Welcome and Opening Remarks

Speaker
Joseph L. Seidel
Chief Operating Officer
SIFMA

- Good morning. My name is Joe Seidel, and I'm the Chief Operating Officer here at SIFMA. And on behalf of SIFMA, I'd like to thank you all for joining us today. Before we begin with our roundtable, I would like to thank Goodwin Procter, and especially Nick Losurdo for hosting us today. I would also like to thank Sapna Patel, Head of Americas Market Structure and Liquidity Strategy at Morgan Stanley, and Chair of SIFMA's Equity Markets and Trading Committee, and Mark Campbell, Head of New Business, Fidelity's Center for Applied Technology and Vice Chair of our Equity Markets and Trading Committee for their leadership in developing this program. I would also probably like to recognize Ellen Greene and our conference staff for being able in a very compressed timeframe to put these roundtables together, and as well as Ellen's work generally on these issues for SIFMA, which has been outstanding. Finally, I would like to thank our moderators today, Craig Lewis, Elad Roisman, Nick Losurdo, and Charlie Sommers, and all our panelists here for participating. Review of U.S. equity market structure, and specifically Reg NMS, has been a SIFMA priority for many years. In fact, we have published at least three white papers on the topic over the last decade. Last June, Chairman Gensler suggested several ideas for equity market structure reform. At the time we noted our support for many of Chair Gensler's ideas, including updating SEC Rule 605, related to data disclosure enhancements for all market participants, including exchanges, market centers, and brokers. However, we also expressed our concerns that some of the other suggested changes could impact investors' costs by eliminating low or zero-dollar commissions or limiting order execution venues, and noted these changes should be reviewed closely and subject to robust cost benefit analysis. Fast forward to December 14th, 2022, when the SEC put out for comment their package of four proposals, and to three weeks ago when SIFMA filed its comments with the Commission. We remain steadfast in our support for updating Rule 605, and in fact, believe the SEC should adopt the proposed changes to the rule. In the SIFMA view, this would provide better baseline data for the SEC and stakeholders to consider what, if any, structural changes may be necessary. We believe an expanded Rule 605 should be the foundation of any future rulemaking the Commission contemplates regarding equity market structure, and once implemented, the Commission will have the data it needs to fully assess market quality and consider whether additional rulemaking is needed and how any such rulemaking should be designed. SIFMA has concerns related to the other proposed rulemakings, particularly around how they interact with one another and to the extent that all four of them could be
adopted or implemented either at or around the same time. SIFMA commissioned a study included with our comments, which demonstrates that the cumulative effects of the proposals may overstate their purported benefits and may understate their costs. Like many commentators, we are focused on the consequential changes the proposals would bring to well-functioning markets without any case of market failure driving such a sweeping realignment. Last fall, we felt potential revisions of equity market structure warranted an open ended discussion of key topics among all market participants, and that is why we hosted our first roundtable in September. Now that the proposals are out and the comment period is closed, we think it remains crucial to pull all impacted voices together to talk about the proposed dramatic restructuring. The purpose of today's event is to hear views on these and other topics from a representative sample of all stakeholders, investors, exchanges, dealers, and market observers, and hopefully provide useful food for thought as the policy makers determine what, if any, changes to make to market rules. By design, we have attempted to assemble a broad sample of participants so that the discussion we have today will be anything but monolithic. As a starting point on this issue, we at SIFMA believe that our equity markets are incredibly efficient and resilient, and investors, especially retail investors, have the greatest ease of access and lowest cost of trading in history. Further, the marketplace is intensely competitive, both upstream and downstream, and again, particularly with respect to retail investors. And of course the marketplace is among the most regulated sectors in our economy. And with that, it is my great pleasure to introduce our first two speakers today. Craig Lewis is the Madison S. Wigginton Professor of Finance at Vanderbilt University, and was the Chief Economist and Director of the SEC's Division of Economic and Risk Analysis under Chair Mary Schapiro. During his three years at the SEC, Professor Lewis led efforts to bolster the role of economic analysis in the financial regulatory process, particularly with the implementation of the landmark Dodd-Frank financial reform law. Craig will lead today's discussion, a fireside chat, I guess, without the fireside with Jessica Wachter, who we are very pleased to have with us. She's Chief Economist and Director of the Division of Economic and Risk Analysis at the SEC currently. In this role, she oversees economists, data scientists, and other professionals who provide economic analysis and data analytics in support of the SEC's mission. Dr. Wachter joined the SEC from the Wharton School, University of Pennsylvania, where she was the Bruce I. Jacobs Chair of Quantitative Finance, and a Research Associate with the National Bureau of Economic Research. Prior to Wharton, Dr. Wachter taught at New York University's Stern School of Business. She was previously on the boards of the American Finance Association and the Western Finance Association, and served as Associate Editor of the Academic Publications Review of Financial Studies and Journal of Economic Theory. Dr. Wachter graduated with an A.B. in Mathematics magna cum laude, and a PhD in Business economics from Harvard. Her research focuses on behavioral finance, capital markets, and financial crises. Please join me in welcoming Craig Lewis and Jessica Wachter, and I will turn it over to them. Thank you, and we look forward to a terrific discussion today.

Fireside Chat with the SEC's Jessica Wachter and Vanderbilt University's Craig Lewis

Speaker

Jessica Wachter
Chief Economist, Director of the Division of Economic & Risk Analysis
U.S. Securities and Exchange Commission

Moderator
Craig M. Lewis  
Madison S. Wigginton Professor of Finance  
Vanderbilt University

- Okay. Thank you for that kind introduction, Joe, and appreciate you inviting me here, and Alan, you as well. I think I speak for everybody when I say how much we appreciate you willing to spend some time chatting with us this morning. I know that from personal experience, just how much time you spend when you are the Director of DERA and Chief Economist on the SEC business. I think I spent more time working on SEC matters in the three years I was in DERA than I did in my entire academic career coming up to the SEC, so appreciate the fact that you're here. We're gonna start off with just a few questions that we have. So what I was hoping you could do is just, yeah, give us an idea of what DERA does, you know, sort talk about how it's organized, what are your responsibilities, and maybe a little bit of time about what it's been like running a division, you know, through COVID-19 and now in the post COVID-19 era, given that President Biden has officially announced you're all coming back to work.

- Right, thanks, and thanks for organizing the conference and for including me, and for the kind words about how much work the position is. So we're a division, we're the youngest division, and we've got, so first of all, what do we do? We provide economic analysis and support of the SEC's tripartite mission, which Joe mentioned, and we've got basically four main offices. One is policy, one provides support to enforcement, one is risk assessment, and one is about data, structured data, data science. And then we have also offices that are supporting those functions. So that's the basic structure. And there's two deputy directors. Oliver Richard is Director of Policy. Some of you may have met him. Chyhe Becker is the acting Chief Economist and is the Deputy Director in the Office of Litigation Economics, so supporting enforcement. So that's the overarching structure. And within policy economics, there's an office that supports corporation finance, an office that supports asset management, and then there's Office of Markets I, Office of Markets II, Office of Financial Intermediaries Supporting Trading and Markets, and finally, the Office of Economic Statistics does data analysis work for all of them. So that's the structure of the division, and so we're roughly 175 right now, you know, maybe a little more at the moment. We're onboarding people, you know, as the economics job market wraps up, and probably on target to be close to 200 or more by the end of the year. And we're mainly economists, though we do have various other support staff, so we're majority economists. So, I mean, in terms of COVID, so I joined in May 2021, so I've only had the experience of running, I've never seen the division in its full force, everybody, you know, in the building. And when I joined, the staff had adjusted, they were very productive, so I just, you know, kind of slid right into that. And people had to learn how to use new tools, but then we did, or they did, and I joined, and learned myself how to, you know, get around using WebEx and things like that. I mean, anybody who started in a new position since COVID, there are some silver linings, like you see everybody's names on the calls. So that's, I think, been a big advantage. So, and now I have the pleasure of meeting people as we come back. So that's, we are starting to come back, and I'm meeting more and more of the staff that I've been working with for almost two years. So, you know, we're gonna have to find a way to integrate like the new skills we've learned that help us be more productive remotely, along with all the benefits of in-person meetings, which frankly, you know, there are some.

- Yeah, so to put things in a little bit of context, when I first took over as Division Director, there were 49 people in DERA, right? We had 21 PhD economists, so it's grown quite a bit in the subsequent years. So let me pivot a little bit. I think to most of us, and I guess this includes sort of the feedback that Chair Gensler received in his hearing yesterday, the pace of rulemaking has really been unprecedented, right? How do you manage this complex agenda kind of on a personal level as Chief Economist, as well as, you
know, how do you manage the division? And the question that you probably would like to answer is, do you have adequate resources to actually handle the job?

- All right, I mean, whoever says that? "Oh yeah. I've got all the resources I need all the time." So, okay, so I'm gonna say that we have, that there's 46 proposals since I joined with 14 adoptions. So I believe that's the count as of now, and we provide economic analysis for all of them. So that's the rulemaking side. So, sorry, the question was what exactly?

- How do you develop your economic analysis? What sort of a process for doing that.

- Right. So what's the process?

- Well, no, sorry. Let's just talk about how do you handle the pace of the rulemaking?

- Oh, the pace.

- We'll get to that question next.

- All right. So, first of all, it's a group that has tremendous expertise. And so we make use of that really deep expertise that the staff have. And there's a lot of kind of managerial talent from my deputy directors who are, you know, experienced economists in government. And so when we have a project, we staff it in support of the SEC's mission. So that's that one side of it. And as for me, I enjoy working on important projects and learning new things and working with talented people, and that just gives me a lot of energy. So that's, on a personal level, that's how that works.

- Yeah. So the guidance was basically developed when I was the Chief Economist, right? I was principal architect of that with the Office of General Counsel when I was at the Commission. So maybe walk us through a little bit about how your team develops the economic analysis of supports rules. And I thought maybe we could use the Order Competition Rule as a specific example. So how did you think about the economic issues around that? Do you take your lead from the Chair's office? Is it a collaborative effort? How involved are the rule writing divisions in sort of crafting the economic analysis? Maybe just give us an overview of how that process works.

- So, a lot, so I'll take those one by one. So first of all, the guidance, which you helped develop, it's on our website. It's a really great document. It's stood the test of time. So I think we can, someday we'll do a fireside chat about how the guidance got developed. But anyway, so I would be very interested in that, and that informs our process. So, I mean the process, it's highly collaborative with the rule writing division. And so it's from the start of the project, I mean, there is a discussion about, you know, the policy, and we plug into that at the inception. And then there's, I think, a very productive back and forth where economics informs the policy, and then obviously what the policy is is what we have to analyze. And then as we
develop our thinking, then we often go back and discuss the policy. So it's a back and forth that occurs at all, generally it's a back and forth that occurs at all levels, at the staff level, at the division director level also, and it's, I think, I believe we have a really good collaboration across divisions. So there's work, you know, within DERA, and then there's work that the trading and markets does, and then we kind of come together and we bring the perspectives together, and the economic perspective is really important at the SEC. So in terms of specifics, you know, not to talk about any specific rulemaking, but we would start by sort of an outline that generally provides sort of the guideposts of what we're trying to do, plan out the analyses so that, you know, we make decisions early that we can be worked in an efficient way. And then we sort of fill in the pieces of the baseline and fill in the pieces of the costs and benefits. That's the procedure that we use.

- So, you know, I always felt, when I was there, we talked a little bit about this earlier, but I always felt like I'm a first principle economist, right? That basically one of my roles as Chief Economist was to basically look at things and try to say, "I need a balanced sort of analysis," right? That I'm gonna look at things at a high level and I'm gonna let my staff sort of fill in a lot of the gaps for me. And it sounds like that is kind of what I heard you say too, a slightly different way. Do you think that's a fair statement?

- So the first principles part, absolutely. And I think I generally like to sort of take things back to first principles when we think about the problem that is being solved. And, I mean, I think economics provides a really important toolkit for how to do that. And I think it also enables one to bring a lot of different potentially perspectives on board if you sort of go back to what are those first principles. So I actually tend to be kind of detail oriented. So while I do tend to like to think about first principles, I also tend to maintain involvement, I will say, But, you know, the extent that I can. But I think it's a really great process, and economics has both theory and data, and they just have to marry up. And so I think just understanding where the data come from, its benefits and also, you know, what it can tell us, what it can't tell us is a crucial part of it.

- Okay, so you explained a little, so I think some proposals like the Order Competition Rule or the tick increment rule, lend themselves to a significant amount of data analysis, right? Because you have the data and you have the ability to analyze data to help you make informed decisions. But some of the other rules, specifically the equity market structure rules that we're probably focused on here today, like the best ex rules seem to have more of a legal orientation than a data-driven orientation. So how do you approach like identifying the economic considerations more generally around non-data oriented topics?

- So I think it's actually quite similar. It's always about, at the end, what the cost and benefits are and establishing the baseline. I think both sets of rules have economic effects, regardless of whether, you know, the actual rule has a number in it or doesn't, and so that's what we have to focus on. So the processes are not all that different, actually.

- And so one of the key issues here, and like every rule, you have to demonstrate like that there's maybe a market failure or some need for regulation. You know, how did you go about making that assessment? Is that something that is kind of, you know, dictated by the chairman that this is a rule that we're gonna go after? Or is this something that you feel like there's a lot of ability to have kind of an independent view on the matter?
Well, so the guidance is actually really helpful here, and it lists various sources one can draw on in terms of a justification for rulemaking, and one of these is a sort of coordination failure, a reason why the market may not reach a certain desired outcome on its own. And so that's one, but there are others. I mean, certainly one of them is Congress, and Dodd-Frank is itself a justification for rulemaking that kind of stands on its own. So I think that we do talk about what's, you know, why we're doing what we're doing. And there could be, there's potentially a variety of reasons, one of which is, you know, coordination among market participants, for example, like, you know, settlement cycle and others might be Dodd-Frank, for example. So there's a range of different possibilities in terms of how we would best kind of present and communicate the why for the rulemaking, so.

Yeah, so there's a, to me though, so you mentioned Dodd-Frank, and I did work on a lot of the Dodd-Frank rules. And a number of the Dodd-Frank rules I didn't really think made a lot of sense, right? And we were unable to really articulate why we thought there were benefits associated with those rules in a clear economic way. So we had the out of basically saying whatever Congress intended, that's why we're passing the rule, but we didn't have the discretion to say this rule has a set of costs that outweigh the benefits. I think the economic analysis itself, though, demonstrated that, that we couldn't identify real benefits, but we were able to quantify a lot of costs. So there was a situation where I felt like as a chief economist, I was able to be balanced in the way I do it, but it seems like there's a higher standard for discretionary rulemaking. You don't get to lean on, "We had to do it, so we didn't have a choice." Here's the situation where you actually are doing it on a discretionary basis. And so I would think that the need to identify a clear market failure is something that would be kind of first order important before going going forward with the rulemaking.

Well, so I think first to build on what you said about Dodd-Frank rulemaking, I mean, I think in any rulemaking, whatever the source, whatever the reason, I mean, we have an obligation to consider the cost and benefits, so we always do that. That's very important. And also, you know, the effects of efficiency competition and capital formation. And, you know, if it's coming from Congress, I mean, we talk about the cost and benefits and we lay them out. And so that's how that process works regardless of the source. I mean, I think, again, how there, you know, we communicate, well, the guidance provides several reasons for rulemaking, and Dodd-Frank is one of them, and another one is, there's a, you know, what would, you know, economists define technically as a market failure, which could include, you know, like asymmetric information problems, just a general failure of everybody to come together in one place in one time. But there are other justifications that are listed in the guidance.

Yeah, so, well, we have a little bit of time here, so let me shift, pivot just a little bit and talk about the comment file. I think almost everybody in the room here has probably submitted a comment letter to one, if not all of the various proposals that are outstanding. During Chair Gensler's testimony yesterday, some of the congresspeople tried to put a lot of weight on the number of comments that were being submitted and how many were in favor of the rules. How do you actually balance the comments? How do you look at, as the Chief Economist, how do you look at the comment file? What do you take out of the comment file that you think is important, and what is it that you kind of, if you can, discount as not being all that important to the rulemaking itself?

Well, so first of all, thank you for the comments. I mean, the comment process is really very important. We're very grateful for the comments that we get, and the discussion is highly informed by the comment file, so we're grateful for all the comments that have been sent in. So, well, we look at all the comments.
One way or another, we look at all the comments. And we evaluate based on the comments whether we might need a change of approach in some cases. That's how the process works.

- So in response to some of the more data driven analyses that have been submitted in these comment letters, does it cause you to go back and sort of think about how you're going to approach the data analysis for the final rule, and whether you need to replicate some of that work internally, if you have the resources to do that, such as using the CAT data, which you've used in some of the economic analyses already?

- We absolutely carefully evaluate the data in the comments, and we, you know, return to our own data analyses and we marry things up. That's generally, you know, what we would do.

- Yeah, sort of a replication exercise,

- Yes, that's right.

- I would assume,

- Yes.

- just to make sure. All right, so we'll end up with kind of a softball here, and that is kind of what did you think was the most surprising part of the position when you took it? And really how does it compare to academia?

- Yeah, it's very different, and I've certainly learned a lot. So I'm very grateful, you know, to be getting the chance to be doing this position. And I believe I did not understand what the SEC really did before I got into this position. I tended to think that well-functioning markets just kind of emerged, and I don't think that they do. So, that I think was a very valuable learning process in terms of, you know, better understanding the SEC and also, you know, gaining more understanding of how markets work.

- Great. Well, I might disagree with you about well-functioning markets not working, but we'll leave it there. I wanna thank you, Jessica, a lot for agreeing to do this, but I think we're about right at time, so turn it back over to you, Alan.

**Overarching Issues with the SEC’s Four Proposals**

*Discussion with the Roundtable Speakers*

Moderator
Elad Roisman
Partner
Cravath, Swaine & Moore

- Great. Thank you so much, Craig and Jessica. And at this time I'd like to turn it over to our first moderator, Elad Roisman.

- Thank you. Thanks. Good? So thank you, Director Wachter and Craig for that. It's honestly so great to see so many folks around this table. It's been a while, almost six months, but I feel like numbers have grown. Thank you SIFMA for inviting me to moderate, and to Ellen for all of her work to make this happen. I know everyone watching and participating is excited for today's discussion. And as Ellen said, my name is Elad Roisman. I'm a partner at Cravath, Swaine & Moore. I'll do my disclaimer, which is my comments today are my own and don't represent the firm or my partners or our clients. So almost six months ago, SIFMA held a roundtable to discuss much of the topics raised in the rulemakings we'll talk about today. However, then there was only a speech, and now we have thousands of pages of rules and comment letters. To say that these proposals have had a strong reaction, I think is a bit of an understatement, given how many stern faces I see in looking around. And I think the record is littered with comments of how expansive people feel that these rules are and the impact they will have. I believe today we'll hear some recurring themes, which echo what was discussed at the last roundtable, and in many comment letters to the proposals, namely, incremental and targeted steps are important and preferred to large and sweeping realignments of how the markets work; robust economic analysis is critical to driving decision making; and it's important to be mindful of how interconnected our markets are, and how even rules narrowly crafted can have widespread impacts and unintended consequences. Before starting, I note that I have the unenviable task of trying to keep the trains on time, so I apologize in advance for ending some discussions. We'll begin with a discussion of the proposals in general, and then move on to a discussion of 605 and then ticks and access fees. And with that, let's begin by asking today's first question. So Dan, as your firm's comment letter noted, there are concerns about the justifications and potential impacts of these rules. What is your firm's views on the reasoning for these proposals?

