bond level to  
 25 cross bonds. You know, I gave some data in the last panel

1 around, you know, on a bond-by-bond level, how there may be  
2 considerable differences, particularly in certain market  
3 conditions and in certain -- you know, as you go down the  
4 liquidity spectrum. But that said, I think that the current  
5 recommendation gets us to a place where again we've ensured  
6 that investors would need to sort of validate any third  
7 party pricing with other inputs. I think that's an  
8 important aspect to this. And likewise, you know, we would  
9 ensure that there are the right balances of not being overly  
10 reliant on one single input and not -- and also with respect  
11 to not having level three assets, like bonds that are  
12 inherently less liquid would not be in the recommendation.

13 So I think those were important modifications that  
14 we made. So thank you, Rick, for the opportunity to work on  
15 this together and come to something that, you know, I think  
16 makes a lot more sense.

17 I think the last point that I would make from the  
18 dealer community is, you know, the role of quotes, et  
19 cetera, is one -- again, there was a panel on this before  
20 this -- the role of quotes in a quote-driven market, as  
21 opposed to firm liquidity orders is something that I think,  
22 you know, is always a tricky one to assess and evaluate.  
23 And I am pleased that we're asking again for the investors  
24 to have some assessment of how firm or how reliable quotes  
25 can be. Again, whether they're relied upon directly or

1 indirectly as a feed into pricing services, we do have to  
2 bear in mind that for, you know, the corporate bond market,  
3 that again what we have outside of transactions are quotes  
4 with varying degrees of firmness.

5 But like I said, I do think the safeguards that  
6 we've included in the final draft of the recommendation get  
7 us much further along to sort of acknowledging these nuances  
8 and these challenges that the investors would need to  
9 consider. So thank you.

10 MR. HEANEY: Great, thanks, Sonali.

11 And Michael, with that, I will turn it back to you  
12 to moderate the open Q&A.

13 MR. HEANEY: Thank you, Rick. That was a great  
14 panel. I appreciate your moderating that and for all the  
15 participation of the panelists.

16 At this moment, I don't have people queued up for  
17 questions. I'll give it another minute or two. And I don't  
18 have people, any of the FIMSAC members, queued up for their  
19 viewpoints. So while giving them another minute, I will go  
20 to the SEC team and see if there are any questions or  
21 comments by either Chairman Clayton, the commissioners,  
22 Brett or any of the other SEC members.

23 MR. REDFEARN: Hey, Michael, this is Brett. I  
24 will try a quick one. I am just wondering if anybody can  
25 offer me your suggestions about, you know, who are the

1 parties out there who are likely to oppose this in some way?  
2 You know, it seems like there is a lot of support from the  
3 panelists and the folks here. But I mean, what other things  
4 should we be concerned about if you had to sort of take the  
5 other side of this? What are the issues we can expect to  
6 come across in looking more closely at this recommendation?

7 MS. JORDAN: This is Nora. I don't know who would  
8 oppose it, unless it is somebody who thinks there is just  
9 too much of a conflict of interest that an adviser wouldn't  
10 -- it would favor one fund over another. But I would be  
11 surprised if anybody opposed it.

12 MR. REDFEARN: We don't get too many where there's  
13 not at least somebody out there.

14 (Laughter.)

15 MS. JORDAN: Well, that's true. The consumer  
16 advocates who -- but there are a lot of benefits to  
17 consumers in this, in terms of lower prices.

18 MR. DIAL: This is Lance. I do think that there  
19 are a lot of benefits for shareholders. I think to the  
20 extent there is opposition, I don't know if you'd call it  
21 opposition as much as just ensuring that investors are  
22 protected. I think it's an area where people want to move  
23 carefully to make sure we don't open the door too far.  
24 Because there have been areas of abuse in cross trading  
25 historically. And so the committee, the subcommittee and

1 the panelists here and the people we worked with spent a lot  
2 of time to try and address those prior issues. And we think  
3 the balance of recommendations here with the controls go a  
4 long way to address those concerns and ensure that we don't  
5 see this recommendation create new misconduct.

6 MS. JORDAN: And I would add that the abuses that  
7 have happened in the past I believe are primarily in the  
8 area of a cross involving an adviser affiliate. So maybe  
9 the adviser has a lot of money in one fund and it crosses  
10 with another fund. And we're not -- this proposal doesn't  
11 go to that. It would have to be a non-control affiliate.

12 MR. REDFEARN: Thank you.

13 MR. HEANEY: Let me go to Larry Tabb, please.

14 MR. TABB: Wrong button. I think we had a really  
15 long discussion about this. I think the big issue that we  
16 had in discussing this was just ensuring that the less  
17 liquid bonds were priced effectively. I would agree with  
18 Nora and Lance that the issue has to do with preferential  
19 treatment of how the -- the pricing of the cross. And I  
20 think we've done a pretty good job at, you know, working to  
21 a solution that most people were comfortable with. So I'm  
22 fully behind this. I think it's good for investors.

23 People who may be not happy with this would be  
24 some of the dealers who get cut out of the transaction  
25 chain. But I think, net net, I think it's good for

1 investors, it's good for the market as long as we can be  
 2 confident that the price that we're matching at is fair to  
 3 all.  
 4 MR. HEANEY: Thank you, Larry.  
 5 Rick, at this point, I've got no other questions  
 6 nor comments lined up. And so for the greater FIMSAC --  
 7 Rick, is there anything else you'd like to say before I open  
 8 it up for a motion?  
 9 MR. McVEY: No, all said here.  
 10 MR. HEANEY: Okay, so I would like to entertain a  
 11 motion to vote on the recommendation. If I could open it  
 12 up, please.  
 13 MS. THEISEN: So moved.  
 14 PARTICIPANTS: Second.  
 15 MR. HEANEY: I am going to go around and do it  
 16 just as a roll call, which is obviously the most effective  
 17 way. So it will be alphabetical. And you obviously just  
 18 please vote for or vote against or abstain.  
 19 Dan Allen.  
 20 MR. ALLEN: I'm for.  
 21 MR. HEANEY: Thank you. Giedre Ball.  
 22 MS. BALL: I'm for.  
 23 MR. HEANEY: Horace Carter.  
 24 MR. CARTER: I'm for.  
 25 MR. HEANEY: Gilbert.

1 MR. GARCIA: For.  
 2 MR. HEANEY: Larry Harris.  
 3 MR. HARRIS: I'm for.  
 4 MR. HEANEY: Ananth.  
 5 MR. MADHAVAN: For.  
 6 MR. HEANEY: Thank you. Lynn.  
 7 MS. MARTIN: For.  
 8 MR. HEANEY: Amy.  
 9 MS. McGARRITY: For.  
 10 MR. HEANEY: Rick McVey.  
 11 MR. McVEY: For.  
 12 MR. HEANEY: Lee Olesky.  
 13 MR. OLESKY: For.  
 14 MR. HEANEY: Suzanne Shank.  
 15 MS. SHANK: For.  
 16 MR. HEANEY: Larry Tabb.  
 17 MR. TABB: I'm for.  
 18 MR. HEANEY: Sonali.  
 19 MS. THEISEN: For.  
 20 MR. HEANEY: Kumar.  
 21 MR. VENKATARAMAN: For.  
 22 MR. HEANEY: Elisse.  
 23 MS. WALTER: For.  
 24 MR. HEANEY: Brad.  
 25 MR. WINGES: For.

1 MR. HEANEY: Mihir.  
 2 MR. WORAH: Approve.  
 3 MR. HEANEY: Thank you, and I do as well, I  
 4 approve.  
 5 So on a unanimous basis, and obviously we had just  
 6 to get the majority, but on a unanimous basis, this  
 7 recommendation has been approved by the committee.  
 8 Rick, thanks again for all your hard work and the  
 9 hard work of the subcommittee to get us to this point.  
 10 So it is -- we're a little early, we're ending  
 11 this session at just prior to 12:25.  
 12 I would ask if the FIMSAC members are fine to  
 13 reconvene at 1:00 instead of 1:15? And it will give us a  
 14 little bit of flexibility in the afternoon schedule, or  
 15 perhaps to end slightly earlier.  
 16 So again, this has been a phenomenal morning, a  
 17 productive session. We'll break for lunch. We'll come back  
 18 at 1:00. And I would ask that all FIMSAC members please  
 19 just stay connected onto the Webex but mute your audio  
 20 during the lunch break. And we will see everybody back here  
 21 at 1:00.  
 22 A big thanks to everybody on the panel again.  
 23 (Whereupon, at 12:23 p.m., a luncheon recess was  
 24 taken.)  
 25 AFTERNOONSESSION

1 MR. HEANEY: Okay, welcome back. It's 1:00 and I  
 2 would like to call the meeting back to order.  
 3 I do just want to remind all participants, to  
 4 manage the discussion in the most effective way, to continue  
 5 to use the email to ask your questions or so I can call on  
 6 you directly for comments and thoughts.  
 7 I think the morning session, despite how tricky  
 8 this may be, the morning session went extremely well. So  
 9 I'd like to thank all the FIMSAC members for their  
 10 cooperation, and again for the people on the SEC for helping  
 11 us along the way.  
 12 RECOMMENDATION CONCERNING ISSUER-PAY CONFLICT  
 13 OF INTEREST IN CREDIT RATINGS  
 14 MR. HEANEY: So to kick off the afternoon session,  
 15 we're going to consider the preliminary recommendation from  
 16 the Credit Rating Subcommittee on issuer-pay conflicts of  
 17 interest. I'll turn it over to Amy McGarrity, chair of the  
 18 subcommittee, to provide an overview of the recommendation.  
 19 Amy.  
 20 MS. McGARRITY: Thank you, Michael.  
 21 Before I begin discussing the recent work of the  
 22 Credit Rating Subcommittee, I want to thank Michael, the SEC  
 23 Staff, the Credit Rating Subcommittee members, and FIMSAC  
 24 members who elected to participate in our subcommittee  
 25 discussions for their continued diligent and thoughtful work

1 on this complex topic.

2 We also want to thank the interested parties who

3 contributed to our research over the past months. We

4 benefitted significantly from their expertise in a variety

5 of areas and we appreciated their insights.

6 You may recall that at our last FIMSAC meeting, we

7 hosted an expert panel discussing various views on the

8 functioning of the ratings agency structure. We also

9 distributed a discussion document which was posted on the

10 FIMSAC's website. This working document was intended to

11 drive discussion and continue exploration of alternate

12 models and concepts to potentially improve the functioning

13 of the ratings agency structure.

14 We received some market feedback on this working

15 document. Written feedback can be found on the FIMSAC

16 website, though I will attempt to broadly characterize it

17 here.

18 Generally speaking, there was concern expressed

19 surrounding commoditization of ratings and the impact to

20 their relevance and usefulness to market participants;

21 concerns surrounding the process and potential delays

22 associated with assigning NRSROs to issuers, in addition to

23 increased costs; and concerns surrounding linking

24 assignments to ratings performance leading to overly

25 conservative ratings. We appreciate the feedback and we

1 also realize there are individuals and organizations which

2 may have intended to comment but have not yet had the

3 opportunity, given the current pandemic. We encourage you

4 to submit your feedback to the FIMSAC comment file at any

5 time.

6 I would like to address another important piece of

7 feedback, one which the subcommittee has explored at length.

8 That is, what is the problem we are trying to solve? We

9 learned through our work as a subcommittee and through some

10 of the panels we hosted at the FIMSAC that there is at least

11 a perception of conflicts of interest within the current

12 credit ratings structure. We heard anecdotal evidence from

13 market participants throughout our study which corroborates

14 this perception.

15 Our research analysis, working documents and now

16 our recommendation, which I will elaborate on momentarily,

17 have focused on ways to mitigate that perception and to

18 ultimately protect investors. This recommendation is the

19 culmination of work of the subcommittee performed over the

20 past months. It leverages ideas that surfaced throughout

21 our research and it attempts to mitigate some of the

22 perceived potential conflicts of interest associated with

23 the current issuer pay model, without being overly

24 prescriptive or recommending structural changes to the

25 current NRSRO selection process.

1 The subcommittee overall encourages the SEC to

2 consider whether enhanced disclosures by NRSROs and issuers

3 could be beneficial, including the types of disclosure

4 indicated in the recommendation before you. I would like to

5 walk you through the main elements of our recommendation.

6 They include increased NRSRO disclosure; enhanced issuer

7 disclosure, including corporate and securitized sectors; as

8 well as a mechanism for bondholders to vote on the issuer-

9 selected NRSROs. The subcommittee believes these three

10 elements work together to mitigate potential conflicts.

11 Thus, we recommend all three in concert. I would like to

12 walk through these three components in more detail.

13 The subcommittee believes additional disclosures

14 will benefit users of credit ratings. More specifically,

15 the SEC should require NRSROs to disclose more in-depth

16 information about their models and how their models may

17 differ by industry. In deriving a methodology or model,

18 there may be qualitative inputs in the application of a

19 model. These inputs should be disclosed by the NRSRO to

20 improve transparency and understanding of the development of

21 model-implied ratings.

