WILLIAMS & JENSEN, PLLC

Fr: Rebecca Konst and Alex Barcham

Re: SEC Equity Market Structure Advisory Committee

Dt: February 2, 2016

Summary

On February 2, the Securities and Exchange Commission's (SEC or Commission) Equity Market Structure Advisory Committee (EMSAC or Committee) convened a meeting to discuss market volatility and the events of August 24, and "Certain Issues Affecting Customers in the Current Equity Market Structure" such as "Risks of Market Orders and Stop Orders"; Payment for Order Flow; and Execution Quality Reports. The Committee also heard updates from the chairs of each of the four subcommittees (Regulation NMS; Trading Venues Regulation; Customer Issues; and Market Quality) on the work of their respective subcommittees.

Steven Luparello (Director, SEC Division of Trading and Markets) said the EMSAC will hold its next meeting on April 26, 2016.

Opening Remarks:

Steven Luparello (Director, Division of Trading and Markets) stated this is the third meeting of the Equity Market Structure Advisory Committee. He expressed the importance of the Committee and the topics being discussed.

Chair Mary Jo White in a statement noted that the Advisory Committee's agenda continues consideration of a range of important and complex market structure issues. She explained at prior meetings, the Committee discussed Rule 611, the Order Protection Rule of Regulation NMS, exchange access fees, and the current regulatory models for trading venues. She stated today, the Committee will take up the issues accompanying the market volatility occurring on August 24th and then discuss a number of issues affecting retail and institutional customers, including: how certain order types used by customers operate; payment for order flow; and execution quality and order routing disclosure. She explained the Commission has a "sharp focus" on optimizing the structure of the equity markets. **White** noted since the last Advisory Committee meeting, the Commission issued a proposal to address one significant aspect of trading venue regulation, namely transparency of alternative trading systems (ATSs). She noted the proposal seeks to "shine a light" on how ATSs operate and on the potential conflicts of interest that they may present. She explained the comment period closes on February 26, 2016.

Chair White suggested the Advisory Committee's discussion of market volatility and the events of August 24th are both important and timely. She stated a key element of the SEC's approach to market structure issues has been to conduct rigorous data analysis. **White** noted in late December, SEC staff posted a research note on the Commission's equity market structure website, addressing the operation of U.S. equity markets under the stressed conditions of August 24, 2015. She explained the paper provides detailed empirical data and other information to help assess trading on that day. She noted among the issues addressed in the paper are the opening and reopening processes at the primary listing exchanges, the effects of market volatility on trading in certain exchange traded products (ETPs) and corporate stocks, and the operation of the limit-up/limit-

down (LULD) pilot plan on a day with market-wide volatility. **White** stated the August 24 paper and other analyses will help provide a sound empirical basis for further consideration of steps to refine current trading rules in order to optimize the operation of controls over volatility.

Chair White noted SEC staff posted a memorandum on the Committee's webpage that summarizes several important issues affecting customers. She explained one topic discussed is the use of certain order types, specifically, market orders and stop orders. She stated these order types may present potential risks to investors, especially during periods of short-term market volatility. **White** noted a second important issue for customers is payment for order flow (PFOF). She explained payments by OTC market makers to retail brokerage firms for marketable retail customer order flow is a long-standing practice. She stated the Commission has stated that a broker accepting payment for order flow does not necessarily violate its best-execution obligations but the Commission has also recognized that the existence of payment-for-order-flow arrangements raises the potential for conflicts of interest for broker-dealers handling customer orders. **White** noted another issue impacting customers is disclosure to inform them of how their interests are being served by their broker-dealers. She stated some market participants have recommended that enhancements be made to the execution quality and order routing disclosures required by Rules 605 and 606 of Regulation NMS. **White** noted SEC staff is developing a rulemaking proposal to enhance the required disclosures, including how to enhance transparency of the order routing practices of broker-dealers for institutional investors.

Chair White noted that as part of today's agenda, chairs of each of the four subcommittees (Regulation NMS; Trading Venues Regulation; Customer Issues; and Market Quality) will provide a brief status update on their respective subcommittees.

Commissioner Kara Stein stated this agenda covers two important areas of concern: the market volatility of August 24 and certain issues impacting retail investors. She noted White's recent comments related to the need to get the Consolidated audit Trail (CAT) "off the ground." **Stein** stated this critical project is years behind schedule. She noted White has arranged for a project manager at the SEC to help the project along. **Stein** stated many market participants feel that the volatility of August 24 may have been exacerbated by certain rules. She stated investors and issuers need to be able to count on the effective operation of the markets during times of stress. She noted concern over certain order types used by retail investors and whether retail investors are uniquely disadvantaged in several ways. **Stein** stated she is looking forward to the discussion on how to improve the experience of retail investors. She expressed interest in the Subcommittee updates on how stakeholders can provide input.

Commissioner Michael Piwowar stated the Subcommittee efforts on identifying and prioritizing issues is underway and he looks forward to an update on that work. He stated the topics on this agenda are important to a comprehensive review of market structure issues. He stated the report on August 24 is a good starting point for this discussion. He suggested the customer issues to be discussed also represent opportunities for refinement to the current regulatory approach. **Piwowar** expressed hope that the discussion will provide direction on where the SEC should focus their activities.