- Well, it's great to be back here. Is my microphone working?

- Yep.

- Good. Good to see so many familiar faces. We've gotten a little closer over the last six months. I dunno why. The letters speak for themselves, 273 pages of letters that I think we lay out pretty specifically how we feel about the proposals. My comments, I'll be specific to the best ex rule and the retail auction FOB rule. You know, the 605 and tick are just debatable things around the edges. What's the reasoning for the proposal there? Exactly what I laid out here, I think, the last time when we talked about false narratives leading to bad policy making. We had events in January 28th, the GameStop events that led to a rush to judgment, right? First it was collusion amongst market participants that the SEC in its own report proved didn't happen. And instead of saying good enough and moving on, looking at real issues, putting aside the settlement cycle, what happened, right? We heard PFOF caused this, gamification caused this. Ignore the fact that social media, and, you know, folks getting together through a medium that allows 'em to act quickly and make decisions collectively caused it. That's too hard to tackle, so let's go after PFOF. So that
gave rise to these proposals as predicted. And look, I've spent my whole career, almost 30 years, I guess, dealing in the SEC, around the SEC. You can scrub, all of you think, you know, I'm a little outspoken sometimes. I never attack the agency, I certainly don't attack the staff, and I have no intention of doing that here. But I will tell you, these proposals, best ex and the CLOB rule, which is really what it is, they're not serious thoughts. They're thought exercises. They're things that, were I to be an academic, I'm not, I would not fit in at all, something I would post on SSRN and say, "What do you guys think?" right? Not right for a serious agency, proposing serious measures to recreate markets involving tens of trillions of dollars, right? At Robinhood alone, we have 23 million customers, retail customers, most of whom are first time investors. And these rules are gonna impact them and their ability to access the market. And we throw up a thought piece? I'm just disappointed. Greatly, greatly disappointed. I think that's reflected in our comment letters. So I hope and expect that the agency takes seriously all the comments, and if they do, I would expect that there'd be reproposals or that they'll just simply drop, either or both of the best ex and the CLOB rule. So looking forward to the debate, not happy to report that it's actually worse than I thought from the speeches and other pronouncements that led to this first roundtable, but it actually is, it's very unserious.

Okay, that's...

Did I keep within my-

You did great.

Who had the over-under. Kinahan was running a book for sure on this. Yeah.

Thanks for keeping on time. So, Sapna, one of the things that struck commenters is how large of a change these rules will have. Given the role of your firm, what are your thoughts on the interconnectedness and impacts of these rulemakings?

- Thanks, Elad, and thanks SIFMA for hosting this roundtable. It feels like just yesterday that we did this. So while the SEC issued four proposals... Mic working? Okay. While the SEC issued four proposals, I think the interconnectedness of all the proposals is something that we've all kind of thought through and looked at. It's hard not to, when you look at the overlapping issues and the questions that are raised when you're looking at all of them in conjunction. I think it's also highlighted that we all recognize the interconnectedness by the fact that if you look at the comment letters that market participants have filed, a lot have filed a single letter across all the various proposals. If you look at all four of the proposals together, close to 1,700 pages of rulemaking, you not only have to think about them in terms of all of them going forward and what our U.S. equity marketplace would look like if all those changes were made, but you also have to consider the possibility that some of these might move forward while others might not, and think about how that would impact our equity markets and how that impacts investors as well. But just kind of taking 'em all together, if all of 'em went forward and we put in place the type of change that's contemplated by all four proposals, this would be the biggest overhaul to our U.S. equity markets that we've seen since Reg NMS was adopted in 2005. And so that certainly warrants the question as to whether or not that type of overhaul is necessary for our U.S. equity markets. We've heard words like gold standard, envy of the world, extremely efficient, robust, beneficial for retail and institutional investors used
to describe our markets. Knowing that and knowing that we have optimized them over the years for various market events that we've had from the financial crisis to flash crash, Hurricane Sandy to various market volatility events, they work really well for investors today. And so Elad mentioned incremental change and carefully measured changes to our market structure to preserve what works really well for investors is the approach that we should take. Identify the problem that you're trying to solve for, have a solution that's backed with data, have criteria to measure whether the solution actually accomplished and solved the problem that you're trying to solve for, and if it didn't, have a plan to unwind that change so that investors are not impacted. When you look at the number of changes and variables that were changing with all four of these proposals, you're not gonna know what actually worked and what didn't. And we are basically putting ourselves in the position of risking making the markets worse for investors than potentially the intended goal of making them better.

- Thank you. So, Gregg, some of the people at this table have submitted comments on the proposal's economic analysis, and we just heard, you know, Director Wachter and Craig go through the role of DERA. Would you like to provide some thoughts on the economic analysis of these proposals?

- Sure. Thank you, Elad. So I think a basic scientific principle is that extraordinary claims require extraordinary evidence. If you tell me that we're gonna have turkey sandwiches for lunch, I probably don't need, you know, to challenge you on that. If you said that Guy Fieri is coming in, is gonna prepare us lunch today, I'd question whether or not that was true, and I'd really wanna see some proof of that. So if you look at the analyses that the SEC did, they need to be of the style that is extraordinary, because the changes themselves are extraordinary. In many ways, Sapna, as you said, not only is this the biggest change since Reg NMS, it actually directly reverses a lot of what's in Reg NMS. And while there's nothing wrong with the Commission thinking through, maybe everything we've done for the last 20, 25 years is wrong, maybe we wanna do something different. It's good to have those thought experiments. Here they're actually proposing to unwind a lot of what was done. So the analyses basically need to be beyond reproach in a way that perhaps has not been done before as, Craig, as you said. So I think we'll hear from a number of economists on the details of the analyses, but just a few high level thoughts. The first is undoubtedly the staff put an enormous amount of time and effort into the analysis, but the analyses themselves, they have to analyze the rule. They can't just be analysis, they have to be analyses that say, "This is what would happen if the rule passed." So take, for example, the analysis that was done for the Order Competition Rule, the auctions. All of the analysis is trying to discern what it would be like if you took retail orders, and you, instead of having them go to a wholesaler, would go directly to the exchanges in an anonymous fashion, as if they were simply exchange orders and they interacted with the existing order books. That's the analysis that was done. That's all the realized spread analysis. But that's not what was proposed. What's being proposed is to take liquid stocks and go to a tenth of a penny. There's actually no analysis on what would happen if we took liquid stocks and went to a tenth of a penny. So I think that the analyses themselves, even though there's a lot of information data, I don't know how much they are on point with supporting the actual proposals that the SEC had promulgated.
- So as many of noticed, many supporting letters of the rule proposals have come from retail investors. So
it'd be great to get some thoughts on what would happen if these rules are finalized as proposed. What do
you think the impact will be to retail investors in terms of customer experience and costs? And why don't
we hear from Joe and Dan?

- Sure. You know, it's funny that the big difference, I think, from the last roundtable to this roundtable, is
last roundtable, we were all, at least I was sort of wondering where everyone was going to agree and
disagree, and this roundtable kind of feels like everyone agrees. But so just adding to some of the things
that were already said, you know, in our view it's undoubtedly the outcome that the rules if they went
forward as proposed would have a very negative effect on retail investors. And I think what's problematic
about that, aside from just the obvious is, you know, we talk about how good the U.S. markets are, and
one of the things when we look globally that is so different about the U.S. markets, and what we think
drives a lot of what makes the U.S. markets as good as they are is the fact that we have such strong retail
participation in the markets, and anything that impacts that retail investor experience, you know, even
though I think a lot of the arguments try to paint the views of the industry as self-interested or bottom line
motivated, the reality is everyone at this table and in the industry has the interest of investors at heart. All
of our businesses only do well if there's a very strong presence from investors, institutional or retail. It's
the foundation of the markets. And regardless of people's business models, I do think that everyone has
that as the primary objective. And what I think becomes problematic when we look at the detail is if you
look at the auction proposal, if you look at best ex, ironically, if you look at some of the increment
proposals, we're essentially taking what is a well functioning part of the market and introducing things like
latency, less transparency, higher cost, into the equation. And what I think a lot of us are scratching our
heads about is how does that potentially result in a better outcome for investors? It's something that to a
lot of us, us in particular, it's just hard to understand how that's a better outcome for the markets. And, you
know, it's saying what's been said a little bit differently. Changing our markets should have a very high bar
associated with it. And some of us have been frustrated by that, I think, in a lot of cases. Going in and
talking to the SEC over the years and getting answers along the lines of, "Where's your evidence?
Where's your data that this is going to be better for investors?" And that high bar, on the one hand
sometimes frustrates people, but on the other hand, it's something you walk away from and say, "That's
probably the right way to think about it," because without a very clearly identified problem, you probably
run a lot more risk of breaking something than fixing something. And the fixing something seems to be
what's largely missing here.

- Yeah, I was really encouraged. You know, we've surveyed the comment file. It's obviously huge, but
there are, you know, per your question, a large number of letters coming in from retail. And it's so funny,
right? Because my view here is this regulation, again, I'm speaking best ex, CLOB, is geared at the notion
that this new generation of retail investors is so stupid that the government needs to protect them from
themselves. They can't make decisions on their own, they can't understand conflicts. This horrible conflict
of payment for order flow. Dear, dear, dear me, right? Even though there's no commissions anymore,
right? There's this latent conflict. They'll never fully understand, so let's ban it through the back door, by
the way, without doing it expressly. And then you read these letters, right? And they're reading 1,500
pages of inscrutable texts, trying to figure out... One by one, it's impossible to figure out how to do it. I did
my old commissioner thing. I had it printed. I took my red pen, you know, I got a bottle of scotch, and I sat
there over a weekend and tried to mark the damn thing up. And back in the old days I would've said, you
know, "Let's send this back down to the staff." I mean, trying to understand one by one is hard. Trying to
understand them together... But these retail letters, some of them just go right to the heart of the issue,
right? They don't want commissions back. I mean, this is a whole new era of retail investing. The idea of
reintroducing commissions. If we make, at Robinhood, and I'm just throwing out a general number, 42
cents on the average trade in payment for order flow. It's somewhere around there. We converted that
because of these proposals to a commission and called it a commission, you would see retail drop out of
the industry. You just would. Just because you called it a commission, you added it on top. They just have
learned, this new generation over the last 10 years that commissions are a bad thing, and they don't want
it. But without it, without the 42 cents, and I've made this argument directly to the TM staff, how am I
supposed to pay the light bill? Like this isn't some sort of price gouging exercise. This is like, we need to
get paid. We provide a service, we subject ourselves to massive liability. Every account you open, right?
You're subjecting yourselves to liability, all the regulatory requirements, all the compliance and operational
requirements go behind it. You're supposed to do it for free? And again, that's where this sort of big
government utility CLOB notion comes back. And by the way, there's no, you know, all these bad ideas,
one are new, right? The CLOB debate led to NMS, right? So it's just dusting off an old bad idea and
giving it a run in the modern era. And it's not a good thing. So I don't wanna be overly doom and gloom.
Like who knows exactly what investors are gonna do? But we do know, and we are on the front line here,
we talk to them and I know there's others, looking at Ovi over there. We talk to these customers. We
understand what drives them. And this is beyond a talking point. This notion of reintroducing fees, costs,
you know, how do I pay the bills? How do I actually provide this service to them, and without, you know,
introducing something that causes them to leave the market, right, that they view as a barrier to entry?
And, you know, all for something, some, you know, alleged conflict that, you know, if this rule was what
the SEC's supposed to be doing, if this was non merit regulation, if this was bottoms up instead of top-
down regulation, we'd all be sitting here debating the new B-10 requirement for exact PFOF disclosure.
You know, make me disclose the 42 cents, show it to the customer. We can even do point of sale at this
point, the way technology is. Have them make the decision. I'm gonna tell you, they'll be fine with it,
based on what we've heard from our customer base. But the idea of adding commissions, adding account
minimums, adding all these other things, to me it's just, you know, I gave speeches. Elad, I think you did
too, right? We watched retail involvement in our markets decline for decades, right, from the peak. And
we all worried. Why, right? Oh, Jack Bogle, all these things, sorry for the Vanguard folks, but, you know,
intermediated investing became a big thing. And that's good, too. That has its place. But we lost the direct
retail participation. It's coming back, and now we're gonna whack it back down. That's what the
government's saying, and it makes no sense to me whatsoever. And you'll see that in our comment letter
too.

- So the buy side has always had a really important voice in the equity market structure debates, and we'd
love to hear from Hubert, Met, And Jim, what are some of your thoughts on the issues being addressed?
The sequencing and scope? So why don't we start with you, Hubert?

- Yeah, so maybe I should just start by saying that there's definitely some aspects of the rule proposal that
thematically makes sense. You know, things like moving away from a one-size-fits-all, you know, market
structure. But that said, as a package, these rules are very impactful. They're deeply interconnected, and
so we think it makes sense to move at a more measured pace. And the rule isn't, the proposals don't
really focus a lot on the sequencing of some of these reforms. And I think there's definitely a natural
sequencing to some of these aspects. For instance, when you reduce access fees, you would expect the
quote to widen as market makers compensate for loss of exchange rebates. If you see the round lots
change to a smaller lot size, you're probably gonna see the quote tighten in higher price stocks. And so it
makes sense that if you're assigning tick sizes in the basis of quoted spread, that you'd want to see the
impact of those effects before you actually go and assign tick sizes so that we're not making decisions
based on the obsolete spreads. But one thing that I think is really important too is the need to conduct
some post-implementation analysis, right? You know, these rules are really gonna be transformational for
markets, and it really makes sense to have some assessment of whether the rules have had their
intended effect, or to see what other changes may need to be made, you know, if the rules aren't working
properly. And I think there was a reference to the tick size pilot earlier. And one thing that we saw from the
tick size pilot is that proposal did not have the intended effect, and we were able to roll it back, and having
the analysis after the fact to assess whether that actually was working or not working was very valuable
and impactful on that rulemaking process.

- I mean, I'll support a lot of, obviously, what Hubert's gonna say, but just to add a little bit, the focus, at
least this morning for the first 20 minutes has been around retail. And I think some people in this room
have heard us say, we are actually retail. I know we get kind of the painted of the picture of institutional
investors, but we represent those same individuals that are, you know, investing money in our mutual
funds, their pensions, their retirement accounts, tens of millions of individuals. So when I look at the
proposals from the SEC, they're obviously trying to address what they consider as a retail problem, but
they have impacts downstream to the institutional community, and that issue that's gonna arise, the
unintended consequences that are gonna arise from whether it's the tick proposal, whether it's the CLOB,
as Dan likes to call it, whether it's best execution, as material impacts those same individuals that the
SEC is trying to. I guess, improve their execution on. So, you know, we look at it from the lens of how do
we not interfere with the institutional side of the business. I'm not opposed, obviously, to giving retail or
self-directed individuals a better experience, if that's an option, that that's feasible. I mean, from my lens,
it looks like they have a very good outcome now. I reject the notion that we're conflicted in our comments.
I've heard that from the SEC a couple times, that most market participants are obviously conflicted.
They're protecting a business model. We do not protect a business model. We derive zero revenue from
trading. We're trying to make the markets as efficient as possible. We wanna make sure that the
experience that our investors have at T. Rowe is optimal so that they can save more for their retirements.
If an individual can save just mere basis points every single year, or earn more basis points every single
year, the compounding effect of that leads to them having multiple years of additional savings at
retirement. It's a significant amount. And when we look at these proposals, you know, far be it from the
fact that I don't see the justification, frankly. I'm concerned about the fact that there's too many variables
being introduced all at once. To what Hubert was saying, it's impossible to analyze the impacts of each of
the individual proposals, let alone together, and how they might interact with one another. But when we
look at that, we are concerned, obviously, that we're gonna lead to worse markets, potentially, than we
have now, especially for institutional investors.

- Yeah, thanks, Met and Hubert. Just to build on some comments, first, name's James Martielli. I
represent Vanguard, which I think is in a really unique position. We're an investor-owned asset manager
that manages assets on behalf of tens of millions of investors, over $7 trillion, and we also offer a retail
broker platform for millions of investors as well. So we actually have both sides. To focus on my
comments on buy side thoughts predominantly, to build on what Hubert said, we do think sequencing
would be the right approach. And we'll get to Rule 605 a bit later, but we do think that's one of the first
things that should be introduced. And then second, if you're looking at the market data reforms in Reg
NMS, there are a couple that we would fully support and encourage to implement as soon as possible.
One, from a tick size perspective, we would just encourage folks to take a little bit more of an incremental
approach. So for those tick constrained stocks, moving to a half a penny and keeping the, from a quoting
perspective, and then from a trading perspective, a minimum trading increment of a tenth of a penny for
all stocks a dollar or more, we think we'll provide some greater flexibility for the exchanges while keeping
a bit more of a level playing field. We also will support lowering the access fee cap to a tenth of a penny,
to really ensure that these fees comprise a small portion of the trading cost. The model that exists today
does sow the seeds for some conflicts of interest for a broker's obligation to get best execution, and it
could undermine some market transparency, because those fees are not, and rebates are not, and the
price is displayed. And it does also contribute to some market complexity, as, you know, some retail
arbitrage strategies and the proliferations of new order types can be encouraged with access fees where
they are today. So we would just really encourage the SEC to take that incremental approach, and then evaluate where future reforms can be potentially considered.

- Thanks, James. So following up on these comments, Debbie, Matt, Gregg, and Dan, what are your thoughts on sequencing and whether it makes sense to move forward with all proposals at once, and what would be a workable path forward, including given other not yet implemented rules like the market data infrastructure? So.

- Maybe, thanks for the question, and, I think, as has been stated by a lot of people around this table, a staggered gradual approach to change we think is really important here. And in particular, as we've discussed, these are widespread, very complex changes that interrelate with one another between the proposals. So let's just say, you know, we talked about the tick size proposal and how it was unwound because it didn't go well. If these rules were to be put all in place at once, we wouldn't even know which component of which rule was the problem. And that really would be very, very difficult to unwind as a market. So from our perspective, we certainly think doing 605 first makes sense. Get better information in the market. And then if we're gonna do these other things, do them incrementally, and then pause and make sure we don't have a negative impact on the markets before introducing more changes into the markets, so that if there is a problem we can deal with it in a more controlled manner as opposed to all of these interrelated rules coming together at once.

- Yeah, I agree with all that. I'll add, and just point to the two joint letters that are out there in the comment file, one which we did with Schwab and the Stock Exchange, and another one with Virtu, and CBOE and a few other firms, which I think map out a pretty logical path forward, which is, you know, a version of 605, market data, infrastructure, a reasonable path on quoting increments, and then putting aside the auction and best ex proposals for a lot of the reasons that have been articulated. So I do think there is a path. I think there are changes that we've all agreed would be good, and if done in the right way and measured, and, you know, waiting for, proposing additional changes, like Debbie said, before you have an evaluation of the rule changes you already made, that there is a path with meaningful change that could bring meaningful improvements to the markets. But certainly doing everything at once, for all the reasons articulated, will have a lot of unintended consequences.

