COMMODITY FUTURES TRADING COMMISSION

SECURITIES AND EXCHANGE COMMISSION

JOINT ADVISORY COMMITTEE MEETING

Washington, D.C.

Wednesday, August 11, 2010

ANDERSON COURT REPORTING
706 Duke Street, Suite 100
Alexandria, VA 22314
Phone (703) 519-7180 Fax (703) 519-7190

PARTICIPANTS:

GARY GENSLER
Chairman, Commodity Futures Trading Commission

MARY SCHAPIRO
Chairman, Securities and Exchange Commission

MICHAEL MENDELSON
Principal AQR Capital Management

NOEL ARCHARD
Head, U.S. Products Blackrock

CHARLES ROTBLUT
Vice President and Editor
American Association of Individual Investors

KEVIN CRONIN
Director, Global Equity Trading Invesco

CHRIS NAGY
Managing Director, Order Routing Sales and Strategy, TD Ameritrade

PAMELA CRAIG
Chief Financial Officer, Accenture

JIM MOSER
Commodity Futures Trading Commission

GREG BERMAN
Securities and Exchange Commission

* * * * *

P R O C E E D I N G S

(9:06 a.m.)

CHAIRMAN GENSLER: Welcome and good morning. I'll call to order this third meeting of the Joint CFTC-SEC Advisory Committee on Emerging Regulatory Issues. The date is August 11, 2010. This meeting is held in accordance with the government's Sunshine Act and we're joined by all of the members of the advisory committee I think except for Brooksley Born and Susan Phillips. Susan Phillips may be joining by phone and maybe Brooksley.

As we have done in our prior meetings of the committee, my co-chair Mary Schapiro and I will share the presiding officer's duties, but first I'd like to offer Chairman Schapiro the opportunity to make some opening remarks.

CHAIRMAN SCHAPIRO: Thank you very much, Gary. I also want to join Chairman Gensler in welcoming all of our committee members and again thank you for the time and effort that you've invested over the past few months as we continue our review of the May 6 events.

As part of the SEC and CFTC review of market events on May 6, we're pursuing two related courses of inquiry. The first is empirical and data driven. SEC staff have been reviewing raw transaction and order data, order book snapshots, trade summaries, information about broken trades and information related to the initiation of LRPs and self-help.

The second area of inquiry is focused on extensive interviews with market participants, their first- hand accounts of what happened on May 6 and their responses to those events throughout the course of the day. These efforts will culminate in a SEC-CFTC joint report that will be presented to this committee for its consideration next month and of course we will share with the public as well.

As part of our review, we have sought input from institutions and individuals who can help us build an understanding of what happened, how it affected market participants and how we might best avoid future events of this type. At our last joint advisory market meeting, representatives of the various exchanges discussed their experiences and their observations of the markets on that day. Significant market participants also shared their views and observations regarding liquidity, trading and the apparent breakdown of an orderly market. Today the committee will hear panelists describe the impact of May 6 from the perspective of investors both large and small and we think the investor perspective is crucial to understanding these events and to fostering stronger capital markets.

As you know, following May 6 the SEC has undertaken two immediate policy responses. The first was to work with the exchanges and FINRA to develop new stock- by-stock circuit breaker rules. These rules which were approved by the SEC on June 10 require the exchanges and FINRA to pause trading in S&P 500 stocks when they experience a 10 percent change in price over a 5-minute period. This pause which is currently applied on a pilot

basis gives the markets the opportunity to attract new trading interest in an affect stock, establish a reasonable market price and resume trading in a fair and orderly fashion. In June we published for comment proposals by the exchanges and FINRA to expand this program to include all the stocks in the Russell 1000 index as well as 344 specified exchange-traded funds, and we're currently reviewing the comments received on those proposals and I hope we'll have Commission approval of this phase of circuit breakers very soon.

The second policy response was to work with the exchanges and FINRA on amending their rules for breaking clearly erroneous trades. As the committee heard previously, after May 6 the exchanges exercised their existing authority to break clearly erroneous trades that were effected that day at prices 60 percent or more away from the pre-declined prices. The process that was used to draw that line however was neither clear nor transparent to market participants and we've received reports that the lack of clear guidelines for dealing with clearly erroneous transactions and the lack of transparency surrounding the decision to break trades but not others created uncertainty for investors and others about how such transactions would be handled in the future. The proposed rule changes are designed to address these concerns by setting clearer standards for breaking trades and curtailing the discretion of the exchanges and FINRA. These proposed rules were published for comment in June and we're now reviewing the comments received.

We're considering as well whether other steps are appropriate to reduce the risk of sudden disruptions and clearly erroneous trades including deterring or prohibiting the use of stub quotes by market makers, and we're studying the impact of trading protocols on individual exchanges including the use of trading pauses, price callers and self-help rules. Finally, we're looking closely at other mechanisms that may contribute to a more stable market such as instituting limit-up/limit-down mechanisms. As we continue to

examine these and other issues and to consider actions that may further protect investors and stabilize financial markets, it is critical for us to continue to hear a variety of informed views. Today's guests and of course our committee members will I'm sure not only shed more light on May 6 but provide some of those knowledgeable perspectives that we need. I want to thank again all of our guests who are speaking as well as our committee members for being here today. Thank you, Gary.

CHAIRMAN GENSLER: Thank you, Mary. Today we'll continue our examination of market events that took place on May 6. I want to thank you for co-chairing this meeting and I look forward to our continuing work together on these issues. But also with regard to the Dodd-Frank bill, this right here my friend, are two sets of Commissioners in a moment, our Commissioners. We're going to be working together very closely. The Dodd-Frank Act for the first time brings the other-the-counter market on comprehensive regulation and I know when you chaired the CFTC you nosed up to that, you tried, but now Congress has actually given the SEC and the CFTC the necessary authority. So I really do look forward, and I can report to the public our meetings today and the last month have been remarkable. We set up 30 teams. The SEC set up a different set of teams. You have more work than we do because you have credit- rating agencies and a lot of other investor-protection issues. Some of these teams have met five and six times already, the exchange emails, and it's really been a cooperative effort. We won't always agree, but I think that we're going to agree on most and where we disagree hopefully we'll disagree agreeably. So I wanted to thank you for that off-script.

The agencies of course are also working together on this issue around May 6 and this Advisory Committee on Emerging Issues and the expert panelists we're going to hear from today are critical with regard to this review. I want to thank the CFTC and SEC staff for all of their hard work in planning this meeting and of course everything they're doing around May 6. I want to thank my fellow Commissioners Mike Dunn, Jill Sommers and Bart Chilton who were able to attend today. I know that Scott was unable to attend, but I want to thank all of you as well.

The market events of May 6 require continued review. The staffs of the joint agencies put out a report I guess it was May 18 which was only 12 days after which I guess with the rule writing we'll have to do some deadlines similar. Today's meeting will be part of that ongoing process building upon those staff reports. I think we're shooting as Chairman Schapiro said for September, maybe even early September that the staff will deliver the follow-up report concerning May 6 based on the research over the last 3 months. Then we look forward to this expert committee to come back and we're hopefully going to set short deadlines that too with your recommendations, whether you're able to do that as soon as the following month, but we're hopeful to get your thoughts on this as well. I look forward to the informative dialogue with the panelists and with the committee members and I want to thank again the CFTC and SEC staffs. With that I think I'm supposed to introduce some of our panelists and then we can get going.

We're pleased to be joined by the panel of witnesses today. This panel will focus on the investor perspectives of those events. We're joined by representatives of exchange trading funds on ETFs, a pension fund, individual investors, retail investors and representatives of asset management and mutual funds. We look forward to hearing their experiences and comments on May 6.

We're honored to be joined in person by six of our committee members, Richard Ketchum who runs FINRA; David Ruder who once had Mary's role at the SEC; Maureen O'Hara, Joe Stiglitz and Bob Engle who are three enormously distinguished economists and professors in finance. I'm blurring finance and economics. I'm just a washed-up finance guy. And Mr. Brennan who used to run I think the largest mutual fund complex but maybe you're second some days. We're deeply honored by the six of you joining us and I said I think that we might have Susan Phillips of this agency and obviously a Board of Governors director.

Our witnesses today including Mike Mendelson, principal, AQR Capital Management; Noel Archard, head, U.S. Products for Blackrock. Blackrock probably might be now the largest asset manager. It depends how you count. Charles Rotblut, vice president and editor of the American Association of Individual Investors. Chris Nagy, managing director, Order Routing Sales and Strategy, TD Ameritrade, probably first in something depending on how you count. Kevin Cronin, director, Global Equity Trading at Invesco. Pamela Craig, chief financial officer, Accenture. We will now hear from our panelists' opening remarks and begin from the left, so I'm going to start over here.

MR. MENDELSON: Chairman Schapiro, Chairman Gensler, members of the joint committee, my name is Michael Mendelson. I'm a principal at AQR Capital Management, an investment management firm that for the last 12 years has managed assets for pension funds, endowments and foundations and now also manages public mutual funds. Thank you for inviting me today to discuss our experience of the events of May 6. The flash crash highlights a risk in an otherwise well-functioning U.S. market. While AQR and the great majority of other investors managed to avoid damage from this event, unfortunately not everyone did. We can reduce the likelihood of a repeat flash crash and the work of this committee and the extensive efforts of the staffs of the SEC and CFTC may be the most-important steps in that effort.

AQR employs quantitative methods in most of its investment strategies. We invest in a wide variety of instruments including U.S. equities. Our holding periods are typically months to years. Some of our investment strategies turn over every

few days but none would be considered high frequency, we are liquidity seekers though we don't use market orders and rely on liquidity providers to perform their essential functions. In many of the markets in which we trade which as fixed income, liquidity is provided by dealer firms whose ability to provide liquidity rises and falls with the health of the financial system. But in the U.S. equities market, liquidity is provided by a broad base of participants. This was a great benefit to all investors during the most difficult weeks of the financial crisis. Our exchange-traded markets performed admirably and those responsible for that from little small electronic market makers to the regulators who led us to a competitive broadly democratized market structure should be proud of this achievement.

At AQR we built safeguards into our trading processes and have human oversight of them, important steps for protecting client assets. On May 6 our trading staff noticed early on that the market was potentially disrupted and shut down our equity trading. We suffered no busted trades, we avoided trading at dislocated prices and we were able to complete the overwhelming share of portfolio transactions planned for that day. Nevertheless, May 6 revealed risks in the trading ecosystem that need to be managed. I'd like to highlight three issues.

First, questions remain about the cause of the flash crash. We know there was significant negative macroeconomic news, very heavy trading volume, substantial liquidity demand from market sellers, trade reports that appeared to be erroneous and a delinking of our trading centers. With liquidity providers experiencing large profit-and-loss moves while fearing they were flying blind with reliable market data, it is easy to understand why they would have compelled to withdraw their limit orders. Meanwhile, liquidity demanders continued to send market orders unaware that the typically deep-limit order book wasn't. I want to emphasize the importance of unaware.

Second, had some of the weak links been stronger, what alternative course could events have taken that day? Perhaps the evaporation of the limit order book was actually our good fortune as the subsequent shocking trade reports screamed out to market sellers to stop. Without that loud blast, selling may have continued unabated causing a real crash from which it would have taken far longer than 15 minutes to recover. The clearing of the limit order book may have acted much like a circuit breaker, albeit a very sloppy one. Better market data, better exchange coordination and additional rules might have prevented the flash crash but might have enabled a real one. I don't know. Careful analysis of market data may yield an answer and I encourage the committee to work with industry participants to explore this. We need to understand what role demanders of liquidity had on May 6 and perhaps consider steps to better inform those participants of the live aggregate supply of liquidity.

Third, the complexities of our trading

environment should give us pause and at least drive us to seeking light-weight and simple solutions. Toward that end, the current circuit-breaker pilot program may be a good start, but modifications may be needed. We have seen as recently as last Thursday that erroneous trade reports can halt a stock. With broad access to the trade reporting facility, there is too much potential for substantial abuse. Perhaps consideration should be given to a limit offer rule. Another proposed solution is to impose market- making obligations. This will increase costs for investors every second of every normal trading day by reducing the availability of liquidity-providing capital and increasing its risk. Adding insult to injury, on those rare occasions when markets are severely disrupted market-making obligations will accomplish nothing. After all, the function of a market maker is not to buy stock at the wrong price as a market is crashing. Market-maker obligations come with special privileges and some markets may need this to encourage liquidity providers in the ordinary course of business, but instead here the suggestion is that privileges will encourage liquidity provision in extraordinary times. They won't.

Thank you.

CHAIRMAN GENSLER: Thank you. Noel?

MR. ARCHARD: Thanks very much. Good morning. My name is Noel Archard. I'm the Managing Director at Blackrock and I head the product team for the U.S. Exchange-traded fund business. I greatly appreciate the opportunity to speak with you today about the impact of the May 6 flash crash on investors and what steps we can take to prevent such market disruptions in the future.

As the members of this committee know well, ETFs have become widely accepted investment vehicles for both institutional and retail investors. There are currently 985 exchange-traded products available in the U.S. market with over $790 billion in assets invested.

They represent 30 percent of the total volume traded on national exchanges and they have become indispensable tools for a range of investment strategies. Institutional investors use them for a number of sophisticated strategies such as cash equitization or as a low-cost hedging tool. For their part, retail investors also use them in a wide variety of ways, to build an asset allocation as part of a core satellite approach or tactical investing among sectors to make a few.

With their low cost, transparency and easy access to a wide range of asset classes, ETFs have significant advantages that have benefited millions of investors. For example, many investors both retail and institutional have found enormous value in able to observe the price of the ETF during the day and to use trade-type orders such as stop loss or limit orders in an attempt to control the price at which they transact.

Against this backdrop, several market issues converged on May 6 to effect prices for U.S. equities in general and ETFs holding U.S.

equities specifically for a period of approximately half an hour during afternoon trading. We note that ETFs holding U.S. fixed-income securities and non-U.S. equities were largely unaffected and generally traded at prices within normal ranges of underlying asset values. Many ETFs holding U.S. equities however did not. In our view, four different factors simultaneous contributed to market prices for some ETFs diverging from underlying asset value.

First, there was the sudden market freefall in U.S. equity prices which preceded the fall in ETF prices and caused market makers in ETFs that seek to track benchmarks heavy in the falling stocks to have difficulty valuing the ETFs' underlying assets. Second, anxiety over potential trade cancellations caused liquidity providers to fear that normal ETF hedging strategies would be interrupted which caused them to pull back from bidding for ETFs. Third, there was market fragmentation where exchange protocols and order routing rules increased selling pressure. Finally, there was unintended selling because of the stop-loss orders that were triggered which increased the volume of sell orders on ETFs. These stop-loss orders which turned into orders to sell at market prices were executed significantly below trigger points due to the speed of price freefall.

While we believe the final impact on investors was relatively limited to widespread trade cancellations, there was nonetheless an impact. To better understand exactly the effect on financial advisers, we at Blackrock's iShares ETF business recently commissioned a survey of retail financial advisers in late June. We commissioned the Flash Crash Perception Study to learn from financial advisers, one of the largest groups of ETF users, what they think about the market event that affected individual securities and ETFs as a category. The survey revealed that the majority of advisers were minimally impacted by the market disruption and they believed that market structure issues such as an overreliance on computer systems and some types of high-frequency trading were the primary drivers of the crash. Stop-loss orders, market makers and exchange-routing issues were seen as secondary issues.

As it relates to the macroeconomic environment, the majority of advisers surveyed expect current market volatility will either increase or remain at today's level over the next 6 months. Furthermore, and perhaps disappointingly, those surveyed anticipate an event similar to May 6 will likely occur again no matter what solutions are adopted. The survey also indicated that most advisers' accounts were not impacted by the events of May 6. Of those accounts touched by the volatile trading on that day, the most common cause was a stop-loss order triggered by the flash crash and executed at a significantly reduced value which happened to about a quarter of the advisers surveyed.

Regardless of the cause of volatility, economic or structural like the flash crash, advisers identified ETFs as the best investment vehicles to navigate a volatile market environment followed by bonds and mutual funds. The survey's findings underscore for us at iShares the importance of strong market structural reforms to help prevent future market disruptions some of which we've already spoke about this morning. We believe those reforms should include uniform circuit breakers for stocks and ETFs across all exchanges, making exchange-trade error cancellation rules less arbitrary and more transparent in a manner that does not discourage liquidity providers from providing liquidity at times of market stress. Clearer guidelines for intermarket order writing rules. Replacing stop-loss orders with stop-loss limit orders to specify a limited price for a caller, and expanding the role of lead market makers to ensure orderly market functioning particularly at times of market reopening. We believe these reforms would represent a strong step toward preventing market disruptions like the one of May 6 in the future. We at Blackrock looking forward to working together with members of this committee and the staffs of the SEC and the CFTC on this important issue.