SEC Presentation on Market Volatility

Daniel Gray (SEC Division of Trading and Markets) stated the research note on August 24 is a starting point for further SEC action. He noted that this report does not provide recommendations,

but that is the second step SEC staff is focusing on. He stated one consistent type of feedback is that the report contains a lot of data. He highlighted that August 24 differed from the 2010 Flash Crash in that during the Flash Crash mid-day prices crashed and quickly recovered. He stated the August 24 event was different in that even before opening there was substantial selling. **Gray** explained the opening auctions on the primary listing exchanges opened to consistent volume but went down 5 percent. He stated there was then a surge of additional selling which the broad market handled well and then recovered relatively quickly. He stated there were some significant issues on August 24: (1) breakdown of arbitrage in a minority of exchange traded products (ETPs); (2) once ETPs entered the Limit Up/Limit Down (LULD) that process did not seem to work well; and (3) several corporate stocks did "flash" crash (6 large stocks). **Gray** highlighted several key data points. He stated on the arbitrage breakdown, the majority of ETPs did not have problems. He noted similar ETPs operated differently which seemed to be related to secondary market trading volume. He noted the LULD issues which seemed to be an ETP issue. He stated a small number of corporates triggered the LULD. He noted more than half of the LULDs triggered were repeats and occurred during the recovery period. **Gray** noted NYSE Arca imposed price collars on the reopening process which seems to have attributed to some of the imbalances. He stated a lot of the selling pressures came from the imbalances in the NYSE Arca auction. He noted that more than 90 percent of imbalances came from market orders. He added that for those large corporates that had difficulties they exhibited a similar trading pattern. He stated more generally the nature of the selling interests which contributed to the demand for liquidity is an important issue for continued examination.

Luparello stated the August 24 report is a preliminary report and further evaluations may be forthcoming.

Presentations and Q&A on Market Volatility

Stacey Cunningham (Chief Operating Officer, NYSE) noted that all equity market structure topics are interconnected. She stressed it is important to consider that the different "regulatory paths" taken can impact other areas under review. She stated reviewing topics in isolation would not be useful. **Cunningham** stated designing reform around current behavior is not enough, as one must also anticipate possible reactions to those changes. She stated significant market events can act as a catalyst for change. She noted many reforms take years to be tested under stress events.

Cunningham stated the August 24 event was a first test of the reforms following the 2010 Flash Crash. She stated regulators need to move quickly to respond to events. She noted NYSE released a report on the August 24 event. She stated NYSE retained McKinsey & Company to conduct a review of trading on August 24, and that those conversations led to the recommendation proposed in the NYSE paper. **Cunningham** highlighted a few areas where current reforms have been successful, such as post-trade systems, market data delivery, and SEC Midas system used for research. She stated in some cases the early "views" turned out to not be what the data actually showed. **Cunningham** stated the market was reacting to a true global volatility event in August. She noted the NYSE paper highlights two different phenomena. She stated there was a significant surge in retail market orders in the opening. She stated there was a six fold increase in market order activity in the opening half hour that coincided with significant broad based withdrawals. She noted liquidity remained low throughout the day. **Cunningham** stated there were a number of factors contributing to market maker activity such as: futures being in a limit state; there were fears of triggering market wide circuit breakers; concerns that clearly erroneous (CE) trades would be busted;

market makers were seeing the impact of their volatility controls; and opening and reopening procedures impacted the markets.

Cunningham stated there are pros and cons to the fragmented market system, including competition which drives down trading costs, and the benefits of increased resiliency in bad markets. She stated the NYSE recommendations include a need for investor education on order types, adding that NYSE will not accept stop orders. She stated market fragmentation can exacerbate customer issues. She recommended a number of LULD refinements. She stated there were multiple LULD halts therefore, NYSE proposed to reform the double the width of bands, harmonize LULD procedures, and ensure there are incentives for market makers to provide liquidity during volatile times. She suggested that one possible option is exempting market makers from Regulation SHO restrictions in volatile times. She noted enhancements NYSE intends to implement such as: improving transparency of pre-opening indications and enhancing automated openings. She noted changes to the open auction collars.

Hubert De Jesus (Co-Head Market Structure & Electronic Trading, Blackrock) stated Blackrock is a strong advocate for equity market structure reform. He stated the August 24 events provided a chance to look at the reforms implemented following the 2010 Flash Crash. He stressed the importance to keep the events of the day in context. He stated the market functioned despite volatility. He stated the morning of the August 24, many ETPs traded at discounts because of a temporary disruption in ETP pricing. He stated the problem was primarily concentrated in the U.S. equity markets, as ETPs listed in other countries performed well. He stated there were a number of structural flaws, namely in opening processes, LULD, and suboptimal re-opening procedures. He noted these issues impacted the ETP arbitrage process. He stated valuation clarity was hampered by the opening delay and trading pauses. He stated ability to arbitrage was impacted and there were inconsistencies in the LULD and trading bands.