- If I could just point out, there's also, in addition to, I think, Debbie, all the points you made about how the interaction works, unintended consequences, there are inherent contradictions in the rule text itself and the analysis, but that would have to be rectified if you put them together. So for example, in the Order Competition Rule, the SEC explains that in a world where you are quoting in pennies, you will be able to respond in a tenth of a cent. And they go on and explain why that's good and why that's different than just the quotes. But we know that the SEC at the same time is proposing to change the quoting increment to a tenth of a cent for potentially thousands of stocks. Well, if you do those at the same time, one of those things is wrong. I mean, so either the Commission is not gonna do the first or they're gonna have to rewrite the analysis for the second because they're completely contradictory. So I just think there's a pragmatic reason why if you put all the rules together, you actually can't do them all at the same time, mechanically.

- Thanks, Elad. Yeah, so no arguing regarding sequencing there. Everyone's laid out here over these last several speakers. I would just, number one, I want to give Director Wachter a little bit of credit, because
during the tenure of Gensler so far, you've had, as you mentioned, 46 proposals. That is a ton of proposals. I think Chair White had 23 in her first two years, and Chair Clayton had 26, so you're obviously very busy. So it's an incredible amount of work. Even beyond the four proposals, though, that we're talking about from December, there are other ones that are gonna slam into these proposals just by their nature. There's so much going on that needs to be taken into consideration, albeit we will work on the sequencing, but we also need to take into consideration our proposals. We don't wanna forget the work that's been done by the previous administration with the market data infrastructure. I think we're, by and large, okay with the factory pulled forward some aspects of the market data infrastructure rule and the Reg NMS one with lots and round lots redefined, but it's a rule, and it passed, and it was a lot of work that went into it, through, you know, industry feedback loops, roundtables, proposals, comment periods, then ultimately a rule that made through, by and large, you know, some touch ups due to litigation, but it's ready to go. Are we gonna cycle back to that, implement that in its entirety at some point in time? 'Cause there are wins within that in the ways of competition in an area that lacks competition.

- Met's telling me we're out of time, which I thought I had us a few minutes to the good? Thanks. Billings burned up my extra time. I'm not, there's not too much more I can add. It's all in the comment letter. I was astonished. I'm sure all of you saw the DOJ comment letter on MDI, which I don't know if they knew what they were doing, they just tripped into this issue. But they hit the core issue here of, you know, MDI needs to be implemented, right? And that's a predicate outside the other four that just further complicates the 3D chess of rolling these four things out at once and not understanding how they interrelate. You know, and I do worry about a world where you have an SEC that regulates every four years. This is a point I've made in other fora, which, you know, you have a new chair, all of a sudden the past Commission's work is suspended. There's, "We're not gonna enforce these rules. We're gonna write new rules." Like this is not a way to run a railroad, and MDI needs to be implemented. It's the law of the land. It's a rule. It should be implemented. It should be a predicate upon which other incremental measures, 605, everything else should be measured against that baseline, and we don't have the baseline yet. So, but I do also want to throw a compliment to Director Wachter, because, like I said, I did the old commissioner thing, and before the scotch really took too much effect, I got to the alternative section, which I love. I think you did a very vibrant and thoughtful job in the alternative section of the economic analysis, which will accommodate a flexible type of incremental implementation. At least that's the way I read it, and I thought that that was very thoughtful and kind of a pressure relief valve on some of this. So thank you for that.

- So we've obviously heard some concerns raised by the scope of these rules, but there's also areas where I think we also have heard there's potential consensus. And Michael, we have not yet heard from the exchange perspective. Perhaps you can provide some thoughts on these areas of greater agreement.

- Thank you. Yeah, certainly the tone today is a very, you know, sober critical tone, but I think it also is worth remembering that there's actually quite broad support for a number of the policy objectives that the rules set out to pursue. Ensuring that we have robust public investor interaction, ensuring that the NBBO is an efficient price discovery mechanism, and ensuring that it's an effective performance benchmark. To that end, you know, in our conversations with market participants broadly, we did identify the emergence of a consensus position that we think could find a path forward to achieve many of the policy objectives while diminishing the risk of some of the downsides. And as Joe mentioned, NYSE, along with Citadel Securities and Charles Schwab propose this in a joint comment letter. It a pretty simple election of changes, but it is significant. The first would be to implement the 605 reporting reforms. The second would be to reduce quoting increments or tick-constrained names to a half penny, to establish a trading increment of a tenth of a penny, and to adjust the access fee cap for the new half penny quoted names proportionally to 15 mils. We'd also recommend accelerating the round lot definition changes. And then
with respect to the other two proposals, to withdraw them, and then circle back once we have adequate data to evaluate what further reforms may be necessary. We all have a shared interest in a fair, efficient, stable marketplace. And this seems like a consensus that really across all areas of the ecosystem, there could be a potential for collaboration.

Why Updates to Rule 605 Should Come First
Discussion with the Roundtable Speakers

Moderator
Elad Roisman
Partner
Cravath, Swaine & Moore

- I'm shocked that we are on schedule, so, fantastic. Why don't we shift over to, yeah, thanks. Why don't we switch over to 605. So, as we've heard, there seems to be greater consensus on the updates to Rule 605, and Chris and Steve, it would be great to get your thoughts on what the impact will be for transparency and standardizing sort of industry benchmarking.

- Thanks, Elad. So Fidelity strongly supports increased transparency. We believe Rule 605 should be modernized and used as the basis for any future market structure reform. We believe that retail and investors could benefit from this increased transparency in a few different ways. One, market makers, retail brokers, will have greater ability to assess venues and whether they access them to provide an enhanced performance. Two, more public disclosure will allow academics, industry practitioners, and individual investors to see comparative metrics on performance across these brokers. And we think that this will help facilitate further competition in the space to drive even better execution quality. And as an example, through FIF, three brokers, starting in 2015, produced execution quality data where we are able to observe across participants and across almost every single bucket, symbol, and size, there's improvement. And that was even further pronounced in buckets that didn't have transparency prior, more specifically in odd lots. And I think lastly, it's important that we provide this transparency to end investors so they can choose brokers that align best to their investment objective.

- I echo kind of everything that you just said, Chris, and indeed, everything everyone's articulated heretofore, which is that an incremental approach is important, and 605 is probably kind of the best way to move forward. It is the single most biggest consensus that we're seeing, and I think the reason is pretty transparent, right, to use a word. It's because more information, more readily available, provides better decision making to investors, whether they're institutions or they're retail. And it provides better analysis after the fact as to whether or not the service provider executed or did the job in a fashion that was in communion with the service consumer, right? Interestingly, this is the cure-all for most of the, quote, "issues" that the Chair has articulated heretofore. Conflicts of interest, right, getting better prices. It's funny, the better prices thing is my entire life I've ascribed to the idiomatic expression that a bird in the hand is better than two in the bush. And somehow we've arrived at that isn't the case here. But as you provide more information, more folks are able to discern whether or not you did a good job. It is the mitigant to the principal agent conflict. It's as old as time. Dan, you mentioned that none of these ideas are new. It's the same rehashed rhetoric that paternalism dispenses, right? Transparency, transparency,
transparency. It is absolutely the lifeblood of any good market. And so we advocate for it. We advocate for clean air and world peace also. Right? Very, very important. To the proposal itself, the only one thing I'd say is we gotta be careful. The summary report, right? Great. Order types are out there. Institutional folks here look at stuff at the parent level. So there's issues there, but what you're gonna do is you're gonna have a report that doesn't tell the whole story, that doesn't provide context. It's like having an orchestra, like you have three flutes, two violins, a tuba, a trumpet, but you don't have music. And there are a lot of different outcomes that you can get from that. And so I would be quite careful about how that summary report is constructed. It needs to be constructed in a way that consumers can do something with it, okay, and in a way where we're not entering into an I gotcha regime. Best execution is highly personal, it's multidimensional, it changes minute to minute. And I could keep going, but Met's looking at me.

- [Met] You owe me dinner.

- I owe you dinner. Boom. I talk too much. And I would also, I should have begun with it, thanking SIFMA for putting this together, and the SEC for coming and talking to us. And I have a ton of empathy for the amount of work that you're putting in. Thank you very much. Appreciate it.

- Professor Battalio, you've studied and commented on equity market structure proposals, including the ones here. What are your thoughts on the proposed Rule 605 rulemaking?

- I kind of agree with what both Steve and Chris said. So these rules were passed originally back in 2001, and a study came out in 2007 not surprisingly found that firms that had good execution quality in a prior month got more order flow the next month, consistent with competition and the search for best price. And then recently, some of your comment letters cite the paper by Dyerberg, Skalko, and Werner that showed this is true 2020, 2021, 2022. So certainly these reports allow us to examine kind of how execution quality is associated with market share. Despite that, though, Bill Alpert tried to... Are you here, Bill? I thought he might be here. Bill, in 2014, tried to link the 605 and the 606 reports, so the routing reports from brokers, which used to be done on a three-month basis, and the 605 execution quality reports. And despite his efforts, he kind of failed, I would say. He did his best he could. I think pushing Rule 605 reporting on the brokers will create a database, as was mentioned, that will allow the press, investors, regulators, academics, to evaluate relative execution quality across brokers. I think as we've seen some people react to the paper by Schwartz et al, you gotta be a little bit careful when you look at these execution quality statistics because brokers have different clienteles. And so even when you have statistics that look like it's apple and apple, it may not be apple and apple because of the different clienteles, but that's the job for academics and well-meaning reporters to think about. Finally, I'll just say that I think that putting this out there will help expose any agency issues that are associated with order flow payments and rebates that are out there. And I can actually imagine someone developing an app that feeds off of last month's EQ stats, and I plug in the order size and stock, and it tells me what broker was best, right? So I think this would be great, at least at 20,000 feet. Thanks.

- So James, obviously Vanguard has a broker, and that broker would be required to complete a 605 report. What do you think will help investors, and what are your thoughts on the EQ metric?
- Yeah, thank you. Gosh, I think I was sitting on the other side of the table about six months ago, when we were strongly supporting standardized reporting, so individual investors could actually get a bit better understanding of execution quality. So we are very happy to see the SEC propose this, and we absolutely welcome it, because we do think it will be the most important proposal that will ultimately improve investor outcomes, because it will enhance competition and will allow investors to make more informed decisions, as was stated. A few things, and to touch on effective over-quoted, there were some things about will investors be able to interpret because different business models attract different types of investors, and those investors have different types of risk, right? But this report will at least, especially for effective over-quoted spread, which is the, I would argue the best measure to understand how effective the trade was. It basically divides up how much price improvement goes to the investor and how much goes to everybody else who touches the trade, whether that's payment for order flow, perhaps a wholesaler's taking on the risk on the other side of the trade, maybe there's access fees, everything else gets divided. I would say from an informing the investor, with these reports, and if you can see the different measures of effective over-quoted, you can get a bit better understanding of, well, okay, certain brokers are kind of akin, if this was like the automobile insurance agency, certain brokers attract safer drivers that don't trade too much and are less risky traders. Other brokers might cater towards drivers that drive a little faster, or maybe have a little bit more risk and are priced accordingly. At least this might give investors a little bit better chance to discern which type of brokers might attract different types of investors, and then they can ultimately see what that execution quality looks like. So lastly, I would say this is the least costly and easiest to implement. So again, we would encourage the SEC to implement it first and as soon as possible.

- Thanks. Ovi?

- Hey, good morning. My name's Ovi Montemayor. I'm with Charles Schwab, and I just wanted to jump in with a couple quick points. I do agree with James here on, you know, that we do widely support, right, all transparency. Steve, I think you made some great comments around transparency, also supporting, right, clean air, and we do as well. But it is important, right, to Professor Battalio's, you know, point, is those summary reports, when you get down to it, need to be accurate, right? If we're going to expect that the investing public to use these as a measuring stick of what brokers are performing better for them, or what brokers, you know, align more with their philosophy, then I think they need to be very accurate, as accurate as possible. And what's being proposed today, I don't think necessarily gets us to that specific point. One of the differences that I think it doesn't capture, and I think Professor Battalio started to touch on that, is that what's being proposed does not capture the differences in the composition of the order flow across different brokers. So if we're gonna do this and supply the... not if we should, we should do this, this probably is the only next path forward, because as the Chair kind of stated, I think a few different times, the measuring stick is broken. Well, if the measuring stick is broken, that's the first thing we should address before we even consider and contemplate any other changes, would be to fix that measuring stick. I think, so moving forward with 605 is the only way forward. Not doing that, and then there was a lot of comments around the sequencing, not doing 605 first in this specific right order, I think puts a lot at risk. Specifically, we quantify that to be $120 billion of direct, right, benefit to retail investors through price and size improvement over the next 10 years. Right, not doing this in the right sequence, in the right order, with the right level of detail for investors to make these decisions on their own could have a lot of negative consequences, so.

- Thanks. Great. Professor Hendershott, your research is also frequently noted in the field. Can you provide thoughts on the 605 proposal and the interaction with the best ex and ticks proposals?
Sure. Thanks for having me here today. So there's been, seems to be a lot of agreement about 605 being good. I'm gonna comment a little bit on what I think some of the complications are and some of the new metrics in 605 for non-marketable limit orders, and these relate to some of the broker clientele effects that have been discussed, right? So these non-marketable limit orders are the limit orders that are priced. They don't execute immediately. And with the tick size changes we may see a lot more of these types of orders. And evaluating the quality of order handling for these orders that don't execute right away raises a number of complications that aren't present for the orders that execute right away, right? The basic economic question that the rule should get at is measuring the welfare of the investors who are trying to trade. When the trade happens right away, you can benchmark it to a price, you can measure a cost, and, well, the cost is usually less welfare for the investor. For orders that don't execute later or never, there's an opportunity cost that's difficult to measure and is investor-dependent. I wrote a paper that settled the true cost of immediacy. I don't really recommend you try and read it unless you want to read about quantile regressions and selection adjustments and things like that. But in doing that, like the problem is really hard for orders that don't trade. How do we measure what the costs were of the investor for not trading? And so if the investor is impatient enough, they always trade, then we hit straightforward. If the investor doesn't trade, how do we know how well it was handled? The rule tries to get at, well, we'll choose a benchmark price and time from when the order becomes executable or when it reaches the best price in the market, and then we can calculate some statistics on that. Now, if all investors place orders in the same market conditions and don't cancel their orders, these straightforward metrics can be useful. If those aren't true, then they can start to be biased, especially if investors cancel their orders, and different brokers have investors who cancel their orders at different frequencies for different reasons. So the rule tries measure the effective spread at the time of the non-marketable order becoming executable and the time to execution. I'm not sure how the effective spread, based on the time the order reaches the best price is informative for investors, right? Because when that happens, the broker or the market center didn't really have any control how the broker or the market center routed the order or handled the order. This is gonna be the same regardless of what the broker did, so it's not gonna help the investors make a better decision. The second metric is on average time to execution. And this depends upon what all of the broker's customers are doing. So we're gonna calculate an average, and then how does an investor treat that average relative to what they're going to do. And so in particular, one thing that could happen is if you have investors or traders who cancel and replace their orders a lot, they're gonna have a very short time to execution by construction, because their only orders that execute are gonna be ones that haven't been in the market very long, 'cause they're constantly canceling them. Now, what does an average investor think when they see that the execution time was very short? Well, they would see what's happening for the investors who may be very different than them, who cancel their orders a lot. And this, even worse, could cause some perverse incentives for brokers and market centers. If I want to try and improve my time to execution metric, I want to attract the types of customers who will cancel their orders a lot, because they'll have a short time to execution. And, you know, then the metrics may be even less representative from what a typical retail investor would receive. So, and while these proposed metrics may not be that useful, I think there may be some costs in calculating them, because they're different than the current 605 rules, which are only about actual executed trades. So is this gonna require a forensic reconstruction of all the quote history throughout the day to see when an order became executable, and then to start calculating statistics there. So there may be an increase in costs, and if the brokers and market centers have an incentive to get more traders who cancel orders more often, that will raise the cost even more. And finally, the next proposal we have is about tick sizes, which is likely going to increase the amount of market data, which is going to increase the cost for calculating all these metrics even more.

So, believe it or not, we actually have some time. So if anyone wants to sort of follow up on anything. JJ.
- Yeah, so I wanna pick up on something Professor Hendershott just talked about, and Ovi, and that is, I think if we're gonna, you know, I'm all in favor of what everyone's saying about 605 reform, et cetera. I've had the good fortune in the 20 years of my, you know, retail career to meet tens of thousands of retail clients live. I've never had one ever ask me about a 605 or 606 report. And so I think if we think about the reform, that, Professor Battalio, I love the app idea, by the way, but what he's saying is actually true. I think it almost has to be in two parts. Something that retail can easily consume if that's truly our end goal. But at the end of the day, we're making a report primarily for each other and for professors and for the press. Retail traders don't use that information. And so I think we have to be really careful about what are we truly saying is the goal, and does there have to be one very simple report, just for retail to use, and then one that's actually the more detailed, that's actually for one another, which is primarily what it's used for right now.

- And at the expense of piling on, and it goes back to what Gregg and Joe talked a little bit about is like what's the problem, right? And extraordinary change requires extreme, and I'm talking only about 605 here, but it requires some pretty significant evidence. And so, yes, I look forward every year to read the report from the Office of the Ombudsman. Every year I look for that. And this year, last year, I looked back, right, looked back a bunch of years, and not in one instance was there a complaint, a retail complaint, about the execution quality, about routing, about anything that has to do with their executions. Indeed, had a lot to do with being sold something that wasn't adequate for them or didn't fit them, and a myriad of other things. But not once was there any evidence that this official government body, whose job is to field complaints, ever receive a complaint about payment for order flow, about price improvement, not getting enough of it, or their order routing. So JJ, thanks for saying that.

- [Gregg] So, I'd echo...

- It's a good report by the way.

- I'd echo a lot of the positives about 605 and the importance of getting that out first. And I have to say, I thought the division of economics risk analysis did a terrific job on teasing out a lot of the metrics. I know this is something that the industry has been working on, and we've been in to see the SEC over a number of years. I think you've actually taken it a step further, and some of the constructs are more robust than perhaps that the industry even had thought at that time. So I think that's where the analysis was quite positive in supporting a lot of the new ways and the new details of looking. Where I think the consensus is, we're all a little nervous about a single summary report, if that summary report is supposed to drive individual investors to make choices, that that's the part where you'd have to be really careful about that. Because as a summary report, it's a summary report across all stocks, all sizes, all order types, et cetera. I don't know the last time that I bought a product by looking at what is the average price of all the products across every possible thing. Like if I go to two big box stores, I wanna buy a lawnmower, I look up the price of the lawnmower, I don't go to the big box store and say, "What's the average price of all the goods you have? Okay, $83." And I go to the next one, it's like $200. Well, I'm gonna go here, cause the average price is $83. Yeah, but actually the lawnmower's a lot more expensive on that one. So I just think we need to be careful when we do a summary report, that not only are they actionable, but they don't inadvertently cause an individual to make the wrong choice because you're trying to compress too much in a single report.
- Well, that was excellent. I think we now have a short break, and then we will reconvene at 11:45.

**Tick Size, Access Fees and Transparency of Better Priced Orders**

Discussion with the Roundtable Speakers

Moderator

Elad Roisman
Partner
Cravath, Swaine & Moore

- So, thank you, everyone. Let's go right into tick sizes, access fees, and transparency of better priced orders. So the issue of dynamic ticks is not new, and a lot of study has already been done, and the SEC's proposal is in a way a response to this longstanding issue. So before hearing from the exchanges, let's hear from the market participants' perspective, their perspective on dynamic ticks, access fees, and liquidity provisions, including thoughts on the proposed quoting, trading, and access fee increments. And why don't we start with Joe?

