**STATEMENT OF GARY GENSLER**

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**BEFORE THE**

**SENATE COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS**

**SUBCOMMITTEE ON SECURITIES, INSURANCE, AND INVESTMENT**

**AND**

**SENATE COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS**

**PERMANENT SUBCOMMITTEE ON INVESTIGATIONS**

**December 8, 2010**

Good afternoon Chairman Reed, Chairman Levin, Ranking Member Bunning, Ranking Member Coburn and members of the Subcommittee on Securities, Insurance, and Investment and the Permanent Subcommittee on Investigations. I thank you for inviting me to today's hearing. I am pleased to testify alongside Securities and Exchange Commission (SEC) Chairman Mary Schapiro. This is our seventh time testifying together, and our third on issues related to the May 6 market events.

Since we last testified before the Subcommittee, staff from the Commodity Futures Trading Commission (CFTC) and SEC released a supplemental report on October 1 on the unusual market events of May 6, 2010. As outlined in the joint staff report, there were three chapters of the May 6 market events:

- very fragile and uncertain markets due in part to the unsettling news concerning the European debt crisis;
- a liquidity crisis in the E-Mini S&P 500 futures contracts (E-Mini) and related index securities; and
- a liquidity crisis in individual securities.

The events of that day highlighted many aspects of our markets, but two that I want to specifically focus on. One is how interconnected our markets are and the second is the role of technology in our markets. Before I talk about the overall nature of our markets today, though we have put this in previous reports, I want to mention some of the events during that critical half hour on May 6.

At around 2:30 pm that day, in markets that were already frail and volatile, a large fundamental trader came into the E-Mini market to hedge about $4.1 billion of equity market exposure by selling 75,000 futures contracts, using an executing broker to execute the transaction. The trader chose to put the entire order into an automated execution algorithm. The trader chose to use an algorithm without establishing a price limit or a minimum time for execution of the order; instead, the order was executed based upon an aggregate target of nine percent of the trading volume calculated over the execution period. Once the order was entered into the algorithm, it stayed on auto-pilot to be executed in its entirety even if the market fell rapidly.

This particular half hour highlighted cross-market linkages between securities, futures and other derivatives marketplaces that are enabled by technology. Traders can employ automated trading systems to detect and take advantage of differences in prices of related markets. Cross-market trading strategies are about buying in one market and selling in another market products that are highly correlated. For instance, it may be something traded in the futures market that is indexed to the stock market and separately trading in the stock market itself. Where small disparities in the prices arise – even for just milliseconds – market participants try to profit from those differences in what economists and financial experts call arbitrage.

During the critical 13-minute period on May 6, cross-market arbitrageurs transferred the price declines in the E-mini futures market produced in part by the large fundamental seller to the equities markets by opportunistically buying the E-Mini and simultaneously selling the S&P 500 SPDR exchange traded fund (SPY) and baskets of underlying stocks in the S&P 500 Index. Subsequently, prices in the SPY and individual securities rapidly fell. After a critical five-second pause in trading of the E-mini in the futures market, the prices of the E-mini began to rise. During that period, as the price of the E-mini rose, the cross-market linkages resulted in a rise in the price of the SPY.

Though the markets for the E-mini and the broad market SPY began to rise, there was a liquidity crisis in individual securities as well.

## Technology

CFTC-regulated markets have rapidly transitioned from face-to-face to electronic trading, where 88 percent of trades are executed electronically. The move from trading on the floor of an exchange to electronic trading introduced significant changes in trading methods, spawning dramatic increases in automated execution, algorithmic market making and high frequency trading.

### *Automated Execution*

Executing firms that have direct access to an exchange's electronic trading platform provide investors with automated execution of large orders. These programs often are used to divide a large trade into many small trades with the goal of achieving the best average price. Automated execution is widely used by large investors, such as pension funds and asset managers, to acquire or hedge their exposures in different markets, including cash, futures or options.

### *Algorithmic Market Making*

Algorithmic market making broadly consists of placing limit orders, either as offers to sell above the current market price or bids to buy below the current market price. The goal of this strategy is to earn the bid-offer spread on lots of transactions. Algorithmic market makers generally do not access the markets in the same way that investors using algorithmic execution

do. They tend to design their own algorithms to quickly, often in a manner of microseconds, get their orders into the trading platforms.

*High Frequency Trading*

High frequency trading typically refers to trading activity that employs extremely fast automated programs for generating, routing, canceling and executing orders in electronic markets. They often act as algorithmic market makers, but they do other things as well, such as cross-market arbitrage, for example. Another high frequency trading strategy is referred to as "sniping." This strategy submits and quickly cancels orders, looking for hidden pockets of liquidity.

**Surveillance and Safeguards**

The CFTC's surveillance program works to promote market integrity and protect against fraud, manipulation and other abuses. In the ever changing market environment, it is important that regulators have access to data, coordinate across agencies, trading platforms and self-regulatory organizations and have effective market mechanisms and pre-trade safeguards.

*Data*

By the morning of May 7, the CFTC had all of the transaction and open position data for trading on May 6. We are fortunate to receive futures data every day. Because of the events of May 6, we also asked for full order book data, which we do not normally do. We do not have the resources to collect or examine order books on a daily basis, but, given the events of May 6, we reviewed that day's order books. This was a tremendous effort to collect and analyze an enormous data file that included more than 14 million messages just for one day in the lead month of the E-Mini.

Though we do get daily futures data, it is currently missing an important bit of information: We receive traders' account numbers, but we do not get the identity of the owner or controller of that account. Over time, CFTC staff has manually identified traders associated with a significant number of the more active trading accounts. The Commission published a proposed rule in July of this year that will, if finalized, require automated identification of account ownership and control.

