JOINT CFTC-SEC ADVISORY COMMITTEE ON EMERGING REGULATORY ISSUES

Minutes of May 24, 2010 Meeting[1]

The Joint CFTC-SEC Advisory Committee on Emerging Regulatory Issues convened its first meeting at 9:00 a.m. on Monday, May 24, 2010, in the Auditorium, Room L-002, at the SEC's headquarters in Washington, DC. The meeting, which was open to the public, was held to discuss the preliminary findings of the staffs of the CFTC and SEC related to the market events of May 6, 2010. The agenda for the meeting included: (i) opening remarks; (ii) the introduction of Committee members; (iii) discussion of Committee agenda and organization; (iv) discussion of the joint staff report of the CFTC and SEC on the market events of May 6, 2010; and (v) discussion of next steps and closing comments. The meeting proceeded according to a presentation of slides ("Presentation Slides" attached as Exhibit A hereto) that was provided to the attendees. The meeting concluded at approximately noon.

Advisory Committee Members:

SEC Chairman Mary Schapiro, Advisory Committee Co-Chair
CFTC Chairman Gary Gensler, Advisory Committee Co-Chair
Brooksley Born
Jack Brennan
Robert Engle*
Richard Ketchum
Maureen O'Hara*
Susan Phillips
David Ruder**
Joseph Stiglitz*

* Present by telephone
** Not present

Co-Designated Federal Officers:

James Burns	Counsel to SEC Chairman Schapiro
Timothy Karpoff	Counsel to CFTC Chairman Gensler

Commissioners of the SEC and CFTC in attendance:

<u>From the SEC</u>:
Commissioner Luis Aguilar
Commissioner Kathleen Casey

1 A Webcast of the meeting and copies of materials distributed at the meeting are available at http://www.sec.gov/spotlight/sec-cftcjointcommittee.shtml.

Commissioner Troy Paredes
Commissioner Elisse Walter

From the CFTC:
Commissioner Bart Chilton
Commissioner Michael Dunn
Commissioner Scott O'Malia
Commissioner Jill Sommers

SEC and CFTC Staff Presenters:

From the SEC:

Robert Cook	Director, Division of Trading and Markets
David Shillman	Associate Director, Division of Trading and Markets
Gregg Berman	Co-Deputy Director, Division of Risk, Strategy, and Financial Innovation
Jonathan Sokobin	Co-Deputy Director, Division of Risk, Strategy, and Financial Innovation

From the CFTC:

Steve Sherrod	Acting Director of Surveillance, Division of Market Oversight
Richard Shilts	Director, Division of Market Oversight
Andrei Kirilenko	Senior Financial Economist

SEC and CFTC Staff in Attendance:

From the SEC:

James Brigagliano	Deputy Director, Division of Trading and Markets
David Hsu	Senior Special Counsel, Division of Trading and Markets
Ronesha Butler	Special Counsel, Division of Trading and Markets
Edward Cho	Special Counsel, Division of Trading and Markets

From the CFTC:

Cyrus Amir-Mokri	Senior Counsel to Chairman Gensler

I. OPENING REMARKS AND INTRODUCTION OF COMMITTEE MEMBERS

Chairman Schapiro opened the meeting by welcoming the members of the Advisory Committee, Commissioners and staff of the SEC and CFTC, and guests in attendance for the first meeting of the Joint CFTC-SEC Advisory Committee on Emerging Regulatory Issues. Chairman Gensler also offered his welcome and thanks to those in attendance and, after acknowledging his fellow CFTC Commissioners, provided opening remarks. Chairman Schapiro also acknowledged her fellow SEC Commissioners and, together with Chairman Gensler, introduced each of the members of the Advisory Committee. Chairman Schapiro next provided her opening remarks, after which she turned the meeting over to the staffs of the CFTC and SEC to present their preliminary findings regarding the market events of May 6, 2010.