- Sure. So, look, I think there's a ton to say on this topic, but just trying to keep it high level to the core principles, going back to one of the points we made earlier, and anything along these lines need to start with what the actual problem is that we're solving for. And in our view, tick-constrained is a valid problem to solve for, and so we've long advocated for narrowing to half a penny in a list of truly tick-constrained stocks. But there is a lot of danger, and part of what we've also tried to highlight is going too narrow in a tick increment can also have detrimental impact on securities markets. And we have data in our comment letter around observations we've had when the Tokyo Stock Exchange went to too fine of a tick increment. The SEC in the original Reg NMS proposals had articulated a lot of the negative outcomes that come from too narrow of a tick. And I think we worry that some of the drivers for tenths or twentieths of a penny, like tying into what a trading increment ends up being in practice, or looking at the reverse of what happened when the tick increment experiment was backed out, is just the wrong logic and the wrong proof behind trying to advocate for a quoting increment change. So I think, again, coming back to evidence of something that you're actually trying to solve for, that you can measure after the fact becomes of primary importance.

- Sapna?

- Sure. I think looking at tick size and access fee are probably two areas that folks are generally supportive of the SEC looking at, given that we've had conversations around both of those topics for a number of years, especially the aspect of both, where it's a one-size-fits-all model, and some of the unintended consequences that we've seen over the years as a result of the two. Despite what is kind of set forth in the proposals, I think we have seen areas where there is consensus with respect to what the SEC has put out there. Joe mentioned going to half a penny for tick-constrained names, and there seems to be support for going in that direction. It's hard to kind of argue when you have certain names that would
naturally trade at tighter spreads that are being artificially held to that penny tick, that that's not something that we should look at from a market structure standpoint. And so I think that's one area where there seems to be consensus. There seems to be consensus, too, that access fee and tick size are tied, when in terms of how you think about them, and they go kind of hand-in-hand when you think about the cost of an execution. Spread costs certainly factors into it, and what you pay for the transaction certainly factors into it. And so proportionality, if you're going smaller in terms of the tick, the access fee should come down proportionally with that, seems to be something that we've seen kind of broader industry support for. In terms of dynamic ticks, my firm particularly has been an advocate of seeing a dynamic tick approach for the last five years. We first advocated for it as part of our comments to the transaction fee pilot, for the same reason that I mentioned before. The two kind of go hand-in-hand, tick size and access fees, so possibly going down to half a penny tick for the tick-constrained names, however we define what tick-constrained is. I think we'd be advocates of even looking at a larger tick increment for some of the higher price stocks, which has come up in certain conversations as well, and having the access fee kind of proportionally tied to the two. With respect to the trading increment, I think as a broker dealer, it's hard to advocate for something that would tie the broker dealer's hand in giving any amount of price improvement to the retail and institutional customers, though that's an area where we would not be supportive of. I think Joe mentioned going too granular in terms of tick sizes beyond the half a penny to a tenth of a penny, two tenths of a penny, raises some of the same issues with respect to sub-penny jumping, flickering quotes, that the SEC was addressing as part of Reg NMS when we went from fractions to decimals, and we put in place the Sub-Penny Rule in the first place to address those concerns. So it's almost going backwards and undoing some of Reg NMS to go in that direction.

- So, I guess, you know, I'll agree with a lot of what Joe and Sapna said. I'm not sure that we're as convinced dynamic ticks are necessary, but certainly I do think we've seen in the comment file a lot of coalescing around half a penny for tick-constrained names. Now, it is difficult to agree on how to define tick-constrained names, but, you know, we, in our comment letter did propose one alternative. These are complex issues, so we think you need to be careful in how to do that. But for some stocks, you know, a tighter tick would make sense, and we think access fees should go along with that in terms of coming down proportionally, or, you know, if you're gonna have more than one tick, we had agreed with the proposal that was put out there by NYSE and Citadel and Schwab in terms of, you know, a tenth of a penny might just make sense. Let's not make this... We have a very complex equity market. We're a little concerned that some of the proposals would make this an even more complex market, which we don't think is helpful to the overall efficiency of the market.

- So Mike Masone at Citi. As we were writing our comment letter, I took a look back at about a dozen or so letters that we had penned in the past, dating back to the SEC's concept release on equity market structure from 2010. And a consistent theme throughout was something that Hubert, I think, touched on earlier. And, you know, when you go at this point in this forum, you're often gonna repeat what many people have said before, but Hubert mentioned this idea of a one-size-fits-all approach not necessarily being the optimal way to look at the market. We've debated that in our committee for many, many years, and to Debbie's point, you've got this push and pull between the desire for simplicity versus the acknowledgement that our markets are just different, primarily depending on liquidity profiles. So we certainly are of the view that a one-size-fits-all approach is not appropriate. However, you know, look at your, you know, in line with the Hippocratic Oath, let's do no harm to markets as much as possible before we look to an expansive rewrite of the rules. So specific to tick size and access fees, so quoting increments in particular and access fees, if you adopt the SEC's idea of a correlation between the two and a multi-tiered approach to it, our view would be consistent with what many people have said, move away from that tenth of a penny, two-tenths of a penny, for all the reasons that have been enumerated, the information leakage, the penny jumping, the general noise in the marketplace, often to the
disadvantage of our institutional customer base. Not to mention the premium that that would place upon proprietary market data feeds, which seems to be going in the exact opposite direction of all the efforts to bolster the SIP in the market data infrastructure role. So if you take that tiered approach, but move off of the lowest sort of, you know, the most granular tick increments, we think that by leaving the majority of names in that one penny tick increment, you do the least harm and cause the least unintended consequences to markets. Move in the direction of half a penny. So we're very much in the camp of half penny for tick-constrained names. We're also in the camp of moving to wider tick increments for less liquid names. So you essentially would have the majority of the market staying where it is, but have two additional buckets for most liquid, least liquid names in the marketplace. Correspondingly, so if you want to retain that correlation between quoting increments and access fees, then our view would be, again, trying to do as little harm to markets. And here we're a little bit more nuanced. I think most of the folks in this room, we've been debating access fees for so many years, and I think you can quote the NSAK, you could quote SIFMA recommendations in the past, Citi certainly. We've been of the view that 30 mills is too high for the majority of the market. So we would very much support a reduction down to 10 mils. You could argue whether it should be 15 in line with what Michael and others had said earlier, but reducing for those penny-wide quoting increments, reducing down to a 10 mil cap, for your tick-constrained names actually moving down to five mils, and then for your higher priced or lower liquidity securities actually retaining the 30 mil access fee cap. So this is spelled out in our letter, but that what we have in mind is adopting some of what the SEC is looking at structurally, but shifting it away from the most granular parts of the market towards, you know, A, staying in harmony with the current structure as much as possible, but also looking at lower liquidity names and trying to do something there.

- So I think it's time to hear from the exchanges. It'd be helpful to hear what, you know, the thoughts the exchanges have to identify sort of the tick-constrained names, given that there's a wide range of methodologies, as Debbie sort of alluded to. So Michael, why don't we start with you?

- Sure, happy to. You know, the objective when you develop a methodology to identify the tick-constrained names is to find a meaningful universe, but also, you know, not a sort of overly broad universe. And so I think most methodologies will start with the time-weighted average spread. Our recommendation is to first identify stocks that trade with a time-weighted average spread equal to or less than 1.1 cents. That means that they trade at a penny-wide, at least 90% of the day, during regular trading hours. In Q4, that universe would've brought you to about 1,000 securities. Now, that universe is probably too broad in our view, because in many cases, immediately after a trade, the spread will widen. And so we would then apply a secondary filter of a quote stability measurement. And so we would recommend measuring the spread 10 milliseconds after a trade, and only determining that something is tick-constrained if 90% of the time after a trade the spread remains stable. So applying that secondary factor in Q4, it would've brought you down to about 900 names. That's meaningfully smaller than the universe that's contemplated in the SEC's proposals. I think that's closer to 3,000 names. Some of the other exchanges have proposals that are, you know, a good deal narrower, you know, maybe only five to 10% of traded value. I think traded value for our proposal is closer to 40%. So, you know, there will be some, you know, I'm sure, healthy debate about what's the right methodology, but we're looking for something that's, you know, not too broad, not too narrow, the Goldilocks just right in the middle.

- Sure. As you might expect, we have a few opinions around tick size. You probably have heard me ad nauseum talk about it, but just a couple high level points. First, one, and just wanna be real clear on this, we are also supportive of peace and clean air. Just wanna make that clear. When you think about these important topics that we're covering, and obviously everyone here sees it as important or else we wouldn't have made our way down to D.C., and for some people it was a pretty long trip. The markets, no doubt,
have to evolve over time, and the regulation then has to evolve with it. And I think "evolve" is really the key word, and I'm reiterating what some others have said already, but evolution is iterative over a very long period of time. So, you know, we need to see that. We need to see evolution. And I don't think anyone here is resistant to change for no good reason, but we need to ensure that we're open to good change. And I think I've heard around the table and in comment letters that there is some consensus on some changes. And what you need when you do that is some guiding principles. One of the main ones that has been a theme for us over the years and in our comment letters is around sort of the NBBO, and ensuring there's a robust displayed market, 'cause we believe that's gonna drive competition. It's gonna reduce investor cost, it's gonna improve liquidity, it's gonna reduce cost capital for issuers. So we find that as a good place to start. And there's a couple things that really drive that in my mind from like an exchange operations perspective, which is the tick size, which we're talking about here, and certainly the access fee, or really from our perspective, the rebate, which is the opposite side of the access fee. And we have found over time that the rebate has been an extremely useful tool at driving liquidity, at driving spreads tighter. We have multiple programs designed at market quality, ways to improve market quality. So, again, to go back to my previous theme, we're not saying we shouldn't change, but we should be just mindful and careful about that and ensuring that the changes we make produce outcomes that we want. And so from a tick size perspective, there are, as Michael mentioned, there's a lot of different opinions about where to sort of strike the line of what's tick-constrained, what's not. And so there's some debate to be had there. It is nice to see that there's consensus around half a penny. We were really concerned at first that there would be a million different opinions about what that should look like. And I think it's really interesting and positive that through the public debate and lots of conversations, the industry came together and is pretty aligned on half a penny. Not 100%, but pretty close, especially in something so important as this. And then it just comes down to, you know, where to strike that line. And one other thing on the half penny, I think a few folks mentioned having too many ticks or going too narrow. We already have that, by the way, in a bunch of stocks that have way too many ticks. That's why we advocate on the other end of the spectrum, whether it's liquidity spectrum, a price spectrum, however you wanna frame it, there's securities that could benefit from a wider tick. And a lot of times people wrap that around their heads and think of it as a wider spread, and that's certainly not what we would say. You would only apply this where the spread's already way wider than whatever tick you would choose. When it comes down to, actually, I think this is the answer to your actual question, Elad. When it comes down to where to actually draw the line of what bucket a stock belongs in, I think there's many reasonable proposals out there. What Michael went through, what some other exchanges have said, there's merit to them. What we had looked at is a lot of our own study. We did a ton of studies around stock prices and stock splits to talk to our issuers to get some of them that had very high prices, but were also liquid to split their stocks. And so we did some work around that which fed into how do you determine what bucket a stock should be in. We also use other academic research that's out there, and a lot of what it came down to is two to four ticks is sort of the optimal. And so you can use that to kind of back into what bucket a stock should land in, and using average weighted spread, for example, and backing into that. I would say, though, we think that's a starting point for debate, not a final word. And I think it's really healthy that we all are out there, sort of talking about that and getting to a good place. And my last thought is coming back to sort of the incremental point that many have made. Regardless of where we land on that, I think it's good that we move forward, but also we can take our time. We decide 1,000 stocks the right number, or 2,000, or 100, or whatever the number is. It makes plenty of sense to start with a small number and sort of have a rollout plan so we can measure as we go. And if you think of that in a sense of assuming we roll out more than just that change throughout this process with these proposals, the same thing goes for all of 'em. You know, we go out, we go out in order, we have a sequence that's logical, and you measure things as you go. And that's, I think, really important and key to ensure we have positive outcomes for all the constituents I mentioned and others have mentioned.

- Adam? Thanks, Charlie. Left me a couple minutes. Just one area that I think we want to focus on is just, I think, with Gregg, you had mentioned before, about understanding that there are extraordinary issues
that we want to tackle. And so when you look at this overall proposal around tick sizes and access fees, as well as potential for rebates, when you look at that knowing the time of rebate and fees at the time of execution, we believe that we want exchanges to be able to compete effectively for order flow. We want to ensure that if there is a fee cap or any other changes, that is not anti-competitive or discriminatory. It's a unique tool that exchanges are able to utilize today, to be able to compete effectively for off-exchange trading. One area that I think is important for people to put in context, is that if you look at the growth of off-exchange trading towards the latter part of 2019, you see a significant divergence between principal dealers and ETSs, where today principal dealers represent 75% of off-exchange trading. So if there's an implicit issue that brokers are routing to reduce cost, I think it's important to focus more around transparency and other means to kind of understand what the true issue is before imposing fee caps or changes to the rebate structure. As it relates to tick sizes, we've been very adamant about leveraging empirical data to make that known. So I think a couple of areas that we focused on, it's just looking at between 1 cent and 1.10 cent and below is roughly about 920 securities or 22% of notional traded. The other statistics that we wanted to look at is names that have a high quote to trade ratio, and what that implies is that essentially that people aren't willing to cross the spread at that particular price point because it's too expensive. So when we look at the 75 percentile, we bring that number down to 230 names, and it's roughly about 8% of the total notional. And so another area that we said, "Okay, let's add additional metrics," similar to what Michael was mentioning about an additional metric such as quote stability, we came up with a high average daily notional turnover, and just allow me to elaborate on what that means, is that basically we're calculating the daily average of each security's notional value traded divided by its market cap. And we believe that this criteria is important because it's very objective signal because it focuses on tick reduction effort for high turnover versus securities that would benefit for the ability to trade in finer increments. Conversely, we do not believe that thinly traded names in proportion to the market cap which have a low notional turnover should be the focus of a tick size reduction. And when we add that in that number, it gets to about 4% of total notional, or 58 securities. And the idea here is it's flexible enough that you can amend that over time. So very similar to what Chuck was mentioning, leveraging data to drive the results and evaluate them, and then you can always change that criteria over time or the parameters to allow for more securities to be incorporated. So the idea is to create something that's flexible, that allows us to evaluate the performance and look at the data to make an informed decision about where we need to be able to move forward.

- So let's round it out with the buy side. Why don't we get Ashley, Hubert, and Matt's take on the proposal. So, Ashley.

- Great. Thanks, Elad. So just to maybe take a quick step back and level set, you know, fidelity supports regulatory efforts that, you know, achieve better outcomes for our retail investors, and maybe more specifically support the broad objectives that the SEC laid out ahead of these proposals. But, you know, in terms of, you know, the implementation, it's really not a trivial exercise. And so I'd say we agree with many of the concerns that are being shared around the table today. In terms of the proposal in question, I'll probably focus my comments more around tick size and related access fees, but Fidelity supports lowering the minimum quoted increment for tick-constrained NMS securities trading at or above a dollar to 50 mills, along with a commensurate reduction in the access fee cap. In terms of defining tick-constrained, we obviously heard a number of thoughtful approaches from Michael, Chuck, and Adam, but I'll maybe offer just one additional thought, which is that we'd support using a multifactor approach. So looking at time-weighted average quoted spread, in addition to some liquidity metric, which, you know, I think serves as further evidence that there's a desire or demand to kind of narrow the quote. In terms of just the asset management concerns, and I'll focus on one primary concern that we've discussed in our letter, which is really around the negligible cost of market participants to step ahead in the narrowest of increment buckets, so 10 and 20 mils, you know, I think that the SEC actually acknowledged this concern
in their proposal, and I quote, "A smaller tick fragments liquidity in the order book into more price levels, which can increase complexity in the incidence of pennying, which could harm liquidity." And so, you know, I guess not to restate what many of you have already said, but taking a measured and data-driven approach, and sort of the importance of sequencing and using updated 605 is really a benchmark to, you know, measure and assess the impact of any incremental change, and just ensure that there's some, you know, connective tissue with cause and effect, I think is going to be important in terms of, you know, how effective any implementation actually is.

- So, I'm gonna echo a lot of the thoughts that have already been highlighted, so maybe I'll just kind of concentrate on the areas that may be worth stressing. You know, one thing I think we highlight is that tick size increments are inextricably tied to the criteria that you actually utilize for determining those tick sizes. So to the extent that you want to have smaller tick sizes or be more differentiated in the increments, you need to be much more discerning about like the criteria that you're using in determining what stocks are gonna be tick-constrained. And so we would definitely wholeheartedly agree with using a multi-factor approach to assessing that and making sure that we have really identified the right universe. Along with what Chuck said, we think that, you know, an environment with a larger tick size would make more sense, and so we've recommended in our comment letter going to a nickel for some of those securities. And we think there's definitely a lot of positive benefits of that, not not just in the way that those stocks trade, but thinking about how it counterbalances the effect of going smaller in tick sizes as well. So if you're concerned, for instance, about too much market data because you're going to a smaller tick size, well, if you increase the tick size on the other side, you're actually gonna be reducing the amount of market data that you're generating. So it definitely counterbalances some of the effects of going smaller on the tick size increment. And we think this is also important, because, you know, you should really be addressing market structure holistically, and so if we're gonna be fixing tick sizes, we should be thinking about fixing tick sizes across the board, otherwise we're really regulating, you know, as if we're playing a game of whack-a-mole, right? Really just trying to address whatever issue kind of comes up without really being thoughtful around like how we address the entire market as a whole.

- I should just say ditto. Really put us fast forward to lunch, but since I have seven minutes left, 'cause everyone's really moving along, I'll start by modifying a common saying a little bit, and saying, "I know what I don't know." I don't know what the right tick size is for all NMS securities. I don't know what the right access fee is for all securities, round lots. I mean, I don't know what that optimized value should be for both liquid and illiquid, large and small cap securities. When I read a 1,600-page proposal from the SEC, and I see in there 100 times or more that they're uncertain of the outcomes of these proposals, I know that they don't know what the optimal size is for access fees, for ticks, or for round lots either. And so when there's that much uncertainty and there's that much risk, the best approach, in my opinion, is to be conservative and take the most narrow approach we can. Again, we're not opposed to it from an institutional perspective. We've advocated for a, you know, not one-size-fits-all approach. We've been supportive of ticks, intelligent ticks, both narrowing and widening where necessary. We've long advocated for access fees coming down, but specifically in a subset of securities that requires it. So anecdotally, or intuitively, I would say, too narrow of a tick increment is harmful. And we've seen data around that, by the way. So when we went from fractions to decimals, we saw displayed liquidity decline significantly. If we go to a tenth of a penny, I assume we'll see displayed liquidity decline significantly again. That's not a great thing for institutional trading. I also worry about all the other nefarious things that people have pointed out, which is sub-penny jumping, quote flickering, the value of even displaying, really being relevant, the value of the NBBO when it's being set by a very small increment and a small size because of the new round lots or odd lots that are gonna be shown on the tape. So again, I don't know what the optimal size is, but I
would say too narrow is something we're gonna be opposed to for many reasons. When it comes to access fees, you know, again we've been supportive of bringing that number down, but for very liquid names, where we believe intermediation is excessive, where we believe that securities don't need that intermediation, because there's liquidity already present in those particular names. I'm opposed to regulators setting price. It's not a good thing. And the reason is, you know, if we get to the point where we realize the next modification should come even lower or maybe tick up, we have to go through a rulemaking exercise. That takes years to implement. I think the market should help drive where the appropriate access fee is. So again, not opposed if we were going to make a tick reduction to have those names commensurately have an access fee reduction, but going across the board to 10 mils doesn't make sense and it goes against our one-size-fits-all policy. The other thing on, you know, looking at tick-constrained stocks specifically, the one factor I always look at is quoted size at the touch. And that's an important factor to recognize, 'cause the average quoted spread of something could be a penny all day long. And I appreciate what Michael's saying about, you know, after a trade, what happens to the spread. But if the data suggests that these securities pretty much trade at a penny all day, I doubt they're gonna change materially post the trade. What we'd like to see is quoted size be factored in, because it shows that there's actual competition there at that quote, and that there would be multiple participants that are willing to potentially narrow that spread if they had the opportunity to do so. When I look at a security that's trading penny-wide for the majority of the day, but only has 100 shares available on the bid or the offer, that to me is not tick-constrained. There is no competition in that name to narrow. So I think a multifactor approach is obviously necessary, but I think quoted size is the most important factor to really consider when you're looking at it.