22 NRSROs should disclose the credit ratings produced

23 by their model-implied credit ratings and discuss the

24 rationales for any material differences between their model-

25 implied credit rating and their final issued rating. In

1 addition, if an NRSRO does not use a systematic approach

2 which can be captured by a model-implied ratings disclosure,

3 the NRSROs should disclose the information and qualitative

4 inputs considered to derive their ultimate rating to provide

5 context to investors. This information should be disclosed

6 publicly as well as to the SEC.

7 The subcommittee recognizes that NRSROs sometimes

8 have good reasons to deviate from pure quantitative scores.

9 But it also believes that NRSROs should provide more in-

10 depth disclosures of when and how NRSROs' modeling approach

11 may change and why.

12 Since the recommendations surrounding increased

13 NRSRO disclosure is not sector specific, we are recommending

14 it be applied broadly across fixed income markets. However,

15 our recommendation regarding enhanced issuer disclosure is

16 specific to corporate credit and securitized products. We

17 believe based on our research that these are the two areas

18 of the market which will most benefit from enhanced

19 disclosure surrounding NRSRO choice.

20 The subcommittee recognizes that many corporate

21 credit issuers currently institute disclosure practices that

22 may be considered best practices. Further enhancing

23 disclosure of how issuers select credit rating agencies will

24 be beneficial for investors. Such disclosure will provide

25 greater insights into each issuer's process for choosing

1 NRSROs and will also encourage wider adoption of best  
 2 practices. We encourage the SEC to partner with appropriate  
 3 trade groups to develop a set of best practices for choosing  
 4 NRSROs and, once established, to require corporate issuers  
 5 to disclose if and why they deviated from those best  
 6 practices in their annual reports.

7 The subcommittee recognizes that many securitized  
 8 issuers currently institute voluntary NRSRO rotation and  
 9 other best practices. Similar to the recommendation for  
 10 corporate credit issuers, we believe enhancing disclosure on  
 11 how securitized issuers select NRSROs will benefit  
 12 investors. Establishment of a set of best practices and  
 13 subsequent disclosures of deviations from them by issuers  
 14 will improve transparency and potentially add insight into  
 15 potential conflicts. Additionally, issuers should disclose  
 16 any nondisclosed NRSROs that rated the deal to enable the  
 17 deal to gauge potential ratings shopping.

18 The last component of our recommendation provides  
 19 bondholders the ability to provide feedback to the issuer in  
 20 the form of a vote on a ratification of the NRSRO. The  
 21 subcommittee recommends that the SEC explore a ratification  
 22 of issuer-selected NRSROs. Periodically, holders of  
 23 publicly issued bonds should vote to ratify or simply  
 24 confirm confidence in the NRSROs chosen by each issuer. The  
 25 subcommittee believes the risk of censure that these votes

1 would place on credit rating agencies will encourage  
 2 additional discipline to the quality of their work.

3 The subcommittee recognizes that even with the  
 4 implementation of these recommendations, issues remain.  
 5 We've discussed benchmarking considerations wherein some  
 6 investors use benchmarks that require issues rated by  
 7 specific NRSROs or investor guidelines that specifically  
 8 reference NRSROs. We believe these requirements contribute  
 9 to the persistence of NRSRO market concentration.

10 We also discussed that some investors owned bonds  
 11 that strictly meet their guidelines, but which market  
 12 participants know should be, for example, high-yield bonds.  
 13 Thus these bonds trade with wider spreads than other  
 14 investment-grade bonds and expose investors to the risks of  
 15 high-yield bonds despite guidelines that may restrict such  
 16 holdings.

17 Our studies have reinforced our view that this is  
 18 a very complex, far-reaching topic with global  
 19 ramifications. I believe our recommendation hits on  
 20 Chairman Clayton's key tenets that he highlighted this  
 21 morning of improving accountability, transparency and  
 22 competition. The subcommittee recognizes that existing  
 23 statutory, regulatory, or legal constructs may prevent the  
 24 implementation of these recommendations, yet we urge the SEC  
 25 to explore these recommendations further and work to

1 establish the needed legal or regulatory authority.

2 With that, I would like to turn it back to Michael  
 3 for questions and comments.

4 MR. HEANEY: Thank you, Amy. That's a very  
 5 helpful summary. And I would like to thank the subcommittee  
 6 for the wide and large body of work that they have done to  
 7 get to this point on the recommendation.

8 I have no questions logged in yet, but I do have a  
 9 viewpoint, so I will go to that. And please continue to  
 10 email me. But I will turn it to Larry Harris.

11 MR. HARRIS: Thank you, Michael. It turns out  
 12 that Amy covered my point very well, so there is no need to  
 13 hear from me.

14 MR. HEANEY: Okay. Thank you, Larry.  
 15 Others? Questions, comments?

16 Let me turn then to others, as I have. Anyone in  
 17 the SEC team, Chairman Clayton, commissioners or Brett, any  
 18 thoughts or questions?

19 It seems like people are well versed on what this  
 20 recommendation is and how we've gotten here without any  
 21 questions or comments.

22 MS. MCGARRITY: It looks like Brett is trying  
 23 other say something.

24 MR. HEANEY: Okay, Brett.

25 MR. REDFEARN: Hey, Michael. Yeah, it looks like

1 I have two mute buttons, so I only got one of them.

2 So just a quick question on the bondholder vote on  
 3 ratification. I'm just wondering what the thoughts were on  
 4 the somebody regarding, you know, certainly there are going  
 5 to be different bondholders that have different investment  
 6 theses or different ideas about where they would like it to  
 7 be, similar to, you know, people maybe disagreeing with an  
 8 analyst's recommendation on a security. And therefore,  
 9 there could potentially be conflicts there.

10 Can you just elaborate a little bit on your  
 11 thoughts as to how the bondholder ratification will be able  
 12 to be -- how you got to the point that you thought it would  
 13 really be sort of neutral enough to be helpful in the end?

14 MS. MCGARRITY: Yeah, and for this I would like to  
 15 actually call on our colleague, Larry Harris, to help me  
 16 answer this question. But broadly speaking, just to kick it  
 17 off, it's more like the auditor ratification process that  
 18 you have on the equity side. So we felt it was somewhat  
 19 similar to that.

20 But, Larry, I'll kick it over to you, since you  
 21 were the one who brought this to the subcommittee.

22 MR. HARRIS: Thank you. Yeah, I think the auditor  
 23 affirmation is a good starting point for this discussion.  
 24 We know that it doesn't have a whole lot of teeth. But if  
 25 there were ever an auditor who didn't get ratified, that

1 would be a very serious problem, and that would -- that  
2 potential tends to, we suspect, tends to discipline auditors  
3 and also the issuers as well.

4 In the instant case, the notion is this, that by  
5 giving bondholders a formal way to express themselves, which  
6 will typically be after the fact, we create the potential  
7 for a focal point event that could potentially be  
8 embarrassing to credit rating agencies. And in so creating  
9 a system like this, we provide a bit of power to the buy  
10 side bondholders that is intended to balance the power that  
11 the issuers have in choosing the rating agencies.

12 So the purpose here is to simply create a  
13 mechanism where the buy side bondholders -- their needs are  
14 given greater consideration because the credit rating  
15 agencies may fear the potential censure. Now, the question  
16 is, when would we expect this to be exercised? And the  
17 answer is, probably very, very rarely and almost never if  
18 there aren't any problems with the credit rating agencies.

19 But if a set of bondholders set that the credit  
20 rating agency had done poorly on some issue and it probably  
21 came to bite them, then this would be their way of  
22 effectively casting a message. And the threat of casting  
23 that message is designed to ensure or help ensure that it  
24 will never need to be done.

25 MR. HEANEY: Brett, does that answer the question

1 for you?

2 MR. REDFEARN: Thanks.

3 MR. HEANEY: I would just like to -- you know,  
4 when Amy kicked off and said about each tenet of this  
5 recommendation being put in total, this was one of them.  
6 And I think it is a really good one. It gives some measure  
7 of discipline. And to Larry's point, maybe hopefully never  
8 enforced, but a good one to have, nonetheless.

9 So the subcommittee, Brett, really discussed and  
10 debated each one of these on its own, but much more so  
11 together than what kind of the package looked like for  
12 bondholders and for rating agencies.

13 Let me turn to Suzanne Shank, who I know has a  
14 question.

15 MS. SHANK: Yes, thanks. I just had a question  
16 about the process of how you would secure a bondholder vote  
17 on municipal issuances. Generally today, if we are trying  
18 to seek bondholder consent on a change in legal parameters  
19 for an issuer, they are deemed to sign off on those  
20 provisions by, you know, a majority of outstanding holders  
21 purchasing bonds with the new requirements. So there's a  
22 trigger point. And so you don't have the same situation on  
23 the municipal side where, you know, a bondholder is giving  
24 consent for or endorsement of auditors, for example. So  
25 what was the thinking around how to actually effect a

1 bondholder approval on, you know, this point for municipals?

2 MR. HARRIS: I can give it a go.

3 MS. McGARRITY: Go for it, Larry. We've talked  
4 about it, so go for it.

5 MR. HARRIS: First of all, I'd note that the  
6 parallel that you identified is an important distinction  
7 that we should think about. But it actually probably  
8 doesn't apply to the extent that you might have suggested.

9 So we're not talking about any change to a bond  
10 indenture agreement or anything like that. Not talking  
11 about anything to do with the cash flows of the bond or  
12 basically anything at all to do with the bond.

13 And so all it is is a mechanism essentially for  
14 organizing publicity in a formal way that might be viewed as  
15 -- hopefully would be viewed as fair, that would allow the  
16 bondholders to have their interests to weigh more heavily in  
17 the minds of the credit rating agencies than they otherwise  
18 would.

19 Now, as to the actual mechanics, this is something  
20 that people better informed than perhaps we would need to  
21 work out. In particular, how do you get a list of the  
22 bondholders, which bondholders should be allowed to vote.  
23 Presumably, the vote would be in proportion to their  
24 holdings. But these are issues that aren't all that  
25 difficult because, ultimately, we do know who the

1 beneficiary owners are of everything, although sometimes it  
2 takes a bit of research. But these are problems that have  
3 been dealt with on the equity side and in qualitative  
4 character they're no different.

5 MR. HEANEY: Thank you, Larry.

6 I will now wait a few moments just to make sure no  
7 other questions or comments come through, questions or  
8 people looking to express a viewpoint.

9 (Pause.)

10 MR. McVEY: Hey, Michael?

11 MR. HEANEY: Yes.

12 MR. McVEY: I am very much in favor of the  
13 recommendation. It seems to me that it's a logical path  
14 forward to minimize the risks of conflicts with either  
15 issuers or ratings agencies. And I think it's such a  
16 complicated topic, to think about turning a whole model  
17 upside down. But this to me is a very logical step forward  
18 with the safeguards that have been recommended.

19 So I applaud the subcommittee. I think it is a  
20 sensible step.

21 MR. HEANEY: Thank you, Rick.

22 MS. MARTIN: Michael, I would also like to opine.  
23 I am supportive of two of the three tenets of the proposal.  
24 I think Amy and the subcommittee have done a tremendous job.

25 But I do believe that the bondholder ratification

1 may cause a series of unintended consequences on the issuers  
 2 in particular and an undue burden on them. But certainly,  
 3 he first two parts of the proposal, I am very supportive of.  
 4 MR. HEANEY: Thank you, Lynn.  
 5 I will say, and Lynn will have heard this, Amy  
 6 will have heard this, I mean the subcommittee would have  
 7 heard this as we went back forth in thinking about these as  
 8 pieces and in total, and the strong opinion of the  
 9 subcommittee, with all views still being taken into account,  
 10 was to keep this as a whole package. And I am not just  
 11 buffering this explanation out to the FIMSAC as a whole.  
 12 And so the recommendation that came -- that has  
 13 been brought forward is with those three pieces as Amy  
 14 outlined them. So I just want to clarify, in avoidance of  
 15 any doubt, that the recommendation, should we move forward,  
 16 which I will anticipate we will, to vote on, will be on all  
 17 those pieces together.  
 18 And I will give it another minute or two to see if  
 19 there are any other questions or comments by anyone on the  
 20 FIMSAC or the SEC team.  
 21 MS. SHANK: Michael, just Suzanne, again. I agree  
 22 with Lynn's, but I feel strongly in favor of the other two,  
 23 so I can support the recommendation. Just asking that the  
 24 mechanics around bondholder votes, you know, just be  
 25 considered very carefully.