De Jesus stated there is not a single solution, but suggested a need for a harmonization of trading rules across securities and across different rule sets. He stated this will reduce uncertainty and unnecessary complexity. He expressed support for a review of the LULD to recalibrate the opening and reopening process, and maximize liquidity. He stated market wide circuit breakers need to be reconsidered. He urged transparency and timeliness around exchange opening auction processes, and clearly erroneous rules need to be harmonized. He added that there should also be edition efforts directed at better informing retail investors. **De Jesus** stated a collective effort is needed to advocate for reforms which will improve the resiliency of the markets.

Frank Hatheway (Chief Economist, NASDAQ) stated there are pitfalls to be avoided even when using high quality data. He stated at its best data analysis provides an impartial view of the facts. He stated the SEC staff research note looked at a single event which confounds the interpretation of the cause and effect. **Hatheway** stated one challenge for the SEC will be considering how their response will interplay with other SEC activities. He stated the August 24th research should not be a single review. He suggested simulating market events to attempt to properly respond to market events. He stated there is a common set of facts for the August 24th event. He stated market technology worked considerably better on August 24th than on May 6, 2010, market data feeds met demands, order routing proceeded without declarations of self-help, and LULD operated as designed.

Hatheway stated conditions in LULD and reopening processes resulted in differing outcomes. He noted concerns that the research note found that market orders remained problematic, the amount of available liquidity on order books was less, and trading pauses remained out of sync. He noted the market wide circuit breaker was not triggered. **Hatheway** noted many expressed relief that the market wide circuit breaker was not triggered. He noted that SROs are working to address "leaky bands" and opening and reopening rules are being reformed. He stated the exchanges should not be forced into a one–size-fits-all opening process. **Hatheway** stated the clearly erroneous protection rules are intended to prevent losses of fat finger events, short sale restraints are designed to prevent speculative short selling, and market wide circuit breakers were to limit consequences from a market wide event. He endorsed synchronizing the clearly erroneous with LULD but not taking the clearly erroneous authority away from exchanges. He stated NASDAQ does not accept stop loss orders. He expressed skepticism over the proposals for market orders. He stated the SROs should be left to demonstrate how they can address this issue. He stated the focus should be on how the markets reopen following such events.

Paul O'Donnell (Managing Director, Morgan Stanley) stated the events of August 24th were driven by many interrelated actions and there is no one fix. He stated the pricing mechanisms did not function as expected which resulted in price dislocations during the opening. He stated this was the first real test of the changes implemented following the Flash Crash. **O'Donnell** noted the state of the global markets, S&P closed down and Asian and European markets were in a sell off. He noted the mini future market was limit down 5 percent. He stated market participants were facing a possibility of a market wide circuit breaker. He explained the NYSE invoked Rule 48, which didn't help. He noted since August 24th the NYSE has partially altered this policy.

O'Donnell stated further research is needed to understand the nature of the liquidity flow. He stated many securities suffered several halts on August 24. He stated the opening and reopening process should be revisited. He stated the repeated nature of the halts showed that many auctions did not find a clearing price. He suggested many imbalances consisted of market orders. **O'Donnell** stated a sell stop order will trigger on a down tick. He suggested an analysis of non-public data would show whether the decline was driven by stop loss orders. He noted a disconnect between LULD and clearly erroneous rules. He suggested to attract liquidity exchanges should publish imbalances. He stated collars should be built into auctions until a clearing price is found. He suggested LULD bands should be published and listing markets should honor these bands when transitioning into regular trading. He stated more research should be done on stop loss orders. Finally, he suggested a review of the LULD process.

Committee Discussion on Market Volatility

Jamil Nazarali (Citadel) stated Regulation SHO (Reg SHO) does restrict the ability to provide liquidity and to arbitrage between markets and for ETPs. He stated many Reg SHO rules do not make sense, such as counting all sell orders into their position but not buy orders. **Nazarali** noted that both stop orders and market orders are important to retail investors. He stated most of the time stop orders operate really well. He suggested more investor education is needed because many retail investors do not understand what a stop order actually is. He stated many comments Citadel received from financial advisors were also concerning because of their lack of knowledge about how stop orders work. **Nazarali** suggested requiring a "pop up" disclosure for retail stop orders that explains the order may trade at a different price and which asks whether an investor wants to continue with the order.

Reggie Browne (Cantor Fitzgerald) stated the August 24th event was not an ETF event but a market structure event. He stated the opening procedures were an issue. He stated when the arbitrage mechanism is unavailable for an ETF they switch to futures products. Regarding the LULD, he stated the inability to open ETPs and the excessive halts created an inability to make a fair market. **Browne** suggested finding equilibrium through liquidity. He stated LULD should be looked at in terms of liquidity. He stated it is essential for the exchanges to harmonize and force liquidity into the primary listing venue before reopening. He stated there is no need for price bands around indicative fair value for ETFs, since indicative fair value can be wrong. He stated clarity around clearly erroneous and LULD would be helpful.