Thank you again for the opportunity to speak today.

CHAIRMAN GENSLER: Thank you, Noel. I wanted to ask and I apologize. If have all of your written reports electronically it facilitates putting it up on the web and I don't know if we do, so that the public can see what your comments are too. Charles?

MR. ROTBLUT: Chairman Schapiro and Chairman Gensler, thank you for having me. I'm Charles Rotblut and I'm vice president with the American Association of Individual Investors and editor of the AAII Journal. We represent 150,000 individual investors and we are a nonprofit organization focused on giving individual investors education and information about investing. Our members typically have an intermediate-level knowledge of investing, they

typically hold either a college degree or an advanced degree and the majority of them trade online through discount brokers and most of whom do follow a long- term strategy though we do have some who trade a little bit more actively.

Many individual investors continue to have questions concerning the May 6 flash crash. They are unsure about the procedures that caused stock prices to become so volatile. They are worried that solutions have not been established to prevent similar events from occurring in the future. They wonder about how much control over the movement of stock prices has been ceded to complex software programs that trade within milliseconds. They don't understand how market makers could have allowed some highly liquid stocks to fall to a penny per share. Most importantly, they are asking where the protections are for the individual investor.

The biggest impact of the flash crash and the events of May 6 from the standpoint of the individual investor was not the effect it had on their brokerage account balances but, rather, the effect it had on their confidence. They are concerned that unusual volatility such as the large price swings that transpired could occur again. They are also worried about the possibility of a buy or sell order, especially a stop order, not being executed in an orderly fashion.

CHAIRMAN GENSLER: Thank you very much. Kevin?

MR. CRONIN: Thank you, Chairman Schapiro and Chairman Gensler and members of the advisory committee for the opportunity to speak here today. My name is Kevin Cronin. I'm head, Global Equity Trading for Invesco, and I appreciate the opportunity to speak to you today about the events of May 6.

Invesco is a leading global asset management firm operating in 20 countries with assets under management of approximately $560 billion. I'll try to be brief in my statement. I have however posted a more-detailed statement for the record.

I'll spare any of the drama. We believe that the crash that happened on May 6 was in large measure the result of flaws and inefficiencies in the current U.S. Market structure. Specifically, the flash crash the need for updated market-wide and stock-by-stock circuit breakers, effective and transparent procedures for resolving clearly erroneous trades, a review of the risks and effectiveness of market orders, alignment of the inconsistent practices and procedures used by various exchanges to address major price movements, an examination of the responsibilities and obligations of registered and unregistered market markers and better coordination across all types of markets.

Removing all instability and volatility from the equity markets is neither possible nor appropriate. However, establishing mechanisms to address extreme price moves in the markets and the volatility related to inefficient market structures will be critical in preventing a repeat of the May 6 flash crash. As such, Invesco supported the single-stock circuit-breaker proposals as a means to mitigate the impact of sudden market volatility. Similarly, we strongly supported amendments to the rules relating to clearly erroneous executions, to clarify the process for breaking erroneous trades and to provide uniform treatment across exchanges for clearly erroneous execution reviews. However, we believe the whole notion of taking trades off the tape is generally detrimental to investor confidence. We would propose that exchanges clearly define and articulate the parameters that constitute erroneous trades and then program their systems to detect and reject trades outside of those parameters. We believe uncertainty surrounding clearly erroneous trades and the risk associated with entering orders during a drop in stock prices very likely contributed to the rapid and dramatic market decline on May 6.

As was clearly illustrated by the events of May 6, there was also a vacuum of liquidity and in this vacuum of liquidity small market orders can have an outsized impact on the prices of securities. This vacuum was created when a massive wave of sell orders hit the markets triggering liquidity replenishment points, LRPs, on the New York Stock Exchange. These LRPs or speed bumps resulted in the NYSE going into slow mode. Subsequently, NASDAQ and the other exchanges declared self-help against NYSE Arca. This declaration of self-help allowed the other exchanges to essentially ignore the quotes on NYSE Arca. Thus as various exchanges where determining where to route their orders to fulfill their reg NMS obligations, they could do so without consideration to NYSE Arca. At the same time market makers and liquidity providers were widening their quotes or getting out altogether as the quotes they were receiving became less reliable. As a result, small market orders and stop-loss orders which were triggered became market orders and left to execute against the very limited amounts of liquidity that was posted on

other exchanges or market centers. In some cases, the only available quotes left were the so-called stub quotes of some of the market markers.

As an institution we have long understood the significant risk of using market orders particularly as the market has become more fragmented, and as such we have not used them for some time. In light of the events of May 6 and the continuing issues small market orders have had in the market, obviously recently with the triggering of circuit breakers in stocks like Cisco and Citigroup and others, Invesco recommends that exchanges and broker dealers only accept market orders which have collars on them. A collared market order would only execution of the order within a certain percentage of the referenced price, for example, 3 percent of the last sale. We would also recommend similar treatment for stop-loss orders. This would give investors some level of protection from the impact of market orders that market orders can have in the current environment and would likely reduce or altogether eliminate the issue of small share amounts triggering circuit breakers.

We believe that the self-help provision under reg NMS needs to be reviewed. This provision was put in place many years ago to prevent manual markets from unnecessarily slowing down trading. It was also conceived at a time when there were very few high-frequency trading firms and fast executions were defined in seconds and not milliseconds. The events of May 6 also illustrate the interdependency of equity, options and futures markets, particularly the connection between price discovery for the broader stock market and activity in the futures markets. Invesco strongly supports a more robust discussion and examination of the linkages and interdependency of the equity, options and futures markets and whether rules need to be made more consistent across types of markets.

The role of traditional liquidity providers such as market makers has taken on more significance given the events of May 6 as the sudden absence of liquidity in the markets played a critical role in the severe price declines. Several ideas have been put forward to improve the operation of market makers that are worthy of further consideration including obligations surround best price, depth of market and maximum quoted spread obligations. In addition to traditional market makers, an examination of other liquidity providers particularly high-frequency traders is warranted. While Invesco believes there any beneficial high-frequency trading strategies and participants which provide valuable liquidity and efficiencies to the markets, we also believe there are some strategies that could be considered as improper or manipulative activity. This highlights the need for the industry to better understand high-frequency traders and the practices of high-frequency trading firms. While it is important for the advisory committee to study the impact of market orders, LRPs, the declaration of self-help by exchanges, market makers and other issues we've mentioned, we believe that more fundamental consideration is warranted, and this is whether the current structure has become too focused on the speed of execution over all other factors. At some point we believe that speed and price discovery have an inverse relationship and this dynamic needs to be well understood.

I thank you for allowing me to participate and I look forward to answering any questions you might have.

CHAIRMAN GENSLER: Thank you, Kevin, for those provocative remarks. Chris?

MR. NAGY: Thank you. Chairman Schapiro, Chairman Gensler and members of the Joint Advisory Committee, thank you for the opportunity to participate on this panel concerning the May 6 market event.

I'm Chris Nagy, managing director, Order Routing Strategy, TD Ameritrade. TD Ameritrade based in Omaha, Nebraska, was founded in 1975 and was one of the first firms to offer negotiated commissions to investors following the passage of the 1975 amendments. Over the course of the next three decades, TD Ameritrade pioneered technological changes such as touch-tone trading and internet investing to make market access by individual investors more affordable and transparent. While TD Ameritrade clients predominantly trade equities and options, recently we've begun offering clients the ability to trade futures and Forex through our Think-or-Swim Division. TD Ameritrade has long advocated for market structures that create transparent, promote competition and reduce trading costs for individual investors.

As technology rapidly advances, it's ever more important that regulators complete a comprehensive review that they are now undertaking to ensure our U.S. market structure remains among the greatest in the world. It's our intent to present these comments on behalf of our 7 million clients based upon the views they regularly expressed and our experiences in providing services to them.

While the U.S. financial markets have experienced precipitous market declines during a single day including the most famous 1987 market crash when the Dow Jones dropped 508 points, the May 6 market event in many ways unique first in the speed of the decline. The market whipsawed 1,000 points in just 10 minutes. Second, the market decline was somewhat random and uneven causing over 90 percent temporary declines in some stocks while others were relatively unchanged. Third and perhaps most importantly it appears that the very nature of how the U.S. Markets are structured was a contributing factor to the precipitous decline. Although the causes may never be completely identified or understood, they appear partially lie in the dispersed structure of the U.S. markets and the markets' increasing dependence on liquidity providers who have no affirmative obligations to maintain two-sided quotes.

Regardless of the exact cause, it's clear that the May 6 market event has had an

impact on investor psychology and their trust in the markets. How do you explain to an investor that a company with a market capitalization of $26 billion that trades at $40 per share and seconds later trades at a stub quote of a penny? Obviously investors on the receiving end of executions filled against those stub quotes are going to question the fairness of the markets. Similarly, misgivings were voiced by investors who add executions that were less than 60 percent away from the market. Again, how do you explain to investors that a trade 61 percent away from the market was deemed erroneous but orders filled anywhere up to 59 percent away were not? And how do you explain to investors that some trades even though they were more than 60 percent away were busted while others were not?

From our perspective, the answers for these clients will lie in the actions we as an industry and the regulators now undertake. Specifically, we may need to adjust the way in which the U.S. markets are currently structured so

that investors can trust that the price displayed to them is valid, so that they have the confidence in the liquidity available and so that they do not believe the markets are somehow rigged against them. The May 6 event was a wake-up call and one that requires a comprehensive response. Today's panel is just a small part of the appropriate response. It's a response that requires looking across equities, options and futures markets and approaching regulation holistically. It requires addressing not only the imposition of circuit breakers but also must include a review of dark pools, flash orders, access fees, high-frequency trading and naked access.

For investors we think the right approach is a combination of the following. First, we agree with the adoption of the circuit breakers as a first good step. The regulators correctly identified an issue and took quick action to ensure trading took a pause during extreme market movements. But as everyone who has had to fumble around in the darkness of their basement searching to reset a circuit breaker knows, circuit breakers are fail safe and do little to address the underlying cause of the problem.

Second, TD Ameritrade believes that the regulators need to find a way to incentivize market centers to stay in the market, maintain two-sided quotes and most important to post size regardless of the market environment. The firm has noted previously that the May 6 market event demonstrated that today's markets contain many players who use their liquidity opportunistically, applying it when it's in their favor but pulling it during times of market duress.

Third and particularly in the equities and options markets, the SEC should proceed with all due speed to move its concept release on market structure to a proposing stage while at the same time addressing issues like collocation, access fees, flash and naked access. Finally, as to the specific allegation that retail market orders and stop orders contributed to the downturn, I can tell you from TD Ameritrade's perspective such orders are important to our clients and in looking at our own data we do not believe that there is any factual basis to assert that these types of orders contributed to the problem. In fact, TD Ameritrade's clients' market and stop orders were within average daily volumes on a percentage basis. Prohibiting market and stop orders would be a significant adverse, misguided and unnecessary overreaction to the underlying cause of the May 6 market event which would unduly deny retail investors the access to the markets they enjoy today.

I look forward to answering any questions you may have. Thank you.

CHAIRMAN GENSLER: Chris, thank you very much. Pamela?

MS. CRAIG: Good morning. My name is Pamela Craig and I am the CFO of Accenture. Chairman Schapiro, Chairman Gensler, Commissioners and members of the Advisory Committee, Accenture appreciates the opportunity to share our perspective on how the trading events of May 6 impacted Accenture and our investors.

Accenture is a global company with $22 billion in annual revenue. We have 190,000 employees, 32,000 of them in the United States and our market cap is $29 billion. Over 70 percent of our stocks are held by institutional investors based in the United States and just over 20 percent are owned by current and former employees. Of our current employees, 25,000 are shareholders, 62 percent of whom are in the U.S.

We recognize that there is still not total clarity about what happened on May 6. We do understand that there was seemingly a perfect storm of economic news around the globe, a reduction of liquidity in many securities, unusual trading volumes and some technology challenges. Based on what we've all witnessed in the markets that day and since then, there is every reason to expect that this will happen again. We strongly believe that in times of market stress, all markets should operate under the same circuit-breaker rules in order to promote orderly markets and investor as well as business confidence.

We have a unique perspective on the trading events of May 6. Between 2:40 and 3:00 p.m., the price of Accenture stock went from $41.01 to 1 cent and back again, and then closed that day at $41.09. Between 2:40 and 2:46 p.m., Accenture shares fell from $41.01 to $38 as liquidity evaporated in the equity markets. This triggered an Accenture-specific circuit breaker at the NYSE, the LRP. At that point the NYSE stopped its own electronic trading in our stock briefly to go into slow mode so that market makers on the NYSE floor could then line up in orderly matching of trades. During this transition of about a minute, trading in our stock was temporarily halted on the NYSE while orders had the option to execute on other exchanges. A few small sell it market orders totaling just 10,000 shares altogether and all in a 10-second window were directed to other exchanges. These exchanges were not coordinated with the NYSE and expected market making did not occur. These orders included 19 trades of 100 shares each trading at a penny. Trades below $16.40 were subsequently busted. None of the cancelled trades were on the NYSE where the low trade for the day was in fact $38.75.

This erratic trading rattled overall investor confidence in the market, but specifically affected our investor base including thousands of our employees. Accenture employees are granted equity compensation and participate in our employee stock purchase plan which provides them with a way to invest for their future and participate in the success of our company. Fifty-one percent of our 32,000 U.S. employees participate in the plan. After May 6 many employee shareholders were concerned about why our stock was affected versus other large cap companies. We believe this sentiment is consistent with the concerns of retail investors.

The Joint CFTC-SEC Staff Report on the

market events of May 6 also highlighted Accenture's trading on that day and this brought further attention to the company. In addition, the partial trade cancellations have had an ongoing adverse effect on historical trading records. After May 6, the exchanges and FINRA cancelled trades in stocks between 2:40 and 3:00 that were more than 60 percent away from the last trade at 2:40 p.m. This arbitrary pricing threshold caused the 52-week low for these stocks to be misleading to investors. It is disappointing that the 25-week low for Accenture's stock is currently $17.74 which obviously reflects the malfunction of the market- making process on not the true 52-week low. The low point on the New York Stock Exchange on May 6 was $38.75. We commend the SEC, the exchanges and FINRA for proposing new rules for cancelling clearly erroneous trades.

We support efficient and fair markets and we also understand that the markets need to be governed by some rules. Increased competition with more and better technology all the time has been good for the markets and has driven down the cost of trading. Nine years ago a substantial majority of our trades occurred on our primary exchange and today that's only about 45 percent. The rules need to be updated, modernized, if you will, so that they adapt to how the markets are evolving and continue to work as intended. If we expect today's markets to function well and keep up with increasingly sophisticated trading technology, then the rules need to be clear, coordinated and consistently implemented. If something similar to the May 6 events happened again, investors could be deterred from investing in our company even though it would have nothing to do with the strength of our underlying business, but instead would be due to a market glitch. We therefore urge the SEC to adopt the exchanges' and FINRA's proposed rules to expand the circuit-breaker pilot beyond the S&P 500. Expansion of the pilot to include companies in the Russell 1000 would provide protection for investors and companies such as Accenture that experienced severely erratic trading on May 6 as well as provide regulators with a broader sample.

In the end, while we understand it's good to pilot something with a smaller sample, it does not make sense to perpetuate different rules for different issuers. We firmly believe that changes are needed to limit the impact breakdown on issuers, their shareholders, their employees and business and investor confidence generally. As noted above, investors in many other companies remain unprotected by circuit breakers and we urge you to promptly expand the pilot to protect these investors and increase confidence in the U.S. equity trading markets.

Thank you for inviting me to participate today and I welcome any questions you may have.

CHAIRMAN GENSLER: Thank you, Pam. Thank you to all the panelists. Now I'm going to turn to our committee members who are going to do this in an informal way. Does someone want to start with a question?

CHAIRMAN SCHAPIRO: I'd like to address this question to Mr. Cronin. You talked in your discussion about the need for collared orders, in particular collared market orders and collared stop-loss orders. How exactly would a collared stop-loss order work however? I'm trying to understand the logistics of guaranteeing an execution. If it would through the collar it would simply be voided? Is that the argument that you would like to put forth?

MR. CRONIN: Yes. I think as hopefully I was able to describe, a market order today given the fragmented nature of the market has to be understood in the context of what a market really means. So much of the liquidity that's available today is either hidden or available in places that some orders don't have access to. Our concern is, and I suspect Pam shares the same concern, that small orders if not carefully governed market orders can have a big impact. What we would propose is that we have market orders that are allowed to continue in through the system, it is easy to hit the market button and I suspect quite a bit more difficult to put a limit price in.