1 MR. HEANEY: Noted. Thank you, Suzanne.  
 2 MR. HARRIS: Michael, may I address Lynn's  
 3 comment?  
 4 MR. HEANEY: Please, Larry. The floor is yours.  
 5 MR. HARRIS: So there is no question that by  
 6 giving bondholders a vote and basically the potential to  
 7 censure a credit rating agency, that that may reflect poorly  
 8 on the issuer as well. And so it would be natural for  
 9 issuers at first blush to oppose a proposal like this,  
 10 because it would seem to take some of their power, and  
 11 perhaps prerogative, which is essentially another fancy word  
 12 for power.  
 13 But there is a flipside to this, which is that  
 14 anything that we do to increase investor confidence in the  
 15 -- the fixed income markets accrues to the benefit of all  
 16 issuers and the benefit, of course, is that when investors  
 17 are more confident in the market, they are more likely to  
 18 hold bonds and that causes interest rates to be lower.  
 19 And so the immediate impact of I don't want to  
 20 lose control here should be offset by considerations about  
 21 what's good for the market, and ultimately what's good for  
 22 all corporations taken together.  
 23 MR. HEANEY: If I can, I would like to turn to  
 24 Elisse who I believe has a viewpoint.  
 25 MS. WALTER: Thank you, Michael. Just a quick

1 point that will not keep me from voting for the  
 2 recommendation. But again, like Suzanne, I think it is  
 3 something that we really need to look at or the SEC really  
 4 needs to look at as we go forward.  
 5 I think existing bondholders have a bias to  
 6 keeping the rating high so that they are holding a more  
 7 valuable commodity. And I think it's important that we take  
 8 that into account in how this is implemented. Thank you.  
 9 MR. HEANEY: Thank you, Elisse.  
 10 Other thoughts or comments?  
 11 (No response.)  
 12 MR. HEANEY: Okay, I am, you know, based on what  
 13 I'm hearing, and what I believe is how the subcommittee  
 14 feels and a number of members represent FIMSAC there, I  
 15 think there is sufficient support to vote on the  
 16 recommendation. So I will at this point entertain a motion  
 17 to vote.  
 18 PARTICIPANTS: So moved.  
 19 MR. HEANEY: Thank you. Okay, so we will do it in  
 20 the same format, alphabetically if I can. Starting with  
 21 Dan. Dan, your vote? It's yes, no or --  
 22 MR. ALLEN: Yes, I'm supportive.  
 23 MR. HEANEY: Thank you.  
 24 Giedre.  
 25 MS. BALL: Approve.

1 MR. HEANEY: Sorry, I still can't hear.  
 2 MS. BALL: Can you hear me? Yes, yes.  
 3 MR. HEANEY: Yes, thank you. Sorry, I apologize.  
 4 Horace.  
 5 MR. CARTER: Yes.  
 6 MR. HEANEY: Gilbert.  
 7 MR. GARCIA: Yes.  
 8 MR. HEANEY: Larry.  
 9 MR. HARRIS: Yes.  
 10 MR. HEANEY: Ananth.  
 11 MR. MADHAVAN: Yes.  
 12 MR. HEANEY: Lynn.  
 13 MS. MARTIN: No, solely for the reason that I  
 14 cited.  
 15 MR. HEANEY: Amy.  
 16 MS. McGARRITY: Yes.  
 17 MR. HEANEY: Rick.  
 18 MR. McVEY: Yes.  
 19 MR. HEANEY: Lee. Lee Olesky.  
 20 I will come back to him.  
 21 Suzanne Shank.  
 22 MS. SHANK: Yes.  
 23 MR. HEANEY: Larry Tabb.  
 24 MR. TABB: Yes.  
 25 MR. HEANEY: Sonali.

1 MS. THEISEN: Yes.  
 2 MR. HEANEY: Kumar.  
 3 MR. VENKATARAMAN: Yes.  
 4 MR. HEANEY: Elisse.  
 5 MS. WALTER: Yes.  
 6 MR. HEANEY: Brad.  
 7 MR. WINGES: Yes.  
 8 MR. HEANEY: Mihir.  
 9 MR. WORAH: Yes.  
 10 MR. HEANEY: And I vote yes as well, affirmative  
 11 as well. (Audio dropout) if I may to Lee.  
 12 (No response.)  
 13 MR. HEANEY: Okay, by a measure of 16 to one, the  
 14 recommendation has been approved by FIMSAC.  
 15 Amy, thank you. A very, very big thank you for  
 16 taking us through this and through all the hard work and the  
 17 zigging and zagging necessary to get this recommendation  
 18 here. And to the subcommittee as well. Because it was --  
 19 having listened to it, not an easy -- none of these are easy  
 20 topics, none of these recommendations are simple. But this  
 21 one certainly had, like I said, a lot of twists and turns  
 22 and an incredible amount of teamwork and thought by the  
 23 entire subcommittee.  
 24 So thank you all for all your hard work on this.  
 25 The recommendation has been passed.

1 We are remarkably well ahead of schedule. And I  
 2 think just so we don't -- I want to make sure all the  
 3 participants, and I know they're FIMSAC members for the next  
 4 panel, are ready for it, why don't we just take, if I could,  
 5 if we take a 15-minute break. I know we just had a lunch  
 6 break. But a 15-minute break and we'll start again at 1:45.  
 7 Gilbert, if that's okay with you?  
 8 MR. GARCIA: That's perfect.  
 9 MR. HEANEY: And transparency for block trades at  
 10 1:45. Good by you, Gilbert?  
 11 MR. GARCIA: Yes, it's perfect.  
 12 MR. HEANEY: Okay, super. Let's just take a 15-  
 13 minute break. Thank you again.  
 14 (Recess.)  
 15 MR. HEANEY: Okay, if we can resume now, please?  
 16 DISCUSSION OF TRANSPARENCY IN THE MARKET FOR  
 17 LARGE SIZE TRADES  
 18 MR. HEANEY: Next up, we will hear from the  
 19 Corporate Bond Transparency Subcommittee on transparency in  
 20 the market for block trades. Gilbert Garcia, chair of the  
 21 subcommittee, will be leading the discussion.  
 22 Gilbert, I'll turn it over to you.  
 23 MR. GARCIA: Thank you, Michael. And thank you to  
 24 Chairman Clayton and all the members of the SEC and Staff  
 25 and all the members of FIMSAC.

1 First and foremost, when Michael talked in the  
 2 last panel about zigging and zagging and twists and turns, I  
 3 think he was trying to lead into our panel discussion. So I  
 4 appreciate that discussion.  
 5 And again, don't touch your dial. I am the  
 6 chairman of this. It is no longer Mihir. So if you see me,  
 7 it is correct. Mihir, of course, worked very, very hard for  
 8 the first part of the existence of this subcommittee. And I  
 9 took over that role here in March.  
 10 But we have had many significant and robust  
 11 discussions in our subcommittee. And we came out of the  
 12 gates pretty fast. But we've come full circle in many ways  
 13 and in the end, we did not reach a consensus. But I think a  
 14 lot of the hard work will be very useful to lay a very  
 15 strong roadmap for the SEC and others in the future. And  
 16 we'll talk more about that.  
 17 But let me give some background. Just to remind  
 18 everybody, we started this journey on FIMSAC a little over  
 19 two years ago on November 15, 2017. And at first, our  
 20 subcommittee was the Transparency Subcommittee and we had  
 21 our first meeting in February of 2018. And, of course, our  
 22 task was to look at and consider the impacts of  
 23 transparency, both pretrade and post-trade. And it was to  
 24 look at both corporate bonds and municipal bonds. And then,  
 25 of course, those two committees were then split. One was

1 for corporates and the other was, of course, for munis.  
 2 And so our subcommittee met often. And again,  
 3 there was robust discussion. And we ultimately came up with  
 4 a recommendation and an idea to put together a protocol for  
 5 block trades in corporate bonds and to look at their impact.  
 6 So on April 9, 2018, we developed the concept for  
 7 a pilot study. And then FINRA went out for comments on  
 8 April 12, 2019. And those comments lasted up until June 11  
 9 of 2019. And from this process, we received 31 comments.  
 10 And the comments were pretty widespread. There were some on  
 11 both sides of the issue. And I think overall, Tom Gira, of  
 12 course, from FINRA, who will be our first panelist, will  
 13 talk a little bit about those comments. He will give his  
 14 perspective, he will try to summarize them and give some  
 15 weight to some of the participants, because I think there  
 16 were a lot of very good letters and so forth.  
 17 Our second panelist again will be Kumar  
 18 Venkataraman, and he's going to speak about some of the  
 19 challenges of the original proposal. And I think everyone  
 20 felt some of the testing and so forth might have been pretty  
 21 clunky. But at the end of the day, he is going to talk  
 22 about some of the challenges of the original proposal.  
 23 And then Sonali Theisen, of course, will talk  
 24 again about the merits and why we really came to this in the  
 25 very beginning, which is the reason for a risk warehousing.

1 And she's going to talk a little bit about how other markets  
2 do it and how they do it successfully.

3 So at the end of the day, we've come full circle.  
4 We're going to present a lot of these findings. And again,  
5 we'll have any questions that Michael will then bring  
6 forward from the group. But I think that you'll see that a  
7 lot of work was done. It's not an easy topic. But I think  
8 we want to sort of keep all this information together, so  
9 the SEC won't have to reinvent the wheel in the future if  
10 and so if they do.

11 So with that, Michael, I am going to turn it over  
12 to you, just really to turn it over to Tom as our first  
13 panelist, to again review the various letters that came in  
14 and his view from FINRA's point of view.

15 So, Tom.

16 MR. GIRA: Thank you, Gilbert. Good afternoon.  
17 My name is Tom Gira. I am a proud member of FIMSAC and an  
18 executive vice president at FINRA, in charge of our Market  
19 Regulation and Transparency Departments.

20 I would agree with Gilbert. I think robust debate  
21 was a very good way to describe sort of our journey with  
22 this proposal. But I think it's an especially appropriate  
23 time to revisit the block pilot and the debate around  
24 liquidity in the corporate bond market.

25 While our earlier discussions did not reveal clear

1 to immediate dissemination since 2004, FINRA uses  
2 dissemination caps that vary between investment grade and  
3 non-investment grade to provide some degree of protection to  
4 large block size trades that exceed the caps. For other  
5 debt instruments like securitized products, FINRA employs  
6 different dissemination caps. And for certain categories of  
7 securitized products, FINRA takes additional steps such as  
8 not disseminating information about the contra-party type  
9 and side of market or using aggregate periodic dissemination  
10 instead of immediate dissemination for larger size trades,  
11 again reflecting the balance between transparency and  
12 liquidity.

13 FINRA is committed to an ongoing view of its range  
14 of TRACE transparency protocols. FINRA provides specialized  
15 academic access to TRACE data to support independent study.  
16 And FINRA also performed and published its own analysis of  
17 corporate bond liquidity in 2015. This research generally  
18 has found liquidity conditions as measured by aggregate  
19 activity have improved or have not deteriorated with the  
20 introduction of additional TRACE transparency.

21 However, as was discussed at prior FIMSAC  
22 meetings, some market participants have expressed concern  
23 about difficulty executing block size trades in recent  
24 years. And some raise questions about metrics they feel are  
25 not fully addressed in the academic research, including

1 agreement on the then-prevailing liquidity conditions or  
2 even how to measure them, there's no question we experienced  
3 a significant market event in March, which should serve as a  
4 critical point of reference and further study.

5 Before jumping in, I would like to start with a  
6 little background. TRACE is the system that provides  
7 consolidated information on bond trades to market  
8 participants, investors and the public. In general,  
9 corporate bond trades must be reported to TRACE as soon as  
10 practicable and no later than 15 minutes after the time of  
11 execution. TRACE then disseminates information about  
12 secondary market trades immediately, including price and  
13 trade size, up to dissemination caps that vary by bond  
14 category.

15 TRACE was launched by FINRA in 2002, following an  
16 SEC Staff study of the corporate bond market and a call for  
17 FINRA action to promote transparency by then-Chairman  
18 Levitt. Since 2002, FINRA has adopted a measured, phased  
19 approach to TRACE dissemination to try and best balance  
20 transparency and liquidity.

21 Importantly, throughout these phases, FINRA has  
22 tested and continues to rely on different mixes of  
23 dissemination protocols that best reflect the attributes of  
24 markets for particular fixed income instruments. For  
25 example, while all corporate bond trades have been subject

1 turnover and the concept of unexecuted trades.

2 With those questions in mind, after much robust  
3 debate and discussion, the majority of the FIMSAC approved a  
4 recommendation for a pilot to study whether a different mix  
5 of dissemination protocols, specifically larger trade size  
6 dissemination caps, coupled with a 48-hour dissemination  
7 delay for trades above those caps, would improve liquidity  
8 conditions for block size trades. Based on information  
9 included at the time of the recommendation, it would result  
10 in delayed dissemination for 1.2 percent of investment-grade  
11 trades, representing 32 percent of total par value traded,  
12 and 3.2 percent of non-investment-grade trades representing  
13 40 percent of total par value traded.