Though our interviews with traders did not suggest that on May 6 the swaps marketplace played a significant role, it may have on other days and may in the future. That is why I think it is very important that Congress has given regulators the authority to require swap dealers to provide swaps data to trade repositories that must make the data available to regulators. The CFTC has a rule out for public comment that would allow us to see all the data in the swaps markets that we see in the futures markets. Additionally, the CFTC will need to establish data

linkages between swaps and futures data to conduct financial risk surveillance, market surveillance, economic analysis and enforcement investigations across markets.

*Coordination with Regulators, Exchanges and Self-Regulatory Organizations*

The CFTC is coordinating closely with the SEC on a policy level. We coordinated in providing recommendations to Congress on harmonizing our regulations. We also are closely coordinating on rulemakings to implement the Dodd-Frank Wall Street Reform and Consumer Protection Act.

Importantly, we are working together on surveillance and data sharing. For instance, after the events of May 6, CFTC staff promptly shared position and transaction information directly with the SEC.

Though coordination between the regulators is important, it is every bit as important that there be coordination between the exchanges and self-regulatory organizations, who conduct front-line market surveillance. The securities, options and futures exchanges have an inter-market working group to address surveillance concerns.

Futures exchanges utilize computer surveillance systems that enable their investigators to conduct focused reviews of exception reports and create customized, ad hoc queries of trade data

to identify instances of possible trade practice rule violations. The largest exchange also uses specific computerized pattern detection algorithms to identify trading patterns associated with several major types of violations. The exchanges monitor the basis relationship between cash and futures for both broad based index and single stock futures and look for anomalies.

The CFTC also has been developing automated surveillance programs to detect prohibited trading activity and identify large price changes and large position changes. We have only just begun this process. We have significant more work to do to adequately automate surveillance in the futures market – not to mention the swaps market. The Commission will require additional resources to complete this project.

*Pre-Trade Safeguards*

Both CME Globex and the ICE trading systems have automatic safety features – termed "pre-trade risk management functionality" – to protect against errors in the entry of orders and extreme price swings. These features help ensure fair and orderly markets. These pre-trade risk management safeguards include: 1) price bands; 2) maximum order size; 3) protections against market stop loss orders; and 4) stop logic functionality, or market pauses that prevent cascading stop orders. This is what was triggered on May 6 and coincided with the bottom of the E-mini. Exchanges also require executing brokers to have pre-trade credit limitations to ensure that traders have the financial resources to complete transactions.

One rulemaking that the Commission proposed on December 1 requires futures exchanges to have effective risk controls to reduce the potential for market disruptions and ensure orderly market conditions. To prevent market disruptions due to sudden volatile price movements, the proposed rule requires futures exchanges to have effective risk controls in place. This includes pauses or halts to trading in the event of extraordinary price movements that may result in distorted prices or trigger market disruptions.

**Implementing Enhancements to the CFTC's Regulatory Program**

Though the Commission draws on more than 70 years of experience regulating futures, the events of May 6 and the Dodd-Frank Act present new challenges, responsibilities and authorities.

*Joint Advisory Committee*

The CFTC and SEC – with Congressional authorization – established the CFTC-SEC Joint Advisory Committee on Emerging Regulatory Issues. The first task of this Advisory Committee is to evaluate the events of May 6 and make recommendations to both agencies to improve market structures and regulations. The Advisory Committee has met four times thus far, and we are targeting to reconvene in late January. Amongst the areas we have asked them to address are the design of existing broad market circuit-breakers and pre-trade risk management safeguards.

CFTC staff is working with SEC staff to review and recommend potential revisions to the design of broad market circuit-breakers in light of today's interconnected markets and changes in technology.

*Disruptive Trading Practice*

The Dodd-Frank Act gives the CFTC specific authority to restrict disruptive trading practices. The Act specifically prohibits three trading practices: 1) violating bids or offers; 2) intentional or reckless disregard for the orderly execution of transactions during the closing period; and 3) spoofing (bidding or offering with the intent to cancel the bid or offer before execution). In addition, Congress gave the Commission the authority to write rules and regulations that are reasonably necessary to prohibit trading practices that are disruptive of fair and orderly markets.

On October 26, 2010, the CFTC published an advanced notice of proposed rulemaking seeking public comments on disruptive trading practices and the appropriate exercise of our rulemaking authority in this area. Specifically, the Commission solicited public input on the intersection of algorithmic and high frequency trading with possible market abuses and asked whether – outside of the closing period – there should be an obligation on executing brokers.

**Resources**

Before I close, I will address the resource needs of the CFTC. The futures marketplace that the CFTC oversees is currently a $33 trillion industry in notional amount. The swaps market that the Dodd-Frank Act tasks the CFTC with regulating has a far larger notional amount as well as more complexity. Based upon figures compiled by the Office of the Comptroller of the Currency, the largest 25 bank holding companies currently have $277 trillion notional amount of swaps.

The CFTC's current funding is far less than what is required to properly fulfill our significantly expanded role. The CFTC requires additional resources to enhance its surveillance program, prevent market disruptions similar to those experienced on May 6 and implement the Dodd-Frank Act.

The President requested $261 million for the CFTC in his fiscal year 2011 budget. This included $216 million and 745 full-time employees for pre–Dodd-Frank authorities and $45 million to provide half of the staff estimated at that time needed to implement Dodd-Frank. The House Appropriations Subcommittee with jurisdiction over the CFTC matched the President's request. The Senate Appropriations Subcommittee with jurisdiction over the CFTC boosted that amount to $286 million. We are currently operating under a continuing resolution that provides funding at an annualized level of $169 million. To fully implement the Dodd-Frank reforms, the

Commission will require approximately 400 additional staff over the level needed to fulfill our pre-Dodd-Frank mission.

I again thank you for inviting me to testify today. I look forward to your questions.