So if we were all in agreement, what would happen is any market order would have a reference price as soon as it came in and depending on what would be a reasonable percent, I think 3 percent, it would not executive if it was unable to find a price within that price band. This is something that has worked in various forms and fashions in other exchanges particularly the CME and I think has been very, very beneficial.

I do believe also it would have the knock-on effect of getting rid of this nefarious problem that has erupted here the last couple of weeks which is small trades causing circuit-breaker elections and halts in stocks like Cisco, Citi and others that really have no business being halted for such small share amounts.

CHAIRMAN SCHAPIRO: Could I say one thing with respect to that? This is an issue I'm really interested in pursuing so if the committee would particularly devote some thinking to this alternative, circuit breakers were the thing we could do fast and get in place and have a calming effect on the market. And while we have had a number of triggers, I'd be interested to know if anyone thinks they caused any harm to the marketplace. It's not my perception that they have. But to get some thoughts from the committee on this issue in particular over the next couple of weeks I think would be really helpful to us.

CHAIRMAN GENSLER: Staying with that, I notice that I think Chris probably, though you're sitting next to Kevin, might be miles away in terms of this issue so I'm curious, do you think that collared market orders whether it's up and down 3 percent or 4 trading or any number would work for retail investors?

MR. NAGY: Let me take both of those because we're talking about stop orders and we're talking about market orders. So let me take the stop-order issue first and talk a little bit about that. At our firm TD Ameritrade we do offer a sort of collared type of order through our technology. It's what we call a trade trigger. Effectively what that allows the investor to do is just set a stop-loss limit price, however that limit price is going to track the underlying price of the security. Once the trigger event hits then that order goes into the market as a stop order.

The problem that you have with collars, and I think it's a very intriguing idea. Don't get me wrong on that. I actually leaned over to Kevin and told him I like a lot of the aspects of the CME limit up and limit down program. The problem with some of the stops and some of the market orders by just eliminating those in the totality of the marketplace would have an adverse impact on retail investors for the following reasons. Here's why. Retail investors, and I said this on June 2 and I think we put it in a couple of comment letters, really invest in the market at two points in time. One is in the morning right when the markets opens. Ironically the circuit breakers don't start until 9:45. Why do retail investors invest right in the morning? It's because they work all day. They go home, they eat dinner, feed the kids, then they sit down and they get to their investment portfolio and redo their investments. We see an awful lot of that. At my firm we see 10 to 15 percent of our trading day occurs at 9:30 in the morning even though the circuit breakers don't go into effect until 9:45.

Stop orders likewise are important to retail investors for a lot of the same reasons. They want to protect the downside of their security. In a very precipitously declining market with a lot of volatility, if there are collars in place and it happens to miss that collar event, there's not going to be a very happy retail investor at all whether they're off on their family vacation which is typically when things like that would occur. That's the problem that you have.

I think what we need to look at is addressing the structure of the markets more. Had the markets not dropped 900 points in 10 minutes, I don't think we'd be sitting here today, but there was a complete evaporation of liquidity in the marketplace and I think that itself is more concerning to investors rather than missing their stock price by a dollar or two.

MR. CRONIN: The thing I would say, Chris, is that the two are very interconnected. Liquidity providers are generally watching things happen and making decisions based on that so that as bad quotes start to get into the system, as clearly erroneous trades get into the system, their ability or interest in making markets goes away with it. What I would propose is I get how investors might have an interest in times of heightened dislocation in the market, but is that particular instance of all the times that they invest which I would suspect is a relatively smaller percentage, the volatility we had maybe a year-and- a-half ago, but it seems like to me that the protection that they would get generally from a collared order would certainly exceed any material consequence of not being able to sell at the market in worse times.

I would also offer that this doesn't preclude anybody from putting a limit order in that's well below the market. I suspect that an investor who got the penny, Pam clearly was irritated and I suspect that the guy who sold it at a penny was irritated too. There are basic procedures that could have been put in place that would have precluded that event for not only that seller of the penny but also for Accenture as well and I think it's a sensible thing to do.

MR. NAGY: The one thing I'd say about the aggressive limit stocks, and Mr. Ketchum will know this, there are actually FINRA rules that prevent hyperaggressive price limit orders into the market so that we've got to have certain parameters within our system to prevent a lot of that. I think that would need to be restructured if we were going to go down that road. The one problem that you have with that though is that what happens if the investor misses that collar?

That's the quandary and that's where I think we really need to take a look at the structure of the market, the liquidity in the marketplace during times of duress like we saw on May 6, like we saw in 1987, like we saw with that Friday the 13th crash in 1988 or 1989, they're very similar in that the market went down but they need to go down in an orderly fashion. In 2008, when the market started to decline into 2009, that was pretty ordered. People were writing market and stop orders and things worked very, very well. That happened on May 6 was unique and it was different and that's the problem that we need to fix.

MR. ARCHARD: I think I'd like to build on that if I could from an adviser's perspective because I do agree that clearly it would be nice to get something in place from the perspective of the collars or something else. But when we did our survey just a little over a month ago, over 60 percent of advisers said they would continue to use stop-loss orders and over 75 percent said they would continue to use market orders.

To use an anecdote, I was in front of a group of advisers about 3 weeks after the crash and we talked about do you think it's a good idea to use market orders and already at that point there was the consideration do we get rid of stop-loss orders. The sentiment from this group of 50 advisers was be careful of fighting yesterday's battle. If this had been a day that truly was going down 1,000 points in the market or more which some of the models were saying because there had been a true market event, they would have been pretty upset if they had had stop-loss orders in place that got blown through the collar, that they didn't executed because the market was moving so quickly so that a defensive strategy that they wanted in place as investment professionals that are monitoring the account, they wouldn't have access to that. So I don't think it's something that we should ignore.

Clearly the issues that we saw of small market orders pushing through the order books was an issue but it's part of that larger issue of all

these interlinked events that came together so that we should be careful of trying to solve the bigger problem and not just solve the May 6 issue.

MR. KETCHUM: To that point, Mr. Archard I think you suggested what arguably could be an alternative to collars which is to shifting the existing pilot with regard to pauses to rolling limit ups and limit downs which has arguably two benefits. One, as Chairman Schapiro noted, if you are concerned with respect to a single trade stripping beyond the pause level since a single trade can do that, a limit up addresses that by not allowing trades in any market below the limit. Secondly, it doesn't require a pause for 5 minutes if there's buy interest or the futures reacts and bounces so that you don't hold the market up in those circumstances. Yet to do build in essentially on an organized basis across all markets an assurance that stop- loss orders don't strip past the limit or at least provide a firm for a period of time a chance to react to those stop losses before they trade again.

Maybe I can address to anybody, but certainly to Noel, Kevin and Chris, the downside of limits in a terribly fragmented environment like the U.S. securities markets is that they are only uniform in some ways. They're uniform in ensuring that trades don't go below them, they're not uniform as to when the marketplace starts up and there's always the potential you can have a single random bounced trade but still have serious sell pressure and you lose the opportunity to have the auction that the pause provides from the standpoint of trying to pull together buy and sell activity, and you also result in one market starting up at a different time albeit not probably significantly different than the other markets since that market will know when its order hits.

I question would be is that a fair reflection of the ups and downs and given the pros and cons of it, do you think that's a better solution where we sit with respect to pauses and a possible collar?

CHAIRMAN GENSLER: In answering the questions, the public might not know what a rolling limit is.

MR. KETCHUM: Who knows what I said? You know far more about limits than I do.

CHAIRMAN GENSLER: In your answer for the public try to say briefly what was suggested.

MR. CRONIN: First you were very articulate which is excellent.

MR. KETCHUM: Which is always a miracle.

MR. CRONIN: That aside, I think that there has to be a bifurcation, you have circuit breakers and a collar type arrangement or you go to this limit up/down, and what that would mean is that a stock at any point in time would have a percentage that it would be allowed to trade up or down and it reached that limit, if it were a sell for example, it could only trade down to that limit price and no further, say for 10 minutes on CME it would trade down at that limit price. It has the opportunity to trade above that, but it can't below it. If after the 10 minutes it were to continue to trade at that price, there would be a 2-minute halt again using the CME as the model where all investors hopefully would take into consideration exactly what had happened, the 2-minute halt would end and then the stock would be free to trade below that first limit price. You might find that there would be a second limit price that would be appropriate and you would go through the same machinations again.

CHAIRMAN SCHAPIRO: Kevin, after the halt would you have the listed market reopen the stock or would all markets simultaneously try to reopen the stock?

MR. CRONIN: I think the devil is in the details and that was what Rick was alluding to. I would personally prefer that it would be a coordinated event like the NASDAQ open where you have multiple players putting indications in and you have an open. That to me makes more sense. You get all buyers and sellers together and you don't get these dislocations in one exchange versus the other. To me this fundamentally gets to the issue of some of the problems we have today. Markets are not aligned. People are doing their own thing and when you get to that, even if you come up with sensible solutions, to the extent that things are not all linked together, the beneficial outcome which we think could happen won't if they're not linked appropriately.

MR. BRENNAN: Kevin, let me follow-up for one second. The cynics say there are 40 trading menus for a guy like you, not for somebody who trades through TD Ameritrade and doesn't know necessarily where it happens. Do you think that coordination can occur for dark pools and other trading venues to make the net effect that you want out of that type of limit up/limit down? That's been one of big reactions, it's easy to do in one exchange in Chicago, it's tough to do in the equity market. What's your sense of that?

MR. CRONIN: It would be tough to do for sure, but I think most institutions, clearly Invesco and I'm certain Vanguard and Blackrock and others, would take the opportunity to make sure that they were in the right venue to ensure that they are protected as that stock reopened or to source the liquidity wherever it was appropriately sourced at that time. Clearly it keeps getting back to this root issue that we have a very fragmented market, different market centers in large measures who are doing their own thing, and to the extent that that's not better coordinated, this is going to be a very, very difficult thing to fix.

I think generally, and I don't mean to speak for our peers, we would be very supportive as an industry to try to get to a better location where things are linked better where we wouldn't have to for example hide so much of our order flow, where we would have more incentive to post liquidity and some of these dislocations perhaps wouldn't happen, certainly not to the magnitude that they have recently.

CHAIRMAN GENSLER: Chris?

MR. NAGY: Just a note on the circuit breakers. We as a firm are fans of this trading band idea that the CME has been running for a long time. It's been in place for I think 20 years. It seems that it's worked very effectively with the limit-down strategy. Halting and stopping trading is always a bad idea because of the devil in the details of the opening process. I said this in my speech that circuit-breaker rules don't kick in until 9:45 and here we're going to talk about trading in milliseconds today yet the markets open at 9:30, all stocks aren't usually open until 9:31 or 9:32. It's an ironic situation to be in. We've also noticed that with the circuit breakers the problems that we've had with those have been in the reopening process.

If you look at Citigroup, for example, it was triggered on an erroneous trade. The opening process that occurred after that wasn't equal among all the exchanges. One exchange opened before. Genzyme, which was about a week ago, same exact thing there. That was triggered off of another erroneous trade but then it was an erroneous price for the opening price that triggered it go into a halt again. Then Hewlett Packard, which we had just the other day, was a manual issue from one of the exchanges that caused that to go into a regular trading session when it should have been extended hours. So a lot of the reopening processes on these tend to be very difficult.

I'd also add, and I think this goes to some of Pam's comments, that there's not a lot of transparency when you see a halt. If you're a retail investor looking at quotes be it on TD Ameritrade, Google or Yahoo or one of the quote providers out there, it doesn't clearly say that this stock is in a halt type condition and that's a confusing environment for the investor. I think when you get into some of the trading band issues, then when you start harmonizing across the different products and agencies be it the minis versus inequity, but then you can also tie that I think into a lot of the ETF products which had a lot of the erroneous issues. Those are my thoughts on the direction that we'd like to see the overall circuit- breaker system go.

MR. ARCHARD: One topic leads to another here. I would say that from our perspective as we've looked at it we're deeply concerned about the reopening of the securities. Closing them is only half the story. Getting a logical restart if there's a 10-car pileup you really need the state trooper to get traffic moving in the right way again. When we think about the role of lead market makers and we think about even the role of the specialists going back many, many years, it feels like many years, 5 to 6 years now, in this rapid environment you can't go back in time, but there was a benefit to having some there that regulated the activity that was happening on the exchanges. And we do think as we look to balance obligations with incentives to some of these types of players in the marketplace, looking at things such as making the lead market maker responsible for the orderly reopening of the markets if there is a stop, there could be a type of incentive that then is the other side of the obligations that they might have to step up into to be lead market makers on the securities. So looking at the interlinking of those issues at the time of reopening of securities we think is pretty important.

MR. KETCHUM: Maybe to that point and the broader issues since there were differences of opinions suggested by a number of panelists on market-maker obligations, I'll start on one side. Mr. Mendelson you indicated you thought that market-maker obligations of any sort will never solve anything, and certainly you're right that no one has ever seen a market-maker obligation that encourages somebody to go off a cliff in a steep downturn, although I'd note that I think if you go back and look at most of the studies it would show on the days when there were more incentives to market making, those people ended up net long in those days and certainly net long during the timeframe in which markets were going down.

I guess the question would be there are two pieces of market obligations. One is another piece of addressing Accenture and Ms. Craig's concerns and that is addressing stub quotes and at least requiring a market maker to not have a two-sided quote outside of the pause level. Would you think even that so skews the incentives that you wouldn't be in favor of it?

MR. MENDELSON: No. I think that's a probably a little bit different type of story. Right now some people are obligated to provide stub quotes and I don't think that's very helpful. I think it's almost better if there were no quote. So I don't think a penny bid in Accenture stock -- I don't see what economic function that serves.

MR. KETCHUM: Maybe on the other side, Mr. Archard, to your point, and Kevin and Chris, I know you both suggested you favored some increased incentives and increased obligations from a market-making standpoint at least I guess for lead market-maker types. My question there would be incentives as in what? Obviously we have a very fragmented commoditized set of exchanges that have relatively little pricing power and relatively little ability to attract. One market competes on market-making obligations and provides a significant incentives of parity and that would be the New York Stock Exchange. The other markets choose not to provide that significant incentive. But if there were a view of something more than just getting out of the stub quote problem and having narrow quotes requirements to generally be around the best bid and offer and then requirements to layer the book on both sides which is what I see that would not create miracles in bad times but probably would avoid having single relatively small orders stripped through the book. That does change the cost-benefit issues to market-makers. What incentives do you think would make sense to you as non-market-making participants to encourage that?

MR. NAGY: I will tell you that market makers as a whole are very, very important to us at TD Ameritrade because what they do is they provide the retail investor consistency in the marketplace so that if there is not necessarily

liquidity available at the inside, that market maker will generally step up and fill the entirety of the order at the inside so that client got the price they saw when they entered the order.

In terms of incentives I don't think you can just -- and there's been a lot of talk about let's create rules where we'll get rid of stub quotes by forcing market makers to quote right inside of the 10 percent threshold and that should do it. The problem I think there is, and we've seen this over the past decade, market makers are fewer and fewer and fewer in number and a lot of the growth in overall liquidity providing has been in more opportunistic liquidity, albeit there is a fair-weather trader, but if turns dark and gloomy I'm out of here. I read about it in the journal every day.

So I think in order to counter that and in order to get incentives in the markets I think there are a couple of things. One I don't unfortunately this committee has the power to do but I think it would be a very good one which would be tax incentives to liquidity providers in the markets. I think that would very powerful similar to how in some products on the CBOE for example where you've got 60-40 tax -- on particular products. I think that's very appealing.

The second thing that I think this committee does have the power to do is when you take a look at market data, the overall infrastructure of market data and what can be done with market data incentives in the marketplace. We begin addressing this issue in a very large fashion there appears to be a very large dislocation in the cost of that data, in getting that data by some firms versus other firms and we don't see a real fair allocation of the overall infrastructure of the data and I think that's a very good resource to take a look at to see what opportunities can be created in the marketplace.

Finally, I'll say that in our markets today we incentivize the quote and not the depth. So if you look at all the market structures that are out there, all the different ECNs, all the different exchanges that are out there, we provide a lot of incentives to post a limit order but not for size and there are ways that you could change that structure so that you're incentivizing size rather than just the limit. I will say I think reg NMS did a wonderful job of making the markets more electronic during that time but I do think the overall notion of access fees in the markets should be looked at as well, too.