14 The recommendation would also shorten the time for  
15 historic uncapped trade data to become public from six  
16 months to three months. The recommendation suggested that  
17 FINRA test these changes without a control group, although  
18 there was spirited debate among FIMSAC members on that  
19 point.

20 Following the FIMSAC's recommendation, FINRA  
21 worked to develop the details necessary for a pilot  
22 proposal, which FINRA published for comment in April 2019,  
23 as Gilbert mentioned. To inform our work, we studied the  
24 FIMSAC recommendation and associated public comments and we  
25 consulted closely with SEC Staff. Ultimately, our proposal

1 incorporated the two core elements of the FIMSAC  
2 recommendation, increased dissemination caps and a 48-hour  
3 dissemination delay for block-size trades above the caps,  
4 with a few modifications.

5 The most significant changes we proposed were  
6 separate test groups for each aspect being studied, as well  
7 as the addition of a control group designed to support a  
8 meaningful analysis of the pilot's impact. Specifically, we  
9 felt it was important to try to separately discern the  
10 market impact of the higher caps from the impact of the 48-  
11 hour delay in dissemination because these two features of  
12 the pilot could potentially offset each other in whole or in  
13 part.

14 Consistent with our usual approach to policy  
15 proposals, we solicited comment on a number of specific  
16 questions, as well as overall thoughts on all aspects of the  
17 pilot. Among other things, we asked for additional input on  
18 data, on the need for the pilot, the potential impacts and  
19 its proposed design. To date, as Gilbert mentioned, we've  
20 received 31 comments from a range of market participants.

21 At the risk of over-simplifying a few top line  
22 themes, 25 commenters overall opposed the pilot, five  
23 supported it and one offered an alternative design without  
24 expressing a particular view on the proposal.

25 The commenters that opposed the pilot expressed

1 concern that a dissemination delay would discriminate  
2 against all but the largest firms, result in information  
3 asymmetry, cause market distortions, increase systemic risk,  
4 negatively impact bond valuation services, harm the markets  
5 for derivative products, and create compliance challenges  
6 particularly around fair pricing and best execution. A  
7 number of these commenters also questioned the need for the  
8 pilot, because they felt there was not sufficient evidence  
9 of a liquidity problem because existing data should be  
10 studied further before such a dramatic change to market  
11 transparency.

12 On the other hand, the commenters that supported  
13 the pilot thought it was needed to improve block liquidity  
14 or provide the data necessary to inform future policy  
15 choices. Commenters also provided input on our proposed  
16 pilot, which some felt was too complex and offered  
17 alternatives FINRA might consider, like lower dissemination  
18 caps with no dissemination delay.

19 FINRA appreciates the thoughtful input reflected  
20 in the comment letters and FIMSAC's interest in this  
21 subject. It is critically important that our review of  
22 TRACE's design and impact remains ongoing, both with the  
23 academic studies that I mentioned earlier and the guidance  
24 from market participants prompted by FIMSAC. And it is  
25 especially important that we use recent market events to

1 guide us and further inform this exercise.

2 While it does not seem that we have the  
3 commenters' support here that would usually carry us forward  
4 on an important policy initiative, FINRA will continue to  
5 study the corporate bond market to seek to have a rule set  
6 that properly balances transparency and liquidity. As the  
7 robust and necessary dialogue we have had at the FIMSAC  
8 level and at the subcommittee level has shown, the  
9 calibration process is not easy. And I think it needs to be  
10 guided by a philosophy of do no harm, a principle that Brett  
11 Redfeam, the director of the SEC's Division of Trading and  
12 Markets invoked at a prior FIMSAC meeting.

13 MR. GARCIA: Thank you, Tom.

14 Kumar, you're up, my friend.

15 MR. VENKATARAMAN: Gilbert, can you hear me? I  
16 know there was some --

17 MR. GARCIA: Yes. We can hear you perfectly.  
18 Thank you.

19 MR. VENKATARAMAN: Wonderful. Thank you.

20 Well, good afternoon, everyone. Thank you,  
21 Gilbert, Michael, and the SEC Staff. I appreciate the  
22 opportunity to provide FIMSAC with my comments on FINRA's  
23 block trade pilot proposal.

24 As a brief introduction, I am Kumar Venkataraman,  
25 professor of finance at SMU's Cox School of Business, and I

1 study the market structure of fixed income markets. The  
2 views that I express today are informed by my research on  
3 market transparency, related academic studies, FINRA's pilot  
4 proposal, industry comment letters and discussions within  
5 the Transparency Subcommittee, of which I am a member.

6 As Gilbert and others have pointed out, members on  
7 our subcommittee do not share the same viewpoint on the  
8 pilot. But I appreciate our frank and collegial discussions  
9 on a difficult topic.

10 My prepared remarks will closely follow my  
11 presentation slides, available on FIMSAC's web page, titled  
12 Transparency Panel Presentation. If it is handy, please use  
13 the presentation slides to follow my remarks.

14 I will first summarize what we have learned from  
15 prior experiments when trade reporting was introduced in  
16 corporate, municipal and structured bond markets. There is  
17 a wealth of evidence that should inform our deliberations.

18 Next, I will consider possible explanations for  
19 decline in block trading volume in corporate bonds, which is  
20 the key problem that FIMSAC is trying to address.

21 Finally, I will discuss the intended benefits and  
22 the unintended effects of FINRA's proposal and summarize my  
23 views on the pilot.

24 My remarks borrow ideas from a comment letter that  
25 FIMSAC members Larry Harris, former SEC Commissioner Elisse

1 Walter and I submitted to FIMSAC in August of 2018.

2 On page 4 of my slide deck, I show the timeline of

3 the initiation of trace reporting in the U.S. Registered

4 corporate bonds were made transparent between 2002 and 2005.

5 Structured bonds were made transparent between 2012 and

6 2015. And for Treasury bonds, trade data collection began

7 in July 2017, but trades are still not publicly reported.

8 FINRA implemented the rollout of TRACE reporting

9 in phases. That is, beginning July of 2002, FINRA asked

10 bond dealers to report trades for all corporate bonds into

11 the TRACE system. However, TRACE trade data was made

12 available for only 500 bonds in July 2002. Trades of the

13 next group of bonds were made public in 2003, the next group

14 in 2004, then 2005. Similar staggered rollouts were

15 implemented for structured bonds between 2012 and 2015.

16 FINRA's staggered rollout is a fantastic situation

17 for researchers because treatment bonds at various stages

18 can be benchmarked against control bonds that did not

19 experience any change in transparency. Thus researchers can

20 calculate market quality change before and after TRACE

21 initiation for treatment bonds and compare the change to

22 those for control bonds. This difference and different

23 approach to some extent helps control for market-wide

24 conditions that impact dealer behavior and trading costs.

25 So what are the key results of these studies? The

1 results are summarized on Slide 5.

2 Timely public trade reporting is associated with

3 large reductions in customer trading costs for all trade

4 sizes. Even institutional investors experience large

5 reductions in trading costs. TRACE reporting also

6 facilitated greater competition among dealers and, in

7 particular, helped small dealers gain market share.

8 Similar benefits of transparency are observed for

9 Rule 144A corporate bonds and TBA Agency bonds when

10 transparency was introduced, markets which are dominated by

11 institutions, and these results are reported on Slide 6.

12 Again, lower trading costs for customers, even for trade

13 sizes that exceed 10 million and, important for our

14 discussion, no decline or evidence of decline in block

15 trading volume or decline in capital commitment by dealers

16 or change in dealers' propensity to facilitate block trades.

17 On Slides 7, 8 and 9, I have listed over a dozen

18 related studies on corporate bonds, municipal bonds and

19 structured bonds on the topic. Some of these studies have

20 been conducted by SEC staff. I know Amy Edwards is on the

21 call and she has a paper with former Commissioner Mike

22 Piwowar and Larry Harris on the topic.

23 The key result is that the benefits of timely

24 reporting of trades have been observed in many markets using

25 different data sets, different empirical methods, different

1 time periods for both retail and institutional investors.

2 Timely reporting of trades levels the playing field, making

3 important information available to all market participants.

4 Transparency in particular helps less sophisticated

5 participants such as retail investors, smaller institutions

6 and smaller dealers.

7 So Gilbert, at this point I'll pause and ask

8 whether my audio continues to be clear?

9 MR. GARCIA: Yeah, it's perfect.

10 MR. VENKATARAMAN: Thank you.

11 Next, let us consider a metric that has been the

12 focus of FIMSAC, the decline in block trading in corporate

13 bonds between 2007 and 2019. On Slide 10, I consider three

14 explanations for the decline.

15 The first explanation is that the decline is

16 caused by TRACE trade initiation, which I quickly rule out.

17 For just the corporate bonds, there was no change in post-

18 trade transparency between 2007 and 2019. As I noted

19 earlier, TRACE reporting was initiated for just corporate

20 bonds between 2002 and 2005.

21 The second explanation is that post financial

22 crisis reforms in banking-related regulations, such as the

23 Volcker Rule and the Basel requirements made it harder and

24 more expensive for bank-affiliated dealers to hold large

25 inventories of corporate bonds, thus leading to a decline in

1 their capital commitment and block trade volume between 2006

2 and 2016, and also a move away by the traditional dealers

3 towards a matching or a brokerage role rather than a market

4 making role.

5 On Slides 11 and 12, I reference several empirical

6 studies that point to this explanation, including studies

7 conducted by the Federal Reserve economists.

8 The third explanation for the decline in block

9 trading is the modernization of corporate bond market. The

10 growth in electronic trading, alongside emergence of new

11 types of liquidity providers and new and better ways to

12 search for and trade with counterparties. Much of this

13 modernization has occurred between 2007 and 2019, which can

14 explain the decline in average trade size. As has been

15 observed in other markets, when electronic trading took off,

16 explanation three is simply that the trading ecosystem for

17 corporate bonds has changed between 2007 and 2019, which

18 helps explain the decline in average trade size.

19 There may be other explanations as well. For

20 example, because volatility has been low and interest rates

21 have been low, there is less need for asset managers to make

22 large positional changes in their portfolio. And, as a

23 result, we observe fewer block trades.

24 So what does all of this evidence mean for FINRA's

25 proposed pilot? One thing that is clear is that TRACE is

1 not the cause of the decline in block volume between 2007  
2 and 2019. So what can be a possible justification for  
3 proceeding with FINRA's proposed pilot? One argument that  
4 we have heard is that, while TRACE is not the cause of the  
5 problem, it's an easy potential fix to address it.

6 So if we implement the pilot, as I note on Slide  
7 13, I expect that we might see an increase in the block  
8 trade volume and that large institutions who trade in blocks  
9 and large dealers who facilitate blocks will benefit from  
10 the pilot. And this is the pilot's intended benefit.

11 However, we need to consider two categories of  
12 unintended effects. The first is that trade reporting delay  
13 leads to an increase in information asymmetry. To  
14 understand this, let us consider the mechanism by which  
15 delayed trade reports help the dealer. Delayed trade  
16 reporting represents a reduction in transparency that  
17 provides information advantages to those trading in block  
18 sizes. Delayed reporting will make it easier for dealers to  
19 distribute a large block because the investors to whom the  
20 block -- the dealers will distribute the block, who we call  
21 the receiving investors, are at an information disadvantage  
22 over the next 48 hours. Since trading is a zero sum game  
23 when measuring trading profits, delayed reporting simply  
24 shifts the costs of liquidity from block participants to the  
25 receiving investors.

1 Who are these receiving investors? Examples of  
2 investor groups which I discuss on Slide 14 include retail  
3 investors. Note that 70 percent of the TRACE trade reports  
4 are for less than \$100,000. Large institutions who trade  
5 patiently by splitting orders. And several large  
6 institutions point this out in their comment letters. See  
7 in particular the letter from Dimensional Fund Advisors.  
8 Smaller institutions and portfolio traders such as ETF  
9 market makers. Smaller traditional dealers. And  
10 nontraditional liquidity suppliers in electronic platforms.

11 These categories of receiving investors are the  
12 counterparties to the large block trade and are likely to  
13 experience higher trading costs.

14 Now, we have discussed an alternative proposal  
15 that we delay reporting for super blocks. I would say that  
16 the same logic would hold for super blocks, except that the  
17 benefits accrue to an even smaller set of super-large  
18 participants.

19 There is also a second unintended effect of trade  
20 reporting delay, a deterioration in the quality of data  
21 available in the market, as discussed on Slide 15. Note  
22 that the pilot proposal delays reporting of a significant  
23 volume of trades as mentioned by Tom, almost 30 percent of  
24 investment-grade volume and 40 percent of high-yield bond  
25 volume. Delayed reporting increases uncertainty about what

1 is going on in the market, particularly during periods of  
2 high volatility.

3 Delayed reporting leads to dissemination of  
4 potentially misleading information about market conditions.  
5 For example, a block sale from a large institution to a  
6 dealer is not reported on TRACE but smaller offsetting sales  
7 by the dealer are reported on TRACE.