Joseph Mecane (Barclays PLC) stated a lot of what is being discussed has to do with the reopening auction process after LULD. He suggested they could "tweak" the rules around the pauses or they could eliminate the idea of auctions around LULD. He stated there could be floating bands that readjust periodically. He stated what seems to happen is the pause states are entered and people pull out their liquidity until there is a reopening. **Mecane** suggested this is overwhelming any liquidity in the auctions. He stated unless liquidity is brought in there will be a dislocation. He stated the market seems to recover better in the limit states than it does in the pauses. He suggested there is a better way for the system to work without pausing the market.

Eric Noll (Convergex Group) stated the theoretical idea was that the market is supposed to open at a better price after the pause but that does not seem to be happening. He stated the reopening auction does not seem to be working. He suggested instead the bands could readjust without a halt. He stated that would eliminate the troubles with the auction. **Cunningham** stated this is a good example of the LULD plan adjusting, but she advised the need to consider how other asset classes could be impacted by changes.

Nazarali stated another potential improvement is when there is a large price movement on the opening print to have more agreement that if it dropped by so much it can go up by that much in the same print.

Joe Ratterman (BATS Global Markets Inc.) stated the LULD has done well in determining when a pause is needed. He stated the question is how to find the best price afterwards.

Ted Kaufman (Duke University Law School and former U.S. Senator from Delaware) stated it is about investor education. He stated market orders and stop orders for most retail investors are helpful. He stated eliminating those would eliminate parts of the market which use them well most of the time.

Luparello asked about harmonization of LULD. **Cunningham** stated if a stock triggered a pause it should be allowed to recover. **O'Donnell** stated if a stock drops it should be allowed to reopen at that price or higher. **De Jesus** stated there is little confidence in pricing of a paused stock. He stated it would make sense to have a consistent band at the open and close. **Hatheway** stated there is more financial risk if the clearly erroneous bands are widened.

Nazarali asked why NASDAQ did not go for a market wide LULD. **Hatheway** stated the reason is because Nasdaq wants to compete, and if they feel they have a better way they will implement that. **Ratterman** stated before August 24 there was not much discussion about whether the bands were

wide enough. He stated where the bands are is about right and the issue is how to get the right price after. **Gary Stone (Bloomberg)** agreed the exchanges should be allowed to compete for listings. He agreed about stop orders but he is not certain they should be handled at the exchange level. He suggested the exchanges do not have the responsibility of best execution like the broker does. He stated it is the brokers who serve that function as they are closer to the investor. **Stone** noted the coordination between the futures and the ETP market. He stated ETPs are not equities but are equity-like. He asked whether there is something that prevents a halt of the exchange because of something happening in the futures market. **Hatheway** stated having these unanticipated de-couplings does not benefit anyone.

Maureen O'Hara (Cornell University and Investment Technology Group Inc.) noted the importance of the reopening auction. She stated the delayed opening was a focus of many of the problems on August 24. She noted the proposals will provide more imbalance information but not indicative prices. **Cunningham** stated in October they began publishing imbalance information which includes indicative information. She stated the NYSE also publishes broader data. She stated the proposal would include more indications with wider parameters. She stated they allow those parameters to adjust for volatility. **Cunningham** stated that the enhanced disclosure of order imbalances and the opening procedures proposed by the NYSE eliminate the need for Rule 48.
Matthew Andersen (Headlands Technologies LLC) asked whether that data is available to all participants or only to a direct feed. **Cunningham** stated most data goes to the direct data feeds but the indications go out to the SIP.

Andersen asked about the NASDAQ's clearly erroneous bands. **Hatheway** stated if the bands are widened the threshold for breaking is larger. He stated a firm would be on the hook for a trade which is 10 percent away. **Andersen** suggested adjusting rather than busting trades, adding that not having certainty around a position is the number one way to ensure market makers do not make markets. **Hatheway** asked whether Andersen is suggesting not harmonizing LULD with clearly erroneous. **Andersen** stated problems could be addressed by providing certainty of positions. **Luparello** expressed support for the SEC's market access rule.

Chester Spatt (Carnegie Mellon University) stated if there are rules about breaking trades then there will be disruption of liquidity in the markets. He stated there are so many rules which disrupt the liquidity process that these rules collectively disrupt the liquidity provision process. He stated that if too many trades are broken, then there is not an incentive to provide liquidity. **Hatheway** stated they do not look forward to breaking trades but it is something they have to do. He stated the focus has been to eliminate the need to do that entirely. **Spatt** stated the financial services firms need to own their process for submitting orders and invest enough in their process to deal with these issues.

Luparello stated there is a large correlation between the clearly erroneous bands and the LULD bands. **Spatt** advocated that exchanges should put themselves in a position to encourage liquidity provision. **Cunningham** stated a number of trades were not broken because they were not requested to be broken. She stated adjusting trades works for institutional investors but not as well for retail investors.

Brad Katsuyama (IEX Group, Inc.) stated if viewed in terms of notional at risk it makes sense to look at adjustments rather than breaks.

Nazarali stated clearly erroneous rules are not needed anymore because of LULD. He stated the problem was probably more perception than anything else. He stated clearly erroneous is "antiquated."