MR. CRONIN: Rick, I guess there are two ways to look at this. First, it's easy to say that the market- making function failed at this particular point in time. It had issues to be sure. But I do think that as you look at different types of markets that are being made for example in ETFs, the mechanism works very well. The incentives are in place. If you're able to understand what the value of the underlying securities in a basket are and at the same time understanding what you could see the ETF for for example, you have this ability to make a reasonable market and there is risk that's assumed and you have the ability to make money. That works. It doesn't work when they get bad information and they have to pull away as we clearly saw, but I think that mechanism generally is in place and works well today. We want to be very careful that that is not upset as we proceed.

That said, I think if you look traditionally at the market-making function, market makers have been given some level of advantage and with that advantage there is an expectation that there was a commensurate amount of obligation. As we look at market making today, there are some firms that clearly are designated market makers, broker dealers registered as market makers, but as we went to pennies, the spread mechanism that used to incent market-making activity went away and as we had this influx of new participants, i.e., high-frequency traders, the ability for traditional market makers to participate and/or compete has been severely compromised.

What we have today I think is a group of investors, gosh here he goes again, with high-frequency traders who have an advantage and they don't have a commensurate amount of responsibility. So I ask is it fair that they have direct access to exchanges where the rest of us are looking at CQS? Is it fair that they have collocation and have maybe a 100- or 200-millisecond advantage? Maybe the answer is yes. Maybe people can intellectually argue the point away. I happen to believe that there are real advantages that are conferred and as such there should be real obligation. If not, everyone should have the same quote access which would be CQS and collocation would go away.

MR. MENDELSON: May I comment on that?

CHAIRMAN GENSLER: Yes, because I also want to let our panelists ask questions. Why don't you go and then Rob is going to ask some.

MR. MENDELSON: At our firm we track our transaction costs and we have for the history of this over a very long time and our transaction costs have gone down steadily. In the old days when there were market makers and many years ago I used to next to a very large group of market makers, there was a group of participants with very significant advantages. The result was that investors paid significantly every minute of every single trading day and when there was a market-disruptive event, it didn't help us. In 1997, I think it was October 27, we had a crash. It wasn't like the 1987 crash but I think we were down about 7-1/2 percent on the S&P 500 or something like that. Market makers weren't there to buy your stock at a bad price and they're not going to be now. So what we have is we're hoping that by providing special incentives or obligations or preferences for market makers, that they're going to do something that they simply aren't going to do. They are not going to stand there and buy stock at the wrong price.

On the other hand, on an ordinary basis the system today allows us to trade more cheaply in more stocks than ever before. While the market-making function today as Chris just described as opportunistic, I don't think it is opportunistic. They're always there. On a previous panel before this committee one participant suggested that obligations have to be there 97 percent of the time. I would say with no requirement for obligation, certainly electronic market makers have been present this year, which we would call a bad year I think, 99.975 percent of the time. So in the 150 trading days so far this year there have probably been 20 minutes where some of them weren't there. I don't think that an obligation where 97-percent of the time you have to be there is in the slightest bit helpful. It won't change a thing.

CHAIRMAN GENSLER: Rob just had a question.

MR. ENGLE: I was wondering when we talk about incentives for market makers, does it make any sense to think about these as being time varying? In other words, there are some times when you would especially like to incent market makers to stay in the market, and so the question is I suppose partly would such time-varying incentives which could be quite substantial because they would only be for a small amount of time have an effect in a temporary market disruption? Obviously it's not going to stop the prices falling off the cliff if that's what we're talking about, but it would stabilize an event potentially like the flash crash.

MR. MENDELSON: Professor Engle, I think that if you had a large enough incentive that might work, but at the time of let's say a flash crash time, you're facing enormous risks so if you have an enormous edge you are going to be more likely to participate but it may have to big. I don't know. I may have to be a very big incentive.

MR. CRONIN: I would add that nobody would expect any person in any vocation to catch falling knives. That's probably not good for your health. On the other hand, market making is part of what the market structure is. Hopefully they're there making fair and efficient markets and that facilitates people's interest and hopefully confidence in the marketplace. What we're talking about is a particular instance where stocks are falling precipitously and, again, I wouldn't subscribe or prescribe the notion that market makers necessarily should step in and absorb a half-a-trillion-dollars' worth of what would otherwise be market losses. It's impossible. On the other hand, that's why you have things like limit down or circuit breakers. At least getting to that point of hitting the circuit breaker or the limit down would be fair and orderly. Walking away from it as we saw clearly does nothing. Nothing good comes out of that. So I do think that we're not talking about this particular market event for market makers standing up and taking one for the team, it really is an overall effort to ensure that all of these pieces are appropriately in place so we don't get an event like May 6.

Bad markets are going to happen. We've

had more than our share of bad markets over the past 2-1/2 years. What happened on May 6 was different because not only did we have events a la Lehman or Barclays and what was happening with Greece, but we had a market that's evolved to the point where it's become so electronic and there is so little communication between the different exchanges that this is invariably going to happen. It wasn't right. You had a huge price point drop and it rebounded back. That clearly tells you that something is wrong systemically. It wasn't the event. It wasn't the shock to the system that caused a semipermanent erosion in the value of stocks. This is what we're talking about. We're trying to address the everyday lives of investors and as best we can prepare for these events making sure that we're not causing them by not paying attention to some of the details we need to pay attention to.

MR. ARCHARD: Most of the market makers who we spoke to after this event, from an incentive perspective they felt there was the

right level of incentive per risk in the marketplace and that's why they were in there today in most cases as Michael pointed out. The trouble is again no regulation or no amount of obligation or anything else is going to -- someone is not going to put their firm out of business over the course of the afternoon or in 20 minutes. But trying to look at the positives of this and not to state the obvious, but I will, this was really a remarkable event. Twenty-five percent of the Russell 1000 securities dropped over 10 percent in about 90 seconds. We were talking to the market makers through the afternoon and they were saying that their models were showing -- they were anticipating a 5,000-point decline by the end of the day. They thought a bomb had gone off somewhere and that they were the last persons to hear about it and they were frankly very concerned.

I think the point that Kevin is making, that when we look at circuit breakers, if we look at market makers, are there to help with the

orderly flow of traffic in the market but they need orderly markets to operate in in those situations so that thinking about circuit breakers and thinking about orderly restarts and how all that works, it gives them the confidence, the clearly erroneous trade rule, a really critical juncture when they're doing trades in the market, they're hedging. No market maker wants to go into the overnight holding a long or a short position. They want to be neutral to the market. If they're not sure what the parameters are for a cancel, they're going to step away. Even if there's a bright shiny line that says at 20 percent if anything moves from here we're going to stop markets and everything below that could be cancelled, they'll still probably not too incented to take trades up to that 20-percent line in the case that they're going to be lopsided, negatively biased in their hedge. So there are concerns there that that raises other issues around should it be straight cancels on clearly erroneous or should we be rebooking at some other values similar to what the futures markets do. Again, this all comes around to what do we facilitate to make the participants in the market be there through thick and thin from a structural perspective rather than from a compensation perspective because if the structure is right, the business model is there for them to participate.

MR. NAGY: I think your idea is very intriguing and it's one that I'd certainly like to give further thought as to the implications because I will tell you that the retail investor, I already mentioned that we get about 10 to 15 percent of our orders overnight because they go home, the other time that the retail investor is in the market is during times of market duress. That's when they're at work and all of a sudden their coworker leans over and says, Do you see the market? It's down 600 points. My nest egg, my 401(k). I'd better take a look at them. In fact, during that time I think we had 127 orders in Accenture down to 88 cents which we ended up correcting. The reality is that 2 percent to 3 percent of the time that we really need to consider in the marketplace that we need to put productions in.

In 1987, we did have something that actually worked and the market rebounded after that. The market halted and it stopped. The fear was subsided and the market started to I believe rebound after the second halt during that particular instance. It's been a while. I think the combination of those incentives and some of the halts, the structures that we're putting in, do go a long way to sooth confidence and fear.

CHAIRMAN GENSLER: We've talked about market orders versus collared markets, stop-loss orders, pauses and rolling limits, and now we've spent a lot of time on market-making obligations and we've also talked about the challenges of the reopen. I've listed what I thought but I don't know where Joe is going to take us.

MR. STIGLITZ: I wanted to pursue a question that you proposed, how do you incentivize greater depth in the market? You talked about

taxes. Within the structure of the market, the rules, are there some that you think would do that better?

MR. NAGY: Honestly, I think when Mary Schapiro and the Commission put forward the concept release on market structure, it is has a lot of noble thoughts on how to change market structure for the better. Again, I said this in my opening statement, I think that there are a lot of things that we can do to ultimately change that structure, one of those being how we incentivize the quote today. I really think that needs to be looked at. We've focused so much at the quote but we've not focused anything on the size at all in the marketplace.

MR. STIGLITZ: I was trying to ask you to be a little bit more specific on how you would answer that.

MR. NAGY: How I would get liquidity into the marketplace?

MR. STIGLITZ: Yes.

MR. NAGY: What I said earlier is I

think ways that you can start getting liquidity into the marketplace are through tax incentives, market data incentives, or changing the structure of how you provide rebates to limit orders today. I think that those are a couple of important steps that you could take to do that.

In today's markets it seems to be difficult to trade in the visible market, and Kevin and these guys know this a little bit better than my smaller retail orders, but the minute you expose your hand in the visible marketplace, the liquidity is gone. It evaporates. If there are processes like that that can help bring that liquidity into the visible marketplace I think is important. There I'd specifically say some of the dark pool changes that we're looking at and how dark pools operate I think are very important measures that we can take to help bring liquidity back into the markets.

Again, I won't say there is a silver-bullet solution to any of this. I think it's a much more comprehensive process that needs to be undertaken fundamentally with the entire market structure which a lot of it I think is contained in the concept release.

CHAIRMAN SCHAPIRO: Could I follow-up on that quickly and on Joe's question? I don't want to suggest that we're headed in this direction at all, but if, for example, and it's been proposed that orders have to have a minimum lifespan but you could incentivize market makers to continue to make markets by not having that rule apply to them, if we can think a little bit differently about not just the market structure as it is and what kinds of incentives can we layer over it but, rather, the market structure as we would like it to be and what kinds of incentives might exist. One that pops into mind is whether there would be limitations placed on the way trading is done today and then some of those limitations might not apply to market makers as a way to incent them to be there in size.

MR. NAGY: Interestingly again, I believe the CME has a process in place where they charge for cancellations on a number of orders. In our market structure today we've got a profound amount of orders. If you take a look at any quote be it Accenture or any stock, you see 70 to 90 quote updates in a single second and a lot of these are almost like flickering quotations. Those are actually orders followed by an immediate cancellation. The irony of that is that's taxing and utilizing the infrastructure of our nation's pipes to get that data out to the retail client. Yes, I do think there are things that can be done so that everyone has to pay their fair share to utilize the infrastructure of the bandwidth that we have. Our firm is one of the largest payers of market data in the industry yet we don't use the largest pieces of the pipes. That seems a little unfair. So I think things like that, taxing cancellations on a certain basis and forcing people if you're going to put up a quote, maybe that quote needs to be there, the market data plan requires that the quote is visible for a certain amount of time.

CHAIRMAN GENSLER: I'm going to turn to Maureen. One of the things, and I'm looking at this panel and not this panel, I'm interested in is as trading velocity is increased or one might say that trading times have gone down into microseconds and nanoseconds and order size has come down, the e-mini on that day, I think on most days, the average trade is five or six contracts and that's about 250- to 300,000 notional amount of stock. Market makers, and we've studied this and you all will get this data by early September, they really are there. There are dozens and dozens of market makers in the e-mini but they're staying relatively flat. Their whole economic model is they're not putting a couple of billion dollars on the line. They just simply aren't. So how in an environment where average trade size has come way down, average trade time has come down, 70 to 80 orders in Accenture in a second, and yet as it was said earlier, in normal times, 99-percent of the time the cost to transact in the futures and securities markets have come way down?

The bid offer spreads have narrowed and there are enormous benefits to the American investor in most times. But then what happens?

So that's just a question. I'm just framing. Not that there's an answer, but Maureen has a question.

MS. O'HARA: I wanted to follow-up on the idea of the incentivizing of size. Obviously one direct way to do it would be to change priority rules to go from price time size to price size time. That would incentivize size but yet at the same time your retail traders now would step behind size. As we think about these priority rules, how do we sort through this? Are you in favor of a change in priority rules?

MR. NAGY: I think that's something that should be looked at. When you look at the retail investor the beauty of dealing with a lot of market makers out there is they understand the importance of taking care of the investing public so that there are things that you can do in that particular instance. In fact, there are a lot of things that were done back in the early days. When New York traded a lot of securities and they had a very deep book, one of the ways that some of the other markets could incentivize orders on that is they would match the liquidity available so they kind of mark you where you're at in line on your limit order so that when that order became available on New York you were then executed for retail limit orders and it was a way for the retail client to almost get double protection on their limit order. Again if you incentivize a market maker I think things like that could be created in the secondary market. I think that's a very intriguing idea to bring size back to the marketplace.

MR. CRONIN: May I suggest that the bigger problem is that institutions have no incentive to post real liquidity in these markets. Nothing could be clearer than to watch IBM trade down in a vacuum and some of the other big-cap names that ordinarily would have had significant levels of interest on that book, but because of the predatory nature of some of the participants today we have no incentive to post large amounts of liquidity. I submit to you that transaction costs have come down, but could they be lower of the markets were more efficient? Are there dimensions of cost that we can't understand today because we're not even sure what the value of a quote is? There are 40 places where stocks are transacted at any given point in time. None of us have clarity on what the real supply and demand is in most issues. These are fundamental issues of what the value of a securities market is. So I submit that a more important effort would be to try to help institutions come to a better understanding of how we're incentivized to send more of our orders directly to the market and to post them so people can see them.

Priority is an important point. A lot of people now are talking about whether or not there should be a trade at rule. A trade at rule would say not only is there a top of book protection, but the first one in gets executed.

That's reasonable. Some others would say don't just do one top or one part of the book, do the whole book, why shouldn't there be time and price priority at each level and not just at the quoted level? I'm not prepared to go there just yet but I do believe that we have that in our arsenal ultimately if we're not finding the right mix. But make no mistake about it, if institutions had higher incentives to post limit orders, if there weren't these nefarious participants jumping in front of us, they had no interest in a stock until we had an interest, we show it and they jump in front of us, we hide in dark pools now. That's how we accomplish now. That's how we accomplish our orders. We worry about their infiltration into dark pools.

It's not 70 quotes a second, Chris, it's 5,000 quotes in a second in some of these names. This is the new phenomenon called quote stuffing. So what happens is they send in a particular issue 5,000 quotes within a second. What in the world is the value of that enterprise? So let's concentrate on some of these things and really get back more to the fundamentals which is really creating a market where transparency and posting liquidity is not only incentivized but creates efficiency and effectiveness for all participants.

CHAIRMAN GENSLER: There is one issue that we need to get to still which is ETFs.

MR. STIGLITZ: Following-up on this a little bit, the one time where these issues become very relevant is if you had rules about the rate of decline of stocks. You have clearly a statement of an excess demand or supply that's being manifested and you're restricting the market. At that point who gets the priority of fulfillment is a big deal and one might argue going back to Rob's point about being sensitive to the time, this is an automatic way where the greater the market imbalance, the greater the value of the prioritization rule would then have in a way an automatic way of giving more return to people who are putting in greater depth.

MR. MENDELSON: May I make a comment?

These things that we're talking about right now seem to be more about how the market functions day in, day out all the time and not so much about the flash crash or something like that, although there is clearly a relationship such as how market-making activity is done is going to effect crashes or flash crashes so that we don't even know I don't think in this case whether the flash crash was an alternative that day to a real crash. It was a bad day. We don't know.

We shouldn't confuse these things. When we talk about things like Invesco not having incentive to post size, I think that's true. But as you've also said transaction costs are much lower because trading is a little bit like a repeated gain where you have to adjust. You have to adjust to what other participants are doing. Other participants are showing smaller size and trading in smaller lots more frequently. Other participants have to adjust. If you don't adjust you're disadvantaged. The market has adjusted by offering dark pools but there is only so far it can go. Other participants have to adjust and change their trading size and if they don't want to change their trading size they will in fact be disadvantaged, but it's not clear at all that that has a lot to do with the flash crash.

MR. CRONIN: I totally disagree. Liquidity is the issue in the flash crash. If people had been there and had more incentive to be there, and by the way, we came rushing in to buy a number of securities that were dislocated so we would have been there, others would have been so I think it's exactly related to what happened here. Confidence in the markets is everything whether it's on the institutional side or individual side, whether it's the issuers or participants who are just watching who have interest in 401(k)s or whatever. It's everything and until and unless we get greater confidence in the market and better ability for all participants to make sure that it's a level and fair playing field, we are going to have these kinds of problems.