II. PRESENTATION BY SEC AND CFTC STAFF ON PRELIMINARY FINDINGS REGARDING THE MARKET EVENTS OF MAY 6, 2010

A. SEC Staff Presentation of Preliminary Findings

Introductory Remarks. Robert Cook and Steve Sherrod introduced their fellow presenters from the SEC and the CFTC. Mr. Cook provided an overview of the meeting's agenda and noted that: (a) the investigation into the events of May 6 is still ongoing, and (b) the joint report was only able to reflect preliminary findings, given the enormity of data that still needs to be compiled and reviewed from multiple sources. As a result, the findings presented at the meeting are subject to change as new data is incorporated into the analysis.

General Market Context. Mr. Sherrod began the presentation by describing the general context of the May 6 trading day, including the global political and economic backdrop that created uncertainty in the financial markets. For example, there was downward pressure on the Euro, an increase in the cost of credit default swap protection for Greek sovereign debt, a broad decline in the equities markets, a rise in expected volatility as captured by the rise in the CBOE S&P 500 volatility index (the "VIX"), and a fall in the 10-year Treasury yield. Continued pressure in the market occurred in the afternoon. Between 2 to 2:30 p.m., there was an increase in liquidity replenishment points (LRPs) or "go slow" periods on the NYSE, declarations of self help by certain exchanges, and a dislocation of liquidity in the E-Mini S&P 500 Futures (observing an increase in sell orders in the E-Mini). The existing market decline accelerated and implied volatility increased. After bottoming, the equity and equity index futures markets began to rebound. **[Presentation Slides 3-7]**

Overview of the Securities Markets on May 6. Mr. Cook then began to present the preliminary findings of the joint report with respect to the securities markets, noting two distinct themes at the outset: (a) a precipitous drop in stock indices (followed by a rapid recovery); and (b) extreme price fluctuations in certain select securities. Mr. Cook then described the general timeline of events that occurred during the May 6 trading day and, in particular, from 2 to 3 p.m. when the equity markets experienced significant price volatility. Mr. Cook noted that understanding the rapid decline and recovery in prices is crucial to the analysis, and one of the key areas of focus involves the linkage between the cash equities and futures markets, as the values of the major stock indices closely correlated with the values of the E-Mini. Analyzing the data revealed that many securities declined in value past 2:40 p.m. at an accelerated pace, and certain securities traded close to zero, possibly due to executions against "stub quotes." Almost 70% of the trades between 2:40 p.m. and 3:00 p.m. were executed at a loss compared to their 2:40 p.m. price, and though most of the trades during this time were executed within 10% of their 2:40 p.m. prices, approximately 2% were executed at losses of 10% to 100% of their 2:40 p.m. prices. **[Presentation Slides 10-15]**

Discussion of Examples of Select Securities. Gregg Berman then began to discuss the behavior of a few select stocks during the afternoon of May 6, noting for Stock A an observable "drying up" of liquidity, a collapse in bid prices, and occurrences of possible trade throughs (which require further investigation), and for Stock B, a more dramatic collapse in bid prices to close to zero in a 5-second period with trades executed at those prices. Mr. Berman noted that there clearly were counterparties, or at least systems, that were willing to buy and sell Stock B at a penny, and it appeared that the market stayed at the stub quote price for 10 seconds or more with trades executed at various levels, including near zero. In both cases, the recovery in the bids rose as fast as the decline. Mr. Cook emphasized that these are just two examples of experiences of two particular stocks; there are many different stories that evidence similar or different behaviors with respect to different stocks. **[Presentation Slides 16-17]**

Broken Trades. Mr. Cook then began to discuss the broken stock trades that resulted from the exchanges cancelling certain trades pursuant to their "clearly erroneous execution" rules. The broken trades on May 6 were determined by the exchanges to be those trades that were executed at prices either 60% higher or 60% lower than their 2:40 p.m. prices. Most broken trades occurred between 2:45 and 2:55 p.m., and a significant percentage of the broken trades occurred as a result of stub quote executions (i.e., trades at prices in the penny range on the low side, or in the $100,000 range on the high side). In addition, trades marked as short sales appeared to represent an important fraction of broken trades executed at stub-quote prices. Mr. Cook noted that the data received by the staff regarding short sales has not been verified and that these trades will be more closely studied. Mr. Cook also noted that almost 70% of securities with broken trades were ETFs, both large and small. **[Presentation Slides 19-22]**