Browne stated "adjust not bust" would increase market confidence. However, he suggested if a clearly erroneous request is submitted there is a FINRA investigation. He stated there should be an environment for "adjust not bust" and reduce the regulatory response for it. He asked about aberrant trades. **Cunningham** stated it is reported to the tape but does not go towards setting the prices for the day.

Ratterman stated LULD was put forth after the Flash Crash to eliminate clearly erroneous. He stated trades which were allowed to trade within a certain band were allowed to stand. He stated the vision is to get to a point where clearly erroneous is eliminated. He encouraged the SEC to keep that vision in mind to eliminate clearly erroneous. He suggested LULD may need to be tweaked for clearly erroneous to go away. **O'Donnell** agreed that when LULD is functioning then clearly erroneous is not needed. He noted people were concerned that there would be millions of busted trades. He stated he is not advocating for widening LULD. He stated the problem was the reopening. He stated the question is once they hit this situation they cannot rush to reopen until the right equilibrium price is found.

Stone asked about future coordination. He asked whether this is something which should be handled by the joint working group or the industry. **Cunningham** stated there needs to be coordination with the regulators.

Katsuyama asked about indications being published to the SIP. **Cunningham** stated the mandatory imbalances go out through the feeds. She stated the mandatory information is a price range. She stated the indicative pricing goes to the feeds. She noted Rule 48 only impacts the price range information not the automated imbalance information. **Hatheway** stated they disseminate auction data on the exchange feeds. He stated in 2004 no one wanted the data. He stated there are discussions whether it should be disclosed to the SIP.

Nancy Smith (AARP) asked about market and stop orders. She asked what scale of effort is needed in the investor education area and whether risky trading times could be targeted. **Cunningham** stated the education can happen on multiple levels. She stated one would be right at log on, and an alternative could be when an investor enters a stop order they could be asked whether they want that stop order or a price alert instead. **De Jesus** stated broker-dealers need to be invested in this. He stated stop limit orders can be used and marketable limit orders can be used as well as other orders. He stated investors do not understand the situations under which their order will be triggered. **O'Donnell** stated education is critical. He stated limit prices would be more useful for investors. **Hatheway** stated he has no objections to brokers using "pop-ups" to warn people but it is incumbent on the markets to know how to deal with these orders.

Stone noted Rule 15c3-5and he asked whether guidance is needed on whether brokers should even be taking in market orders. **Luparello** stated there are a lot of protections in the market access rule but preventing dislocation of smaller market orders will not be one of them. **Kevin Cronin (Invesco Ltd.)** stated there may be a greater responsibility to the market to say if certain events occur, a market order should be an order with a certain collar. **Nazarali** stated market orders and stop orders have a purpose. He stated what cannot be done is to make a decision to change a held

order into a not held order. **Mecane** suggested the two issues should not be treated as mutually exclusive. He stated the primary goal should be how to design LULD so even if there is a wave of selling the market mechanisms can protect people. He stated the market should be designed to be able to absorb those trades regardless. **Noll** stated these orders in market stress tend to flood to the lit market. He stated on August 24th liquidity was down but the order flow was high. He stated the question is how to deal with the liquidity provision issue. He stated August 24th is an obvious example but there are other instances of liquidity provision problems. **Ratterman** stated retail brokerage firms would say that a market based approach is what is needed. He stated "changing lanes" would be problematic right now. He stated retail brokers would like to solve this rather than eliminating these order types. **Cronin** stated he is not suggesting eliminating these order types but having more investor education. He stated there is evidence that there could be a better mechanism to understand supply and demand. He suggested in certain circumstances those orders need to be considered in the broader context of the market.

SEC Staff Presentation on Customer Issues

Michael Coe (Division of Trading and Markets, SEC) stated two order types are most popular for retail investors: market orders and stop orders. He explained these types of orders can pose issues during times of market volatility. He stated many use these order types because they are not actively trading during the normal operating day. He stated those using these order types are expecting fair execution prices, however, during market volatility that might not be the case. He said stop orders can be triggered by a price decline, which can then be rapidly reversed. He noted that some exchanges have recently eliminated stop orders, but they still pose risks. He said possible approaches to addressing this order type include enhancing investor education and imposing restrictions on these order types, such as limit prices. He said stop orders remain popular with investors and work well during ordinary conditions.

Coe said most retail customer orders are internalized by broker dealers or sent to the OTC market. He stated that dealers that pay for order flow provide some type of price improvement. He noted that the SEC has said that a broker-dealer does not violate its obligations simply by accepting payment for order flow (PFOF), but there are concerns about conflicts of interest. He noted that some have suggested that PFOF benefits customers by encouraging competition. He said if PFOF were banned other less transparent means could be adopted. He said the Commission has discussed requiring that PFOF be passed on to retail customers, but that concerns have been raised with the complexity of this proposal. He suggested that more detailed guidance could be provided to broker-dealers regarding their obligations. **Coe** said another option could be to require broker-dealers to provide customers with detailed information on how much money they receive from PFOF.