MR. RUDER: As I listen to this, I agree that we're not really addressing the flash crash problems which exist in my mind because of some problems that have existed in the high-frequency trading market. We have computer trading going on with the retail investor severely disadvantaged by the others who are able to trade in an automated way. We have programs which are established and are not subject to human intervention so that we're talking about how to do with a whole series of traders who are programming their computers to trade based on events that they can imagine and if they don't imagine a really serious loss of liquidity in a way that is realistic, we're going to continue to have these kinds of events. I don't know what it is we can do to avoid this kind of computer- generated loss of confidence.

MR. MENDELSON: I think we have to understand first what actually did happen and I'm not sure we really do understand that. I know you're all working on that but there are a few things that we may have to look at like there's also the other side of the equation with the liquidity demanders. I think there's been much less focus on that. I think we have a reasonable understanding of what happened with the liquidity providers, that they more or less went way eventually and we have some reason to understand why they did because their market data appeared to be corrupted although it may have been correct prints that looked bad, but things went off the rails from there. But there was no connection between the information that the liquidity provider has whether it's a person or whether it's an electronic system that says this is scary and at the same time the liquidity demander whether it's a TV client or an institutional client who's sending orders who isn't really in touch with what a market maker is thinking at that point and you have this disconnect between what the liquidity providers are thinking, all of a sudden they're saying I got to go away, and the liquidity demanders they just keep going on their merry way sending orders. That's where the imbalance is. It takes two sides to have an imbalance and we haven't focused a lot on the other side of the equation and maybe we ought to.

To respond to your point about what the computers are doing and disadvantaging retail, retail has been a very significant winner in this whole thing because their trading costs are lower by far, their commissions are lower, and I'm sure that TD's data would bear that out. On the machines being like unguided, they're not. There are people sitting in front of those machines and those are the ones who turned them off so that there are people sitting there just like in the old world of market makers there were people there to not pick up the phone which is what happened.

MR. ARCHARD: I'm going to be cautions. I'm a little bit in between these two groups as far as wanting to be sure we don't throw out the good with the bad. If I use something like the exchange traded fund where it's difficult to say are you getting the right price for IBM or even for Accenture, we have a range but it's again it's trading in a lot of different places. We can look at the ETF at the underlying securities in the ETF, the cost of acquiring that basket for a large institution and for the largest, heaviest traded ETFs, the cost of the spread acquiring that in the market for the average investor is inside of that because of the activity of all the trading that's going on in the market. So for many days out of the year, many hours out of the year, I would say that there is a benefit there.

But I'll go back to this whole interlinked situation, how you define a high-frequency trader, I haven't heard anyone who has come up with any one solution. I don't know much about quote stuffing intuitively. That doesn't sound like a good thing, but I'll admit I don't know in that situation. But I do think we have to be cognizant that even long-term investor at some point do want to sell their securities and you're not going to naturally find another long-term investor to sell it to all the time. There is a benefit to this trading that's going on in the marketplace.

What we have to be aware of is what are the behaviors that we want to link here. If collocation of server farms with the data source is important in today's model, then maybe that's a privilege you do give to a lead market maker and not someone else who's just going to throw trades in front of the lead market makers and for doing that collocation maybe you have to say there are three levels of orders with size underneath because anyone can come up 97 percent of the time and throw out a best bid and offer and only show 100 shares. That's the way I think we have to be thinking about the behavior in the marketplace to try and negate 20 bad minutes.

CHAIRMAN GENSLER: You mentioned ETFs, may I shift for a moment because I think between at least two firms, I know you're not over there, and one other firm, it's probably 80 percent of the ETF providers. You said something in your opening remarks that I don't think bears out with some of the facts that we've been looking at. You said that ETFs are followed. You used different words. In fact, I thought that at the critical minutes not just dozens but it got to the point of hundreds of ETFs were breaking down early, and they weren't just small ones. One of them was one of largest Vanguard ones, I can't remember the name of it. What do you think it was why 5, 6 to 7 minutes before the dive there were so many ETFs that were significantly down in more than the market?

MR. ARCHARD: I'd like to see that data because I would not agree with that statement. From what we've looked at from time and quotes of the individual securities of the underlying baskets and where the ETFs were --

CHAIRMAN GENSLER: It's a very different question. I'm not saying whether the ETFs reflected the time, but there were a lot of ETFs in the 5, 6 or 7 minutes before the dive that were already significantly down and a high percentage that hit this busted trade rule, the 60 percent rule and so forth. What is it in ETF land that you think has a high proportion of busted trades, that there was a group of them, not the broad market ones but more of them that were 5 to 10 minutes early?

MR. ARCHARD: Again I would still assert that I did not see, and I'd be happy to look at any data that you have, that would show that ETFs were leading the charge on this. Every ETF for those of you who might be familiar with it, an exchange traded fund generally follows the market value follows the value of the underlying securities. That pricing that's put out by the market makers is determined by calculating the weighted value of the securities that make up that ETF. As it became more difficult to come to that value as these individual securities were rapidly dropping, you can almost think of it as a contagion in the basket, as bad prints were going off in multiple different locations showing pricing all over the boards, the confidence level in the derived price of the ETF was very unclear and the confidence level was falling rapidly and that's where you started to see the step back from the pricing.

The closer the ETF and the securities that make up the ETF got to that 10 percent threshold, that's the point in some situations where you saw a really rapid acceleration of the disconnect between the price of the ETF and the individual securities, or in some cases there might have been a leveling off and it continued to send the ETF until the pullback several minutes later. There are a number of reasons for that. One of them is understanding how they calculate the price of the ETF based on the underlying security. You also have the situation that some of these people who we've talked about, some of the electronic market makers, are not calculating the price of the underlying securities, they're looking at what the lead market maker is doing in the market. As those market makers were unable to calculate a price and stepped away, then the opportunistic traders or the people who are in there sort atop a book also went away.

You raised the point of ETFs being a

disproportionate number of the cancels. As I mentioned in my statement, ETFs make up about 30 percent of the trades on any given day. They were about 60 percent of the cancels. The reason that we see for that, and I've seen some data recently come out I think from the ICI that also supports this from time and quote data that came from the New York Exchange, what we saw was once the self-help provisions kicked in, over 90 percent of the exchange traded funds in the U.S., their primary listing is on the New York Stock Exchange's Arca platform and about 30 to 40 percent of the trades usually execute I think is a ballpark number each day. For the lower average daily volume ETFs, over 60 percent of the daily executions occur on NYSE Arca. So at the most critical juncture of the day or of that 20 minutes when liquidity was most important and where most of the trades would go off toward NYSE Arca, some of that got lost in the closed loop where again there are more sellers than buyers and as the people normally making quotes in these went away you had that. So that's an argument why you saw a disproportionate amount of ETF cancels versus individual securities.

CHAIRMAN GENSLER: Rick, help me out here.

MR. KETCHUM: I agree with your questions. I thought from exactly the direction you said with respect to self-help. Certainly anytime the primary market and any listed security goes out, there's a tendency for that to be the deepest book and I would suspect you're waiting for the analysis for the SEC and CFTC that that's one reason why ETFs were a substantial percentage of the cancels. A couple of you suggested there should be changes in reviews from the standpoint of self-help. Self-help today is essentially driven by SEC's fairly specific standards from the standpoint of what an exchange or a firm must see with respect to response time on the orders before calling for self-help. It sounds like you think that some of the calls were too quick or something else should happen. My question would be how would you change the self-help requirements or would you look at self-help with respect to a primary market as perhaps another reason to have a brief pause or something else. We can agree that self-help didn't work terribly well that day. What would be the change that would make sense?

MR. BRENNAN: Gary, could I just add on to Rick's question?

CHAIRMAN GENSLER: Please.

MR. BRENNAN: And do you think it's beneficial to have something like LRPs in existence on one major market but not the others not to steal your whole question?

MR. KETCHUM: I think you've added an additional question.

MR. BRENNAN: No, there's a semi-colon in between. It's still the same question. Is it beneficial to have different rules or should they be common if you guys could rewrite the rules?

CHAIRMAN GENSLER: Self-help in LRPs, but we don't have 2 hours.

MR. NAGY: I'll say a couple of things.

I have one point that I wanted to make on ETFs and I'll go really quickly here. The one theory that I have is certainly exchange traded funds are very, very important to retail investors and advisers. We see quite a bit of that business at the firm. I'll submit to you that the IPOV calculations for those aren't always readily disseminated to the entire marketplace.

CHAIRMAN GENSLER: Do you want to say what that is for the public? What does IPOV stand for?

MR. NAGY: My feeble understanding of this would be the mechanism that allows you to calculate what the value of the ETF itself is.

CHAIRMAN GENSLER: That's good enough I think for now. So that's not transparent.

MR. NAGY: That's not transparent. It's not readily disseminated in the price feed or it's not really disseminated by the underwriter of the specific ETF. We saw that in one of our products so that I would say that probably is partially responsible for it.

Getting to the issue of clearly erroneous, I think similar to the circuit breakers that we just installed, the self-help rules have an itchy trigger finger available to them so that there are no clear-cut guidelines when that was implemented to reg NMS on exactly when or how you would implement the self-help rules. It's not standardized I'd say across the exchanges. It's not consistent. I think that's the exact same issue with the LRPs. LRPs are not on every exchange and that created on May 6 a real dichotomy in trading in that was that a real price? Was it a self-help? There were some self-help rules that were called against the NYSE at that particular time. I think in order to fix that the rules across the exchanges need to absolutely consistent and that's one thing that we don't have not even with the circuit-breaker rules today that we just installed, they're not consistent across the exchanges, hence why we've seen issues with Genzyme and Citigroup and Hewlett Packard as of late. I think that's the most important thing that could happen with the self-help change.

MR. ARCHARD: From a competitive markets perspective, I think you want to have self-help provisions. You want to have something that's there that says if there's a problem at exchange A, the whole system doesn't grind to a halt. But I think that has to be in conjunction with if there are security-specific issues that that approach then is uniform across the exchanges and that you don't have a situation again where you're turning it off in one place, having it flow at another where there might be loss of liquidity.

To clarify something that Chris said, the IIVs or IOPVs, they go by different names, again indicative values, this is a calculation of the underlying securities of the ETFs. It's usually calculated by the exchange or by a third party and it has a ticker assigned to it and you can pull it up and look at it. It is again just an indicative value. We've seen plenty of times where the value of the ETF is really the price discovery mechanism because the ways that the IIVs are calculated are different. If you think about a domestic equity ETF versus an international ETF, IIV calcs a little bit more clean during market hours of the domestic equity that's trading. For an international security where the underlying securities and not trading and you have to do currency overlays to get to the value of an IIV, not as clean linkage, so that I want to be clear on the benefits, pros and cons of the IIV as a mechanism. It's something that's there as a reference point. It is not used by market makers as a means of getting to a price of an ETF.

MR. MENDELSON: May I add on on self-help? Remember, Rick, you were involved very heavily in these discussions. The whole notion at some level with NMS was to really facilitate competition among marketplaces. At that time the New York Stock Exchange had a 65 to 70 percent market share and many of us were concerned that our orders had to be subjected the continuous option market process which we didn't want.

Sending orders to the exchanges were really indications of interest. They weren't executable orders. So we wanted that change, and part of that was that you create this self-help mechanism that would encourage or perhaps discourage certain manual exchanges from trying to always have this mechanism where they would try to commandeer all the order flow. So self- help was a way that you could avoid a market that was trying to get their own market share up by always being in slow mode.

There is an inherent conflict of interest between the exchanges and self-help. If you ignore one market, presumably you get more market share and now all exchanges basically are for-profit enterprises and that's a big difference from when this rule was put together and some of the tenets behind it were formulated.

I do think, Jack, to your question, LRPs are a reasonable pursuit. I don't think that they necessarily should be pushed on all markets, but I do think if we've learned anything in this enterprise is that taking time and making sure we understand exactly what's going, whether that's in seconds or minutes certainly could be debated, isn't a bad thing. If we could get to a market that among all the exchanges supported this ability to take inventory of things after you get down to a certain price dislocation, I think that would be a very workable and efficient thing for the markets.

MR. ARCHARD: And I'd add on the self-help that I'd be interested or we'd be interested in seeing something as simple as if you're going to declare it to go back to what are the reasons for it? Do you have to go back to your regulatory body and say we've brought in self-help, this is why, this is the proof point behind it, end of story so that there's a clear trail as to why it was called and was it for a good cause?

CHAIRMAN GENSLER: There are hundreds of days. I don't want to speak for the SEC.

MR. KETCHUM: Let me try to speak slightly for the SEC. There is a record-keeping requirement and a justification requirement with respect to self-help and I think actually there are some fairly specific standards with respect to the delays and return of orders before an exchange or market can --

CHAIRMAN GENSLER: On self-help I think there was a provision as I understand it that if it's longer than a second that you don't have connectivity or you can judge what connectivity is, then they can go on to self-help. Jack and Rob. We're running a little late.

MR. BENNAN: I want to ask about specifically, you keep trying to get back to ETFs and it gets hijacked away, so I want to go back and ask Noel a specific question. He had a definitive recommendation on circuit breakers, and the treatment of ETFs in a circuit-breaker mode Pam recommended an expansion of circuit breakers. What did you mean by having circuit breakers be the same for ETFs as for stocks, if I captured it right?

MR. ARCHARD: Yes. Our view is we were

concerned early on when the pilot first rolled out of having stocks in a circuit-breaker mode and not the ETFs that might have those in the basket because if there were a system-wide error or a systemic issue I should say, something that was larger, on every given day one or two stocks might stop trading during the day for a variety of reasons. And this goes back to what I was saying earlier that market makers are calculating the value of the ETF based on those underlying securities. And if one or two stocks stop trading and it's for a known reason, news just came out they can quantify, they can get their heads around it, that's not going to disrupt their ability to price their basket or their confidence in that pricing level. But if a lot of stocks are going and then they all stop but the ETF is still trading, you're in price discovery mode. And maybe that works for the short-term, but for the long-term it feels like there should be a synchronization between what's happening in stopping the ETFs versus the underlying securities.

MR. KETCHUM: May I press that to make sure I understand the point? Obviously as the pilot moves to a second phase, a large number of ETFs will be pulled into it. Are you saying beyond being subject to the pause as that pilot gets expanded you also think an ETF should stop if a certain percentage of the stocks in the ETF have paused or what would be your thinking?

MR. ARCHARD: Yes, I think that would be extremely difficult to put together. I think it just more came down to we wouldn't want broad swaths of the individual securities to stop trading when the ETFs aren't there so I think the ETF still has to be plugged to its value where it started the day or whatever intraday view that we're looking at but that there should be the safety net beneath the ETF just like there is beneath the individual securities that make it up.

CHAIRMAN GENSLER: One thing, Jack and Rick and this group here that I think that the SEC and we're going to be looking for are your thoughts in that there are the broad market circuit breakers which we know we're going to get advice from you on in a timely way. Right? We'll get that on a board market which currently include these 10 and 20 markets. The ETF land starts to blur into that because if you put in 5-minute pauses on ETFs, for instance if the SPDR 500 went into the 5-minute pause, what does that mean for the overall market, what does it mean to the e-mini, so that it's a continuum from individual stocks to small- basket ETFs to broad-market ETFs to the overall markets. I raise that as a question for this panel that I think we're all going to want to get your advice on.

MR. ENGLE: One of the things that many of you brought up today we haven't actually discussed at all and perhaps that just as well, but it's the question of what are the rules for breaking trades. It seems that we talked about collars as ways of breaking trades before they get entered, but the difference between breaking trades afterwards is that you know more by the time you're deciding whether to break a trade than you do at ex ante, at the moment when the trade is being entered. Do you really think that rules should be set up so that you would know ex ante whether a trade was going to be broken and if so maybe this is just the same as the collars that we're talking about?

MR. NAGY: Yes, absolutely. One of the major issues of May 6 was that no one knew until the wee hours of the night exactly what the percentage was going to be and there was a lot of discussion. In fact, it's in the joint report regarding the "arbitrary" almost decision whereby the 60 trading was reached. I believe that any rules, which I think clearly erroneous is a very good idea. It's one of the unique things I think that we have in our capital market structure that some of the other structures around the world don't necessarily have and I think it's worked well. It's never an enjoyable process for either party at all, but in the particular case the rules need to be clear, concise and expeditious so that we're not at 8 o'clock at night on May 6 saying 60 percent away, those trades are going to be busted and then going in and finding those trades. I think it's got to be a much more clear process and coordinated across the exchanges and it wasn't at all.