Exchange-Traded Funds. Jonathan Sokobin next discussed the timeline of events as they occurred with respect to ETFs. 25% of ETFs experienced a price decline of more than 50% from their 2 p.m. market price, and a significant percentage of ETFs experienced price declines after 2:40 p.m. of almost 100% as compared to their May 5 closing prices. In addition, there were approximately 227 broken trades in ETFs. Although there was no distinguishable pattern with respect to the various ETFs based on asset class, there appears to be some weighting toward ETFs that invest in large cap stocks. Mr. Sokobin stated that this was subject to further investigation. Mr. Sokobin concluded his presentation by describing the timeline of trading for a sample ETF designed to track the total stock market and comparing specific spikes in the ETF spreads, bids, and prices with the timeline of the underlying stock market. Mr. Cook added that this sample was just one example of an ETF and that other ETFs exhibited different patterns of behavior during this trading day. **[Presentation Slides 24-26]**

Liquidity Issues. At this point, David Shillman began his presentation on liquidity issues that arose during the market events of May 6. Mr. Shillman first stated that the joint report looks into whether certain practices that have developed in the national market system contributed to or exacerbated the market events of May 6 and generally described two aspects of the U.S. equity markets for purposes of this analysis: (a) liquidity replenishment points or LRPs imposed by NYSE to moderate price volatility on NYSE when prices begin to trade materially away from the last sale (generally between 1-3%); and (b) the self-help remedy under Regulation NMS pursuant to which a market can declare self help and trade through another market when such market experiences a trading disruption. Mr. Shillman noted that the SEC is looking into whether the unavailability of any buy orders on NYSE as a result of an LRP exacerbated the overall decline and volatility in market prices. In addition, Mr. Shillman noted that the SEC is looking into whether the self-help declarations and the resultant inaccessibility of the liquidity on NYSE Arca may have exacerbated the price declines that afternoon. Mr. Cook added that there seem to be conflicting reports of self-help claims in the options markets, and the SEC will be looking at this. **[Presentation Slides 28-29]**

Trading Volume and Liquidity Providers. Mr. Cook also added that May 6 represented the second highest daily volume of trading for NYSE-listed stocks and the highest daily volume of trading for NASDAQ-listed stocks across all trading venues. He noted that the enormous volume of trades adds to the complexity of piecing together what happened. Mr. Sokobin next discussed whether electronic liquidity providers (such as high frequency traders), which have become a dominant type of liquidity provider in the equities markets, pulled back during the relevant timeframe. The data received indicates that some of these liquidity providers pulled back, provided roughly the same percentage of liquidity even when trading volume spiked, or ceased providing liquidity altogether. Mr. Cook noted that the data must be very carefully interpreted and SEC staff intends to investigate this phenomenon further. **[Presentation Slides 30-31]**

B. <u>CFTC Staff Presentation of Preliminary Findings</u>

Mr. Sherrod commenced his discussion of the CFTC's preliminary analysis and findings with respect to the futures markets on May 6, first noting that the CFTC did not find any evidence of cyber attacks, significant system malfunctions, or "fat finger" trades. Rather, the preliminary findings suggest that a confluence of market factors and economic developments contributed and/or exacerbated the market events on that day.