- So there's obviously a lot of representation of firms here that facilitate retail trading. Chris, sort of from your Fidelity, you know, perspective and experience, how do you think the proposal would impact retail and their experience?

- So maybe just starting with maybe stating the obvious, that we align with most folks in that we would prefer taking a measured approach here. After implementing the proposed amendments to Rule 605, we would be open to moving to half a penny tick for tick-constrained names. I think this would allow the Commission to review the impact of that through 605, and deem whether it's necessary to move beyond the half a penny or not. And on the other side of that, if it does not, or if it harms end investors, potentially walk that back. So just focusing on retail, I would say, you know, we believe broad-based tick changes, harmonizing quote and trade and disproportionate reductions in access fees have the potential for unintended consequences and harm to end investors. And just focusing on the unclear benefit of going to smaller ticks, I'll talk about market orders in a few different areas. So for marketable retail orders, which is the vast majority of retail orders, we have yet to see data prove out that the tighter quoted spreads that would be yielded from the proposal would actually improve effective spreads, which our retail investors today are really enjoying significant price improvement relative to the quote. The other concern is we anticipate smaller ticks will lead to less liquidity per tick, and obviously increase the likelihood of potentially front running and ticking end investors, especially when this proposal is combined with OCR, the Order Competition Rule. For wider spread illiquid names without an exemption of an intra tick, we think effective spreads could widen even further, and without proportionate access fee changes, we also see that quoted spreads would widen. Obviously these are all potential outcomes that would not be beneficial to end investors. Turning to limit orders, which, you know, are a smaller percent, we still have a good amount of orders that come from end investors. We have significant concern around that, and we noted in our comment letter that we see statistically significant difference in non-adjusted fill rates when we look at orders that are trading in where a sub-penny is permissible and a limit order is received at the penny. For similar conditions, for security that a sub-penny is not permitted, we see that inferior fill rates are realized by these end investors, and a lot of this is driven by the fact that the vast majority are
entering their limit orders in full pennies. So this is something that, you know, is important for us because ultimately this would be an additional cost to those end investors.

- Thank you. So we talked a little bit earlier about the interconnectedness. And coming back to you, Sapna, do you see any sort of potential market or technology risks as a result of the, you know, frequent changes to the ticks, the access fees and lot sizes?

- Yeah. Thanks, Elad. This goes back to my comment that when we make a lot of technology change or a lot of changes to our market structure all at once, you potentially risk there being issues as a result of that. So when you, and I think everyone probably around this table has experienced or been impacted by a technology failure of a single market participant or a venue at some point or another. None of us wanna see that in the marketplace. It's not good for any of us. But what we see with this proposal is you're taking three things that are fairly static, or as Met put it, one-size-fits-all, a penny tick increment across all NMS stocks, a 30 mil access fee across all NMS stocks, a hundred share round lot size for most NMS stocks, things that are fairly static that we don't really have to touch on a regular basis. The proposals look to make them dynamic, i.e., we're going from a single penny tick to four increments under the proposal, and we're going from a single access fee to two access fees under the proposal, and we're looking at potentially four different round lot sizes that may be used more frequently based on stock price. So you're going and you're making changes to all these variables, but then on top of it you're having people across the industry touch their technology and make frequent changes to change access fee and tick size on a quarterly basis and change the lot size on a monthly basis. That's a lot of touching of technology across the street, and the market risk and the technology failure is something that we should think about in terms of balancing the benefits versus the potential risks. We have experience as an industry making tick size changes. When the SEC put in place the tick size pilot, we had to put in place the changes at one point, and then we also had to undo those changes. But it required touching of technology twice. When you think about who had to touch their technology, the buy side had to make changes, the sell side had to make changes, the exchanges had to make changes, and third party vendors had to make changes. That's a lot of market participants touching their technology on a monthly or quarterly basis all at once. So again, I think we need to kind of weigh the benefits of making those type of frequent changes versus the potential risks of a technology failure in that situation.

- So I think Sapna commented a lot about the potential for the operational challenges that could ensue. Matt, would you like to give some thoughts on that?

- I'm just gonna complement what Sapna said, 'cause when you sit there in your mind's eye, you kind of see the quarterly changes versus a monthly change, you know, for ticks, for quarterly and monthly for round lots. And then ultimately here in the middle of all this, we are gonna transition from a lot-based quoting mechanism to a share-based mechanism. And there's certainly operational challenges, but we also wanna not forget the client experience challenges that will be evident, particularly to the retail clients and how that's gonna impact them and the amount of education that's gonna have to occur to make sure that this goes as smoothly as possible. You know, operationally, and Hubert, I credit for you for kind of pointing this out is when you think about market data in regards to this, it's going to be more, flat out. I mean, and think of it holistically in a sense of not only with the tick sizes and what's gonna happen with more information coming across with tighter ticks and more trading and things of that nature with those tick-constrained securities, but also these other proposals with the OCR occurring, and with, you know, segmented orders being submitted to qualified auctions. Those are also gonna be going through the SIPS, and any kind of response that would be in response to these qualified auctions, all of this going
through what is current state, which is gonna be the future state. These are things we need to take in consideration regarding, you know, ultimately what's gonna be impact to the SIP, you know, the cost to that and any kind of resiliency concerns we will have regarding that.

- So again, under the remarkable occurrence that we have extra time, so if anyone would like to sort of follow up on anything else. Go ahead, JJ.

- [JJ] Sorry to go back to this again, but I forgot to say earlier. we're also for world peace, by the way, Steve. But anyway...

- [Steve] We have consensus. I love it.

- You know, Matt brought up something really important and that's around the retail experience and the average person. So think about constantly changing buckets, et cetera. How do you explain that to people? And education that you'll have to do around that, et cetera. And I just think one thing around this is the more complex you make it, the less trust you have by the retail public, and I think it's something we always have to be really conscious of in any of this stuff is that, you know, we talk about with our teams, "Go explain this to your aunt." How do you think she'd feel about it and would she understand it? And it's not to say people's aunts are ignorant or anything, but, again, the average person, how do they understand this and how does it affect their experience and their trust in our markets?

- And I would add.

- Go ahead, Gregg.

- Well, I was just going to, thank you. I was just gonna mention that while there's been a lot of common themes about the impact on liquidity needs to be taken into account as opposed to simply like a multifactor model, there's also another common theme that we haven't heard, because it's a common theme, which is trading increment. And a big portion of where the SEC's analysis lies in terms of why did they recommend a 10 mils and a 20 mils was not because of liquidity, but because of the constraint that I think gets started with, which is trading increments have to be the same as quoting increments. And I think to a large extent that has hamstrung the Commission, 'cause if you start with that assumption, then you don't have the flexibility to do any of the things that people around the room are saying. But if you get rid of that assumption, then you can build a multifactor model that basically tries to find the best tick for liquidity instead of saying what's the best tick, given that the tick has to be the same as the trading increment.

- And I would just add that I think lost in this robust discussion, 'cause we could asymptotically approach the horizontal axis talking about this, is the limit order, right? It is the bedrock order type. It is the bedrock of the national best bid and offer, right? The lower the increment, we talk about penny jumping and everything, it's all the same thing, but we gotta talk about it as a limit order. As that increment gets lower
and lower and lower, that limit order loses its value. It's an option to trade. Folks are taking, where they're putting a limit order out there, an option to trade. And the lower and lower and lower you get, the less valuable it gets, the less valuable the NBBO gets. I look at Michael. And we all want a strong and robust NBBO, right? It starts moving around, if you start getting pennied, goes to one of the Commission’s principles, and that is to engender confidence in the market. And now as a practical matter, someone who runs a data analytics platform, my God. And for all you folks around the table that look at post-trade analytics, of which we have an abundance, talk about that on best ex, is I can imagine stitching that data together. Imagine the fine increments that you have to stitch together. It becomes quite difficult, and I'm very concerned we're doing this or we do this in great detail at what cost. So.

- I know that's not people's only thoughts, but I think this is a great place to sort of stop and break. Thank you, everyone. Great discussion, and we'll continue in the afternoon.

**Regulation Best Execution Proposal**

**Discussion with the Roundtable Speakers**

**Moderator**

Nicholas Losurdo

Partner

Goodwin Procter

- Okay, welcome back, everyone. So we're gonna talk a little bit about proposed regulation best ex. I'm Nick Losurdo. I'm a partner at Goodwin. Thanks to SIFMA, thanks to Goodwin, for hosting, right? We've only got about 40 minutes, so we're gonna go real fast. I think everyone should treat this like a political debate. You've got about three minutes, opening statement, really not a lot of time left for anything else. So unlike the usual meetings we have here, it seems like there's broad consensus that regulation best ex is not needed. And I think an important question to ask, one of my favorite lines from "The Departed," "Cui bono?" And importantly, will retail investors benefit? So, if you guys wanna focus on that, I think that would be really important. Maybe a not-so-bold statement, though. All four of these are happening. Is there anyone in the room that thinks I'm wrong here?

- Yes.

- Yeah.

- So maybe we can hit on that. I think they're all happening. Typically the Commission's not in the business of proposing things and not moving forward with them, so I'm pretty confident they're all gonna happen, but I think there's opportunities for some small changes around the edges, and definitely interested in what folks think about that. And importantly, firms should be thinking about how they're gonna comply when these eventually do come down the pike. And maybe folks will disagree. I do think they're probably gonna happen right around the same time, maybe some staggered implementation, but I think it's gonna be really difficult for firms to figure that out, and a little bit shooting in the dark. So a few
points that folks have raised during the meeting so far, investors seem to be focused on price, on cost, and those are really important issues, right? But there's other factors that propose Reg best ex will likely affect; access to real-time quotes, access to research and what that might mean, conflicted retail transactions. So the Commission has proposed that when there's a conflicted retail transaction, what we're calling super best execution will be required, essentially scouring small markets, every potential liquidity source out there. How will firms do that and how will investors be affected? Dan, you alluded to, you're not on this panel, but can't help but quoting you. You know, you alluded to basically a backdoor ban on PFOF, or de facto ban. Is that what we'll experience here? PFOF is essentially anything that introducing firms receive for free, really vast, and I think firms really need to be thinking about how that'll affect them. Is this gonna result in additional complexity for the market? I think yes. Might this be easier, to the extent firms can get midpoint executions for retail investors? It seems like the proposal is slanted in that direction, so might it just make things easier? Basically jettison consideration of all the other best ex factors that we've lived with for many, many years and just get midpoint executions for your customers. The definition of introducing broker, I feel I could use a little bit more tinkering. And then competition. It's really, really important. The cost benefit analysis seems to suggest, maybe not surprisingly, that small firms will have it more difficult than large competitors. Not a surprise. The cost benefit analysis also suggests, though, that the larger firms, many that are represented here, will actually gobble up the smaller brokers. And I think that raises a really important question. When have consumers ever been better off when there are fewer choices? To the extent that you guys want to hit on any of those, I welcome that. I'm gonna start with Annette from Goldman. You're up first.

- Thank you. Thanks very much. And thanks to SIFMA for hosting this. I think it's really important for us to hear the comments from everybody. We were actually just joking in the hallway about the fact that I don't know if I've ever seen such consensus across the entire industry, you know, except around the edges on some of this. And so that in and of itself should be a signal to the SEC. I think that they need to like maybe take a second look at some of this. Obviously we come to this from the lens of, you know, our client segment, which is, you know, institutional and private wealth management, people trading large size orders. So in looking at the proposal, and through that lens, you know, first of all our position is that best execution as a whole is very foundational to the health of our markets. And I would be remiss if I also didn't say we're also for clean air and, you know, world peace. But, you know, I think that we don't support this particular proposal because we also support resiliency of the markets and efficiency, and other factors that we think are important. And we're concerned that best execution, as it's proposed, is going to have an impact on some of these very critical components of our market. We've made a lot of comments on some of the things that you just alluded to, including, you know, introducing broker and other things, and that's all spelled out in our comment letter. But I think what we would like to highlight today is a couple of things. First of all, you know, there was a question I see on the original outline that went around that was asking, you know, what will this accomplish and do we need it? And I think our perspective on this is that the framework that we have from FINRA and MSRB, which has been developed over decades, you know, is a very solid framework. And, you know, from our perspective, in looking through the proposal, and by SEC's, you know, they actually note this in several of their footnotes, you know, FINRA has been very active in enforcing it. In the last year alone there's been a couple of very significant important cases. And as always, when those come out, you know, it is a signal to the industry on how we are to address best execution, because it totally embodies how the regulator, who principally enforces this, is thinking about practices and thinking about how best execution should be interpreted and applied. So one of the big themes for us is like, "Do we think we need this?" And if we do, the starting point probably should be to examine, and if needed enhance the existing framework that we have rather than attempting to have us comply with all of the overlap of a new rule, which is just going to, as many people have already alluded to, bring additional complexity into the way that we operate our businesses and the way that we provide services to our client base. Two major themes I just wanna highlight quickly, 'cause I know I don't have a lot of time here, that are in our letter, and, you know, we agree with many of the commenters' other concerns about this proposal and the others, as well as SIFMA's stance on all of these things. But one of
the things that concerns us about the best execution proposal is that we think there's a key element of best execution that's definitely gonna be undermined here by this proposal, which is broker dealer judgment and discretion. That's very important. And when they apply, like the way they're thinking about this with this overly prescriptive type of framework, which of course emphasizes mostly prevailing price without really a lot of attention to the other execution quality factors, we think that that is going to be very, very disadvantageous to investors because it does sort of displace broker dealer judgment and discretion. In particular, and from our perspective, we handle very, very large orders on behalf of our client base. Most of the time those large orders that are being handled outsize the prevailing NBBO. That and performance is typically, in those instances, actually keyed off of things such as benchmarks and not necessarily the small size orders that are being traded at the NBBO that are part of a parent order. The scale of such orders is also makes it such that there's a multitude of decisions that you have to make about how to handle these orders, how to route them, you know, the liquidity solutions that might be available to clients. We feel that's a hallmark of best execution, and that to the extent that you try to set a bunch of predetermined decisions and try to pregame everything with the mosaic of all the factors that are in the marketplace, that it becomes just too prescriptive and also starts to restrict the ability for broker dealers to provide that very valuable service, which is their judgment and making predictions, whether through algorithms, smart order routers, or however they're doing it, to like decide on what the best solutions are for our clients. The other thing that's emphasized in our letter that I just wanna highlight briefly is what other people have talked about a lot, which is like the impact of the overlap of these various proposals to market liquidity, resiliency, and efficiency. So the Order Competition Rule, not to get into all of that right now, but I mean it is going to compel, under the tenets of the new best execution regulation, people to consider these auctions and other things in making their assessment around best ex. But we think it comes at a cost. And what is that cost? And some people have already alluded to this. Increased opportunity cost of unfilled orders, heard that from, you know, the academics who've been looking at this. Greater risk of information leakage. You know, we're gonna be sitting there 100 to 300 milliseconds, you know, waiting for a fill. And then finally, you know, operational risk that's gonna result from just the confluence of stress points that are gonna be in the market and the surge of orders that are going to be responding to these auction messages. So these consequences are probably gonna likely constrain liquidity in some respects, because market participants are going to naturally have to make an assessment. They may become more conservative or change their behavior just in the face of these risks. So we think that those dynamics will be even more pronounced when there's market stress. Those are our primary concerns. Again, we think that if there is going to be a revisiting of best execution regulation, it probably should start with the framework that we currently have, which has not been shown to be deficient. Thanks, Annette. Gregg, can we go to you?

- Yes. Thank you, Nick. I want to touch upon, I think you had asked, what does this really mean for retail investors? I think it has bigger implications, but I'll focus my comments just on the retail side. So the first is in building on something that Annette had said. Let's keep in mind, the SEC is not proposing a best execution rule. The SEC is proposing to replace an existing best execution rule. We already have a best execution rule, and I think FINRA has made it clear through their comment letter and their public statements that this is a replacement, because the rule today is perhaps not compatible with the existing rule. So the real metric is, is this new rule from the SEC better or worse for retail investors than the existing rule itself. The existing rule, the FINRA rules, cover all retail, covers everybody, but for certain it covers all retail investors. If you accept payment for order flow or if you don't accept payment for order flow, you are covered by the exact same rule. And FINRA, and ironically the SEC over the years, has made that very clear. Whether or not you accept payment for order flow cannot impact your ability to provide best execution. People get in trouble when that happens. So the FINRA rules are very clear. The new rule splits the world, and says if you accept payment for order flow, not you as a retail investor, but if your broker dealer accepts payment for order flow, your best ex obligations go down path A. If you don't accept payment for order flow, your best ex obligations go down path B. Well, I know that people like to say best execution is about getting the best price. So which is it, SEC? If path A is different from path B,
because they think there is, then that means two things are different, one is better than the other. So if path A is better, why am I not doing path A for everybody? And if path B is better, why am I not doing path B for everybody? So today's FINRA rule basically says, "Everybody gets the same experience regardless of PFOF." The new SEC rule says, "Everybody's gonna get a different experience depending on how much PFOF you have." That seems rife with contradiction, because it seems like it's the opposite of best ex, it's partial best ex. Some people get it, some people aren't. So that's a little puzzling to understand. In addition to that internal contradiction, there's also contradictions between the best ex proposal and the other proposals. No surprise. We've talked about that that before. But in particular, there seems to be a very stark contradiction between the best ex proposal and the Order Competition Rule. And I think it stems from the fact that a theme throughout all of the proposals is that there's exactly two prices that you can get as a retail investor. You either get midpoint, or you get the quote that's on the market. And, of course, that's totally wrong. There's a whole bunch of price points between the midpoint and the quote. But in the Order Competition Rule, the SEC basically says you either go to an auction or you get midpoint. That if you don't do midpoint, you have no choice but to go to an auction. Well, is that a safe harbor from best execution? Is that basically what the SEC is saying? You do not have to give best execution if you route to an auction. That would certainly not be compatible under today's FINRA best ex rules, because if I look at an auction, examiner's gonna come in and say, "How well did you do in the auction?" "Well, I went to an auction a million times, and I got a quarter of a penny of price improvement." "Okay, well, what about other venues?" "Well, I can get a half a penny there, I can get a full penny there, I can get 4 cents over there." None of those are the midpoint, but they're a heck of a lot better than going to the auction. Today's rules would say, "Then why are you going to the auction?" The auction, if it's not better, you're not allowed to go there. And I think a practitioner's answer would be, "Because the SEC makes us go to that auction." So it would seem that there is a definite conflict between the best execution proposal, and even in the SEC's format, and the auction proposal, if they both were adopted at the same time, I don't know how you can comply with both at the same time.