MR. KETCHUM: I want to follow-up quickly on that. Did I hear you right in your initial statement that you're satisfied with the new proposed rules of the exchanges and FINRA with respect to this type of event?

MR. NAGY: I would say yes, that starts to go down the road of consistency and coupled with stock-by- stock halts, yes.

CHAIRMAN GENSLER: Pam, did you have a view on that?

MS. CRAIG: I do. I agree and I support what you're doing in that area because that was very disheartening for us at all. At the end of the day we didn't know what the heck was going on and that's obviously not good at all to have that kind of disruption.

MR. ROTBLUT: I want to add that I think those rules need to be communicated. We heard from one investor that probably had a stock drop about 45 percent that wasn't broken and he actually called us up about a week after May 6, wanting to know what he could do and I think it needs to be clear to the investors that these are the rules that will cause a trade to be broken so that they know going in what to expect, but I think it needs to be combined with other measures to prevent illiquid trading which might cause an artificial large price swing as well, so I don't think you can have one without the other. I think there needs to be clarity for all individual investors going into the trade.

CHAIRMAN GENSLER: We still need to hear from staff on the subcommittee report and I want to see if there are more subjects.

MR. STIGLITZ: I wanted to pursue the question about restarting that was raised. I guess there are two questions. One is what are the consequences? You said that it was upsetting that it wasn't done in an orderly way, but who looses and how significant is this? Obviously it would be better if it weren't, but is this a very significant thing and suggestions about how that might be done.

CHAIRMAN GENSLER: This is the reopening after there's a 5-minute pause or any such circuit-breaker pause.

MR. NAGY: I will submit that I believe that the opening processes are some of the most difficult processes in our market structure today when you've got a multitude of different market centers. It's something that's very uncoordinated. For example, in the listed markets we have two different openings. NASDAQ has a listed opening and New York has a different listed opening. Those are at very different prices and very confusing for investors. At the same time, adding more opening processes into that when we can't open at 9:30 in the morning in this day and age when we're trading in milliseconds I think is something that seriously needs to be looked at and considered. That's why it gives me great concern when we're halting stocks and then starting a reopening process because you get a lot of confusion out of it, and with the issues that we've had of the halted stocks and the new program, almost every one of those have literally been attributed to how the stock reopened again once it was closed, Hewlett Packard and Genzyme, for example.

MR. CRONIN: Yet there is a tradeoff. No one is here to suggest that this process would be easy, but what's the consequence of not doing it, and I think we've seen some evidence of what the consequence is and I submit that that's worse than what could be the preventative maintenance to prevent it from happening again.

MR. STIGLITZ: What happens when you place an order and there are these different prices at the beginning?

MR. NAGY: It's not an easy process, I can tell you that much. We try to educate our clients a lot about the differences in the various openings across various markets and in this day and age even the options exchanges, we have eight options exchanges now with eight different opening prices that go off and it tends to be very difficult. We try to use technology quite a bit so that if one exchange happens to open before another one, we try to pull those orders back and send them to the other exchange. There is no easy process and it makes it difficult to a big degree. Actually it's the subject of a lot of client complaints on a daily basis from not understanding the differences in the market openings that exist. And I think for issuers for as well, too, seeing different opening prices and how those print in the paper each day tends to be very confusing.

MR. KETCHUM: The pause itself operates differently. Right? The pause itself requires a trade in other than very exceptional circumstances such as when the market is having technology problems that essentially requires a trade from the listing market before anybody else trades. Are you troubled by that or do you think that makes sense?

MR. NAGY: No, I think that makes sense but I think it's still a little confusing. And don't get me wrong. Kevin brought up a really good point which is what's the alternative. Right? And the alternative if we were not to have that looks worse. Again with stock-by- stock halts, I would not like to see that as the ultimate end solution to where we are. Earlier in this conversation we were talking about trading bands and limits up and limits down. I think the CME has run a very good program for 20-plus years with that and I think that's something that this advisory committee should look at maybe changing the stock-by-stock halts to something more like that.

MR. CRONIN: Rick, as you know there are indications that investors get when these things are about to reopen. It's not like they happen in a vacuum and you have no idea of what the indication is. From an institutional perspective that's probably much easier to source than the retail investor and if that's more problematic than I understand it to be it probably needs to be addressed.

CHAIRMAN GENSLER: I want to thank you all, but I want to bring it back to Pam, it could have been a story of an investor, but to me the most riveting testimony with all respect. It reminds me that we're fortunate to have Commissioner Dunn today, but 10 to 14 days he's on the highway, and not anything to his fault, I feel the same way about Accenture, a car comes out and there's a massive pileup and fortunately he's here and more than a little bruised and battered. I thank God Mike is here and thank God Accenture's stock got back to the right levels. But in the same way for 10 seconds, a split moment, somebody sped through a stop sign is what happened to Mike, and for some 10 seconds, 10,000 shares which is nothing took your stock from $38 to a penny. We can't have that. So that's the direction I'm giving probably for my co-chair to the advisory committee. To me that was the most riveting and it could have been a personal investor as well. Something doesn't feel right that in 10 seconds, 10,000 shares takes you from $38. Your market cap at $38 was how many billion?

MS. CRAIG: Less than $29 billion.

CHAIRMAN GENSLER: So the consequential $35 to $30 billion of market capitalization at least on paper in 10 seconds was less than $10 million.

MS. CRAIG: Stunning.

CHAIRMAN GENSLER: Stunning. Less than $10 million. Obviously that wasn't a true reflection of supply and demand and the valuation that investors placed on the long-term prospects of your company. So that's where we're looking for good advice. Thankfully both of you are here.

I want to thank each of you because this has just been tremendous, and if there are not any further questions we will I think take a few moments before we hear from staff. We need to hear from staff. We have two subcommittees that we set up and officially they need to report. We could do it if we had chairs of the subcommittees, if you want to pick chairs of these two subcommittees then you could report, but we need for the public to have some staff report on his subcommittee. We're going to take 2 minutes. We're going to thank our panelists and staff is going to give us a quick review.

(Recess)

CHAIRMAN GENSLER: I'm going to try to bring this back together. I thank you all. I hope I gave a long enough break. Again I want to thank the panelists because that was a very, very helpful discussion. I can tell from the 10-minute break that to be the case.

The next item on our agenda is an update from our two subcommittees. As we had mentioned at our last meeting, we believe that it's important to provide the public with as much transparency about what these subcommittees are doing, their goals, priorities and deliberations. As a result, we'll have reports from the subcommittees as a standing on our committee agendas. As I mentioned, I know you've only met a couple of times, but if the two committees appoint committee chairs among yourselves, I know you are thinking in your busy schedules who wants to be a committee chair, but then you get to report. That would be helpful. In the meantime, we're asking staff to report.

The first subcommittee is the Cross-Market Linkages Subcommittee which focuses on topics related to the futures markets. This subcommittee addresses topics including the analysis of orders and trading and the broad-based e-mini 500 contract, liquidity and the selling pressure that we've seen on May 6; trading practices and roles that can affect both futures and equity markets and some of the cross-market mechanisms and arbitrage. That subcommittee is Brooksley Born, Jack Brennan, David Ruder and Joe Stiglitz. Brooksley is not here so we can make her chair. I see by a vote of three and one abstention. Jim Moser from the CFTC will provide an update on this subcommittee. I'm going to introduce the second, too, and then, Jim, I'll hand it over to you.

The second subcommittee is the Pre-Trade Risk Management Subcommittee and focuses on topics related to equities, ETFs and equity index options, though I would note pretrade risk management also happens in the futures markets and I know you're talking about that too. This subcommittee will provide an analysis of the liquidity and selling pressures on May 6, provide an in-depth look at the order and trading of select dislocated securities and the trade practices and rules around that and implications for May 6. Additionally, this subcommittee will provide a review of the latency issues, that's how long things get to the consolidated tape. Members of the pretrade group are the other four members, Rob Engle, Rick Ketchum, Maureen and Susan. I guess I know who the three of you are appointing as chair, but that's not fair to Susan. I thought I had Robert, but Greg is going to do it.

MS. PHILLIPS: This is Susan. I'm on.

CHAIRMAN GENSLER: Susan, I apologize because we should have allowed you time to ask questions and I didn't give you that chance on the earlier panel. I see that you're speaking up to make sure that you're represented not to be chair. Greg Berman is going to report for us for the SEC. Jim and Greg, take it away.

MR. MOSER: Good morning Chairs Schapiro and Gensler and the advisory group. I'll be summarizing the cross-market presentations that were given by staff at the two conference calls that were held since the last public meeting. First, on the July 6 call there were two presentations made. The first was an analysis of the e-mini S&P 500 futures trading volume, and then there was an analysis of the e-mini order book. On the analysis of the e-mini trading volume and price, we found that trading activity exceeded 50,000 contracts per minute at two points on May 6, at the point when prices declined precipitously and then about an hour later or 10 minutes before the close. Trading activity was classified into two groups. The first group paired aggressive selling to passing buying and the second group paired aggressive buying to passive selling.

Comparing these two price changes we found no clear pattern emerging. However, at the price trough, passive buy volume much exceeded aggressive buying. In a plot of differences between aggressive buy and sell activity, aggressive selling turned out to be more prevalent than aggressive buying with that difference increasing throughout the afternoon and then reaching a minimum at the time of the sharp price decline. A rebound in the aggressive buy/sell difference also coincided with the price rebound.

As for the analysis of the e-mini order book using CME supplied Globex message data, staff reconstructed the limit order book for the e-mini futures contract on May 6. Plotting the near inside order book depth, this would be the best five bids and best five offers, the order book appears to have been well balanced with the number of buy orders generally close to the number of sell orders. At about 2:30 Eastern Time there was a sharp drop-off on both sides of the near inside order book with the drop-off in orders to buy slightly leading, then matching orders to sell. Just prior to about 3:00 p.m., orders to sell spiked followed by a recovery period as the order book filled approaching its previous levels. It didn't quite get there but approaching those. These data closely matched the Globex data that was provided by the CME and plotted in the May 16 preliminary report so that we felt that we had closely replicated the process that the CME was using.

Staff then used the reconstructed Globex order book to construct an analysis of all standing bids and offers. The pattern from that analysis differs in that the depth of the order book can be seen to have been declining throughout the day. Staff noticed stale sell orders can be expected to accumulate over a period of declining prices so that we're not entirely comfortable with analyzing that portion of the order book. What we can say is that the buy side of the order book was declining throughout the day.

Staff has recently obtained order book data from some other days as was recommended by the advisory group. These are being used to compare the May 6 order book analysis to that of other days, both critical days and so- called normal days.

On July 29 we had a second call where one presentation was made in that case, trader classification and trader behavior in the June 2010 e-mini futures contract. In this case the data were grouped into a pre- event period, that would be May 3, 4 and 5, and then an event data group of May 6. Trading activity patterns observed during the pre-event period are analyzed in order to classify accounts as one of the following, market makers, high-frequency traders, buys/sellers, opportunistic traders and noise traders. Comparing the pre-event period to May 6 on the basis of both percentage of volume and percentage of trades, activity levels were similar for those of the assigned categories. The largest differences were for the seller and the opportunistic seller categories. Seller activity as a percentage of trades decreased from 10.10 percent in the pre-event period, to 6.95 in the event period. Opportunistic trader activity increased from 33.34 percent in the pre-event period, to 40.13 percent in the event period. We also noted that the noise trader activity albeit it small in both periods did drop by half and went from 2.2 percent of trades in the pre-event period, to 1.04 percent during the event period.

The next step in this analysis will apply the relationship of trader categories to volatility normalized price changes determined in the pre-event period and apply those into the event period. This will obtain some estimates of predictive price impacts from changes in the trading activity of any single group.

Let me wind this up by thanking the advisory group for their insights and guidance.

It's been an interesting summer. It reminds of when I was a university professor and we used to do all of our research in the summer, so it's been fun.

CHAIRMAN GENSLER: This may not be yet on our website for the public. I think these documents whatever Jim just went through will be on our website related to this committee. Are there questions from the full committee either to Jim or to other members of the committee who are on the subcommittee? Susan, did you have any questions on this one?

MS. PHILLIPS: No, I'm fine. Thanks very much.

CHAIRMAN GENSLER: Greg?

MR. BERMAN: Since the latest full meeting of the Joint Advisory Committee on June 22 we've held two conference calls with members of the Pre-Trade Risk Management Subcommittee. As you know, our investigation into the events of May 6 is based on a two-pronged approach combining objective data analysis with direct insights from market participants concerning their actions and decisions on the afternoon on May 6.

In our first subcommittee call held on July 7, we discussed preliminary observations of our interviews to date with market participants. At that time we had already held a series of extensive interviews with market makers in equities and exchange traded funds from which an emerging theme had developed. We reported that most of the firms we interviewed significantly curtailed or completely halted their market-maker activities during and immediately after the rapid downturn in prices at or around 2:40 of the afternoon of May 6. Many market-making firms use a combination of automated algorithms and human traders to oversee their operations. As such, data integrity was cited by the firms as their number one concern. To protect against trading on erroneous data, every market maker implements automated stops that trigger when any questionable data is received. One way of identifying potential bad data is to look for large, rapid price moves which were unfortunately in significant abundance on May 6.

For example, the rapid decline in prices of the e-mini contract at around 2:40 triggered data integrity pauses in trading across a number of automated market- making algorithms even though these price declines were of course accurate. Rapid declines in individual securities also contributed to data integrity concerns and triggered likewise pauses.

Some market makers also reported that trading volume overwhelmed their internal systems causing latencies in their ability to monitor the markets and confirm orders. Others found delays in the market feeds themselves and questioned their own ability to track prices accurately and in real time. Many were concerned that trades were going to be broken and that they would be inadvertently left long or short -- the market. If is fair to say that most market participants felt a certain sense of real-time confusion as to what was actually occurring as many securities began to dislocate.

We further noted that since exchange traded funds are based on baskets of securities, any data issues whether real or perceived with the pricing of an individual security can trigger data integrity pauses in the trading of ETFs that hold those securities, hence there is a knock- on effect. This is one of the reasons ETFs may have been disproportionately affected on May 6.

As automated trading systems paused, some market makers withdrew completely from the markets and relied on autogenerated stub quotes to fulfill their market-maker obligations. Others fell back to manual trading but had to limit their focus to only a subset of securities and were not able to keep up with the unprecedented volumes that were ever more concentrated as yet other market makers continued to withdraw. In our interview process we were actually able to trace back a significant number of trades that were executed at stub quotes and were subsequent deemed erroneous and broken by the exchanges later that evening.

Our interviews with market makers were only a first step in a planned series of extensive interviews and conversations with a wide variety of market participants. At this time we are pleased to report that in addition to equity and ETF market makers, we have now completed many dozens of detailed interviews with option market makers, internalizers, dark pools, high-frequency traders and cross-market arbitrageurs. The noted behavior of almost all market participants remained consistent with a general theme of a rapid withdrawal of liquidity, but the specifics for each participant differ materially based on the type of participant. A detailed summary of these findings will be presented in our upcoming September report.

In our subcommittee call held on July 29, we covered three individual but related topics. These topics were chosen because they both completed and subtle in nature, have lots of technicalities that afforded lots of questions and not necessarily because we believed that they presented any problems on May 6. A number of those topics were actually discussed today, and as demonstrated there are lots of opinions on these different topics.

We began with our Division of Investment Management giving a detailed presentation about the ETF market itself. Exchange traded funds are a specific type of exchange traded product registered under the Investment Company Act of 1940. Today ETFs represent about $700 billion in assets. Like mutual funds, ETFs hold a portfolio of securities and are often designed to track a given index or sector. However, unlike mutual funds, ETFs are not individually redeemable at a net asset value but instead are traded in a secondary market alongside individual equities. Only authorized participants can directly engage in transactions with ETFs to create or redeem large blocks of ETFs known as creation units. These transactions are executed at the end of the trading day through an exchange of creation units for a predefined basket of securities or cash equivalents. In this fashion, the prices of ETFs and the prices of the securities that underlie the ETFs are linked through a detailed arbitrage relationship. Understanding how these relationships function provides the context to and some color on the behavior of ETF market participants on May 6.