Analysis of E-Mini S&P Futures Trading on May 6. Mr. Sherrod stated that the E-Mini S&P Futures (June 2010 contracts), which experienced higher than normal trade volume and price volatility on May 6, represented 78.2% of total trading volume in the 12 most actively traded index futures on that day. The CFTC observed an imbalance of orders on the sell side that resulted in a decline in prices. In addition, the depth of the order book declined as prices fell, and the bottom of the price decline coincided with the CME Globex Stop Logic event, which instituted a temporary reserve state in orders that held execution of transactions for five seconds. Mr. Sherrod stated that the hold allowed orders to flow into the market and, upon exiting the stop logic reserve state, the E-Mini began to recover. Mr. Sherrod stated that, consistent with the broad market trends on May 6, trading volume in the E-Mini was about 2.6 times greater than the average daily trading volume over the prior month (the fifth highest daily volume over the past five years). The E-Mini experienced significantly higher trading volume during certain periods of the day. **[Presentation Slides 33-36]**

Role of Liquidity. Mr. Sherrod continued his discussion by explaining that the data suggests that liquidity may have "dropped off." While market liquidity cannot be directly observed, CFTC staff reviewed multiple indicators of liquidity, including: (a) trade volume; (b) bid/offer spreads; and (c) depth of the order book. In the case of the E-Mini, these contracts experienced high and erratic trade volume (with simultaneous declines in prices), a widening of the bid/offer spreads, and an imbalance and decrease in market depth during the relevant time period, all of which collectively suggesting a dislocation of liquidity in the trading of such futures. **[Presentation Slides 37-41]**

CME Globex Stop Logic Functionality. Mr. Sherrod next discussed the CME Globex Stop Logic Functionality that is designed to stop a cascade of stop loss orders. The functionality imposed market pauses to prevent a cascade of greater than 6 points (the "no bust" range). In the case of the E-Mini, the reserve state paused executions for five seconds, during which time orders were permitted to continue to flow into the exchange. The reserve state is released if an execution occurs within 6 points (otherwise, the reserve state is held for another 5 seconds). Trading in the E-Mini resumed trading after a single reserve state pause of 5 seconds. **[Presentation Slide 42]**

Large Trader Analysis. Andrei Kirilenko then discussed the CFTC's preliminary analysis into the account-by-account trading activity to identify particular liquidity patterns in the way accounts were traded. Specifically, the CFTC looked at the activity in the 10 largest accounts and found that the net sell activity far exceeded the net buy activity during the relevant time periods, both before and after the CME Globex Stop Logic Functionality was triggered. In addition, the largest net seller in the E-Mini only entered orders to sell, which represented 9% of overall trade volume. Mr. Kirilenko explained that, based on the CFTC's analysis of groups of liquidity providers and takers, data revealed a decline in the participation of liquidity providers. **[Presentation Slides 43-45]**

Summary of Findings. Richard Shilts next discussed the CFTC's summary of preliminary findings. Economic events and market developments on May 6 showed a move by investors away from risky assets. This translated into a decline in prices that coincided with higher trading volume. Around 2:30 p.m., analysis shows that there may have been a liquidity dislocation in the E-Mini market, in which there resulted an imbalance of sell and buy orders and a reduction in depth of order book for these futures. Mr. Shilts then reiterated that the triggering of the CME Globex Stop Logic Functionality caused a reserve state pause in executions which ultimately caused a return to a balanced order book and tighter bid/offer spread. **[Presentation Slide 46]**

C. <u>Advisory Committee Q&A</u>

Chairman Schapiro then opened the meeting for questions from the Advisory Committee members.

1. <u>Richard Ketchum</u>:

(a) Mr. Ketchum stated that it would be interesting to see across all stocks how many trades were outside the bid/ask spread, particularly for those for which self help was exercised, to determine if the declaration of self help rendered the NYSE Arca book inaccessible. He stated that if the declaration of self help rendered the NYSE Arca book inaccessible, one would expect to see trade-throughs.

(b) Mr. Ketchum suggested looking at a few stocks that had high volatility and to see which of those were traded through as a result of the LRPs. He also suggested looking at the breadth and dimension of the trades that occurred outside of the NYSE price indications during the LRPs.

(c) Mr. Ketchum suggested looking not only at how much liquidity was provided, but also at how much liquidity was provided within a certain percentage (perhaps 20%) of the price at which the stock was trading previously, to help determine the degree to which certain market makers were providing market continuity during that time.

(c) Mr. Ketchum suggested that it might be helpful to look, on a stock-by-stock basis and for the E-Mini, at the precise moments when a stock or the E-Mini was declining and when a stock or the E-Mini was rebounding to see whether the liquidity providers/takers were providing/taking during those periods.