Coe stated that some market participants have suggested that Rules 605 and 606 have provided additional information to consumers and encourage market competition. He noted that the market has changed significantly since the rules were implemented and proposals have been offered to update them to keep pace with changes in the market. He said there are proposals to address the fact that institutional orders are not covered by Rule 605 and 606. He said the Commission has directed the staff to develop a rule to enhance disclosures related to institutional orders.

Presentation and Q&A on Customer Issues

Presentations

Jeffrey Brown, Senior VP-Legislative & Regulatory Affairs, Charles Schwab, said Schwab clients use market orders extensively. He stated that limits on market orders would trouble Schwab

and their clients. He said the risks associated with market orders are accentuated when the markets are falling, noting that Schwab informs its clients of these risks. He said stop orders are usually triggered when markets are falling. He stated that putting a limit price on these orders does not necessarily limit risk, because the customer could miss the next trade. He contended that there are still very valid uses for market orders and stop orders, but that there must be adequate education for investors.

Brown said the failure of exchanges to provide adequate execution quality to consumers contributed to the development of PFOF. He stated that a competitive market structure has emerged which provides continually improving execution quality. He said investors are getting better execution quality than ever before. He said the system is very competitive and execution quality is very high. He said Schwab's average order is 823 shares and their average price improvement is $6.06, of which PFOF constitutes 82 cents. He acknowledged that Schwab does receive a payment and this presents a potential conflict, but Schwab takes action to mitigate the conflict by limiting its wholesale vendors to a very narrow range. He said this limits the incentives for Schwab to route orders based on payments. He stated that the payments flow indirectly back to the clients by allowing Schwab to maintain quality services. **Brown** expressed opposition to proposals to ban PFOF, suggesting that this would not drive orders back on to the exchanges. He emphasized the benefits of competition to consumers.

Frank Childress, Managing Director, Wells Fargo Advisors, said retail investors of U.S. listed equities have "never had it better." He stressed the need to manage the once or two times a year events which hurt confidence in the market. He said spreads in the S&P stocks have declined from 20 basis points to 3.5 basis points since the implementation of Rules 605 and 606. He stated that market and stop orders benefit customers the large majority of the time. He said education is the primary tool which can be used to mitigate the risks from these order types, noting that Wells Fargo has improved its educational tools. **Childress** said the SEC staff paper lays out the challenges with restricting or banning the use of stop orders. He contended that limiting stop orders would reduce consumer choice, suggesting that they are valuable tools. **Childress** said Wells Fargo Advisors does not accept PFOF from dealers for equity order flow. He stated that there has been significant discussion in the industry, such as SIFMA and STA, which have influenced industry practices on PFOF. He stated that there is still a duty of best execution and firms are executing the vast majority of orders inside the NBBO. He expressed concern with the impact of banning PFOF on the self-directed space. He said it would be extremely complicated and costly to require that PFOF be passed on to customers. He emphasized the benefits of appropriate disclosures and transparency, noting that Rule 605 and Rule 606 need to be updated. He said Rule 605 needs to be updated related to time stamps and speed measurements. He noted that NYSE is working to improve the opening process and the LULD process.

Dennis Dick, Member, Capital Markets Policy Council, CFA Institute, said the stocks of hundreds of major companies fell by more than 10 percent on August 24, which led to a large number of LULD halts for ETFs. He said the rebound in the market did not help the market participants who made use of stop orders. He stated that stop orders are meant to limit losses, but consumers lack adequate knowledge about how these orders operate. He expressed opposition to banning or limiting stop orders. He said a better approach would be to require brokers to use automated warning screens during times of stress. He suggested that circuit breakers and warning systems are merely a "band aid" for issues in the underlying market structure.

Dick said the CFA Institute has raised concerns with the role of PFOF in the rise of off-exchange trading and its effect on displayed liquidity. He illustrated a sequence of trades, which he stated appear to give nominal price improvement but suggested there are unquantifiable costs from missed trading opportunities. He suggested that orders being routed to OTC markets miss opportunities to interact with hidden orders on the public exchanges and miss opportunities for larger price improvements. He said as more retail order flow is routed away from the public exchange the toxicity of the order flow on lit market rises. He said market makers will have less incentive to quote aggressively. He stressed the need to avoid the predominance of dark trading. He said to better protect displayed liquidity providers OTC market marker should provide meaningful price improvement rather than nominal price improvement. He suggested that market makers free ride of the public quotation. He recommended making enhancements to Rules 605 and 606 and reducing access fees at exchanges.

Christine Parlour, Professor of Finance & Accounting, Haas School of Business, UC Berkeley emphasized the need to examine the "all-in costs" to retail investors when looking at PFOF. She said if PFOF flows to retail brokers they are in a position to compete more aggressively in a way that is passed on to retail investors. She suggested that if PFOF did not exist liquidity provision would be more efficient. She said PFOF removes liquidity from the lit markets, suggesting that spreads would be even tighter without PFOF. She said has "absolutely no answer" as to what can be done to address PFOF, suggesting that the best way forward is unclear. She said the all-in costs under PFOF for smaller investors are higher than they should be.