We then turned to a presentation given by the New York Stock Exchange on the use of liquidity replenishment points or LRPs. LRPs essentially represent price bands within which an individual security can trade in an automated fashion. When the best bid for an individual security moves above the upper LRP limit or when the best offer moves below the lower LRP limit, fully automated executions on that side of the book are suspended and quotes on that side are marked as slow under Rule 611 of regulation of NMS. During an LRP, NYSE continues to accept orders and most LRPs are automatically resolved as additional buy or sell orders are received within the price bands. However, if an LRP does not self-resolve in a short period of time, it is converted to a floor auction and the security can be repriced outside of the band. When an LRP is in effect at NYSE, other exchanges are allowed to trade through any quotes NYSE marks as slow, though NYSE cannot trade through the protected quotes at other exchanges.

Also noted was that trading participants may cancel resting orders at any time during the LRP and reroute without any manual intervention. The presentation by NYSE closed with a variety of statistics related to LRPs throughout the last year. In our September report we will be providing more details on LRPs in the context of liquidity and market participant behavior related to the events of May 6.

We then concluded the July 29 subcommittee meeting with a presentation by our Division of Trading in Markets on what is known as the self-help exception, 206.11 of Regulation NMS, something also discussed by the panelists. This rule generally requires trading centers to implement reasonable policies and procedures to prevent trade-throughs of protected quotations at other markets. Self-help permits a trading center to bypass the protected quotations of another market that is experiencing system problems. It was noted that the declarations of self-help by one market center against another are not uncommon as system arise from time to time. As with LRPs, our September report will provide more details on self-help in the context of liquidity and market participant behavior related to the events of May 6.

Thank you.

CHAIRMAN GENSLER: Thank you, Greg. Are there questions? Jack?

MR. BRENNAN: I don't want to ask you to play psychologist, but what was it that the market makers told you that prompted them to fear broken trades as much as the clearly erroneous trade rule? Why on May 6? There are lots of times when the market is volatile and could can have that same sense. Was there some confluence of events that caused it because we hear it a lot in various aspects of this investigation.

MR. BERMAN: There is not necessarily a rule but a bit of an unwritten convention regarding rapid price moves of more than 10 percent and the exchanges can declare trades that fall over 10 percent very quickly as erroneous. This was not a matter of uncertainty in whether the trades were going to be declared erroneous, even if there were complete certainty and the market makers knew ahead of time what would be declared erroneous, as soon as you get into an area where something can be declared erroneous, a market maker does not want to be caught with half a buck so they will choose to not participate in the market at all and then risk having one side of the trade be broken.

MR. STIGLITZ: Can you explain a little bit, if at the end of the day a market were still closed or maybe this hasn't happened, how would the ETFs get priced? Is there a clear rule?

MR. BERMAN: I think I understand the question. During the day ETFs are priced like any stock. It's technical. It depends on the buy-and-sell pressure of the ETF and the negotiated prices. There is a separate mechanism by which creation and redemptions occur and that's where an ETF looks more like a mutual fund where that is tied to the NAV of underlying securities. What happens is that at the beginning of each say I believe a basket of securities is identified as what will be tradable for creation units or will be redeemable if you're going to redeem some shares. Again, individual investors don't do this. This is only authorized participants in very large blocks. Even of the markets are closed, the securities can still be exchanged and redeemed. There are circumstances where you have ETFs on international markets where the end of the days don't coincide and in that case I believe that there are lags between the time that the actual settlement happens and then the transfer occurs.

CHAIRMAN GENSLER: Joe, did that answer your question?

MR. ENGLE: I was going to say I don't know how you would take the closing price of an individual stock that was closed, but I assume it's still going to be the last trade and I would think with an ETF you would also record the end-of-the-day price as being the last trade. I'm not sure whether there is any provision that would be different from that. You're talking about if there is a circuit breaker at the end of the day?

MR. STIGLITZ: That was the question. It's not like delivering wheat where you actually deliver the wheat. I believe there is a cash settlement of some kind.

MR. ENGLE: I don't think there's any special end-of-day role that the ETF price plays, unlike a mutual fund.

MR. BERMAN: You actually can deliver the securities so that the securities go back and forth. This would only affect the case where in lieu of transferring securities you wanted to transfer the cash equivalent of those securities in which case you would need to have accurate pricing for the underlying securities.

MR. STIGLITZ: That was the question. Maybe the question when you actually do the settlement --

MR. BRENNAN: It's one of the things that keeps them close. It eliminates the discount on a traditional closed-end fund so that you can settle in cash or you can settle in securities. The preference is not to do securities because there are transaction costs but you can do it.

MR. STIGLITZ: If something is missing what do you do?

MR. BRENNAN: I don't know what happens. I'm not sure we've been through a period where the market closed at the end. I'm sure it happened with the SPDR on October 27, 1997, but I'm not how many other days the stocks markets weren't closed at the end of the day.

CHAIRMAN GENSLER: Jack isn't it correct that like the wheat market, we're going through a lot of wheat convergence issues right now in Kansas City and Chicago, exchange traded funds you can literally deliver the securities like you could deliver the wheat at least in theory in Kansas City and in practice hopefully, but you have to be one of these authorized participants and it can only be done by large blocks.

MR. BRENNAN: That's right.

CHAIRMAN GENSLER: They hopefully don't have what we have, this convergence issue, but I guess they could deliver a stock even it's not trading. Is that right, Greg?

MR. BERMAN: I believe so. The question about what happens if you want to deliver a cash equivalent and the stock was closed is more general. How do you come up with what the end price for a stock is so that there are lots of ramifications about margins on a stock. The exchanges would need to come up with an official closing price and I assume that whatever price was picked would be the one that would be relevant for the transfer of ETFs.

CHAIRMAN GENSLER: Rick, did you have a question?

MR. KETCHUM: To follow-up on the data integrity parts of your report of the minutes which again was echoed this morning, do you have a better feel with respect to exactly what those conclusions of data integrity was based on? Was it that they were seeing trades out of line with quotes or trades that would have trade-throughs or were they trying to execute trades against quotes in which they were continually unsuccessful? What were they telling you? And do you conclude that there really was significant data integrity issues across the board or whether they were spotty?

MR. BERMAN: Most of the market participants explained that they put automatic triggers into the systems to look for anything that has the potential to be erroneous data and the first thing that they put in is any rapid price move. While there were true data integrity issues that we are focusing on in various different platforms and there also internal system issues with some of the participants, it was actuate changes in prices that I believe triggered most of these alarms. As soon as you have a rapid change in price even if that's real, someone has to look at see maybe that's not correct and that then causes this huge cascade.

When lots of securities have rapid changes in prices at the same time, then folks can't necessarily respond very quickly because each one of those securities need to be looked at individually to make sure that the prices are right and if you are collectively looking at a whole bunch of securities and finding dislocations, your assumptions are either that there is something greatly wrong with the feeds themselves because we're seeing this everywhere which would cause you to pause, or the feeds are completely correct and there's something fundamental going on in which case that would cause you to pause. Regardless of whether or not the prices themselves are correct, any perception of that is going to trigger these types of pauses and we think that that was the majority of the issues.

MR. STIGLITZ: I wanted to follow-up on that. I understand why people would not want to trade with market volatility but they were using the vocabulary of erroneous data and you would have thought that there would be some mechanism for separating out these two kinds of problems. So far what you've described is that they don't really separate the two and one of the concerns is in breaking the trades again in terms of the erroneous data, erroneous trades, it's understandable why you would want to break erroneous trades, but it seems as if there's another principle which is trades that were not erroneous but at were at prices that were larger deviations from what people had thought. Again, it seems to me that those are two concepts that are really quite different concepts that are being mixed together and one would have thought that there are ways of distinguishing between these two.

MR. BERMAN: I think the clearly erroneous trades and erroneous data, you're exactly right, those are completely separate concepts. The clearly erroneous trades and the cancellation of trades was one process that the exchanges got together and we fully described in the preliminary report how that process worked and we heard lots of feedback from the panelists on how they perceived that process. Completely separate from that is trading on erroneous data, erroneous market data or trading when you think you're placing an order and you don't necessarily get the confirm back immediately so there might be systems issues. That's a completely separate path.

Sometimes I can imagine a situation where a trade is erroneously placed because of erroneous data and one might want to claim, therefore, that that trade was clearly erroneous. I don't think that's really what played into the afternoon of May 6. Those are two separate processes.

MR. RUDER: Could you describe the process for choosing the 60 percent figure for declaring those trades, which ones to be broken or not? First of all, was it across all of the trading centers? Secondly, why 60 percent? Why not 55? Why not 65? Why not 35? What was the thought process?

CHAIRMAN GENSLER: Three questions. The process, was it across all markets and then the thought that went into the number. But the first thing I see is Rick shaking his head. Greg?

MR. BERMAN: I think I might defer to Rick on those particular question.

MR. KETCHUM: I'm glad you're answering it, Greg.

MR. BERMAN: The exchanges did get together after and I know that they agreed on that. I don't know if I can comment on the details of the why and how.

MR. RUDER: You said the exchanges. What about the other markets?

MR. BERMAN: I believe that clearly

erroneous trades are within the domain of the exchanges. Rick?

MR. KETCHUM: I can try to help but trying to explain the process may be beyond me. Each of the registered exchanges or trading in a security or who had trades in the security plus FINRA which through the TRF, whatever it stands for, facility, which represents essentially the internalized trades of the firms and some of the dark trade volume, worked together to have a single decision with respect to erroneous trades. Erroneous trades are relatively predictable from the standpoint of how those decisions work, and they're set out and the SEC worked with the exchanges for some time for that when it involves a single erroneous trade or a machine-gun-like number of errors going in the same security. There is much more flexibility and difficulty working it, when instead it stems from a market reaction and then flows like a waterfall from that in large numbers of securities. In that situation there is much less guidance. There were some similar situations in September and October during the credit crisis but not quite like this.

So in those circumstances the exchanges had more flexibility and on the other less guidance in how to work in a situation where in simple terms there was no clarity that there were any error trades, in fact there weren't. What there was was a massive market panic reaction that from a market structure standpoint resulted in trades that simply couldn't be justifiable. In that situation, obviously the last one was an opinion and not otherwise, the exchanges with FINRA were -- about only breaking the most extreme trades because as been mentioned several times here, these positions don't stand alone, they are traded out of, they are part of hedge positions and part of a variety of combinations or positions so that the breaking of trades particularly when it's not terribly predictable always has consequences.

I think it's fair to say there's nothing specifically justifiable, about 60 percent is the number rather than 50 or 70, it was an effort given the unique nature of this in the absence of any evidence of a particular area of trade to only knock out trades that would appear to be by at least standard undoubtedly for persons involved with it not normal and not real and for better or worse 60 percent was the point that the exchanges landed on.

MR. RUDER: What did you do, put a bunch of pieces of paper in a hat and pick out one?

MR. KETCHUM: I wasn't there so I won't testify how it happened.

MR. STIGLITZ: Do you have any information about who the market participants whose trades were broken?

MR. BERMAN: We're still working on the exact details of that and in our upcoming report in September I think we'll go into more detail, but our initial inclination was to follow the retail path and we believe that quite a number of those trades were actually retail trades. Most of the professionals got out of the market as soon as the decline started happening so certainly the market makers began to pull out, your institutional asset managers would have pulled out, so many of those trades we believe were originally retail trades.

CHAIRMAN GENSLER: Greg, what do you think, and this is a question probably for SEC/FINRA, that the September information will show? I know the May 18 said how many trades, but you're asking who was behind them and you think that you will be able to summarize that for the public?

MR. BERMAN: Yes.

MR. RUDER: To follow-up from your comments, that seems to say that the last part of the declines down to the stub quotes was almost all due to retail trades and it was the retail traders who were really causing this dramatic decline?

MR. STIGLITZ: The question is who was getting stuck with the bad side of that trade and that could be because the way they structure their offers.

MR. RUDER: I take it that a group of stop-loss orders from the retail traders or market orders from retail traders, since you say that all the professionals were out of the market, so now we have the last part of the flash crash determined by retail trades rather than professionals?

MR. BERMAN: I don't want to get too ahead of the final results in September, but what we are seeing is that most of the professionals had exited the market but many of the retail investors, some of them, were stop-loss orders so they were triggered automatically. Others were market orders that folks put in right there and then as they saw the decline going down. It was less around they got stuck with the bad trades; they were the only ones trading at that particular time. So you went to stub quotes and again those trades were later cancelled for those obvious reasons.

MR. RUDER: Then to go one more step

with it, at what point from 60 trading up toward 40 and 30 were the professionals out and the retailers still in? Do you know that?

MR. BERMAN: I don't think we have details at that level. What I can tell you is that there were about 20,000 broken trades and if you plot the numbers of securities and the trades and what the lowest point was, you will find that it's a barbell. Quite a number of the trades fell 10, 11 to 12 percent and then a huge number fell 90 trading or more. The area between 20 percent and 90 percent is very, very sparsely populated. Either you went all the way down or you stated at the 10 percent to 12 percent level. So the difference between 50 percent, 60 percent and 55 percent, we're literally talking handfuls of trades in those regions so that we didn't see too many stocks fall 48.3 percent, either you went all the way down to a stub quote or close to it or you went down a nominal amount and then came back.

MR. BRENNAN: Were they mostly low-volume, small- lot sizes, too?

MR. BERMAN: That's something that I think we will have some cross-sectional analysis on in the final report. I think the answer is yes, but that's not necessarily saying anything about the broken trades. Most trades are small-lot sizes today.

MS. PHILLIPS: Were the broken trades spread across all markets?

MR. BERMAN: I believe in the preliminary report we have a table that illustrates for the 20,000 or so broken trades different markets had different percentages obviously. The New York Stock Exchange did not have any broken trades because of their LRPs. Others had fewer broken trades because they have collars on their orders so that they do not accept market orders, and when they accept a market order they'll actually turn that into a limit order. And others execute the market orders directly.

One thing that I'd like to note is market orders are often converted to limit orders before they get to the exchanges themselves so that there is a limit to what the exchanges can do in terms of treating a market order. If they receive a limit order for 1 penny then that's a limit order for 1 penny. The situation is actually a little more complicated than just sending the retail orders straight to the market centers themselves.

MR. STIGLITZ: Earlier we were talking about a large fraction of the broken trades being ETFs. Can you answer some of these same questions about the ETFs? Were there a lot of retail trades in the ETF that were broken?

MR. BERMAN: My comments really for all broke trades and the majority of the 60-some-odd percent, et cetera, or more of the broken trades were ETFs. So, yes, everything applies to the ETFs themselves.

CHAIRMAN GENSLER: Susan, and it was my fault that I didn't recognize you earlier, did you have either questions for this or even if you just wanted to share because there were five or six really important topics about market orders and limits, all the six or seven topics that we talked about earlier that you wanted to share with the other members of the committee?

MS. PHILLIPS: I remembered that it was ETFs that were predominantly the broken trades, but then I didn't remember about whether the futures markets had many broken trades.

CHAIRMAN GENSLER: Jim can answer that.

MR. MOSER: It did not have any broken trades.

MS. PHILLIPS: Thank you.

CHAIRMAN GENSLER: We're going to stay in our seats but I think Greg and Steve Sherrod from our side, are you going to do anything? No? That makes it easier for me because maybe it's already been done.

I wanted to thank Greg Berman and Jim with regard to what they've done. As said, in early September the staff will deliver a follow-up report so that we'll have May 18 and then we'll have this follow-up report to the Joint Advisory Committee based on the research they've conducted these last 3 months. Then once this committee has received the report, the next step would be to link the staff report back to the broader mandate of this Joint Advisory Committee. To that end we would subsequently ask this committee to prepare a document, maybe it's a shorter document than the staff or it can be as long as you want it to be, to be delivered to the Commissions ideally by early October -- we know that you're busy but we're trying to move this along -- that would address the following points, any specific recommendations that you may have regarding cross-market policies directed and related to the issues of May 6, cross-issues, or all of the six, seven to eight items discussed earlier. Chairman Schapiro had to leave but she particularly said some of those items earlier that were identified around collared market orders and so forth, the pilot program, all of the things that we talked about earlier, the pauses and the limits and so forth, those topics, but certainly included in that is the cross-market policy, circuit breakers across the markets.

Secondly, general areas of further consideration for the CFTC and SEC policies based on any broader cross- market themes. Some of cross-market themes again were talked about earlier today, cross-market themes about the fragmentation in the markets and so forth which were debated this morning and there were obviously a lot of things that were raised by members here, priority rules, and whatever the committee wants to advise us on. The two main areas are the cross-market issues related to May 6 and broader advice that you have. This committee doesn't go away with that report by the way. It goes further so that you're not off the hooks yet.