- [Nick] Yeah, really good points. Mike, what do you think?

- Well, Nick, you raised some eyebrows in the room when you asked, you know, whether or not this room believes that all four of these proposals are going through. You know, I'm certainly in the camp that says, "No." I don't believe that at the end of the day we're gonna see all of these implemented as proposed. If you look at a spectrum, you know, I think I've said the most likely to go through is probably the 605 enhancements, the least likely probably the auction proposal. Won't steal the thunder from our last group. But this best ex falls somewhere in between on that spectrum, and I think is a really challenging one. But if any of you listened in to the House Financial Services Committee oversight hearing with Gensler yesterday, he fielded a number of questions about this, and didn't come off his stated view that the SEC wants its own best ex rule. So, you know, if members of Congress, with oversight over the Chair and the agency are unable to kind of get him off of that view, then I'm not so certain that we will be able to either. And so while we are very much firmly opposed to this proposal, we're at least looking at it and saying, "Okay, but if this goes through, what are some things that ought to be considered?" And it's just essentially in line what both Annette and Gregg have been saying. Number one, the points that we highlighted in our letter, one is the overlap with the FINRA rule and MSRB guidance as well. Number two is the applicability to, you know, this isn't just an equities rule, this is applicable to many other asset classes, importantly to fixed income. So for those of us with large, you know, institutional fixed income businesses, we very much support an institutional exemption for fixed income securities. There are plenty of differences between the way fixed income and equities operates, most notably fixed income being a principle-based market, equities being an agency-based market. And I don't think, you can't just port one set of rules to the other, so we think that that that exemption makes a lot of sense. And then this idea of conflicted transactions leading to, I think, regulation by enforcement, which is a theme that came up
multiple times yesterday, especially at the oversight hearing, especially in the forum in the crypto space, where because of a lack of rulemaking in that space, most of what is happening is being done by enforcement. I think the way this is drafted just leaves too much room for regulation by enforcement after the fact. The obligation to check so many other markets just leaked so much information into the market. The fact that you are gonna be subject to such a heightened standard is going to be prohibitive for many firms, especially smaller firms. Most of the firms, or many if not most of the firms in this room probably have the infrastructure, don't want to allocate those resources and costs, but probably have the infrastructure to deal with what they would need to do to survive, if it's existential. Some small firms just do not, and so there's a disparate impact on smaller firms. And to the extent that, I think as Dan and others have alluded to, if this is kind of a backdoor way of eliminating payment for order flow, without a real, you know, horse in that race, I would just simply say that it is in large part the reason for zero-commission trading. That is therefore the reason for, or at least we saw a huge spike in retail trading activity after the move to zero-commission trading, I think in the fall of 2019. It would be a shame to see that retail participation in the marketplace go away because of, you know, regulation essentially forcing every imposition of commissions. But the point in particular for us that's most important is the applicability to fixed income and the need for an institutional exemption.

- Thanks. Hey, Steve, how about you?

- Not sure there's a ton to add. Maybe I'd add that I don't think it's so much of a backdoor, and if it is a backdoor, it's a pretty small house. It's one of those tiny houses on HGTV, right? It's about a two-foot walk into the back door that's about eight-foot wide. It is, quite frankly, I think we've heard words like not serious. I think it's just sloppy. Sloppy, sloppy work. The only other thing that I would add, and, Annette, you made a great point about how best ex is indeed multi-dimensional, and that it requires judgment. We as brokers, for us on our institutional side, we apply judgment and advice to our clients as to how to move a big chunk of stock with as little impact as we possibly can. We have a lot of tools that we avail ourselves to, but that's kind of our raison d'être, right? That's what brokers do. But beyond that, and I think it's so important to keep harping on this, it is what are they replacing, why are they replacing it, what harm is there, and why is it a new regime, that's paternalistic, that is very discreet, that the FINRA rule doesn't already encapsulate in a broad principle-based method? My favorite economist, Thomas Sowell, always says that you gotta ask three questions, right? At what cost, compared to what, and what hard evidence do you have? And I think they fail in all three of those questions. Right, Matt? Best execution is difficult. It's in the eye of the beholder, right? It is, yeah.

- Matt, why don't we shift to you?

- Thanks, Nick. So, you know, compliments to the other panelists. Not much to add here. I'll focus on a couple themes here. Number one is, let's just start out, we're all saying the same thing here. We are in support of a robust best execution standard, and it exists. We have it today, it functions great, the guidance is there, there's more out there. We have exams that occur at a normal cadence. We know how to react to it, and we're doing everything we can to achieve what ultimately what's best for our clients. You know, what's being proposed here is, you know, it's just gonna create some unnecessary redundancy, complexity, confusion, cost. And the thing that kind of piqued our interest the most was like this prescriptive procedural and documentation requirements. Particularly you have these material potential liquidity sources, and to the point you almost need to stretch into searching out immaterial potential liquidity sources, immaterial liquidity sources, at which point in time that information leakage would come into play. So we may actually turn this into a worse experience for the client, and that's, you know,
obviously it's not the direction you want to go with this. So we just know that where we're at today makes so much sense, and if we were to go down this path, and in your search to make sure you're doing your best to follow this rule as you interpret it, you may overstep and actually create some information leakage, which someone can utilize that information if you search too far to get that midpoint liquidity or whatever it is that you're doing to see as how you define this rule, it may actually turn against you.

- Yeah, I think interesting points. Hubert?

- So I would definitely agree with the panelists in saying that we currently have best execution rules that have served the industry quite well, right? The FINRA and MSRB kind of guidance. And so if the SEC is gonna adopt a rule, we think it definitely makes sense to explicitly incorporate all of the various determinants that are in those existing rules. Things like information leakage, you know, size of your order, because overly focusing on price and not taking into account those other considerations is being penny wise but pound foolish. I think it's important for us to also address the institutional exemption that Mike kind of highlighted. I think that we feel there's definitely instances when institutions, you know, the best execution is to still apply even if institutions are dealing on a dealer quote. And I say that because, as Mike alluded to, fixed income markets are very different. The kind of level of transparency in that corner of the market is very different than it is for equities. If I'm getting a quote on 50,000 shares of Microsoft, I can see how much is traded in the market, I can see where the bids and the offers are, I can look at the depth of book. I don't have that same degree of transparency in fixed income. I mean, the SEC has highlighted in their proposal that the trace data is 15 minutes delayed, there's no U.S. Treasury tape, the markets are very decentralized in nature, and those issues apply equally to institutions as they apply to retail customers as well. So I think we'd be supportive of either a framework where you have an opt-in to the best execution framework, or you carve out, you know, the exemption so that it only applies when you're getting quotes in competition where you have a very good view of where the market is for security. The other thing I'd highlight is this rule definitely intersects with other existing or pending rule proposals as well. So, and in particular I'd highlight the dealer redefinition proposal, because that rule proposal may actually force certain funds to be registered as broker dealers if they meet the qualitative and quantitative test of becoming a dealer, which creates a very interesting problem, because a fund might have a fiduciary obligation to their customer, but at the same time, on an all-to-all trading platform might have a best execution obligation to their counterparty on the platform, and that's very hard conflict to resolve, and may actually discourage use of all-to-all trading platforms. So I think having more clarity around how these various rules intersect is really important.

- Thanks. Met, over to you.

- I don't have a lot to add, obviously, but I will say this. I think the SEC looks at this rule from an academic lens, where they get a complete picture of the market at any given price point, and can look at all the different venues that are out there and say, "There was a better priced offer or bid, and you should have gotten that." That lacks practicality, obviously, in the sense when we're trading, because to what others have pointed out, there's information leakage, there's opportunity costs, we may miss that quote. There might be reasons why that quote isn't accessible. And so to look at it in absolute terms, and say, "Yes, that's your obligation," it's very price-centric, obviously. From an institutional perspective, we like more of a principles-based approach. But when you look at it from that academic perspective, and lack of that practicality, it's not reasonable. And so to those points, I think that's what has us most concerned. And to what Mike was saying before, it is anti-competitive. Smaller brokers are definitely going to incur costs that they're not, you know, required to, I guess, to pay currently. And the folks in this room can handle that.
You know, T. Rowe can obviously handle that. And what's funny is a lot of people sit there and say this is a broker dealer rule. No such thing as a broker dealer rule that doesn't apply to an institutional firm, because I can't access the markets directly. I need to access it via a broker. And so when brokers are hamstrung or required to do something, that requires us to have to follow that same procedure. So it is certainly an institutional rule, and it's one, like I said, that's very myopic in price, and we'd like it to be, you know, more of a principles-based approach and not create additional burdens to the industry.

- Thanks. Terry, how about you, given the good segue?

- Well, I guess I'm gonna give the impractical perspective on this from the academic standpoint. So I was gonna talk a little bit about the extra burdens on introducing brokers, right? And this has been alluded to before. It really seems like the Commission doesn't view the current structure as serving them well. I'll talk a little bit about the evidence they bring to bear, but that's not my reading of the real evidence. Like if you look at Rob has a paper trying to compare internalized trades to exchange trades at the same time. And this was sort of the thought experiment that Gregg envisioned earlier, that, you know, and I'm gonna say I don't think they're even, what they do doesn't measure that thought experiment very well. And so they point to a couple of things in the proposal, and analyses using CAT data that are hard for us on the outside to, well, impossible to actually get and to replicate or test the robustness of. So they do one set of tests on midpoint liquidity, and they basically say, "Well, when the internalized trades are not happening at midpoint, what fraction of the time is there midpoint liquidity available somewhere?" They don't really identify whether or not that midpoint liquidity would be accessible. And in addition, they don't do any sort of analysis about the potential delays it would take to actually ping all those different markets, and how prices might move away and how that delay might be costly for retail investors, and how they might, you know, prefer just the immediate execution they're getting today. So, and if the issue is that they don't think that the wholesalers are providing the execution they should, why don't they examine the wholesalers more carefully as opposed to putting regulations on other people? In some sense, you could view the current system as efficient that the best extra requirements can in some ways be outsourced to someone else who has economies of scale and can monitor all the routing and all these other things. And now they're saying, "But wait. You need to second guess them." And I don't think their evidence to support those extra burdens is very high. So the other analysis they do is this comparison of realized spreads for marketable orders that, you know, are internalized by wholesalers as opposed to what happens on an exchange. Now, there are a bunch of concerns with the calculations and comparisons. I'm gonna focus on a significant one that I think is very hard to overcome, because they're implicitly assuming that these orders sort of would go to both markets in the same market conditions, and they would be the same types of orders. If they're not, then, you know, that comparison is not a reasonable one. And in particular, you know, I guess I'll try and cut my remarks a little bit shorter, but how might the exchange and the internalized trades differ? Basically, you know, the exchange trades are almost certainly coming a lot from algorithms that are monitoring the market carefully and are really observing when liquidity is better, and then they try and execute them. The internalized orders are coming from probably more human beings who are less likely to be carefully monitoring the market. And so it's that the reason why the exchange trades do better is because there are people who are investing a lot to make sure they get the best execution. And unless the SEC believes that retail traders are going to be able to do that, sending the retail orders to the exchanges wouldn't result in the same execution that the current orders on the exchange are getting. And in Rob's paper, he observes that consistent with this, that the quoted spreads are wider when on exchange, when orders are internalized by retailers, as opposed to when trades occur on exchanges. And that's consistent with this idea that the retail traders just aren't able to capture them. It's not that they're getting bad execution, it's that they're not submitting their trades at times when they could get even better prices. And, you know, so I think that I'm hopeful that this won't necessarily go through as it is, because I don't think the economic and empirical evidence is very strong to support it.
- Thanks. Michael?

- Yeah. Thanks. It might cost you a better price. So a lot of commentary about retail investors and how strong the execution quality is today for clients. Retail investors have benefited from the innovation and competition in the marketplace over the years, and I think there's no argument that retail investors, they experience better price improvement and more liquidity than we have. You know, it's continuously gotten better every single year as we've gone through. And I think that's an important thing to think about as you think about what are we solving for. You know, execution quality that retail investors experienced, that has grown under the current regulatory environment that we live in, right? We all have best ex obligations. We all abide by those best ex obligations. And the competition for retail flow, for that order flow has done nothing but enhance that quality for the retail investor. The concern I think that a thing to think about in the rule proposal is, I think, and Met covered this, and others did too, about the prescriptiveness of that rule proposal and what that means to an order sending firm and how do you apply it. You know, you have to go look at, you read and look at, you have to go hit all these markets. I have to go look at 25, 30 liquidity venues, try to find midpoint liquidity. If you handle order flow, you know, wealth management business, you get a lot of orders, the same side of the market at the same time. What does that look like when it goes to the marketplace? How much order information signaling are you putting in the marketplace because you're out there having to hit all these different markets with orders when you know that there's better ways to do that business than just blast the street. So I think the concern that we have in this space is really around that, is what does this, with the new changes of the proposal, what does that look like from a practical perspective? What does it do to my retail clients that send orders, or I have less discretion, less ability to make decisions because I'm really, in some ways, I think I've read something like checking the box. Here's the process that we have to follow, because it's prescriptive. I think that discretion's really important to brokers. I really think it's the key fundamental of what's made this market what it is today. I think it's what's driven competition, and I think that's the concern I have as far as what the proposal looks like.

- Thanks. And JJ, last up.

- Yeah, so I've never hoped you've been more wrong in your life, Nick. But anyway, I hope none of these go through. And Mike also, I mean, I really hope cooler heads or smarter heads, or whatever you will say will prevail. I think there's not anyone here who wouldn't say that retail's never had it better. And so, you know, you come up with something like this, and I agree that this is a total backdoor on payment for order flow. And so with that, the choice already exists. If retail clients don't want to go to a firm that doesn't accept payment for order flow, go there. But people are voting with their feet to go to many of the firms that get money from that. And I think that one of the things that again gets lost is when I, you know, I always try and look at the end user. The end user's been such a beneficiary of this. The free education that's in our business is absolutely amazing. It's gonna be very difficult for all firms, you know, regardless big or small, I think, to say, "Okay, we have to put more money towards that." If we get less money coming in the door, how does that actually benefit our markets? One of the reasons we've had such great explosion in the markets over the last few years, particularly the options market, which by the way also is, I don't think a primary enough concern in some of the things that are proposed here. But, you know, I don't believe will benefit at all from any of the proposals that are on here. And again, I think one of the reasons it's benefited so greatly is because people actually understand it now. And, you know, we've seen all this great participation. One of the things that's a quick sideline on retail and options, often it gets criticized, I think it actually should be a compliment to retail traders that they actually understand how to
manage unlimited amount of money, and sometimes using options helps them manage that limited amount of money in a better way. But, again, that's because of education. The platforms they use are amazing, etcetera. Nothing about this seems to make sense. It is a great solution in search of a problem somewhere. None of us at this table, I think, can really identify what the problem is. The wholesalers, one of the other things, you know, I think there's four or five at this table, the exchanges, one of the things that's not on here is the customer service job they do every single day. They understand when there are people committing fraud, etcetera. And they see it because they see so many orders and can call back to our firms and say, "Hey, you might wanna look at this account." That's not captured here, anyway. It's very difficult to capture just looking at the numbers. So a non-understanding of how the market practically works, and what a great service that is, absolutely it's something that has to be considered when considering this. I know Dan wants to talk. I only got about two minutes left, but Dan, I'm gonna quote you as my final thing. They say it well in their letter. Dan says, "This should be rejected in its entirety." And that is the summary of what our letter says also, you just worded it more eloquently, as usual.

- I'm a technical thinker, as you've all experienced. You know, I don't use these eloquent words that Steve has. Thank you for giving me a second here to speak. Thank you, Ellen. This is the worst of Washington. This is it. If you weren't cynical enough about your government, this is it. Here comes a best ex rule on top of a best ex rule, right? Like we're all, poor Jessica's got 53. Here's one, here's another one, take another one that you don't need, right? As if she doesn't have enough work over there to do. This one blows my mind. And you sit back and you say, "What's so wrong about the FINRA rule?" I think Annette laid it out perfectly. FINRA, all credit to my dear FINRA friends over there. I love teasing you during these things, 'cause you can't show emotion. But like FINRA, please take this back to Robert Cook, does an amazing job of enforcing FINRA's best ex rule, which is incredibly clear. And when it's not, because the markets change, you have interps. Those interps aren't a sign of weakness of that rule. It's a sign of the evolution of regulation, right? And the evolution of markets. That's what SROs are for. Chair Gensler likes to cite FDR all the time. FDR created FINRA, team. Like, this isn't some smoking club when you're a FINRA member, and it feels pretty official to me. Not sure about you guys, it feels pretty official when FINRA brings the case against you. Like I did, just like qualitatively that versus the SEC? I don't know, I mean both pretty official. You know, it's not some voluntary social club. And so the notion that you need the official sector have a rule when the official sector of FINRA actually has a rule that really works well, it's worked well for decades, that we understand and can work with them on. It just shows an ignorance for the marketplace that, again, disappoints me greatly in my former employer. So this one should be rejected in its entirety. Walk off the playing field. There is no predicate. The professor was talking about the cost benefit and everything. There's no predicate. There's no need for regulation. So this just fails on so many levels, right? The economic analysis is what it is. The legal authority fails, right? I love the cite to 11A. Go read 11A. This is one of the problems. I used to say this at the SEC. Did you read it? Did you actually read the thing we're citing, right? So if you go to 11A, Congress directs the SEC to work with the SROs to effectuate NMS. Oh, here comes FINRA says, "Okay, we'll do a best ex rule. How's that?" The SEC says, "Fine." They approve the rule. 40 years, it works really well. Now all of a sudden it's not the official sector, so SEC... It actually is in contravention of congressional intent at this point for the SEC to intervene and have a best ex rule. So, and by the way, again, to Annette's point, has anyone felt like the SEC hasn't been able to bring a best ex case in the meantime? They happen. I can speak from some personal experience. It happens. So this to me is maddening. With so much going on in the world, this isn't a congressional mandate. It's not, right? I had to deal with so much nonsense out of Dodd-Frank, where you're like, oh, you know, and the chairperson, whoever it was, would always say, "Oh, it wasn't me. It was Congress." Whether they liked it or not. Here, no. There's no such excuse. This is coming sua sponte, you know, as a pet project out of an agency that should know better, and it's highly disappointing. And no, they're not all gonna go out. Order, OCR, read the alternative.
Order Competition Rule
Discussion with the Roundtable Speakers

Moderator
Charles Sommers
Partner
Sidley Austin

- Thanks, everyone. My name's Charlie Sommers at Sidley Austin. I'm delighted to take us all through our final topic for today, which is clean air and world peace. No, it's the Order Competition Rule, of course. You know, it was born out of the goal of improving the experience for retail investors, you know, and largely driven by the observation that majority of retail order flow goes to a handful of wholesale market makers today. As folks know, it would require basically all retail orders, which are designated as segmented orders under the rule to go and participate in a qualified auction subject to certain exceptions, such as an execution at the midpoint or better. Really there's three kind of broad areas for discussion. The first is, would the proposal have its intended effect of improving executions for retail orders? The second is, you know, some of the operational challenges posed by, you know, the mechanics of what the SEC actually proposed. And the third is, you know, policy concerns and considerations around mandating where and how certain orders should execute. So kinda starting with the first one of those, you know, the SEC says that it wants to promote order by order competition, you know, largely dismissing the venue by venue competition that exists today as providing good outcomes for retail investors. Professors Chester Spatt and Tom Ernst recently considered whether order by order auctions would be competitive and ultimately result in better outcomes for retail investors in an academic study. Professor Spatt, maybe we can start with you, and you could share some of your findings.