8 Delayed reporting leads to fewer timely trade  
9 reports. Timely trade reports are key inputs for evaluated  
10 pricing models, as we have heard this morning.

11 Delayed reporting hinders technological  
12 innovations that rely on availability of timely, high-  
13 quality data.

14 So to summarize, the unintended effects of delayed  
15 trade reporting are the increases in information asymmetry  
16 and the deterioration in the quality of data available in  
17 the market.

18 I fully support FINRA's randomized control design,  
19 the inclusion of control bonds and the assignment to three  
20 treatment groups to properly identify the effects of two  
21 recommended changes, as I state on Slide 16. Inclusion of  
22 control bonds provides a baseline to measure treatment  
23 effects, even when market conditions abruptly change, as we  
24 saw in March and April of 2020, once the pilot is rolled  
25 out. The randomized control design is necessary because

1 there is genuine disagreement among both FIMSAC members and  
2 the institutional investors community on whether delayed  
3 reporting of trades helps or hurts markets.

4 Some have expressed concerns about fairness. That  
5 is, whether we are creating winners and losers based on  
6 which bonds get assigned to treatment versus control groups.  
7 In my opinion, these concerns about fairness are moot  
8 because we can't even seem to agree on who will win and who  
9 will lose.

10 On Slide 17, I pose the following question to  
11 FIMSAC members, whether reduction in block volume between  
12 2007 and 2017 points to a liquidity problem. Looking at  
13 other metrics of the health of the market, we continue to  
14 see a remarkable growth in the corporate bond market, robust  
15 new issuance activity, high secondary market volume, no  
16 evidence of secular increases in transactions cost between  
17 2007 and 2019.

18 I would also submit that bond markets are less  
19 fragile in 2019 than 2007. In 2007, liquidity was largely  
20 supplied by the traditional bank-affiliated dealers and  
21 large losses in the banks' lending book caused a significant  
22 liquidity problem in the fixed income market.

23 Between 2007 and 2019, new types of nonbank  
24 proprietary traders and algorithmic liquidity providers have  
25 emerged. And this broader participation in liquidity

1 provision points to a less fragile market.

2 Technology and innovations have transformed the

3 bond market, leading to a new ecosystem between 2007 and

4 2019. We've observed a growth in new instruments, such as

5 ETFs, new venues, RFQ venues, ATS platforms, greater

6 availability of pretrade and post-trade data.

7 And so my question is, in this new ecosystem, are

8 old metrics such as block volume still relevant? Should we

9 measure the health of the market in other ways?

10 I don't know the answer to this question. But

11 it's something I believe needs to be part of our

12 deliberation.

13 In summary, I completely agree that dealers who

14 facilitate blocks need to be protected. Dealers play an

15 important role in bond markets, regardless of whether the

16 trade occurs by phone or on electronic venues. Under

17 FINRA's current designation policy, we already have a system

18 that recognizes and specifically helps protect dealers by

19 capping trade-side disclosure, for example, at \$5 million

20 for investment-grade bonds, thus masking the true size of a

21 much larger trade.

22 I also agree that block volume has declined

23 between 2007 and 2019. Other factors can help explain these

24 patterns.

25 In my opinion, there is not sufficient

1 justification for the proposed pilot. There is a large body

2 of evidence that transparency benefits markets. There is no

3 evidence that TRACE caused reduction in block volume. The

4 unintended effects of the proposed pilot are large, and the

5 proposed pilot is likely to hinder technological innovations

6 that are transforming bond markets.

7 In the last five slides of my presentation, I have

8 highlighted comment letters from five large institutions,

9 Vanguard, T. Rowe Price, Dimensional Fund Advisors, AQR

10 Capital and Citadel. These institutions do not support the

11 proposed pilot because they believe it will harm investors

12 and markets.

13 With this, I end my prepared remarks. Thanks very

14 much, Michael, Gilbert and the SEC Staff for giving me this

15 opportunity.

16 Gilbert, back to you.

17 MR. GARCIA: Kumar, thank you. Well done.

18 And Sonali, it's your turn. And, of course,

19 Sonali also has a presentation that of course will be up on

20 the SEC and so forth website. But, Sonali, it's all yours.

21 MS. THEISEN: Great. Thank you very much,

22 Gilbert.

23 Can everyone hear me okay?

24 MR. GARCIA: We can.

25 MS. THEISEN: Okay, terrific. Thank you.

1 Thanks very much, Gilbert, and to the SEC for

2 providing me the opportunity to provide comments today. And

3 I very much enjoyed listening to Kumar and Tom's comments

4 before mine as well.

5 I will start by saying that I fully recognize that

6 this is a complex issue with many perspectives, as was

7 demonstrated by the variety of responses that FINRA

8 received, which Tom summarized. And I certainly respect all

9 points of view that have come out of this process that we've

10 been engaged with FIMSAC on for the better part of the last

11 couple of years.

12 Though I was not on FIMSAC at the time, I did work

13 on the initial analysis for the first proposal in my former

14 shop. And I believe that, you know, if we were to look

15 back, you know, given that this was -- and, I think,

16 Gilbert, you mentioned this -- given that this was really

17 one of the first matters that FIMSAC put forth a

18 recommendation on, perhaps we didn't have necessarily the

19 benefit of the now well-developed process that we go through

20 when we deliberate and then, you know, put forward the time

21 to bring forward the recommendation. And so I do think that

22 FINRA was given a fairly difficult task to construct a

23 pilot. And I can understand the many reactions that FINRA

24 received, both on form and substance, to the pilot.

25 One thing that I would say that I believe in

1 reading through the comment letters is that, you know, one

2 thing that I do think was fairly unanimous from market

3 participants was that the randomized control would be far

4 too complex and expensive and therefore unlikely to be

5 implemented, and therefore very unlikely to create

6 meaningful results that could be properly analyzed to assess

7 the likelihood that the pilot was successful.

8 While I certainly theoretically completely

9 understand the desire for a control group in pilots, I think

10 it would be a very difficult one in any proposal going

11 forward with TRACE to implement control groups. And any

12 thought of pilots should rather be approached as, you know,

13 taking the entire market for a certain amount of time and

14 observing the consequences.

15 In terms of my remarks today instead of -- as

16 Gilbert mentioned, instead of advocating for a particular

17 outcome or modification to the recommendation that FIMSAC

18 put forward and that FINRA had taken forward, I would like

19 to perhaps approach the topic more top down and just discuss

20 what might be the most appropriate way to consider a

21 framework for revisions to TRACE. And then at the end of

22 that time, you know, whatever the framework was, if that was

23 adopted, then there could be thought given to what the

24 actual thresholds might be, whether delays make sense, et

25 cetera. And I certainly also can -- I understand the

1 comments that were received back about longer delays,  
2 particularly after end of day, maybe very difficult for  
3 certain market participants.

4 And so I would say that, you know, this topic of  
5 what is the right size block and then what is the delay, the  
6 two things kind of go hand in hand. And so maybe I would  
7 like to rather discuss just the framework and what's changed  
8 in the market and what other asset classes have implemented  
9 in recent years to help guide the discussion as this topic,  
10 you know, perhaps moves forward in the future.

11 So as Gilbert mentioned, I did have some slides.  
12 If you look at Slides 2 and 3 of the deck that I have that  
13 the SEC has put on their website, these are largely just  
14 updates to the initial analysis that was presented around  
15 this, which continue to just kind of show that, you know,  
16 the concentration of volume has moved meaningfully over the  
17 last 10 years. Again, we have 2007 data that we had used in  
18 an initial presentation, and then we have through Q3 of 2019  
19 which, given that uncapped sizes are on a six-month delay,  
20 that's kind of the furthest back -- the closest forward,  
21 rather, that we could compare.

22 So you can see, for example, you know, on Slide 2,  
23 that again concentration in the IG market has shifted  
24 meaningfully in terms of volumes from the 10 to 25 bucket to  
25 the kind of 1 to 5 million. And likewise, looking at Slide

1 3, you know, looking at cumulative volumes, that sort of 50  
2 percent mark in the investment grade market has moved in  
3 that time frame from eight million to about five million,  
4 and in the high-yield market has moved from about four and a  
5 half million to three million.

6 And so, you know, Slides 4 and 5, I think again,  
7 these are all meant to just illustrate again a similar point  
8 that, whether looking at by volume or by ticket count -- and  
9 we'll talk about ticket count in a moment because that is,  
10 you know, one transparency framework that's been adopted  
11 elsewhere -- but even if you look at by ticket count, again,  
12 there's been a meaningful change in percentiles across both  
13 IG and high yield in terms of how many tickets are done, you  
14 know, at various thresholds.

15 And then lastly, you know, on volume percentile,  
16 on Slide 5, again, some of the conversations that we've had  
17 within the subcommittee when we were thinking about whether  
18 there was a way to consider amending the proposal, was  
19 whether we could recommend thresholds by volume. So, for  
20 example, if we were to use the ninetieth percentile of  
21 volume as the benchmark for IG, that would suggest something  
22 around, you know, 21 million as a block trade size. Or  
23 likewise, you know, if we were to use something closer to 75  
24 or 80 percent in high yield, that would, you know, suggest  
25 something around six to seven million.

1 I come back to my earlier point, which is these  
2 percentiles are useful. One, they are very illustrative,  
3 again, of how much has changed in the last decade or more.  
4 But, two, you know, they, I think, give a flexible framework  
5 by which to think about the ways that the markets have  
6 changed and what really does constitute a block. And also  
7 why are blocks, you know, important for the market to be  
8 able to transact.

9 You know, Gilbert, you mentioned, you know, the  
10 words "risk warehousing" before. And that is really the  
11 purpose that true block transactions -- again, we can debate  
12 what the number threshold is. But true block transactions,  
13 that really has been the role of a dealer, is to be able to  
14 transform that risk quickly in a way that minimizes market  
15 impact. And so one way that, should FINRA or the SEC have  
16 appetite to think about a volume percentile or a ticket  
17 count framework, one way that the SEC and/or FINRA could  
18 think about both implementing and measuring is to, you know,  
19 start with a really high percentile and start to bring it  
20 down or vice versa. You know, try different percentile  
21 levels, and then observe the number of blocks and with those  
22 blocks, the market move. Like so once those blocks are  
23 tagged, the market move of that bond, you know, for the, you  
24 know, person transacting the block, the entity transacting  
25 the block, and also the trades that happen in the meanwhile.

1 Because what you would hope to see is that you don't have --  
2 or you have less of this impact of, you know, the market is  
3 here, to get a block done it goes to here, and then, you  
4 know, you have to kind of come down. You would hope that  
5 you just have sort of, you know, smoother hills, if you  
6 will, not as steep on an individual bond basis.

7 And so, you know, that would be again as a  
8 framework our view and our thought. Again, to kind of poll  
9 the market and look for feedback as to rather than setting  
10 an absolute threshold, whether a percentile approach would  
11 make sense, and then, with that percentile approach,  
12 whether to use, you know, by ticket count or by volume. And  
13 again, you know, these two things go hand in hand, depending  
14 on where you set those numbers. Then maybe your delay  
15 doesn't need to be as long.

16 Obviously, the higher the block number, the longer  
17 the delay the market would desire to be able to digest that  
18 block. So perhaps if you peg one part of that question, you  
19 know, you don't want to delay, let's just say for example,  
20 past end-of-day reporting, then you can use that information  
21 to sort of inform what percentile you would pick. And you  
22 can again look back at data. All of this can be very data  
23 driven. You can kind of look for what is the right  
24 percentile to get out of about 50 percent of that kind of  
25 block risk, or 60 percent of block risk, you know, over

1 time, historically.

2 So, you know, having said this about TRACE and the  
3 framework, I did want to kind of highlight other recent  
4 transparency regimes that have been implemented in the last  
5 decade in fixed income. I have been involved, you know,  
6 actively in both of these. One is MiFID II bond  
7 transparency. And the other is, you know, swaps  
8 transparency via Dodd-Frank.

9 So Slides 6 and 7, for those of you that have the  
10 presentation open, will highlight -- I am certainly not  
11 going to go through a full explanation of MiFID at the  
12 moment. It's quite complex. Nor am I advocating that, you  
13 know, we should be looking at a framework that looks exactly  
14 like MiFID II for bonds.

15 But what I will highlight is that MiFID requires,  
16 you know, percentile buckets at the ticket level for what's  
17 called LIS, large in scale. So for bonds, that's set at 90  
18 percent. And those numbers recalibrate annually for what  
19 they are.

20 And likewise, what is large in scale and the  
21 information dissemination depends on two things. One, if  
22 the bond is liquid or not. And that liquid framework, that  
23 liquid list of bonds is updated quarterly. You know, there  
24 are several hundred bonds in there right now. Most of them  
25 happen to be, you know, sovereigns. But that list is

1 updated. So if the bond is liquid and it's above LIS, there  
2 is a deferral. Likewise, if the bond is illiquid, even if  
3 it's below LIS, there's a deferral. That deferral is in a  
4 bucketed format until the following Tuesday and then on an  
5 unmasked level up to four weeks later.