That's to aid you in the process. We're happy to have staff members of the SEC and CFTC work with the Joint Advisory Committee collect your individual thoughts on each of he points, aggregate, synthesize the information, help organize the final document. Greg Berman and Robert Cook are here from the SEC who runs the

Division of Trading and Markets. We have different names over here and maybe we need to harmonize that too. We have Jim Moser and Andre Kirilenko who you've met who are from our chief economists side, and Steve Sherrod, Rick Shilts and others from our Division of Market Oversight are all available to help out as well.

I want to turn to my fellow Commissioners, Mike Dunn, Jill Sommers and Bart Chilton, I think each have some thoughts too.

COMMISSIONER DUNN: Thank you very much, Mr. Chairman. And first and foremost, I'd really like to build upon what you were just saying in recognizing the importance of this advisory committee. To ensure that we have an orderly working marketplace, a lot falls on your shoulder and I appreciate you, Mr. Chairman and Chairman Schapiro for getting such a distinguished panel here. I've just finished reading Joe Stiglitz's book, Freefall, and I'd highly recommend it to everybody. Since we're not paying them we can plug them. I'll plug the Stern School of Business and Northwestern as well as great institutions.

One thing really struck me today and that was hearing from the panel members that we had, not the advisory committee, who indicated that what happened on May 6 can happen again. In fact, they expect it to happen again.

Mr. Chairman you made an analogy of the terrible auto accident that I was involved in which happened in a very quick time and what happened to stocks at Accenture, but there was a big difference. In my case, somebody broke a rule. Somebody went through a stop sign. We don't have a rule here that was broken that caused this. What we're looking for in this advisory committee are the rules of the road to ensure that these accidents don't happen in the future and certainly don't happen in the magnitude that they happened.

I want to build on something that the Chairman did when he started and that was talking about the Frank- Dodd bill. It has mandated that the CFTC and SEC work together. The two Chairs have started these meetings that have been mandated, staffs are going through those, and I hope, Mr. Chairman, that we would follow-up in a similar format that we have here, where we have an open public meeting where everyone is privy to the types of recommendations that we were mandated to take a look at and what our staffs are going to be recommending to us. To that extent, there are regulatory bodies that I still feel we ought to be working with as well to ensure that we get that out there.

I'd really like to thank the staffs of both the CFTC and the SEC for the work they've done for us as the Commission, but also for this advisory committee. Since we're not paying you we don't expect you to shoulder all the burden of that and we stay in the agricultural area, work them like a rented mule. Get as much out of them as you can.

CHAIRMAN GENSLER: I don't know what to do with that last statement. The one thing I want to say is that Commissioner Dunn is absolutely

right that the SEC and CFTC are working tirelessly together and we are on the Dodd- Frank bill going to have a number of staff roundtables. I can't remember how these are called. Some of them may even start later this month, and between the SEC and CFTC I think they've identified four or five topics. They will be open to the public, I don't think we'll have as many cameras here, but they'll go through a number of topics related to data, related I think to governance, related possibly to these new swap execution facilities and so forth, and will jointly hear from the public on very critical issues and the SEC Commissioners and the CFTC Commissioners will be allowed to go, but staff is going to run them which saves Mary and me from running these things too probably.
Commissioner Sommers?

COMMISSIONER SOMMERS: Thank you, Mr. Chairman. I think following-up on all of that, I want to say how much I appreciate the panelists being here today and all of the committee members. It's extremely important for us to look at this coordination across markets, the equity markets, the security options and the futures and how to appropriately impose the two rules that we have on all of those markets like circuit breakers. I think that as the markets have evolved and products like ETFs and equity index futures have increased the interconnectedness of our markets and the markets that we each regulate have also increased, yet we have completely different market structures and completely different rules on either side.

Some of the issues that we talked about, high- frequency trading, collocation and general structure issues are before both of our agencies so I can't really stress enough how forums like this to increase the dialogue and cooperation between the two agencies is extremely helpful to me and I think to us all as regulators. Thank you all for being here.

CHAIRMAN GENSLER: Commissioner Chilton? We're bound to get sound bite here I know.

COMMISSIONER CHILTON: Thanks, Mr.

Chairman, and thanks to everybody's staffs in particular. I know you guys have already been working like rented rules, and thanks to the advisory committee.

People are going to say it's going to happen again like Commissioner Dunn said and the answer it is could. I think it's less likely that it would today with some of the changes that are being incorporated, and as we move further down the road it'll be even less likely, but you can't give certitudes.

As we were talking about all of these issues and it was fascinating all of the suggestions that the panel have, people come up with sorts of phrases about what happened on May 6, they say it was a perfect storm or it was a collection of culprits, and I think sometimes it's too easy for us to rely on that when we don't know what specifically it was. It was a bunch of things. I'm not saying that it wasn't a bunch of things, but by the same token, I think that the panel and the staff should still be looking for a smoking gun. One of the areas, and I'm not saying that this is a smoking gun, that was not discussed a whole lot today is this gap between the consolidated tape and the premium tape on the New York Stock Exchange. At times there was more than a 20-second delay. What I think we need to do is make sure that there wasn't any price trading, these algorithmic trades that could have gone in and simultaneously bought on the real-time feed, the real- time feed from the New York Stock Exchange, and then sold on the delayed feed, the consolidated feed, right away hundreds of time and taken just a minute advantage individually but collectively it could have been a larger amount.

When I started thinking about this we have a Technology Advisory Committee that Commissioner O'Malia convened a couple of weeks ago and I asked these sorts of questions then to make sure that I wasn't a conspiratorial person thinking this is crazy, and four of the folks who are on this panel, eminent experts, thought I was crazy to ask. Of course that could be going on.

So I don't feel as nutty about asking the question and maybe there is nothing to this Greg or Jim, but that gap of 20 seconds might not be a lot in our lifetimes, it might not be a lot for a lot of folks, in a basketball game it could be something, in these markets it could be huge. So I hope that we make sure that these algorithmic price pirates aren't seeking false prophets, that they aren't trying to go after something they shouldn't have gone after.

Thank you again for everything.

CHAIRMAN GENSLER: Thank you. Rick or Greg? Joe?

MR. STIGLITZ: Two questions. One is we've been talking about the U.S. market. I gather that there have been similar spikes in a couple of other markets. Has your staff looked at any other markets where anomalies of this kind have occurred, that because we've been talking about different rules and the impact, it might be of some interest to see whether they've gone through a similar kind of exercise?

MR. BERMAN: We are aware of the different structures that exist in different international jurisdictions and other types of markets. There is something that is unique around the U.S. equity market in that it is fragmented. There are different market centers, there are at least 9 to 12 depending on how you count the ones that are visible, and as we've heard from a number of panelists, people like to use the 40 as the total number of venues that are actually out there. Forty times 40 is 1,600 different combinations. So while there are certainly things that we can learn from observing these types of patterns in other markets, a lot of this is within the U.S. That we'll have to study.

MR. STIGLITZ: The particular question I was concerned with is if there are these kinds of spikes occurring even without this complexity, ours may be more prone because of the complexity, but it would remind us that even without that we have something to sorry about.

MR. BERMAN: Agree.

MR. MOSER: We're also looking at as I mentioned the order book activity on other days. Two of the days as I recall were in the third quarter of 2008 when there were sharp breaks as well, so what we want to do is analyze and see in what ways was May 6 different than those sharp breaks and how did the order book evolve on those days.

MR. STIGLITZ: I think Australia had a big spike, it was an upper one, and in their case it was a wrong order. Somebody pushed the wrong button. The reason I mention that is it shows the fragility of the system to a mistake, so that's at least one thing that one wants to worry about and if that's the case then obviously with all the kinds of fragmentation that we have, the problems could be much worse.

MR. MOSER: We have some outstanding research from other error trades than in the United States. There aren't too many to analyze, but what we've found is that in general the market does come back very quickly recognizing that it is an error and it just bypasses it. I'd be glad to send the advisory group that paper if you'd like.

MR. STIGLITZ: Just one more question I wanted to ask, and that to do with the Dodd-Frank bill. Are there particular regulatory issues that they raise that you think interact with what we should be doing?

CHAIRMAN GENSLER: I can't speak for the SEC, and as you know the CFTC largely swims in the lane of derivatives, foreign-exchange derivatives which we call futures now, and these newly regulated over-the-counter derivatives. I do think market structure issues here are going to play a tremendous role because, as you know, Congress enacted a bill that says all standardized derivatives that can be clearing platform have to come to a clearing house. And there are various estimates, but that seems that would be a majority of the over-the-counter derivatives marketplace by far, and that those have to then be exposed to transparent trading venues and these transparent trading venues can be swap execution facilities.

So from the world of the futures market, which, as people have pointed out, has been less fragmented than the securities market, this over-the-counter derivatives marketplace may will have multiple trading platforms. In fact, there could be dozens. The bill actually fosters competition among these trading platforms so that I think it will be helpful as you're thinking about fragmentation and market structure issues.

Congress has dealt with the broad policy. There will be swap execution facilities that are supposed to be open to multiple participants making bids and offers to multiple participants. It's what people call many to many. There is pretrade transparency. But how they all will work in combination to enhance market liquidity, enhance transparency, enhance efficiency of markets, which is part of the goal of the statute, I think that will be helpful to get your advice on. Not that you might not have advice on clearing houses and other things, but I think it's probably more around the trading venues that very similar types of issues might arise.

MR. STIGLITZ: One in particular was raised this morning, which is the bill encourages as you say trading on exchanges and clearing houses but also allows for over-the- counter. And in some of the issues we've talking about, dark pools versus transparency, raise the concern that how you organize the transparent part can affect the magnitude of the trading that goes into the dark pools so it seems to me that that's one of the things --

CHAIRMAN GENSLER: Absolutely. I think Congress addressed part of that in that they said even on the bilateral transactions, those that are not on the trading, have to be reported in a real-time basis as well, so there's post-trade transparency we have to sort through the SEC and we have to sort through how to do that. In terms of what's on the swap execution facilities, Congress also addressed it by saying it's multiparty to multiparty. Some of the dark pools currently in the equity markets, the darkest of them, are proprietary platforms if I understand and it appears at least to this reader, I'm can't speak for my fellow Commissioners, that Congress addressed that and said, no, it has to be multiparty to multiparty. It might be addressed right there in the statute in a sense, but those will be subject to interpretation obviously.

MR. ENGLE: I'm wondering what we could do that would be useful, and perhaps maybe the question is what's actually feasible in terms of the various incentives for public liquidity display that were talked about today, things like treating cancellations differently from just having them freely available, changing priorities, changing access fees or rebate structures and so forth which are to some extent under regulatory supervision and to some extent are exchange set. What's the scope that we can think about here?

CHAIRMAN GENSLER: I would hope that you would help the two Commissions on things that are within our authority and jurisdiction. Though you could take up I think it was one of the earlier panelist's thoughts where they had a recommendation about the tax situation, the SEC and the CFTC don't have those authorities. I think what would be best if you recommended things that are either within our authority or if you think there needs to be a change in law related to our specific authorities.

MR. ENGLE: When I used the word tax I guess I meant charge for cancellations.

CHAIRMAN GENSLER: I think the wonderful thing about advisory committees, and this one is an esteemed group, is that we're not looking to limit you. If you have a good recommendation and there's a consensus we want to hear that. The immediate thing are the events of May 6 and the cross-market issues there and then obviously some general market structure issues, and since the panel doesn't go away we're hopeful that there will be lots of other advice along the way, too. What's feasible is also what is doable in a timely way as the first report from the eight advisers. Susan?

MS. PHILLIPS: I was wondering after the September report and if there are recommendations that come out of that relating to circuit breakers or different types of orders, some of the market rules of trading kind of stuff, what other kinds of issues are the two Commissions interested in having the committee look at?

CHAIRMAN GENSLER: You're asking what might be the agenda for this advisory committee beyond this. That's an excellent question, but why don't you allow Chairman Schapiro and myself working with our fellow Commissioners to come back to you as we sort through this first. I think I understood your question but maybe I didn't.

MS. PHILLIPS: Yes.

CHAIRMAN GENSLER: Commissioner Dunn?

COMMISSIONER DUNN: It would be good to hear from the advisory group what types of things they think they ought to look at. That would be very helpful.

CHAIRMAN GENSLER: This group was set up immediately after the May 6 event and Chairman

Schapiro have been talking about it since the presidential transition, then Acting Chairman Dunn had suggested we have this too, and we worked with Congress to get this authorized. Believe it or not we had to have this committee authorized because we couldn't spend money on behalf of the SEC and they couldn't spend money on behalf of us and you had to change an appropriations law to do a joint advisory committee. It's a great country. We did that with the support of many members of Congress, so we really do look for this to be a committee that goes on to talk about emerging risks, that one of the things that came out of the crisis of 2008 is to have an outside group of experts advising these two market regulators. It brings some harmony among them, but beyond the harmony is to say what are the emerging issues? What is the next thing that's on the horizon? You got commissioned into service with the specific task of May 6 but it's much broader than that. It's what do you see on the horizon and what other things do you think the nation's two market regulators should be thinking about, but that's past October.

MR. STIGLITZ: May I give a comment related to the discussion we had earlier this morning in which it was very clear that there have been very big changes in the structure and the performance of these markets in very recent years which affect both the liquidity of the markets and incentives for various market participants to gather information such as previously when you talked about the incentives for those who are doing fundamental research, their ability to extract returns for those investments. In some ways it seems to me that one of the questions is not only the question of stability but also even the efficiency of these markets with respect to the issues these fundamental roles that these markets play in making the real economy work better. I think that should be an important focus.

CHAIRMAN GENSLER: Maureen?

MS. O'HARA: The SEC's concept release

is also is all about that and so I think to some extent we want to make sure that we're not duplicating what they're doing but actually moving beyond that as well. Certainly those issues are there and the SEC has that and that's been out now for 3 months or 4 months, something like that. So hopefully we'll be able to add to that as well.

MR. RUDER: Could I make a comment about staffing? We don't have an identifiable staff that reports to us. I presume that the SEC and CFTC staffs are available to us. I would hope that we would receive from the joint staffs a summary of the various suggestions that have been made so that we wouldn't be starting from scratch in September when we receive a document from you.

CHAIRMAN GENSLER: David, I think that's an excellent suggestion. Technically speaking now, you don't need to speak, but Jim and Tim, aren't you officially the committee's staff? Jim Burns and Tim Karpoff just got outed. Can you follow-up with what are the things that outside market experts or the panelists have suggested?

That's what you're saying?

MR. RUDER: Yes, so that we can consider those in the timeframe between now and the time that we receive the report so that the report then has some relevance for us in terms of the kinds of suggestions we might make, and that would give us also an opportunity collectively to make other suggestions that any of us might have. I would hope that we could have some procedure for circulating papers without having a public meeting about what we might think.

CHAIRMAN GENSLER: All in compliance with the Federal Advisory Committee Act.

MR. RUDER: Yes, I understand that. You've given over the past some documents that have been helpful, some sets of testimony, but I would also urge the staff to give to us if it's available to them any written papers and documents that may be helpful to us in making decisions and evaluating suggestions. This is as you know extremely difficult subject matter and very technical and we need all the help we can get.

CHAIRMAN GENSLER: Those are both excellent suggestions. This is the administrative side, we need to discuss and approve the minutes of the June 22 meeting of the committee. Let me ask whether there is any discussion of the minutes. They're in your binders. Do I hear a motion?

MR. KETCHUM: So moved.

CHAIRMAN GENSLER: Do I hear a second?

MR. ENGLE: Second.

CHAIRMAN GENSLER: All in favor?

GROUP: Aye.

CHAIRMAN GENSLER: Any opposed? Looks like the ayes have it.

I want to thank everybody. I want to thank my fellow Commissioners, all the panelists and the committee members. I think this has been a terrific dialogue today. So I would ask is there any other committee business?

Not hearing of any other committee business, I can declare this meeting adjourned. I might have to entertain a motion. It's a FACA committee.

MR. KETCHUM: So moved.

CHAIRMAN GENSLER: Is there a second?

MR. ENGLE: Second.

CHAIRMAN GENSLER: All in favor?

GROUP: Aye.

CHAIRMAN GENSLER: The committee is adjourned.

(Whereupon, at 12:36 p.m., the PROCEEDINGS were adjourned.)

* * * * *

CERTIFICATE OF NOTARY PUBLIC

I, Carleton J. Anderson, III do hereby certify that the forgoing electronic file when originally transmitted was reduced to text at my direction; that said transcript is a true record of the proceedings therein referenced; that I am neither counsel for, related to, nor employed by any of the parties to the action in which these proceedings were taken; and, furthermore, that I am neither a relative or employee of any attorney or counsel employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

/s/Carleton J. Anderson, III

Notary Public in and for the
Commonwealth of Virginia
Commission No. 351998
Expires: November 30, 2012