- Yeah, happy to do so. I'd like to begin by thanking SIFMA for inviting my participation. My comments are gonna be based in part on the academic paper that Tom and I wrote with Jian Sun, and also the comment letter that we wrote. We didn't actually need 273 pages. We only wrote five pages. But nevertheless, you know, I think we kind of really engaged on this very important issue, and I think we came to the same conclusion that this rule doesn't make a lot of sense. The current trading system...

- Absolutely. Sorry. The current trading system relies upon ex ante competition in which brokers route orders based upon the average execution quality of venues. At every quarter, month, or even daily frequency, brokers evaluate venues. They reward the venues offering the best execution with a larger share of orders. Retail orders are sent directly to wholesalers rather than to exchanges. Perhaps unsurprisingly, given the advantages that wholesalers have in segmenting retail order flow, analysis of SEC 605 reports suggests that broker routing to wholesalers is consistent with competition. The competition above reflects ex ante competition among wholesalers and market makers. Of course, brokers have a best execution obligation. We've heard a lot about the best execution obligation, but in
whatever form, brokers have a best execution obligation to route orders to venues which offer the highest execution quality, which greatly benefits retail investors, especially in light of the segmentation that the current system provides. And I think the importance of the segmentation and the advantage that the segmentation provides to retail seems to have been largely lost in the SEC's discussion. Economic theory suggests that fully effective competition can arise on an ex ante basis and does not require competition at an ex post transactional level. I think this is one of the aspects where the Commission seems to be somewhat confused. The Commission's proposal appears to be predicated upon the view that ex post competition, because it occurs at a final stage, will result in greater competition. I think this is not compatible with economic theory. It's not compatible with economic theory simply to postulate that behavior at an earlier stage will be unaltered by adding additional stages to the specification of a game. So the fact that you add these additional stages at the end alters the behavior at earlier stages. This is a basic principle in economic theory. In contrast, order by order auctions lead to a situation in which the wholesalers are much more heterogeneous in their circumstances due to the differences in inventories and other kinds of signals that they possess. So in effect, inherently they ex post the order by order auctions because it leads to a lot more heterogeneity, actually potentially reduces, at least the theoretical level, the competitiveness. And in effect, the market is then subject to greater adverse selection and one is cursed. Now I think that much of the hope of the Commission, with respect to order by order auctions, is that these would attract greater competition than just the existing wholesalers. That is, whether it be BlackRock or Broadridge or others, that they would now come in and participate too, so that there would be more competition. But I think the problem with that is that the participation of such parties is likely to be one-sided, whether they want to add shares or subtract shares, and as a result, potentially exacerbate some of the issues involving winners curse and adverse selection that the ex post auctions would create. And I think these issues about adverse selection and winners curse are particularly awkward and problematic, relatively less liquid securities and under stressed market conditions. And as pointed out in our paper, which we circulated on the same day as the Commission's proposal, and then independently by Alison Bishop, who's the co-founder of Proof, the presence of five retail liquidity programs, which really the Commission didn't do much to highlight, but which had been proposed by exchanges and approved by the SEC over the last decade, I think also speaks to some of these issues. The broad takeaway from such programs is that while there's a flag suggesting interest in such executions, the overall volume going through these programs is modest. But this is the closest thing we have right now to an analogy to the auctions. This suggests that the frictions associated with one-sided institutional interest doesn't lead to much volume and trading opportunities for retail. One particular of the five programs, one is particularly relevant. That's the IEX retail liquidity program, in which any executions would occur at midpoint, and midpoint, as we know, has a special role in the SEC proposal. Our paper highlights that the IEX RLP offers an opportunity for institutions to trade with retail at mid quote, and offers an alternative way to gauge interest. We document that the IEX RLP has two-sided liquidity less than 5% of the trading day, suggesting that institutional traders have relatively modest interest in trading directly with retail. Our paper includes a proprietary sample of retail trades from a large retail broker. We show that when a retail trader is seeking to buy and the IEX RLP has interest on S the side, retail traders actually obtain far better prices than when there's no RLP interest. I think what a lot of this reflects is that institutional traders seeking to trade at midpoint must weigh the advantages of trading against a small order against any cost of informational leakage. This issue of informational leakage is absolutely fundamental to the trading process, and I think very important in the context of why institutions may be reluctant to step up to the plate to be on the other side within the RLP context. And I think it suggests an important analogy with respect to the proposal.

- Thank you. That's really great. Sticking with the academic focus, one of the biggest concerns about the Order Competition Rule is the lack of a backstop and the potential to get, you know, worse fills or delays in executions of segmented orders if no one responds to an auction. You know, in contrast, the vast majority of retail orders are effectively guaranteed a timely execution by one or more wholesalers today. The SEC did not really analyze the absence of any backstop in qualified auction executions, and this
seems like a major risk to retail investors. Professor Battalio has closely studied retail executions.
Professor, how might the Order Competition Rule result in worse outcomes for retail investors over
today's market structure, particularly given the possibility that a qualified auction might not result in an execution.

- Thank you. So much of what I'm gonna say now is drawn from a comment letter written with Robert Jennings that's posted to SSRN and is also on the SEC's webpage. Two facts. Fact number one, TD Ameritrade executed 98.1% of its marketable orders at or within the NBBO Second Quarter 2022, okay? We have wholesale orders, all retail orders routed to one or more wholesalers, May 2022. 70% of the orders are market orders. Why? Because the wholesalers guarantee executions at or within the NBBO, right? And we don't condition. And if you look at the FIF filings that Fidelity cited earlier today, if you look at their odd lots, it's 99.3, 99.5%. If you look at the 100 to 400 share bucket, high, high percentages, right? And so what we figured, Bob and I, is that 100 to 300 milliseconds, a lot can happen. Quotes can change. The SEC recognizes this, right? So, we worry that in this new world that the customer experience is gonna degrade, right? So abstracting from the price improvement, how often is somebody gonna push a button and get back a trade worse than the price they saw, right? And the SEC kind of recognizes this possibility. They conduct a fade analysis. And so they kind of ask the question, how do quotes move? They look at midpoints, how do quotes move in the 100 to 300 milliseconds after trade? We look at several benchmarks that include kind of price improvement from the wholesaler. We look at the far touch because that's the relevant quote. And we look at midpoint. The reason we did our study was that the SEC studies a subset of stocks, not all stocks, and they use an algorithm to identify retail trades despite the fact that the SEC has the CAT. In fact, in the auction proposal, the SEC uses CAT data in part of it, but not for this part of the analysis, right? So we replicate to the, well, we closely replicate what the SEC did using orders, not trades. Actual trades placed in actual stocks traded by retail investors. And what we find, the SEC's estimates find that the potential costs of failed auctions due to fade costs are an order of magnitude less than the potential benefits. So the potential benefit would've been that they estimate, which we don't touch, 0.15 cents to 0.47 cents, and they estimate the cost of 0.00046, right? So the benefit's much better than the cost, For almost any horizon we look at, we find costs that exceed the lower bound of the SEC's per share estimate. And at 300 milliseconds, we have costs that equal or exceed the high end of the benefits. So I would just implore the SEC to think harder about the potential costs of failed auctions. The wholesalers provide a valuable service. They guarantee certainty, right? And investors don't care about, they would much rather have the certainty than some distribution around the certainty, right? And I'm sure that the people running brokerages would rather have that, right? Anyways, thank you for your time. And I should say, to Jessica's defense, two of us spent three months on this and we couldn't finish it, right? So we would do more if we had a chance, and she had whatever she had to do, right. Lots. Thank you.

- No, thank you. Turning to some of the operational challenges raised by the Order Competition Rule, Chris Larkin, can you share, you know, some of the practical issues about qualified auctions operating at the same time as continuous trading, and, you know, maybe considering, you know, what impact a change to the NBBO during the dependency of the qualified auction might have or operating multiple qualified auctions in the same security at a single time? Or the implications for market data?

- Yeah, so let me just start from the big point that's being said today. So number one, individual investors enjoy a very simple, effective, and I would say explainable execution experience today. It's simple, it's effective, and it's explainable. The retail clients go onto our screens, they see a quote, they press the button to send an order, they instantaneously will get an order that they're execution back. And as was stated, just before, virtually every single time that price will be at or better. And in most cases, it's better
than what they see, so that is what the retail clients enjoy today. And if you take a couple of those terms that you think about for the clients, is that let's take the word of simple and explainable. Those are very important, and the certainty of what you've get from an order that they trust us to execute on behalf of these clients. So let's think about that. So the operation, think about just the idea of building, and I'm sorry, just go back one thing. I know, JJ, you mentioned before, there's a reason why JJ, myself, Ovi, anybody at this table have never been asked for a 605 or 606 report. Our clients are extremely happy with their execution experience. There's a reason why we don't get complaints about the executions. People from the FINRA right now, they can look at the data. How many trade inquiries do they get on their side that people are unhappy? It's virtually none because it's an excellent experience. So think about the operational and a technical burden to put on the industry to build out an auction, an untested process to execute retail orders. It's massive. It's massive from an operational perspective, and it's massive from a technical perspective to implement such a significant change to a market structure that works extremely well. I'll keep on reinforcing this fact that it works very well. Delaying orders, our clients expect instant executions. We are asking for the industry to delay orders, to sit into an auction, which may have a positive outcome for the client. But in many instances, I think that everybody's gone through here and some of the analysis, and we see that there'll be negative outcomes in that particular process. What happens to an auction when the NBBO moves? We've talked about this before. What happens in that instance? There's a continuous market that's happening. 100 to 300 milliseconds is a lifetime in our markets today. It sounds like it's a short period of time; it's a lifetime. Markets will move. There's a lot of information leakage that happens in this particular process, and it's very complex, as you think about the idea of how we actually handle this. What happens in a failed auction also introduces massive complexity. The complexity you see when a client, when an order goes into there and then the auction fails. We hold our wholesalers to a very high bar every single day to execute orders across every single stock that we send to them. There will be some very negative consequences as you think about these less liquid names that are in the marketplace. If our wholesalers had the choice, they would not take every single stock from us. They would prefer to cherry pick and figure out which stocks they would like to trade and then not. That is not what we allow our wholesalers to do. It is the foundation of getting in the door from any single retail broker. They need to execute every single stock and perform for each and every one of them. You take that out of the equation, and you've got horrendous outcomes for retail clients. I can't stress that enough that that is there. And the complexity of when that auction fails, it will be impossible to explain to retail clients. You will not be able to explain to a client when an auction fails and what happens afterwards, which is a bit unclear of how we're gonna get their price, and if they get a worse outcome, I'm not sure how I explain that to a client, when today they get to enjoy the fact that they see a quote on the screen, and they get the quote they get at or better virtually every single time. The quote message traffic that the entire industry would incur in this particular process would be unbelievable. We are already dealing with a lot when it comes down to the message traffic, and we're not even talking about those particular, like forget the volatile days, but just the idea that we continually think through the complexity and the cost of all this message traffic that comes through the market. We are gonna take on tremendous cost by thinking about that piece of it. And I'll say one thing that I think that we haven't said, but I think we've contemplated as an industry, and if you think about sort of the operational and technical burden of these particular auctions, what happens if the wholesalers decide they don't want to be in the order routing business anymore? You're gonna ask every single retail broker dealer to build their own order routing mechanism and deal with these complexities? I don't, again, I can't give you the costs, but I can explain to you that the costs would be massive, the risks would be even higher. What happens in that scenario? Wholesalers have a tremendous positive impact for retail customers. I can't explain that. We talk about the service, the reliability, dealing with complexity, investing in the technology, all the things that they do first each and every day, which creates that great experience. It would be impossible for the industry to comply with something like this if each broker dealer, each one of us had to actually go out and do it. And I think finally, if you think about the idea is that, you know, if you think about the entities that would benefit the most, and the idea of some type of an order competition rule, I do think it speaks volumes that not one of them supports this idea of introducing something so risky to our business, even
though it would benefit them greatly. I think it just speaks volumes from my perspective, and I think
everybody should look at it as well, that the risks and the costs would be too much to bear for the industry.

- Thank you, Chris. You touched on the potentially changing role of wholesalers under the Order
Competition Rule. So let's turn to them, You know, would wholesalers participate in qualified auctions?
Would they continue to provide price improvement, you know, away from qualified auctions, either pre
auction at the midpoint or better, or, you know, after an auction failure? And just broadly, how might the
role of wholesalers change if the Order Competition Rule is adopted? So let's turn to Matt at Two Sigma,
Joe and Gregg of Citadel, and Andrew of Jane Street. We'll start with you, Matt.

- [Matt] Thanks, Charlie. Just in the spirit of camaraderie here, I realize that Andrew hasn't spoken yet, so
can I let him go first?

- Oh, please. Of course.

- [Matt] I'll circle back, if that's okay?

- Yeah, sounds good.

- I wasn't prepared, Matt. Thank you. And thank you to Ellen and to SIFMA for hosting this great event,
and as well to Nick and to Goodman Procter for hosting us. My name is Andrew Upward. I'm with Jane
Street, and I'm trying to talk this way, but the mic is this way. Maybe I'll do that. Jane Street, for any of
those who don't know, is a global trading firm that provides liquidity across a range of asset classes. But
we've become better known in this particular debate as the newest wholesaler on the block. We did our
first wholesaling trade, I think in 2019. And so we're essentially living proof that wholesaling is a market
where new trading firms can come in and compete fiercely for Chris's orders and the orders of the other
retail brokers sitting around this table. As far as the Order Competition Rule is concerned, and I will get to
your direct question in a second, Charlie, but just at a high level, we do have some concerns about the
Order Competition Rule. It's been really interesting to hear some of the professors sitting around the table
talk about their concerns, in part because I think our firm took a somewhat academic view of the Order
Competition Rule, and saw it kind of through an academic lens and found it to be problematic on that
basis. I won't go into all of the details about what we found problematic. A lot of it is in our comment letter,
but it boils down to, and Terrence, I think actually you covered this quite well in your earlier comment, the
Commission, perhaps making a comparison between a retail marketable order that would be sent to an
auction in this new world, making a comparison from that to the marketable orders that take liquidity on
exchanges today, and suggesting that those are apples and apples, and we basically think, no, those are
apples and oranges. So that's kind of the best way I can sum up what our issue is with the economic
analysis in particular of the Order Competition Rule. Now getting to your question, Charlie, would we
provide liquidity in auctions if the Order Competition Rule were passed as is, as it's currently written?
Absolutely we would, but we wouldn't compete in those auctions as a wholesaler. We would compete as a
liquidity provider, and we think that's a crucial distinction. Essentially, as a liquidity provider in an auction,
we think we would have a high degree of optionality, of selectivity, in terms of which orders we actually
want to compete for. And that of course contrasts with the current state of the world that Chris kind of
elucidated really well earlier, which is that we as a wholesaling broker dealer take in all the orders and act
as a service provider for every order that comes our way. That wouldn't be the case in an auction-based world, at least as currently proposed. And then in terms of, I'll kind of wrap up with this question about what would happen for the orders that are not deemed to be segmented orders, right? Whether it's above $200,000, et cetera, it really remains to be seen. I think we're not prepared to talk about what our role would be in terms of interacting with the non-segmented order flow or the non-segmented orders, because it's really, if the rule were to go through as proposed, it would be highly disruptive to retail broker dealers, business models. There would be a lot of figuring out on their part about how they want to route those orders to market and how they want those orders to get to market, and what is the economically efficient way for them to execute those orders. And the wholesalers today, the liquidity providers of tomorrow, we'd all have to figure out, can we add value to those orders or not, and in what capacity could we add value to them? And that would be a negotiation between the retail brokers and us to figure out if, for those non-auction orders, if there would be a role for wholesalers to play. So it really is just unclear what role, if any, we would have to play for those particular orders.

- Matt?

- Right, thank you. So you definitely lead with the investor at heart here, and, you know, you're just deeply concerned that the proposal just is gonna cause significant harm to the very retail investors are trying to protect. Chris did a good job of encapsulating what wholesalers bring to the, you know, the current market structure today. So we don't need to, you know, go through that again. There's a couple points that we'll bring up, hopefully a little bit different here, was back in, when you have a segmented order and you submit into a qualified auction, a segmented order is a really ripe packet of information, which it has the size, side, security, you know, the price of that and the actual firm that's originating order, that's sending that order. So with that, when that is going into this qualified auction, what happens to it at that point in time? And that 100 to 300 millisecond is, as was noted, is a lifetime. We equated it back to, in our research back in 2009, there were what was proposed by a couple exchanges for it to be flash orders, and a flash order was something that had like a last look kind of feel to it. And at that point in time, the Commission spoke out very aggressively against the furtherance of flash orders, and they did not go any further than that. So when we looked at it, we're like, "So what is the difference between flash orders and these qualified auctions?" 'Cause you're essentially giving somebody an opportunity to see this information, and if they choose not to act on it, they choose not to act on it, but they can actually do something the other way on it. They could do something the other way on it. So when you look at it, you're considering like ultimately this whole cadence of how this would operate and the latency in which it'll operate under will create a situation where it can actually degrade the client experience. And another point we were thinking about was just going to the operational challenges of this was we essentially, you know, broke down the trade debt by 300 millisecond segments. Grab Tesla from one day, you know, in March. Say how many times does the quote change during any 300 milliseconds segment? We came up with a mean of like 13.48 changes during any mean of that through any 300 millisecond with a maximum of 462 in one segment. So it just goes back, and I'm sure you read other comment letters where it just talks about the number of qualified auctions that would have to occur during this, just operationally. How do your arms around the massive scope of this? And as Chris was alluding to regarding market data and what we talked about earlier is you're gonna have all that being pushed into the SIP, and which is gonna be being pushed out as an auction, as a qualified auction then with responses going into it, it's insurmountable. You have a hard time grasping how we're going to actually have this operationally happen. And number two, just from a client perspective, this could degrade the client experience, which is we have to start out with the end investor in mind.

- Thank you. Gregg or Joe?
- Yeah, I'll just add a couple of points agreeing with everything but picking up on what Chris said a little bit more. I would say, ironically and bluntly, the auction proposal is probably economically good for wholesalers. And the reason it's good for wholesalers is that's the opposite side of what happens to investors. You know, if you look, we've talked a little bit about the benefits of venue competition and the robust competition that a lot of people don't realize, but does happen between all the wholesalers every day. If you look at EQ over the last 10 years, it's gone from a little over 100 to 40, and that 40 EQ average trade size inside the quoted spread equates to, I think, if we use Robert Battalio's paper, about $15 billion a year. And the outcome that I think is missing in the analysis of the order by order competition proposal is two things. One, there's, you know, and we've talked around it, it's not worth getting into the detail, but there's a $1.5 billion number that's articulated, which I think has a lot of issues that a lot of people have articulated in their comment letters, so point one is, you know, is the 1.5 billion real, and is it even worth jeopardizing the 15 billion for 1.5 billion? But I think the bigger question is there's an implicit assumption that the $15 billion stays in the auction proposal. And I think what all of us are basically saying is if you move to a world where there's order by order competition, you'll get competition in a segment of orders. You may get institutional participation in a segment of orders, you may open it up, but the majority of orders, especially as you get down the small and mid-cap sector segment, you get into different times in the market, there's a lot of very stupid things we do, as our peers do, where we're price improving orders that we don't necessarily want, and that goes into the $15 billion. That will not persist. So I think the bigger issue is the fact that the $15 billion cannot be assumed to remain in whatever model we move to.