6 And again, if there is interest in sort of  
7 analyzing what has happened in the volatility in the last  
8 couple of months, it may be interesting to look at how the  
9 MiFID framework has impacted transactions and number of  
10 blocks that get done and price movement, et cetera, versus  
11 TRACE. So that would be my one point on MiFID which is,  
12 again, a bond regime that we have now in Europe.

13 The second point would be on Slide 7 around Dodd-  
14 Frank's swap transparency. And again, with Dodd-Frank, the  
15 thresholds were set on a notional basis. They were set at  
16 50 percent of notional, and that moves up to 67 percent at  
17 some point. And that threshold again determines post-trade  
18 -- you know, instruments are capped at a certain size. It  
19 also implements a delay in reporting of those trades. And  
20 it also impacts the protocol by which the market can  
21 transact. So, you know, anything above those caps can be  
22 transacted on a bilateral basis, whereas smaller tickets are  
23 transacted in a more competitive format of RFQ to three or  
24 more.

25 And I would highlight again that during the

1 volatility in the last couple of months, you know, there  
2 were concerns voiced by market participants in the swap  
3 market that, you know, the caps were actually too high and  
4 were impairing liquidity in the swaps market. But  
5 nonetheless, at least there is a framework again that is  
6 flexible and that is going to be over time responsive to  
7 sort of market changes in dynamics.

8 And, you know, the last thing, I'm certainly not  
9 the expert on the equity side. But I would note that even  
10 within equities, it is my understanding that, you know,  
11 there are accommodations made for, you know, blocks from the  
12 standpoint of Reg M of secondary offerings. When there is  
13 an offering of large magnitude and there are special selling  
14 efforts, where there is -- you know, trades are not reported  
15 to a tape.

16 One thing I would like to kind of come back to  
17 that Kumar had mentioned about sort of, you know, his  
18 findings through the research that he and his colleagues  
19 have done, I certainly -- again, I have a lot of respect for  
20 all the work that Kumar and the academics have done in this  
21 space. But I would sort of make the argument that the  
22 tightening of bid-offer that we agree would have been  
23 observed in the analysis that Kumar presented is really due  
24 to two factors. One was just the lower bid-offer during the  
25 time period due to low volatility and tight absolute spreads

1 through 2019. And the second, I think, very importantly, is  
2 the increase in competition amongst retail venues, trading  
3 venues.

4 So unlike equities, you know, vendor fees are  
5 embedded in the price that is reported to TRACE in most --  
6 in many instances. There's not one set way that this is  
7 done. But in many instances, the price that hits TRACE  
8 includes a vendor fee. And those vendor fees, given the  
9 decade of competition in e-trading, have come down  
10 significantly over the last decade.

11 So it's really impossible to separate this  
12 phenomenon out in any academic study to understand whether,  
13 you know, what looks like, you know, transactions happening  
14 closer are really because, you know, the market maker is  
15 charging less or because the actual fees being paid to third  
16 party vendors are actually lower.

17 The last thing that I would mention, as well, is I  
18 understand the comments around, you know, Volcker. From our  
19 perspective, we don't believe that this is necessarily  
20 directly related to Volcker. We also don't find that, you  
21 know, balance sheet constraints have been an issue, you  
22 know, when considering a trade. However, you know, again,  
23 this comes back to the general question of warehousing with  
24 the expectation of near-term demand. And that certainly  
25 does play a role. You know, if you can get out of risk

1 easily, then you may be able to provide better pricing on  
 2 blocks. So I don't think that it's a direct outcome of  
 3 Volcker but rather the sort of the fact that there is really  
 4 not an ability to sort of warehouse and transform the risk  
 5 that plays a part.

6 I mean, other factors, I think Kumar maybe touched  
 7 on some of these, that I generally agree are dynamics that  
 8 are changing in the market, is the aggregation of assets to  
 9 fewer asset managers who are of course themselves managing  
 10 all different types of strategies and funds. But I think  
 11 that has played a role. The rise of passive. The  
 12 separation of the PM and trader function and, you know,  
 13 tracking of slippage. I think, you know, all of these  
 14 things have been changing market dynamics.

15 And, of course, algos in the past couple of years  
 16 have been competing for business, not necessarily profitable  
 17 business, I would say. And the other thing that I would  
 18 highlight is that the algos were largely turned off during  
 19 the recent volatility. So the question is, again, it comes  
 20 back to if there is a natural need to trade a larger block  
 21 and the person, the institution that needs to trade that  
 22 block, if they are comfortable managing their execution risk  
 23 and can break that into smaller pieces and get done  
 24 efficiently, then that's a great outcome. And I would agree  
 25 then that that would be, you know, the best evolution for

1 the market, and no intervention was necessary.

2 But the question does become, in my opinion,  
 3 whether that large block in fact could have gotten done at a  
 4 better price which would have not harmed anyone else in the  
 5 market but just sort of, as I mentioned, smoothed those  
 6 bumps, if you will, of getting the block done, rather than  
 7 printing each individual smaller ticket, which might have  
 8 actually added up and aggregated to larger costs.

9 I will stop there, Gilbert.

10 MR. GARCIA: Well, Sonali, well done.

11 Hopefully, everyone can see, there are strong  
 12 arguments on all sides. And this is just a microcosm of the  
 13 robust discussions that we've had really for some time.

14 And so at this stage, I'm going to turn it over to  
 15 Michael.

16 Actually, before I do, let me just say thank you  
 17 to Tom and Kumar and Sonali and all the other committee  
 18 members that really all attended, all participated these  
 19 last couple of years, frankly.

20 So, Michael, I am going to turn it over to you  
 21 now.

22 MR. HEANEY: Thank you, Gilbert. And many thanks  
 23 to Sonali, Kumar and Tom for sharing the perspectives on  
 24 this topic.

25 Again, like many others that we grapple with

1 within FIMSAC, there's no easy answer. But it still remains  
 2 a topic worth debating and worth trying to find ways to  
 3 improve.

4 I haven't received questions. And I think, given  
 5 that this is FIMSAC only, without a panel, we can go right  
 6 to discussion points and viewpoints.

7 And I will go right to Larry Harris with the first  
 8 crack.

9 MR. HARRIS: Thank you, Michael. I think Sonali  
 10 and Kumar did a great job and also -- I'm sorry, I just  
 11 blanked on the name, sorry -- Tom, thank you.

12 I just wanted to add two quick points that I think  
 13 are very powerful that should be mentioned. Sonali  
 14 mentioned the importance of taking a top down approach and I  
 15 couldn't agree with her more.

16 The most basic issue here that we're talking about  
 17 is information is power. This is something that we all  
 18 know. This discussion is ultimately about who can exercise  
 19 power over information and who will not have that power.

20 Everybody, of course, argues for the public good.  
 21 And I assume that their arguments are sincerely offered.  
 22 But the overriding issue remains that information is power.  
 23 And we know that price is very important. It's very, very  
 24 important.

25 Okay, that said, I am opposed to the pilot because

1 I don't believe it's necessary. We will simply learn that  
 2 information is power, and that learning is going to be  
 3 costly to those that don't have that information.

4 Okay, but having said that, I do want to comment  
 5 on the pilot study, just a very quick comment.

6 Fixed income instruments are extraordinarily  
 7 complex. We all know that. And the markets in which they  
 8 trade are extraordinarily complex. That's why we're here.

9 The people who trade fixed income are among the  
 10 smartest people in the markets and arguably in the world.  
 11 The idea that they can't handle the complexity associated  
 12 with a two-dimensional pilot study is simply not credible.

13 That said, I still don't think the pilot study  
 14 should be done. Thanks.

15 MR. HEANEY: Larry Tabb.

16 MR. TABB: Thanks, Mike.

17 In terms of the pilot overall, I have two things.  
 18 First, do we have any good insight in terms of how  
 19 transparency in Europe has impacted -- certainly, there are  
 20 not a whole lot of bonds that are associated with the  
 21 transparency issue under MiFID. But have we studied it and  
 22 looked at the impact of that? And can we learn anything  
 23 from that? That said, there are more sovereigns, as Sonali  
 24 said, and less corporates.

25 The second thing about the control group, if we do

1 move forward, my vote is to go with a control group because,  
2 you know, things happened. Nobody expected, you know,  
3 coronavirus or, you know, and without a control group, it's  
4 hard. You can say, yeah, oh, the market moved this way.  
5 But, you know, now all of a sudden, we're dealing with a new  
6 world than we were dealing with three months ago. It's kind  
7 of hard to look at Control Group A versus, you know, Control  
8 Group B. And that's it for me. Thanks.

9 MR. HEANEY: Okay, great. Thank you, Larry.

10 I have no one else in the queue. I will give a  
11 few more minutes, but I will do what I did earlier and see  
12 if anyone from the SEC, Chairman Clayton or the  
13 commissioners, or Brett and the SEC team, if anyone has any  
14 comments or questions?

15 (No response.)

16 MR. HEANEY: And then back to FIMSAC, if there are  
17 any questions or comments by others within FIMSAC?

18 MR. McVEY: Michael, it's Rick. And just  
19 responding to Larry's question, I think one of the  
20 challenges that many of us had is the U.S. corporate bond  
21 market has been the beneficiary of greater transparency in  
22 many ways, and certainly in terms of the access to capital  
23 in the U.S. market relative to elsewhere, including Europe.

24 And Larry, if you look at the volume estimates or  
25 turnover estimates in euros, so the true corporate bond

1 I agree with Larry Harris. We could figure it  
2 out. But to have four different sets of data in realtime in  
3 TRACE ran the risk of setting us back at a time where our  
4 U.S. corporate bond market is the best in the world by a  
5 mile. And that's the risk that I was concerned about, is if  
6 we really start to create complexity in TRACE reporting,  
7 have some of the benefits that we've seen over the last 10  
8 years in terms of issuers coming to our markets, new market  
9 makers wanting to participate, new asset managers, do we set  
10 that back? And that's the primary concern that I have.

11 MR. HEANEY: Good points, Rick. Thank you.

12 Anyone else? I'm happy to do a little bit of a  
13 free for all, other than the email, if people have comments  
14 or questions.

15 MR. REDFEARN: Michael, I think I want to ask one  
16 question of Sonali. Which is, when we think about, you  
17 know, what's happened to blocks and we think about how the  
18 markets have evolved, including the evolution of, you know,  
19 more electronic trading tools and the use of algorithms and  
20 so on, obviously markets are going to evolve.

21 I guess the question is, in light of some of the  
22 data that was presented, is there any, you know, sort of  
23 contrarian data that you've seen that looked at either, you  
24 know, specifically sort of the impact cost being, in fact,  
25 lower for blocks such that, you know, we're missing

1 market in Europe, it runs somewhere between eight and nine  
2 billion U.S., including both high grade and high yield. If  
3 you look at the market turnover per day in the U.S. markets  
4 measured by TRACE, you currently have been running over 40  
5 billion per day.

6 The other factor at work in block trades, in my  
7 opinion, is there has been an enormous expansion in the  
8 number of unique issuers in the U.S. market over the last 10  
9 years. So we have been the market of choice for issuers  
10 around the world. And a lot of those are infrequent issuers  
11 that -- where blocks don't trade anywhere near as frequently  
12 as they do in the benchmark deals.

13 So it's one of those things. I fully understand  
14 the points on all sides of the argument. But there are so  
15 many good things going on with the U.S. corporate bond  
16 market in terms of the access that issuers have to capital  
17 in our markets, the transparency that's available to  
18 increase participation, which is showing up everywhere in  
19 new market makers in our market, new investment managers,  
20 quantitative strategies in our markets, the growth in ETF  
21 shares and how they're complementing liquidity in our core  
22 markets, that this is one of those things, the pilot in my  
23 opinion that was proposed was so complex that it ran the  
24 risk of setting us back. And that was the nature of our  
25 comment.

1 something in terms of a cost savings, having greater  
2 difficulty with being able to get blocks done? Or anything  
3 that shows that certain trades that people would want to get  
4 done just can't get done because of the nature of the  
5 structure right now? So anything that's evidentiary that  
6 points to a problem that needs to be solved?

7 MS. THEISEN: Sure. Thanks, Brett.

8 I think there were two parts to that question, and  
9 I'll try to separate. But I think the first question was is  
10 there sort of evidence that the blocks are actually getting  
11 done more efficiently in aggregate by breaking up the size  
12 tickets. In other words, the institution that would have  
13 traded a block is now getting more efficient at managing  
14 their own execution risk and breaking the tickets up into  
15 smaller tickets.