2. Jack Brennan:

(a) Mr. Brennan asked whether staff had identified any statistical or anecdotal evidence that market participants were unable or unwilling to participate in creations or redemptions of ETFs when the bid side of the market collapsed.

Mr. Sokobin responded by stating that there were no particular issues with end-of-day pricing and, based on a preliminary and limited analysis, no differences in the way creations/redemptions performed on May 6 as compared to any other trading day. Mr. Sokobin also stated, in response to a follow-up question by Mr. Gensler, that creations/redemptions are only done at the end of the trading day.

(b) Mr. Brennan asked how important the futures and hedging are to the creation of ETFs.

Mr. Cook stated that the SEC needs to look more closely at the linkages between the trading in the underlying stocks and the trading of the ETF, particularly in light of ETF market makers or other investors hedging their portfolios by entering into transactions in underlying stocks. A difficulty in this ability to hedge might be a factor in the breakdown in the prices of the ETFs.

(c) Mr. Brennan asked staff to explain the trade throughs and how prices were affected by LRPs and self-help declarations.

Mr. Shillman described the NYSE LRP pause process and how other exchanges could continue to trade a stock during this LRP. Mr. Shillman also explained that there is no opportunity to arbitrage any price differences in a stock trading on NYSE and another venue because NYSE would temporarily turn off trading in the stock for a brief period. Mr. Cook added that a question to ask is to what extent did the LRP correlate to price declines or broken trades in a particular security that day. Mr. Cook and Mr. Shillman also stated that, in response to a follow-up question from Chairman Gensler on self help, it would be useful to know how much liquidity was trapped at NYSE Arca when self-help was declared by other exchanges and how many market participants did not have access to NYSE Arca's book as a result of the self-help declaration.

3. Susan Phillips:

(a) Dr. Phillips inquired about the theory behind stub quotes.

Mr. Cook responded by stating that stub quotes are a vestige of a market in which market makers had a more formal role in providing liquidity. Chairman Schapiro added that stub quotes arose from a market maker's obligation to continually make a two-sided market and that such stub quotes (place holders) are practically meaningless because they are designed to never be executed.

(b) Dr. Phillips asked if trading would have stopped if stub quotes did not exist.

Mr. Cook answered that if quotes had not existed he believed trading would not have occurred.

(c) Dr. Phillips asked if there were intraday and/or end-of-day margin calls, if the money moved as it was supposed to, and if trades settled correctly.

Mr. Sherrod first responded by stating that there were no difficulties in the clearing and end-of-day payment obligations in the futures markets that day. Mr. Cook answered that, with respect to securities, according to the preliminary analysis, there were no significant issues at the clearing agencies, except for possible case-by-case retail investor/customer margin call issues.

(d) Dr. Phillips asked if any of the firms experienced any capital issues, given the sizeable prices, trade volume, and amount of money that moved on May 6.

Mr. Cook stated that the SEC focused on the largest firms and so far did not identify any firms having problems, but the SEC will be looking at the smaller firms as well.

(e) Dr. Phillips asked how the indexes were affected if there was a slowdown in trading in stocks. Dr. Phillips also asked if a slowdown caused problems throughout other markets.

Mr. Cook stated that trading in the stocks did not halt, but continued to occur, and each index would have its own set of rules on calculating values.

(f) Dr. Phillips asked if both agencies were satisfied that the markets were fully integrated across both the derivatives and the underlying securities markets during the relevant time period on May 6.

Mr. Sherrod responded by saying that this is an area that the CFTC wants to carefully review with the SEC. At this point, the agencies have not completed this side-by-side analysis. Mr. Cook then referred to the chart that indicated that the movements in prices of the S&P 500 stocks and the E-Mini declined and rose in tandem, suggesting that there was a correlation between the cash and related derivatives markets, reinforcing the idea that such markets are interrelated and linked, and highlighting the possible systemic concerns as a result of this integration. Because these markets work closely together, Mr. Cook acknowledged that the agencies need to think about an integrated and coordinated regulatory approach to minimize systemic risk.