- Can I add just one point I wanted to build on, on something that Matt had said about the number of auctions and just the practicality. So if you think about this, and I think Chris also mentions, what is an investor gonna see? Today an investor goes on the website, they see $12, they press the button, they get $12 or better, but they're definitely getting $12. It is extremely rare that they get a price that's worse than $12. In its analysis, the SEC, or in the rule proposal, the SEC said it will be an option as to whether or not exchanges will support simultaneous auctions in the same stock. Now if you do the analysis, which many of us have done, the probability that there is an auction at the same time in the same stock on the same exchange is, for most stocks, it's like one outta three, one outta four auctions. And on busy days, there will be simultaneous auctions all the time. So first, I have no idea how the SEC made this an option. If an exchange is gonna build this, you're gonna have to handle, I think we calculated on average probably 100 to 200 auctions simultaneously running. So now you're the investor, you see a price that says $12, you put it in an order, you press the button and say I wanna buy 100 shares. I see that there's 500 shares. I just want 100 shares. I press the button, I'm gonna get those 100 shares. Today, that order is handled sequentially. Someone is gonna handle that order and fill it before they even look at the next order that has come in. Going forward, that order is gonna get broadcast, possibly with the name of the broker dealer, to the entire world. Everybody on the planet, including other retail investors, are gonna see that. Now another order comes in for 100 shares at the same exact price. Now everybody says, "Well, wait a second. I don't know if I want to fill that first order anymore, because now I see..." Wait, now a third order, while I'm thinking about this, a third order has come in. Now I really have no idea whether or not I want to fill this first order. So what does the retail investor see? The retail investor sees, they put in something, then they see other orders coming in, and they potentially see many players buying up all the stocks that were $12. Then they get a note that says you weren't filled at $12. I can't imagine, your help desk's gonna have to hire thousands of people to handle the number of complaints that come in, which is about 5 million auctions a day is what we'd estimate. And let's assume that, let's make it really conservative. Only 1% of those fail, probably should have done a different one in my head, that's 50,000 help desk calls that you're gonna wind up having to answer a day. "Why am I not getting the price that's on the screen? I see other people trading at that price. How come I was last?"
- Thanks, Gregg. Let's let's turn to the institutional side of things. So the SEC posits in the proposal that institutional investors and asset managers would participate in qualified auctions and provide a valuable source of liquidity to retail orders. Are these assumptions correct? Do institutional investors generally want to trade against, you know, typically smaller size retail orders, and would they be capable of responding to, you know, auctions only lasting 100 to 300 milliseconds? So for this, let's have Ashley and Met speak.

- Great, thanks. So I'll try to kind of tackle all the questions, but I guess first I'd say I think there's this prevailing view that asset managers are just gonna be lining up to provide liquidity, and I would just say like that's not our role in the market, right? We are not a market maker. You know, we're really looking to achieve the best outcome for our parent level orders. And, you know, I'd say it's not to say we wouldn't access this type of mechanism, and really that would happen through a broker algo with having tools kind of built in that are obviously automated, but we would be measuring how utilizing that mechanism impacts those parent level costs. You know, I just, I think it's incorrect to assume that we're just gonna be lining up to provide liquidity across a wide range of securities at all times in the day. And then I think as it relates to OCR, and specifically the auction, you know, we do have a number of concerns, some of which have been shared, but, you know, you think about, you know, things like the sort of signal to noise ratio that exists in the market, and how that changes with information being broadcast, you know, across all participants, how our utilization of these auctions impact that parent level order cost, as well as just the, you know, massive uptick in message traffic, in additional data fields to the SIP and the associated cost with that. And I think there's still a number of other questions, you know, things like for retail SMAs, right? How are covered orders handled as it relates to those types of accounts? So, you know, I just think there's sort of a lot of open questions as it relates to OCR. Just, I guess, in terms of, you know, interacting with retail liquidity, I would say, you know, broadly we're open to interacting with a wide variety of liquidity, whether that be retail or otherwise. And I think, you know, it really depends on what we're trying to achieve with our order. So we have, you know, a range of tools, you know, that can help us sort of, you know, achieve different outcomes, but obviously we're always, you know, making trade-offs between liquidity and costs. And so, yes, in an ideal world we're interacting with, you know, outsize liquidity, but it's not to say that we wouldn't consider, you know, the opportunity to interact with retail liquidity, we just need to ensure that we're measuring it and thinking about it not only in sort of a child slice but also how it impacts that parent level. And I do think it's just really important to stress that we are not market makers. We will not just be kind of constantly providing that liquidity. So hopefully I answered most of the questions.

- No, that's great. Met?

- Well, considering how juicy retail is, it's gonna be hard to pass up. But we'll say this, the point that Professor Spatt made around information leakage is the most important thing from an institutional perspective. You know, again, as Ashley mentioned, happy to obviously interact with a broad range of market participants. That's what you need when you're a large institution. So retail being one of those, happy to interact with that, but not in the construct of the Order Competition Rule, and the way that these auctions would be facilitated, primarily because they're out loud. So anonymity is extremely important to institutional traders, 'cause again, we're not trading 200 shares and then we walk away. We're trading 2 million shares. So we're in the market continuously for days buying the same security. When you look at it from that perspective and say, "All right, do I want to interact with 1,000 shares of a retail order?" Of course. Do I want to interact with 1,000 shares of a retail order if that gives a signal to the market that I'm now a contra and I'll be here for days doing this? Absolutely not. And so when you look at the construct of these auctions, there'd be a lot of information. I mean, you're publicizing to the world that there's a held
order, directionally, size, and it's a retail person coming in. Now the question is, great, they're trading Apple, there's gonna be a lot of market participants. Who cares who's the contra on that? Nobody, generally. And so we're gonna be fine, and everybody in this room will be fine if they're the contra on Apple. They're trading a small cap name that doesn't trade well, because we're doing that. I don't see a lot of market makers being obligated on the auction construct to step up on 2,000 shares of an illiquid name. It's just not going to be the future if it goes in as proposed. And if we then go ahead and interact with that because we happen to be the contra, it's a massive signal to the marketplace. That now you have an institution, potentially, that's willing to fill that, and, hey, they probably have more. And we know the buyer had to be retail, 'cause that was broadcast to everybody. But now I have an indication that there's a large seller potentially in the marketplace. That's bad. And so the notion that we're gonna step up, even if we wanted to, it's not realistic. So our message to brokers would be only participate in small size where we can retain our anonymity, make sure that we're not causing significant detriment to the parent order level performance of our orders. So when I look at this proposal, and someone smarter than me just said it's the worst of Washington, this is the worst of Washington, because it is a ridiculous rule to say... Yeah, you're much smarter than me. I already said that. It's a very prescriptive, very direct rule of telling certain market participants how to trade. And it was a very good question by Congressman Torres yesterday to Chair Gensler where he said, "What's wrong with the experience right now?" Wholesalers aren't doing anything wrong. Retail is getting a very good execution. So if you want to justify it by saying, "Hey, we're gonna allow more market participants to participate against retail order flow," or, "Hey, you know, we're gonna level the playing field." Level the playing field. There are retail liquidity programs out there that can work. There are proposals by exchanges that are intended to improve that experience. There are current proposals that are actually in effect now. Figure out how to make that more balanced than requiring people how to trade and going to a certain facility the way it's constructed.

- Thank you. And we'd really like to get the retail broker dealer's perspective. We're running a little bit off of pace here. I'm not as skilled as as Elad was, but why don't we start with Chris Larkin. You know, what are some of your thoughts from the retail perspective? And then we'll pass it on to some of the other folks.

- Yeah, so I'll be brief on this one. You know, there's lots that come up, but I think the one right now that I'd just like to highlight is we talked a bit about sort of, you know, the investors having confidence in the markets that they trade in in every given day. I think the question we also need to ask ourself is, and which is very unclear to me throughout the proposals, is how does the Order Competition Rule hold up in extremely stressful situations in the market? So if I can think back on all the times we've seen, especially if the most recent around the GameStop, AMC trading, and the amount of stress that was put on the market, and thinking through the hundreds of thousands of auctions that would be going off at the same time. And if something went wrong, the clients look at us during times of stress, not during times of when things are all good. So I think we have to think through when you kind of make any type of a market structure change, it's not how it operates in normal environments, it how does it operate in extremely volatile environments.

- Thanks. Chris?

- Sure. Thanks. I'll be brief as well. So first, we support market-driven innovation to lead hopefully to better trading experiences and execution quality. However, the prescriptive nature of the proposal leads us to believe that there may be a minimum at mixed results and potentially worse experience for end investors. And I'll just hit on a few things that we have concerns with. They've been noted here before, the opportunity for increased quote fading and front running, which ultimately leads to higher cost to our end
investors, and certainly a less consistent experience. The prescriptive nature may make it difficult for a qualified auction to differentiate themselves and monetize, which may lead to more opaque expense that is passed back to retail brokers and potentially end investors as well. And then the last piece that I'll mention is moving the majority of retail order flow to qualified auction or exchanges that may be operating under limited liability for us becomes a challenge. We've all experienced that recently. That was difficult to navigate, and now we'd be shifting the risk and cost to retail brokers and potentially our end investors. The last thing I'll mention is, you know, we'd offer or suggest the Commission to consider an alternative pathway where exchanges and ATSs may be able to focus on retail and have an exemption around ranking, trading, and accepting orders where there's a bonafide retail order involved in the transaction.

Thanks. Michael?

- Yeah, thank you. Just a couple quick things here. One, I think about, one is how does this interact with the best ex rule? I mean, you can't take one apart from the other one, right? And how do you handle order flow in that situation? We talked best ex and the obligation to look for midpoint, and the time it takes to do that and then turn around and send an order to the auction if you don't get filled and the time it takes for that. So really for me it boils down to a kind of information leakage and for retail order flows and how do you handle that? I think also the concept of going out loud with broker dealers on an order flow can be concerning from the standpoint of what your order flow looks like. It depends on business models obviously, but if you've got continuous order flow on the same side of the marketplace and you're coming out loud and saying, "I'm a buyer, I'm a buyer, I'm a buyer," it's the same firm. We know that in today's world a lot of people follow models and model portfolio rebalance activity. It's no secret when they kick off at times. Now if you're gonna go to the marketplace and also say who the broker is, you're probably gonna see impacts to retail investors in that space. So those are the biggest things I think that we're concerned about.

- Thank you. Ovi?

- Thank you. So, I won't tell you that our markets are the envy of the world because you already know that. I also won't tell you that the retail investor has never had it better, because you already know that. And there's mountains of data that we all have that could demonstrate that. I do wanna express our concerns that these proposals would be endangering the benefits that today's market structure provides retail investors, and reflects a re-imagining of equity market structure based on untested theories and incomplete or flawed analysis. And I'll elaborate on that briefly, shortly. As I mentioned earlier, we estimate that over the next 10 years, the industry, through price and size improvement, will provide over $120 billion of direct benefit to retail investors. That's what's at risk. That's why this is important. The Commission has not articulated the problem to justify this market structure overhaul, but did find, right, the Commission's analysis found that 46% of marketable orders received midpoint. Pretty good. Professor Schwartz, in a recent study, found that 69% of his trades on a Schwab platform were executed at midpoint. Pretty good. Professor Schwartz, in a recent study, found that 69% of his trades on a Schwab platform were executed at midpoint. Impressively if I say so myself. Shifting, there's been a lot of great points that have been made, but with all due respect, Jessica, I will have to shift to the economic analysis, and what I believe are some of the flaws that we actually would qualify, we consider, you know, severely flawed. So just a few examples. In quote fading, the Commission could have used the CAT data to identify what the retail orders actually were, but instead it chose to use NYSE's TAQ data along with an algorithm known for its shortcomings, incorrectly identifying these retail orders. Makes you wonder why. Like they had the data, why would you choose not to use that? Professor Battalio, in a recent study highlighted that the algorithm used by the SEC identified retail orders has two flaws. It falsely identifies institutional trades as retail, and two, it identifies only a subset of actual trades. Further, his paper concludes that the annualized cost of these adverse movements from auction delays is estimated at 1.8 billion. That's negative 1.8 billion. That
one factor alone exceeds the Commission's supposed 1.5 billion in benefit from this proposal. A few other examples on the competitive shortfall. The real life spread is not a good proxy for liquidity providers' profits because it's purely theoretical. It does not equate to profits achieved by wholesalers as acknowledged by the Commission in its footnotes. It also compares data sets that are not similar. Orders sent to wholesalers and orders routed to exchanges are comparing apples to oranges, I think as Andrew just mentioned as well. Orders sent to wholesalers are typically larger, routable market orders and orders that are routed to exchanges tend to be IOC limit orders of smaller size, and they intend to take liquidity at midpoint or at the far touch of the NBBO. Additionally, Schwab's own liquidity test on exchange found that order flow routed to an exchange had 2.5 times the price impact of the same order flow routed to a wholesaler. So, Charlie, you asked like where does this leave retail? And I guess it leaves them with a very large target on their back.

- Thank you. James?

- Sure, thank you. Retail investors have never had it better than before. We've heard that a lot, but we also think that retail investors can have it better. So we do think there is room for improvement. We actually think the Rule 605 and market data reforms will have that effect, and reforms that promote greater interaction of order flow and understand that, you know, increased public competition could be desirable. However, we question whether this reform to submit retail orders to auctions would improve outcomes for all retail investors. So let me explain. So retail investors right now enjoy price improvement from wholesalers, given they're generally less risky to trade, given their smaller size and their idiosyncratic nature. But not all retail flow is the same. Some platforms, retail broker platforms cater more towards perhaps some riskier trades that are a little bit more momentum-oriented or maybe a little bit more on the professional side, and some cater more towards investors that make regular and study investments or withdrawals. To go back to that automobile industry analogy, some retail investors currently enjoy a safe driver discount, if you will. And since wholesalers intimately know their broker dealer customers, they price that trade flow accordingly, offering less risky trades, better execution. So now under a forced retail auction system, we are concerned that those lower risk investors would lose that safe driver discount. Now the SEC does propose to identify the introducing broker name, in part to try to counter that potential loss of a safe driver discount. However, we're concerned that the potential hundreds of potential auction participants may not be able to discern quite as well what flow is risky or less risky. Therefore, it's possible that if everybody's in the same auction pool, ironically some of the riskier trades might actually realize some price improvement. But it's possible that some of the mom and pop retail investors might actually end up with potentially worse trade execution. So fundamentally we would just encourage the SEC to make sure that all retail investors can benefit from any potential reforms, and to consider, you know, these factors and engage in, you know, potentially sequentially introducing reforms to avoid any unintended consequences. Thank you.

- Thanks so much, James. For the final group here, we'd love to hear from the exchanges to get their perspectives. You know, do the exchanges support the OCR? Are there alternatives to the Order Competition Rule that might fulfill some of the SEC's objectives with less disruption to the market, perhaps including, you know, changes to some of the exchange retail liquidity programs. What are your thoughts there? We'll start with with Michael from NYSE.

- Thanks. Professor Spatt, I think you were very generous in describing the RLP programs as having had modest success. I think in aggregate across all of the different exchange programs, I think they amount to about maybe 10 to 15 basis points of market activity, so modest indeed. I think the principle reason that
they haven't been successful is the uncertainty that exists when you try to interact with that program today. There's a flag that's published on the SIP that there's available interest inside the quote on one or both sides of the market, but the specific price is unknown and the quantity is unknown. And so in the absence of certainty, there's opportunity cost and other factors that the wholesalers or retail brokers need to consider with respect to whether or not to access those RLP programs. And, you know, obviously based on the results, they largely are not. If we're going to move into a world where we deliberately segment order flow on public markets, an alternative to the OCR would be to have displayed books for retail. You know, allow the RLP programs to display their size, display their price. That's probably the most straightforward enhancement to improve their competitiveness.

- Thank you. Adam?

- Yeah, thank you. Just a couple points I think is worth noting. In the proposal itself, the Commission makes clear that the specified limit price proposed to be included in a qualified auction is specifically not a reserve price or backstop requirement, and states that as proposed, segmented orders would not have certainty of an execution of qualified auction at a price equal to the NBBO or better, which generally does not benefit investors, right? So intermediaries play a significant role in the ecosystem where they're able to step in and use balance sheet and commit capital and execute in a principle capacity. As an exchange operator, if someone sent us an order and they don't receive a fill, they cannot call our trade desk and ask them to make them whole, right? Because of the way the rules are situated today. So by no means am I implying that we should change the rules and have exchange issues. Balance sheet can make capital. However, similar to what Michael has mentioned, there are ways that we think that we can be complementary in the marketplace today. And the nice thing about the U.S. equity markets is all the information is publicly available to consume around how held orders in a retail space are being performed. And just one statistic that I thought would be worthwhile to throw out there is if you look at the S&P 500, between 1 and 499 shares, the average effective divided by quoted is roughly 22.56. So on a scale of 0 to 100, 0 means execution is occurring at midpoint, and at 100 they're occurring at far touch. So that's a sizable amount of price improvement that's being provided today. Could it be more? Potentially, yes. And one way to be able to do that is, as Michael was mentioning today, you know, RLP programs, which we have in our inverted market of BATS Y, today, we just tell you that there's a better price to order in the book. If we're able to show price, if there's a certain risk parameter that a wholesaler or an intermediary is hitting, and they can't fill the order in a principle capacity, and still not provide the same level of price improvement, they could then leverage an RLP program to be able to go out and buy stock at a particular price and sell it back to the customer at that same price. Keep in mind they can't capture spread on that, 'cause that's market order demanding rules that would apply to that. So from our perspective, we do think that there is a way for it to be complementary. If they were to propose the qualified auctions as designed, they would need to be two-sided. And one thing that we do wanna make clear, CBOE, as a very large option operator, we do want to emphasize that we also disagree with the implication that exchange auctions auto match and allocation guarantees are faulty or reduce competition. You can see that in the option market, where we do provide sizable price improvement, 80 plus percent on any auction, which roughly represents 15 to 20% of our option volume. Big difference in the option market versus the equity market. Option market, there's no what? Off-exchange trading. Very limited non-display liquidity, where in the equity market, completely different ecosystem, where there's a sizable value for an intermediary to play a role. And we think that exchanges could potentially play a complementary role by augmenting the current RLP programs to provide price and size.
Closing Remarks

Ellen Greene
Managing Director, Equity and Options Market Structure
SIFMA

- Well, I wanna thank everyone for joining us today, all of our roundtable participants, our moderators, Goodwin Procter, and everyone for joining us, both virtually and in person today. Certainly a lot of good dialogue today, a lot of consensus amongst participants about the quality of our market structure today and some of the risks that the proposals present. I do wanna just close by sharing that SIFMA did publish new research today, "The ABCs of Equity Market Structure: How U.S. Equity Markets Work and Why." I think a lot of folks in this room are familiar, but we think that this is a good piece to help folks get more familiar with U.S. equity market structures and the true benefits that it does provide to investors. So thank you all for joining today, and with this we conclude our program.