Discussion

Nazarali said he disagrees with Dick's testimony, aside from his argument that stop orders and limit orders should not be banned. He emphasized the $150 million of the price improvement provided by Citadel. He said retail orders deserve a better price than the NBBO, because they are less toxic than institutional orders. He stated that the only mechanism to achieve this outcome is to have an OTC market maker which provides price improvement. He noted that internalization would happen even in the absence of PFOF.

Nazarali said PFOF is not perfect, but it is better than the alternatives. He noted that some firms take payment and some do not, stating that customers have a choice about where to open their account.

Dick said Citadel may provide significant price improvement, but others do not. He asked if there should be a requirement for a minimum amount of price improvement. **Nazarali** said there are trades with small price improvement, but that average price improvement for a market order below $10,000 is probably 0.3 to 0.4 cents per share. **O'Hara** noted that Canada has implemented a rule requiring significant price improvement, which has not worked well. She said PFOF came about because spreads were too large. She suggested that on balance retail investor do better by allowing PFOF. **Mecane** said retail is advantaged through internalization. He stated that there are disagreements about how to address the conflicts associated with PFOF. He questioned whether current disclosures are adequate or whether they need to be improved. He suggested improving Rule 606 to make it easier to determine how firms are making routing decisions. **Nazarali** recommended the best way to address conflicts is by enhancing Rule 606 to disclose execution quality received from different venues.

Noll said retail customers are fairly sophisticated and have a large number of choices. He said the Committee should not assume that retail investors need a "seeing eye dog." He argued that there should not be a class of investors that gets a better price based on who they are. He asked about the impact of exchange rebates on liquidity provision. **Parlour** said she specifically examined the impact of PFOF, but that other mitigating systems could also be examined.

Spatt asked if the routing decisions at Schwab are dependent on fees. **Brown** said almost all of Schwab's wholesale brokers offer the same fees, because they allow such a narrow band.

SEC Staff asked if customers are informed about the amount of PFOF. **Brown** said PFOF is aggregated at the end of the month, so brokers cannot immediately tell customers about the PFOF on a particular trade. He said if the customer inquires, Schwab will inform them about the PFOF on a particular trade.

Cronin said dark trading is predicated on the existence of the NBBO. He said the current environment does not facilitate the price discovery mechanism. He expressed concern that sometimes the retail investors' interests trump price discovery for other participants. He said retail investors assume opportunity costs, which are much harder to quantify. He said it is hard to strike an appropriate balance in this area. He emphasized that he is not necessarily saying there should be a trade-at, but that there should be a focus on the price discovery mechanism, not on any particular investment class.

Mehmet Kinak (T. Rowe Price Group) raised concerns that there are perverse incentives in the market. He noted that Wells Fargo Advisors does not receive payment. He asked if they receive better execution from wholesalers. **Childress** suggested that firms that do not take PFOF have marginally better execution statistics than those that do accept payment.

Ratterman said limit orders tend to set the price rather than chase the price. He said he is not concerned about where retail limit orders are placed, as they have a very high probability of being executed because they are at the top of the queue. He said exchanges have a very different mechanism than market makers. He said exchanges are limited in how granular a price they can display, so they cannot show half a penny price improvements.

Manisha Kimmel (Thompson Reuters) asked about the compliance burdens of applying Rule 605 to retail brokers. **Brown** said Schwab has already disclosed this information for years, so he does not view it as a burden. **Childress** said there would be a certain level of burden to requiring firms to disclose Rule 605 metrics for retail, but the industry could manage it. He suggested that Wells Fargo Advisors would fare well in such a comparison.

Nazarali noted that since a retail order is smaller, it will get a better price than a 100,000 share institutional order, since a market participant on the other side does not want to get run over.

Dick asked if the market is too dependent on high frequency liquidity, as it "flees" during times of stress. He said Bright Trading is primarily a taker of liquidity. He suggested that high frequency traders are primarily incented by rebates. He asked if the market is too homogenous. **Katsuyama** said there are not a lot of incentives for long-term investors to provide liquidity in the public market right now. He stressed the need to give long-term investors the level of confidence needed to display liquidity. He said PFOF provides short-term incentives to short-term investors. He suggested that

there is an imbalance in the market. He said there is an argument of price improvement, but he described one mil price improvement as questionable, suggesting that there should be a minimum price improvement to step in front. He expressed interest in learning what percent of off-exchange trading occurs at one mil increments.

Browne said bond ETFs are growing rapidly. He also noted that in polling clients he continues to hear that retail investors have it better than ever. He stated that the majority of PFOF is used by brokers to improve their platforms and innovations for the benefit of investors. He contended that PFOF enhances market access. He expressed concern that placing limitations on PFOF will limit competition and innovation and impact retail investors.

Matthew Andresen (Headlands Technologies LLC) said there are separate discussions to be had about PFOF and internalization. He said if PFOF were eliminated order flow would still not go back to the exchanges, as brokers feel they can get a better price on the OTC market. He pointed to the access fees at exchanges dwarfing the amount of price improvement. He explained that there are many rational reasons that retail brokers use wholesalers to better serve retail investors including: avoiding access fees of up to 30 mils; taking off the risk of execution; and dealing with exchange calamity situations to better protect retail investors from loss, including instances such as the Facebook IPO where intermediaries rather than exchanges ate the losses. He emphasized the need to consider these benefits, suggesting that a "fix" of a certain amount of price improvement is not a cure all.