4. <u>Brooksley Born</u>:

(a) Ms. Born asked staff to discuss the broken trades, noting that there were many broken trades. Ms. Born asked if the broken trades were mostly executed against stub quotes. She also asked if there have been complaints about the cancellation of these trades.

Mr. Cook stated that many of the broken trades were indeed executed against stub quotes. He also stated that broken trades are not uncommon because markets do experience pricing irregularities from time to time. The process is designed to protect parties from a situation in which a trade occurs at a price at which no one would have reasonably expected to trade. For the May 6 events, the exchanges convened a conference call to discuss the threshold price for breaking trades. The process of breaking trades has "worked" before May 6 because the process is designed to focus on trades on a stock-by-stock basis and to address only those that were peculiar or aberrant. Mr. Shillman added that the stock-by-stock circuit breaker proposals, once they are implemented, should reduce the number of broken trades in the future.

(b) Ms. Born asked how long NASDAQ's self-help declaration lasted and about the mechanism for revoking the declaration.

Mr. Shillman explained that when one market detects that another market is not responding, the detecting market must give notice to the other market that it will declare self help to allow it to route away from the unresponsive market. Once this market no longer experiences any problems, routing to this market is supposed to resume. When asked about what happened on May 6, Mr. Shillman stated that four markets declared self help against NYSE Arca (although there is some disagreement about the legitimacy of these declarations) during the relevant time period, but around 3:00 p.m., these exchanges resumed routing to NYSE Arca. Mr. Cook added that self help is not uncommon, and Mr. Shillman confirmed that self help occurs about once a week on average.

(c) Ms. Born then asked whether staff is looking at whether the use of market quotes, stop loss quotes, and stub quotes are causative factors. She stated that limit orders presumably would not have caused the drop in prices and asked if staff is considering requiring orders to be limit orders.

Mr. Cook stated that the SEC is looking into this, although preliminarily the SEC is viewing these types of orders not as causative, but as factors that exacerbated the steep decline in prices. There are several competing regulatory issues to address; for example, market orders are widely used as they give investors some degree of certainty of executions. There are a wide variety of approaches on what the SEC can do; for example, the SEC is looking at investor education and considering filters that could collar certain orders at or around a certain price.

Chairman Schapiro asked whether eliminating stub quotes altogether could change how the SEC thinks about the use of stop loss orders.

Mr. Cook said that eliminating stub quotes altogether might change SEC staff views on the use of stop loss orders, noting that all approaches present interrelated issues. The goal is to not cause excessive disruption in the markets, while at the same time to effect some change to address problems such as those that arose on May 6. Mr. Cook stated that a definitive action plan is still being discussed as the staff findings are only very preliminary. Mr. Cook stated that the elimination of stub quotes could reduce the need to eliminate market orders. Mr. Shillman added that the SEC did not encounter any defenders of stub quoting and that eliminating stub quotes could eliminate those market orders that execute at outrageous prices. Investors should still be aware that they may still get a bad price, even though the bad price is not the result of a stub quote.

Mr. Sherrod discussed the pre-trade automated safety features that exist on ICE and CME. These features are designed to restrict both volume (i.e., to avoid a "fat finger" error) and price (i.e., to prevent price spikes). Mr. Cook added that certain securities markets also have similar mechanisms, but it is not uniform across all markets.

(d) Ms. Born asked if there was an investigation in the other futures contracts based on other broad-based equity indices (other than the E-Mini contracts). She asked if there has been an analysis of individual stock futures and how their behavior compared to the index futures markets.

Mr. Sherrod stated that the CFTC has begun an analysis in futures on the Russell 2000, and this inquiry is ongoing. The CFTC focused on the E-Mini because it represented about 78% of trade volume on May 6. Also, Mr. Sherrod recalled that the total number of contracts in single stock futures was about 12,000 contracts, so they weren't terribly significant, and such contracts are therefore lower in the CFTC's priority.