16 I think that would be an excellent study. I don't  
17 know the answer to that. We're limited with being able to  
18 analyze the data. On TRACE, we don't know who the  
19 counterparty is, right? So we're not able to identify that,  
20 you know, this 20 million block that we know maybe was going  
21 to go through the market went through as, you know, 10 \$2  
22 million tickets because there's not an identifier to who  
23 that was, right, on an anonymized basis. But I do think  
24 that that information is available, and I think would be,  
25 for the public sector perhaps something that would be really

1 interesting to understand.  
 2 Because this all goes back to my, I think, just  
 3 philosophical question that I think we all would like to  
 4 know the answer to, which is, you know, our mandate, right,  
 5 is to ensure that we create efficiencies and balance  
 6 transparency and liquidity for, you know, not just  
 7 institutional but Main Street. The question that we have  
 8 is, you know, those large blocks, are they actually then,  
 9 you know, going into indirect investment by, you know, by  
 10 retail, by Main Street, et cetera, and would you have gotten  
 11 a better print on a 20 million versus two. I think that  
 12 that analysis can be done; we just don't have the access,  
 13 have the access to that information.

14 And I'm going to -- I feel terrible but I forgot  
 15 the second half of your question already.

16 MR. REDFEARN: No, that's okay. I think the  
 17 second part had more to do with opportunity costs associated  
 18 with not being able to get things done that people would  
 19 otherwise do, right?

20 MS. THEISEN: Right, the trades that didn't  
 21 happen. Right. So how often is it that, you know, the  
 22 ticket didn't print?

23 One piece of data, obviously, inquiries that  
 24 didn't happen, there's no systematic way -- there's  
 25 certainly initiatives by market makers to try to track that

1 information, you know, in fits and starts. Unfortunately,  
 2 there's no, I think, robust, systematic way of like the  
 3 inquiries that didn't print, like we don't, I don't think,  
 4 have good data yet in the marketplace.

5 But one data point that I do think is observable  
 6 that I think Rick alluded to is turnover in the market.  
 7 Right? So we think about not just volumes in the market,  
 8 but volumes divided by, you know, outstanding. And the  
 9 turnover numbers in our markets, you know, I think have been  
 10 over the last decade, generally, have continued to decline  
 11 as opposed to have, you know, meaningful upticks. I mean,  
 12 you know, it's not a straight line, necessarily.

13 But that's where you would think that, you know,  
 14 for all of the advances that we've made in connectivity and  
 15 electronic execution and just making the process more  
 16 efficient, you would assume that there would be a -- I  
 17 think, you know, higher turnover in the market. So I think  
 18 that is one piece that is observable and it would be  
 19 interesting maybe to segment that the turnover by various  
 20 ticket sizes because it might tell you again that, you know,  
 21 although overall turnover has not gone up, it's gone up so  
 22 much in the smaller ticket sizes and maybe that's, you know,  
 23 where the liquidity of choice is today.

24 I do think that we can't really have this  
 25 conversation without talking about and thinking about the

1 role that algorithms have started to play. We've been in,  
 2 you know, I say this a lot -- I think we're still largely,  
 3 while a lot of advances have been made, I think we're  
 4 largely still in the toddler phase of algorithms for  
 5 corporate bond markets. And by that I mean, you know,  
 6 generally as an industry, we can come up with a mid and  
 7 assess a bid-offer and skew for position. But we don't  
 8 necessarily have, you know, algorithms that are as  
 9 sophisticated as you might see in, you know, other asset  
 10 classes that have had the benefit of, you know, longer  
 11 development and have a different market structure.

12 But, you know, those smaller tickets, oftentimes,  
 13 on the liquid instruments, let's just say under two million  
 14 on bonds that are liquid, by and large now are getting done  
 15 with the algos. And I don't think it's a surprise to anyone  
 16 to say that the algos have been largely competing for that  
 17 business, as we sort of all try to, you know, establish this  
 18 as part of our business models.

19 So I think it would also be important to sort of  
 20 take out, you know, and look at separately what we might  
 21 think is algorithmic trading and understand whether that's a  
 22 long-term sustainable environment, if those ticket sizes are  
 23 going to go up, are the algos going to become more  
 24 sophisticated and be able to take on bigger tickets and less  
 25 liquid instruments? Or is that a, you know, a transition

1 phenomenon of sort of competing for business?

2 MR. REDFEARN: Thank you.

3 MR. HEANEY: Thanks, Sonali.  
 4 Anybody else?

5 MR. HARRIS: It's Larry.

6 MR. HEANEY: Sorry. Go on, Larry.

7 MR. HARRIS: A very quick observation. We do know  
 8 the answer to Sonali's question about the effect of  
 9 electronic trading and breaking up trades in the equity  
 10 markets. Equity markets, of course, are different from the  
 11 bond markets. But the processes are somewhat similar.

12 So it turns out that large trades are now broken  
 13 up routinely by algorithms in the equity markets. And there  
 14 are databases available that allow you to put those trades  
 15 back together again to find out what the overall cost of  
 16 trading was. And the cost of trading dropped following the  
 17 introduction of electronic trading and algorithms. And I  
 18 think the reason was because it's simply a more efficient  
 19 way of trading.

20 So probably would happen in the bond markets.  
 21 Can't absolutely promise you that it would, but I see no  
 22 reason why it wouldn't.

23 MR. GIRA: I think the only comment I would make  
 24 to that -- I think it's a great point, Larry -- is that  
 25 certainly the pretrade transparency generally in equities, I

1 think, you know, based upon even the discussions we've had  
2 today about pricing mechanisms, it's a little different in  
3 equities. I think that there's a different type of  
4 transparency, generally, that tends to exist, the way that  
5 the tape works in that. And also it tends to be a different  
6 liquidity profile.

7 And so I guess I've always wondered in the bond  
8 market, when you think about, you know, especially as you go  
9 to -- you know, even in equities, right? So we were even  
10 looking at thinly traded names because there's some question  
11 as to whether or not the market structure as it has evolved  
12 in a way that's worked extremely well for highly liquid  
13 names with a great deal of transparency, whether they work  
14 as well for the thinly traded names.

15 And I think in the bond markets, you do have  
16 enough names that are significantly less liquid without the  
17 same type of transparency, and therefore may be more  
18 challenged with some of those electronic trading tools. And  
19 so I think that was the area that might be differentiated.

20 MR. HARRIS: Something that certainly can be  
21 examined.

22 I would argue, though, that if we think that it  
23 was these other characteristics in market structure that led  
24 to the cost savings in the equity markets, that we ought to  
25 be considering them for the bond markets as well.

1 sellers are looking for buyers. And a fellow named Pete  
2 Kyle made this observation that maybe the only difference is  
3 that time moves faster for the bigger assets.

4 And so if you scale the trading by time, you see  
5 that the trading is essentially the same. And he has a  
6 bunch of very sophisticated ways of looking at that. But  
7 basically, the principles are pretty simple. I won't go  
8 into them but observe that there really isn't much reason to  
9 think that the search problems are any different, other than  
10 that time is moving at different rates.

11 MR. HEANEY: Okay, thank you all. I think at this  
12 point we probably should move forward.

13 I want to thank the FIMSAC panel. Clearly, a wide  
14 range of views. Rick, I appreciate your thoughts on this as  
15 well, as others, as they led to this pretty good discussion.

16 You know, I for one, I hope this is something that  
17 continues to get discussed. Maybe this wasn't the right  
18 solution, but I certainly think, to Sonali's point, things  
19 perhaps can be done slightly differently and/or better.

20 Gilbert, I appreciate you as well and your  
21 willingness to assume the chair of the subcommittee. And  
22 thank you for a very thoughtful discussion today.

23 So right before we move to Lynn and the last  
24 recommendation and portion of the agenda, the technology has  
25 worked pretty well today with one exception. And you could

1 MR. GIRA: Mike, I have a point, as well. Just  
2 based on the discussion we've just had; this is probably  
3 going to be maybe a few years out. But I would just when  
4 the Commission approved CAT, they specifically mentioned  
5 that it should be expanded at some point to include fixed  
6 income instruments. So a lot of the issues where we're sort  
7 of saying we don't have the data points, again, who knows  
8 when CAT would be expanded to include fixed income. But we  
9 probably should be thinking about that at some point. You  
10 know, what are the types of things that could help,  
11 particularly on the order side, to be able to sort of  
12 connect and see exactly like you see on the equity side how  
13 orders are split up and they make their way through the  
14 market.

15 MR. HEANEY: Thank you, Tom.

16 MR. HARRIS: If nobody else wants to speak, I have  
17 a very quick response to Brett, another one.

18 So very well accepted empirical and theoretical  
19 results say that trading in slow assets for this, small  
20 trading, if you will, versus trading in the fast assets is  
21 essentially the same. With the only difference being,  
22 literally, time evolves faster for the fast assets than the  
23 slow assets.

24 So basically, in both cases, people are conducting  
25 search problems in which buyers are looking for sellers and

1 hear, I was trying to get Lee Olesky and his vote on the  
2 credit rating. And, Lee, if you're on now -- I know you  
3 were on then and we couldn't hear you and the technology  
4 didn't afford you the opportunity for your vote. But I just  
5 wanted to make sure we could get that and have it in the  
6 record. And maybe the technology has failed twice.

7 Lee, are you still on? We'll try that at some  
8 point down the road.

9 Lynn, are you still on?

10 MS. MARTIN: I am, indeed.

11 RECOMMENDATION CONCERNING PRE-TRADE TRANSPARENCY  
12 IN THE MUNICIPAL SECURITIES MARKET

13 MR. HEANEY: All right. So today's final topic,  
14 we will be considering a preliminary recommendation from the  
15 Municipal Securities Transparency Subcommittee, and I will  
16 turn it over to Lynn Martin who is chair of that  
17 subcommittee to provide the overview and the background for  
18 that recommendation.

19 MS. MARTIN: Thank you, Michael, for that  
20 introduction. I hope everyone on the FIMSAC, the SEC,  
21 commissioners and Staff are all in good health, both you and  
22 your families, and also safe, given the events of this past  
23 weekend.

24 As you heard from the comments by Chair Clayton  
25 and the SEC commissioners this morning, the topic of

1 transparency continues to be an area of focus for us all.  
2 What has occurred to me in the two years since the Muni  
3 Transparency Subcommittee was formed is that the muni market  
4 is far unique from other markets, not just in terms of  
5 composition versus other fixed income markets, but also in  
6 the sheer breadth and complexity of the market.

7 As you heard on panels and in comments this  
8 morning, unlike many markets, most of the securities in this  
9 market do not trade regularly, which makes issues such as  
10 pretrade transparency to be quite challenging. That leads  
11 to a variety of challenges for the market participants,  
12 which again are unique to muni markets.

13 As a subcommittee, we have been talking about the  
14 transparency topic for quite a while now. We stand to make  
15 recommendations on various trading restrictions in the  
16 market in the hopes of improving transparency and liquidity,  
17 as well as more recently on the topic of improving the state  
18 of financial disclosure in the muni markets.

19 On the latter, we are heartened to see an  
20 improvement on the amount of financial disclosures during  
21 the most recent stress period, as reported by MSRB as well  
22 as Chairman Clayton and Rebecca Olsen's recent comments.  
23 Given the current volatility in the market, this increased  
24 disclosure has never been more timely.

25 Today's focus has shifted us more toward the topic

1 available securities, liquidity of those securities, and  
2 price, given that there are more than one million securities  
3 in the market. And those are just a few of those factors.

4 While improvements have been made since the  
5 Commission's 2012 report, we believe that this is an area  
6 that warrants continued examination. In doing so, we  
7 suggest that the entire ecosystem is considered, be it the  
8 role of the Commission, MSRB, ATs and financial adviser  
9 networks all within the ecosystem.

10 At this point, I would like to turn it over to my  
11 fellow subcommittee member, Elisse Walter, for her  
12 perspective on the recommendation and on the work that we  
13 have considered on this topic.

14 Elisse, I believe you are still muted.

15 MS. WALTER: Quite correct, Lynn, as always.

16 This is an issue that deserves and certainly has  
17 gotten from the subcommittee serious attention. My role  
18 here has been traditionally to speak out for the little guy,  
19 for people I refer to as my Aunt Millie and Chair Clayton  
20 refers to as Mr. and Mrs. 401(k).

21 And it is a particularly important issue for  
22 retail investors because, as has been said in other contexts  
23 today, this is an issue of informational disparity.

24 It is the little guy who is a very important  
25 participant in this market, more so than in others, who does

1 of pretrade transparency, which is quite a broad topic.  
2 This topic is one that continues to evolve, particularly in  
3 current times of volatility. There have been papers  
4 authored on this topic, including the Commission's 2012  
5 report and, more recently, MSRB's reports.

6 Since the issuance of these reports over time, the  
7 markets have evolved, as the muni markets represent a living  
8 and breathing ecosystem subject to a variety of  
9 macroeconomic factors. As such, and as mentioned, unique  
10 challenges embedded within this vast market, there is still  
11 a lot of work to be done.