O'Hara questioned whether stop orders create an externality on the market and how it could be avoided. She said stop orders create a problem for the market which cannot be solved with education. She asked if brokers could create a new type of stop order which avoids this problem by having an automatic put, similar to an option. She suggested that maturity dates could be imposed on stop orders. **Brown** said stop orders with automatic puts could be created, but they would be expensive and complex for consumers. He suggested that having stops orders be limit only is one solution, but consumers could be subjected to greater losses during flash situations. **Childress** said there is no single answer to stop orders, as putting limits on them would have consequences.

Spatt asked what Schwab does to educate consumers when they purchase stop orders. **Brown** said Schwab has warnings about the risks associated with stop orders. He said Schwab's clients are self-directed investors and Schwab helps them understand the risks associated with certain types of investments.

Smith asked how brokers examine the effectiveness of their education efforts. **Brown** said firms examine what happens in their investor base after events like August 24. He said Schwab had clients with ETF positions that moved violently compared to the underlying stocks and had significant losses. **Childress** said Wells Fargo Advisors responded proactively after the August 24 event by enhancing its communications and posting educational videos. He said there has been an increase in the use of limits on stop orders.

Subcommittee Updates

Regulation NMS Subcommittee

Subcommittee Chairman Kevin Cronin said the Subcommittee is committed to creating practical and sensible recommendations related to Regulation NMS. He noted that the Subcommittee has held two meetings so far, and the next meeting will be an in-person meeting in New York next

week. He stated that access fees is the Subcommittee's first priority and that it appears to be an area for action, but that he was not advocating a particular change at this time. He said the Subcommittee could seek outside input on this issue, including from retail investors, the issuer community, and market makers. He said he hopes to also include NYSE and NASDAQ in these discussions, and he plans to invite them to Subcommittee meetings. He stated that the Subcommittee is looking to learn more about NASDAQ's pilot program on access fees. He said the Subcommittee will bring in academics and other experts on crafting a pilot program. **Cronin** said the Subcommittee's second priority after access fees is market data, and that the Subcommittee would examine the issue at the next meeting. He said the Subcommittee will also examine the Rule 611 trade through rule at some point.

Market Quality Subcommittee

Market Quality Subcommittee Chairman Eric Noll said the Subcommittee has met twice and has not yet had any outside speakers, but noted a desire to invite the exchanges to participate. He said the Subcommittee is looking to use the August 24 event as a "launching pad" for a larger discussion about the opening process. He noted that they are looking at LU/LD and the clearly erroneous process. He said they are also looking at what it means to be a market maker and what obligations they should have. He noted they are looking at ETFs and how they impact the market. He added that the Subcommittee would examine market data, and that it intends to have recommendations on the issues.

Trading Venues Regulation Subcommittee

Trading Venues Regulation Subcommittee Chairman Richard Ketchum said the Subcommittee has held two meetings thus far. He said their broad objective is examining whether the regulatory model for trading venues is serving the market well and creating a level playing field. He stated that they are comparing the exchange and ATS regulatory schemes. He noted that the SEC recently passed some amendments to Regulation ATS. He suggested that the amendments "hit the market" on enhancing ATS disclosures. **Ketchum** noted that the Subcommittee will also examine NMS Plan governance, with a focus on industry participation, including how to provide the most useful buy- and sell-side participation. He noted that an in-person meeting is expected in February, and that he intends to reach out to the exchanges to participate.

Customer Issues Subcommittee

Customer Issues Subcommittee Chair Manisha Kimmel said the Subcommittee has met three times. She said they reviewed data on investor attitudes, confidence and financial literacy. She stated that they are looking at areas for additional disclosures under Rules 605 and 606, such as including odd lots and OTC equity securities. She noted that the Subcommittee would also examine market and stop orders as well as PFOF. She said they will seek input from retail broker dealers at their next meeting.

Luparello said the EMSAC will hold its next meeting on April 26, 2016.

Advisory Committee Members

Matthew Andresen- Headlands Technologies LLC
Reginald Browne- Cantor Fitzgerald & Co.
Kevin Cronin- Invesco Ltd.
Brad Katsuyama- IEX Group Inc.
Ted Kaufman- Duke University Law School and former U.S. Senator from Delaware

Richard Ketchum- FINRA
Manisha Kimmel- Thomson Reuters
Mehmet Kinak- T. Rowe Price Group
Andrew Lo- MIT and AlphaSimplex Group
Joseph Mecane- Barclays PLC
Jamil Nazarali- Citadel Securities, LLC
Eric Noll- Convergex Group
Maureen O'Hara- Cornell University and Investment Technology Group Inc.
Joe Ratterman- BATS Global Markets, Inc.
Nancy Smith- AARP Inc.
Chester Spatt- Carnegie Mellon University
Gary Stone- Bloomberg Tradebook LLC