5. Robert Engle:

(a) Dr. Engle noted that, Presentation Slide 45 seemed to indicate a marked reduction in liquidity supply. He asked if that reduction is extraordinary or if it is typical in times of higher volatility. He noted that one would anticipate a reduction in liquidity supply when volatility increases.

Mr. Kirilenko stated that the CFTC is currently looking into this question to examine and compare those instances at various time points and volatility levels. In addition, the CFTC would like to know who of the providers stepped in and were quoting and who were not.

(b) Dr. Engle then asked if the SEC had a similar analysis for equities.

Mr. Sokobin responded by saying that the SEC is also looking into this to see where liquidity was provided and taken. Mr. Sokobin added that Presentation Slide 31 was a starting point for analyzing liquidity in the equity markets during the relevant time period of May 6.

6. Maureen O'Hara:

(a) Dr. O'Hara asked if anyone has looked at order cancellations and how those contributed to the hollowing-out of the order book.

(b) She also asked to what extent the proprietary data feeds of the exchanges were synchronized with the consolidated data feeds.

Mr. Berman stated that all of the data that the SEC has received relates to the top of the order book for each of the exchanges. The cancellation data that the SEC has received relates only to the broken trades. The SEC still has not analyzed the depth of the order book and orders that were initially placed and later withdrawn. Also, Mr. Berman stated that though the feed data themselves are seemingly quite precise, in reality timing latencies may exist among the different feeds. The SEC needs to investigate how to best reconcile the different feeds to create a single order book for a given security.

Mr. Kirilenko added that, with respect to the E-Mini, the contracts are traded on one trading venue, so the CFTC is able to reconstruct the limit order book and is keenly looking into cancellations.

III. NEXT STEPS AND ANALYSIS

A. SEC Staff Presentation

Framework for Next Steps and Analyses. Mr. Berman described the framework that may illuminate possible directions and approaches for further inquiry, identifying the shocks/signals, market participants (i.e., market makers, retail investors, institutional investors algorithmic traders, each with their own time horizons for decision making), markets and cross-market linkages (impact of self help and LRPs), inter-market feedback (between the cash and derivative markets, for example) that could exacerbate the situation, and additional resultant signals. In addition, Mr. Berman noted that within the time scales involved, it is less likely that the events of May 6 were a result of real-time human judgment or action/inaction. It is more likely that the events were a result of pre-programmed automated trading and/or algorithmic trading. **[Presentation Slide 48]**

Topics of Further Research. Mr. Cook discussed high-level areas for further research, including the sources of downward price pressure (e.g., inter-market linkages, short sales, algorithms, hedging activities, and liquidating positions) and liquidity (withdrawal of market makers, internalizers, high frequency traders, and trapped liquidity as a result of self help and LRPs). In addition, Mr. Cook stated that it would be important to understand the role of order types (market orders, stop loss orders, inter-market sweep orders, and stub quotes), the experience of the ETFs, and whether there are other contributing factors (how systems work together and latencies of message traffic) to the market events of May 6. **[Presentation Slides 49-50]**

Data Context. Mr. Berman then discussed the importance and inherent complexity of tracing a particular trade through the order book to the ultimate beneficiary at the millisecond level given the numerous and varied sources of data that each provide a particular aspect of order flow. The SEC still needs to analyze the order book for each exchange to reconstruct the orders on the exchanges, although the SEC would not have access to the books of internalizers. The SEC would also look at the orders themselves (limit orders, market orders) from the audit trail to understand where the trade originated. For example, the SEC would need to go to each broker/dealer and request "blue sheets" to fully piece together the data. Mr. Cook added that the analysis would involve pulling in data from a wide variety of sources, which may take some time. Mr. Cook also stated that there will be an SEC open meeting soon on a proposal to establish a consolidated audit trail to provide information on orders from origination to execution in a uniform manner for all markets executing orders. **[Presentation Slide 51]**

B. <u>CFTC Staff Presentation</u>

Mr. Sherrod expressed similar problems that the SEC faces, although the CFTC faces fewer data challenges in that the E-Mini trading is confined to a single exchange. In addition, the CFTC has access to large trader reporting data, but staff must still undergo reverse inquiries on intra-day trades.