12 We are a collection of professionals who live in  
13 the day to day but are also sensitive to the unintended  
14 consequences that being too specific with a recommendation  
15 may have in the market. We take this very seriously,  
16 particularly in today's extremely volatile times. As such,  
17 what we have put forth today to the FIMSAC is a very high-  
18 level recommendation simply that the Commission should  
19 continue to look at the area of pretrade transparency as  
20 this ecosystem continues to evolve.

21 In doing so, we suggest that the Commission  
22 examine the breadth of information available to market  
23 participants, as well as how the retail investor can consume  
24 this information in an educated format. This information  
25 can include issues of creditworthiness, disclosure of

1 not have and cannot obtain the information to give him or  
2 her a reasonable idea, particularly before executing a sale,  
3 as to what the appropriate price is. And that I find  
4 terribly problematic. I did in 2012 when we adopted the  
5 report.

6 We heard from investors who otherwise were very  
7 happy with their intermediaries and their investments but  
8 said that when they wanted to sell, they had no idea how to  
9 do it. And although things have evolved since then, they  
10 have not evolved enough.

11 I agree wholeheartedly with Lynn that we did not  
12 want to be too particular. And not only is this a market  
13 that is extremely important, but it is a market that is  
14 really the backbone of the infrastructure of our country.  
15 And we need to be careful how we move forward. But I'd like  
16 to reiterate that I think it's very important that the  
17 Commission take this issue and run with it and figure out  
18 what the right answer is.

19 Thank you, Lynn. Back to you.

20 MS. MARTIN: Thank you, Elisse.

21 So as you heard, there are a variety of reasons  
22 why we did not get too specific with this recommendation.  
23 Issues of education could be one way to address this  
24 challenge. But our recommendation is to the Commission to  
25 continue to examine this issue, particularly in light of the

1 events over the last couple of months and the impact on the  
 2 retail investor.  
 3 So with that, Michael, I am going to turn it back  
 4 to you for the group discussion.  
 5 MR. HEANEY: Thank you, Lynn. And thank you,  
 6 Elisse.  
 7 So no one queued up in the emails yet for either  
 8 questions or viewpoints, so let's open it up if I can for  
 9 any comments or questions.  
 10 MR. HARRIS: It's Larry.  
 11 I agree with the proposal and support it. I would  
 12 add two additional perspectives.  
 13 With respect to the transparency of municipal  
 14 finances, this is extraordinarily important. And not only  
 15 just for the bond markets but, frankly, far more importantly  
 16 for the municipalities themselves.  
 17 Somewhere, somebody has to provide discipline.  
 18 And if the state governments and if other parts of the  
 19 federal government can't provide it, to the extent that  
 20 somehow the SEC can find some lever to get more transparency  
 21 into those finances, that would be very, very helpful.  
 22 The second point is, with respect to price  
 23 transparency, people are searching for prices. We're all  
 24 very comfortable with the notion that competition is a  
 25 pretty good thing that generates lower costs for everybody.

1 So I'd just note that it's hard to have competition on price  
 2 when people don't know the prices. So price transparency is  
 3 extremely important. And the transparency I'm now talking  
 4 about is the pretrade price transparency.  
 5 We can't mandate it because we can't force people  
 6 to do what they otherwise wouldn't want to do, and it  
 7 wouldn't be appropriate to do so. But we can certainly give  
 8 privileges to those people who provide transparency. And in  
 9 giving such privileges, we can increase liquidity.  
 10 Our primary mandate from the beginning was to  
 11 figure out how to make these markets more liquid.  
 12 Competition could go a long way to doing that. We just have  
 13 to make sure that people have an incentive to compete on  
 14 price.  
 15 Thanks.  
 16 MR. HEANEY: Thank you, Larry.  
 17 I'll keep it open to FIMSAC but just include  
 18 anybody from the SEC, the Chairman, commissioners, Brett and  
 19 team, any comments or questions before we move to a vote on  
 20 the recommendation.  
 21 Any other questions by FIMSAC?  
 22 MR. McVEY: Michael, just one more point. And,  
 23 you know, I support all efforts to find sensible ways to  
 24 expand transparency and expand participation and fairness in  
 25 our markets. I just want to say I just think the reason

1 that both transparency committees have struggled with more  
 2 specific recommendations is because of the point that Terry  
 3 Hendershott mentioned earlier today.  
 4 And actually, for me, it takes us back to one of  
 5 the recommendations that we made earlier, was approved by  
 6 FIMSAC around the abuse of pretrade transparency through  
 7 RFQs with pennyng, where lots of market makers were trying  
 8 to provide prices at a fair and level and playing field and  
 9 compete for orders and the initiators of transactions were  
 10 able to use that information to unfairly take trades away  
 11 from legitimate market makers. And I was glad that we  
 12 addressed that issue.  
 13 But I think what Terry was alluding to today,  
 14 which is where I think many of us have gotten hung up on the  
 15 specifics on pretrade transparency, is that when you get  
 16 into these very illiquid markets, one, there are not that  
 17 many market makers that are making markets and doing all the  
 18 hard work across many sectors and issuers to have pretrade  
 19 prices available to the market; and, two, in many cases,  
 20 they're not truly live markets, they're indications of where  
 21 they may be willing to trade.  
 22 And what I think we need to be careful of is that  
 23 in this process, you do not want to create disincentives for  
 24 the market makers that are working very hard to provide  
 25 prices by forcing them to make all those prices available to

1 every one of their competitors in a way that makes them not  
 2 want to do that. And this is the further down the liquidity  
 3 spectrum we get, the bigger that problem is.  
 4 And this is -- I think both the corporate bond and  
 5 the municipal bond transparency have kicked around pretrade  
 6 many times without the ability to get to consensus. And  
 7 it's not because the majority don't support transparency,  
 8 it's because we don't want to lose the transparency and the  
 9 liquidity for those that are trying to provide it in very  
 10 illiquid markets. And I think that's where the challenge  
 11 comes, in the specifics.  
 12 MS. MARTIN: I very much agree with what you said,  
 13 Rick, and in this market in particular. A lot of the  
 14 subcommittee kept coming back to the issue of price.  
 15 It's not just about price with this market, which  
 16 is why we tried to also go broader for this market in  
 17 particular around availability of securities, things like  
 18 financial disclosures, other types of metrics. Because it  
 19 feels like in this market, the issue isn't just a price type  
 20 of issue, given the breadth of the issue or given the  
 21 breadth of the market.  
 22 And we absolutely didn't want to create unintended  
 23 consequences, as you were just alluding to.  
 24 MR. HEANEY: Thank you, Rick. Thank you, Lynn.  
 25 Any others?

1 MR. VENKATARAMAN: Michael, I have a quick  
2 observation, which falls upon some of the comments that we  
3 heard today in the first panel.

4 In particular, I think this is what Rick was  
5 referring to, Terry Hendershott made the point that will  
6 dealers provide the same quotes if they're not indicative  
7 and are firm? And Chris White raised the point that, to the  
8 extent that dealers are paid to provide information for the  
9 value that they produce, perhaps that could be a viable  
10 model.

11 I think those are all good ideas. We know that  
12 dealer quotations and runs play a very important role in the  
13 case of evaluated pricing, given that bonds do not trade  
14 very often.

15 So to the extent that recommendations or ideas  
16 that we have recognizes this price discovery role of the  
17 quotation data and comes up with ways in which they continue  
18 to have incentives to provide that information, I think we  
19 may have a way forward that may just work well. Thank you.

20 MR. HEANEY: Thank you, Kumar.

21 MR. REDFEARN: Michael, I just want to say one  
22 thing, which is that this seems like an important area and  
23 just chiming in here, a meaningful recommendation. I would  
24 say it is also one of the more open ended ones that we've  
25 received.

1 And so I would just remind the folks who are tuned  
2 in here that we do have a comment file on our FIMSAC  
3 website. It's on the bottom right-hand corner.

4 And if people -- you know, whoever those people  
5 out there who are thinking about this and have some really  
6 good, tangible ideas that are worth chewing on, I highly  
7 encourage you to go to that site and to submit comments and  
8 to give us more to think about here.

9 MR. HEANEY: Thank you, Brett.

10 Any others?

11 (No response.)

12 MR. HEANEY: Okay, at this point, I would like to  
13 entertain a motion to vote on the recommendation. Anyone  
14 care to move it?

15 PARTICIPANTS: So moved.

16 MR. HEANEY: Thank you.

17 Okay, similar to the earlier voting, I will --  
18 same line, roll call alphabetically.

19 Dan Allen.

20 MR. ALLEN: For.

21 MR. HEANEY: Giedre.

22 MS. BALL: Yes.

23 MR. HEANEY: Thank you.

24 Horace Carter.

25 MR. CARTER: Yes.

1 MR. HEANEY: Gilbert Garcia.

2 MR. GARCIA: Yes.

3 MR. HEANEY: Larry Harris.

4 MR. HARRIS: Yes.

5 MR. HEANEY: Ananth Madhavan.

6 MR. MADHAVAN: Yes.

7 MR. HEANEY: Lynn Martin.

8 MS. MARTIN: Yes.

9 MR. HEANEY: Amy McGarrity.

10 MS. MCGARRITY: Yes.

11 MR. HEANEY: Rick McVey.

12 MR. McVEY: Yes.

13 MR. HEANEY: Lee Olesky.

14 Lee, are you there?

15 (No response.)

16 MR. HEANEY: We'll come back to him again.

17 Suzanne Shank.

18 MS. SHANK: Yes.

19 MR. HEANEY: Larry Tabb. Larry?

20 MR. TABB: That's me, Larry Tabb. Yes.

21 MR. HEANEY: Thank you.

22 Sonali, are you still on?

23 (No response.)

24 MR. HEANEY: I know Sonali -- David, Sonali had  
25 expressed hers via email if she was going to be in transit,

1 and I have that as a yes vote.

2 MR. SHILLMAN: That's fine.

3 MR. HEANEY: Thank you, David.

4 Kumar.

5 Kumar? There you go.

6 MR. VENKATARAMAN: Yes.

7 MR. HEANEY: Thank you.

8 Elisse.

9 MS. WALTER: Yes.

10 MR. HEANEY: Thank you.

11 Brad Wings also has done the same, had to step  
12 out and, via email to the SEC team and myself, has voted  
13 yes, and is acknowledged here.

14 Mihir.

15 MR. WORAH: Yes.

16 MR. HEANEY: Thank you. Let me go back one more  
17 time. Lee Olesky, are you there?

18 (No response.)

19 MR. HEANEY: Okay, a unanimous vote of  
20 affirmative. The recommendation has been passed and  
21 approved by the committee.

22 Thank you, Lynn, for presenting the  
23 recommendation, moderating the discussion. And a big thanks  
24 to the subcommittee for all the work here in getting us to  
25 this point today.

ADJOURNMENT

MR. HEANEY: So that will take us through the end of the agenda.

Thank you everyone for participating in what has been another productive meeting, despite having to do it remotely.

I want to again thank the SEC group and its technology team for such a smooth process today. It certainly surpassed my expectations and maybe yours, too.

I am pleased that we've put forth actionable recommendations to the SEC. For those counting, there were 12 recommendations to the SEC prior to today.

With the three that were passed today, it has been a total of 15 recommendations put forth to the SEC since the inception of FIMSAC, so a job well done and a lot of teamwork and hard work and dedication by the FIMSAC members.

As always, if there are other topics that members believe that we should be considering beyond what we have already worked on, please, email myself, raise them with your subcommittee chairs, email Brett. And as the Chairman had asked and pointed out today, we may have additional time to work on some of those.

I would also like to thank those who have already responded to the Chairman's request to extend FIMSAC. And again, as you think about it, if it works or does not work

for you, please just respond via email.

The next FIMSAC meeting is scheduled for August 3. It remains to be seen whether that will be in person or held remotely like today. So stay tuned and we'll come back to you.

At this point, I will entertain a motion to adjourn.

PARTICIPANT: So moved.

MR. HEANEY: Thank you.

All in favor?

(Chorus of ayes.)

MR. HEANEY: Thank you all very much for your hard work. Be well and be safe.

(Whereupon, at 3:14 p.m., the meeting was adjourned.)

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PROOFREADER'S CERTIFICATE

In the Matter of: SEC FIXED INCOME MARKET STRUCTURE ADVISORY COMMITTEE MEETING

File No: OS-0601

Date: Monday, June 1, 2020

Location: Washington, D.C.

This is to certify that I, Christine Boyce (the undersigned), do hereby certify that the foregoing transcript is a complete, true and accurate transcription of all matters contained on the recorded proceedings of the meeting.

6-8-2020

(Proofreader's Name)

REPORTER'S CERTIFICATE

I, Kevin Carr, reporter, hereby certify that the foregoing transcript is a complete, true and accurate transcript of the matter indicated, held on 6/1/2020, at Washington, D.C., in the matter of: SEC FIXED INCOME MARKET STRUCTURE ADVISORY COMMITTEE MEETING. I further certify that this proceeding was recorded by me, and that the foregoing transcript has been prepared under my direction.

6-8-2020

Kevin Carr

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