Further Analysis. Mr. Shilts summarized the CFTC's next steps, including reviewing information from large traders and OTC swap dealers, review of trade-register data, and review of electronic trading. In addition, the CFTC and SEC staff plans to study together the linkages between correlated assets in equities (single stocks, mutual funds, and ETFs), options, and futures markets and focus on cross-market linkages in stock index products. **[Presentation Slides 53-54]**

C. <u>Advisory Committee Q&A</u>

1. <u>Richard Ketchum</u>:

(a) Mr. Ketchum recommended focusing on "flex" moments when reviewing the "blue sheet" and audit trail data, rather than trying to recreate the whole period, at least as a first step. Mr. Ketchum stated that conducting the review in stages could accelerate the timeliness analyzing the data.

(b) Mr. Ketchum also suggested that the SEC look at whether timing latencies in communication lines may be the underlying cause of self-help declarations, as opposed to latencies at NYSE Arca.

(c) Mr. Ketchum stated that another useful approach could be to compare the events of May 6 with the market events of fall 2008.

(d) Mr. Ketchum stated that the SEC might want to consider pulling together previous circuit breaker studies and reports.

2. Robert Engle:

(a) Dr. Engle stated that he would be interested in knowing whether and to what extent the events of May 6 spilled into the options markets.

Mr. Cook stated that the agencies plan to look at derivatives in addition to futures.

Chairman Gensler asked whether Professor Engle's question about looking at liquidity during periods of high volatility suggests that staffs should look at other periods of crisis, including the fall 2008 market events. Professor Engle stated that not only would the distinct periods of crisis by helpful, but there are also smaller periods of relatively high volatility that one could look into, similar to the levels experienced on May 6, with respect to a collapse in liquidity.

IV. COMMISSIONER DISCUSSION AND APPROVAL OF BYLAWS

Each of the Commissioners from the SEC and CFTC next provided closing comments, expressing support for the harmonization efforts between the two agencies and gratitude to the Advisory Committee members. Some of the Commissioners also stated that many questions surrounding the market events that occurred on May 6 still remain unanswered and that they look forward to further analysis. In particular, Commissioner Aguilar highlighted the importance of forming policies that protect the public interest, and Commissioner Chilton expressed the need to pass financial regulatory reform. Commissioner O'Malia also added his remarks by encouraging additional analysis in data processing with respect to the clearing and settling of futures contracts, confirmation of trades in the futures markets, and a possible crisis strategy for future market events.

Chairman Schapiro next turned to the last item of the meeting's agenda, which was to discuss and approve the Bylaws of the Advisory Committee. After sharing the general provisions of the proposed Bylaws, Chairman Schapiro opened the floor to the Advisory Committee members for comments and further discussion. When called to vote, all members voted in favor of and approved the Bylaws.

V. CONCLUSION

Chairman Schapiro and Chairman Gensler concluded the meeting by expressing their thanks to the Commissioners of both agencies, the staff of the SEC and CFTC for their respective presentations and analyses, and the Advisory Committee members for reviewing and digesting the Joint Report in such a short period of time and offering their insightful views and comments.

The meeting recessed at approximately noon for a working lunch to discuss administrative matters.

EXHIBITS

Exhibit A	Presentation Slides

CO-CHAIR CERTIFICATION

I hereby certify the accuracy of this record of the proceedings of the Joint CFTC-SEC Advisory Committee on Emerging Regulatory Issues.

Mary L. Schapiro

Mary L. Schapiro, SEC Chairman
Advisory Committee Co-Chair

6·30·10
Date

CO-CHAIR CERTIFICATION

I hereby certify the accuracy of this record of the proceedings of the Joint CFTC-SEC Advisory Committee on Emerging Regulatory Issues.

Gary Gensler, CFTC Chairman Advisory Committee Co-Chair	Date

EXHIBIT A

PRESENTATION SLIDES