



U.S. COMMODITY FUTURES TRADING COMMISSION  
ENSURING THE INTEGRITY OF THE FUTURES & OPTIONS MARKETS

**Commodity Futures Trading Commission**

Office of Public Affairs • Three Lafayette Centre • 1155 21st Street, NW • Washington, DC 20581  
(202) 418-5080 • [www.cftc.gov](http://www.cftc.gov)

## **Testimony – Embargoed for Release at 3:00 pm ET**

### **Statement of Chairman Gary Gensler Before the House of Representatives Committee on Financial Services, Subcommittee on Capital Markets, Insurance, and Government Sponsored Enterprises**

**May 11, 2010**

Good afternoon Chairman Kanjorski, Ranking Member Garrett and members of the Subcommittee. I thank you for inviting me to today's hearing on the unusual volatility in the capital markets last week. I also am pleased to testify alongside Securities and Exchange Commission Chairman Mary Schapiro. Staff of the Commodity Futures Trading Commission (CFTC) and SEC have been in constant communication since Thursday afternoon. We will continue to work closely together to review the events of last week and make joint recommendations to protect the integrity of our markets and the American public. This afternoon, I will focus my testimony primarily on issues related to the futures marketplace and allow Chairman Schapiro to address the securities markets.

#### **The Equity Index Futures Markets**

Before I turn to the events of last Thursday, I will discuss the makeup of the stock index futures markets. I will also address the market protection mechanisms in place for orders entered into the electronic trading systems of the two U.S. futures exchanges where the highest-volume equity futures trade.

Stock index futures are derivatives contracts that trade on central exchanges. Much like a crude oil futures contract is based upon the price of crude oil, a stock index futures contract is based on the level of a broad based stock index. The stock index futures marketplace consists almost entirely of futures contracts based on four principal stock indices. Futures on many U.S. stock indices, including the S&P 500, the Nasdaq 100 and the Dow Jones Industrial Average, trade on the Chicago Mercantile Exchange (CME). Futures on other U.S. stock indices, including the Russell 2000 Index, trade on the Intercontinental Exchange, Inc. (ICE). The total outstanding notional value of the futures contracts on these indices is approximately \$360 billion. This compares to a total U.S. equity market value of approximately \$13 trillion.

By far the largest stock index futures contract is the E-Mini S&P 500 ("E-Mini") contract, which is a cash-settled contract based on the level of the S&P 500 Stock Index. E-Mini futures account for more than 80 percent of the notional value of U.S. stock index futures open interest. E-Mini futures trade on the CME Globex electronic trading system, which operates nearly 24 hours a day from Sunday evening to Friday afternoon.

## **Electronic Futures Trading Market Protections**

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 (such as “fat finger” errors) and extreme price swings. These features help ensure fair and orderly markets.

First, CME and ICE electronic trading systems both automatically reject orders priced outside a range of reasonability, also known as price bands. For instance, on the E-Mini contract, such band is 12 points – or approximately 1 percent – above and below the last executed trade. This prevents clearly erroneous orders from triggering a sequence of market-moving trades that later require cancellation.

Second, both CME and ICE have maximum order size limitations that prevent entry into the trading engine of an order that exceeds a predefined maximum quantity. In the E-Mini contract, for example, the maximum quantity is 2,000 contracts. With the S&P 500 Index at approximately 1,100 points as it was on May 6, two thousand E-Mini contracts would have a notional value of approximately \$110 million. The average transaction size in the E-Mini contract, however, tends to be six contracts, or approximately \$330,000.

Third, both CME and ICE have protections with regard to “stop loss” orders. Such orders are triggered if the market declines to a level pre-selected by the person entering the order. CME and ICE rules provide that when the market declines to the pre-selected stop level for such order, the order becomes a limit order executable only down to a price within the range of reasonability (12 points) permitted by the system, instead of becoming a market order. Requiring that stop orders have a limit avoids the potential that such stop orders could be executed no matter how low the market goes. This requirement for all stop orders to convert to limit orders prevents, for example, any stop orders from being posted at a price unreasonably below the market, such as orders at a price of one cent.

Fourth, CME Globex has Stop Spike Functionality that protects against cascading stop orders – the domino effect of one stop order triggering others. Globex’s Stop Spike Functionality pauses trading for five to ten seconds – five seconds in the case of the E-Mini contract – when the trading engine recognizes that it has a series of resting stop orders that could lead to a cascade and move the market up or down beyond a specified amount. The pause allows new orders to enter the system to restore liquidity and balance to the order book. On May 6, the Stop Spike functionality occurred on two currency futures contracts and at a critical moment in the E-Mini contract.

## **Preliminary Review**

One of the questions on everyone’s mind – and the topic of this hearing – is: “What happened on Thursday?” While the staffs of the CFTC and the SEC, with the cooperation of the exchanges, continue to review the events of that day, I would like to share some preliminary observations. This review is ongoing, and there is much we have yet to learn.

CFTC staff, in coordination with the SEC and the exchanges, has been working around the clock since Thursday afternoon to collect, review and analyze essential data. The CFTC receives trade and position data on a daily basis from the regulated exchanges and intermediaries. We have been in direct and regular communication with the futures exchanges, and Commission staff has interviewed a number of the major market participants. Shortly after the markets closed on May 6,

staff issued “special call” requests to the ten traders with the largest positions in the June 2010 S&P 500 E-Mini futures contract. Staff subsequently sent similar letters to additional traders. The letters request information on trader positions and all communications related to trading on May 5 and May 6.

Thursday, May 6th, started with turbulent skies as the market digested significant news and information. Many financial news outlets were reporting on the uncertainties emanating out of Europe. In this environment of uncertainty, market participants started to require higher premiums to bear risk as indicated by a number of measures. One leading measure, called the VIX index, earlier in the week between Monday and Wednesday rose 23.4 percent and on Thursday rose another 31.7 percent, reflecting increased uncertainty among market participants. From Wednesday to its highest point on Thursday, the VIX index rose 63.3 percent. Premiums were higher on credit default swaps on many European sovereign debt securities, including debt of Greece, Portugal, Spain, Italy and Ireland. The broad U.S. equity market declined as the S&P fell nearly 2 percent from its previous day’s close by 2 PM.

The stock index futures markets and other markets are intertwined, and market participants in the stock index futures markets look for price signals from many places. By early in the afternoon, market participants would have seen indicator lights starting to flash in a number of places. Though we do not now know how these individual events motivated traders, looking back now, here are some of the market changes that occurred in the 20-30 minutes running up to the decline. Futures market participants likely would have observed some of these things. Currency markets were volatile. Small capitalization equity securities began declining sharply some time after 2:00. In fact, by 2:24, there were already eight closed-end mutual funds that had declined by 50 percent or more since 2:00.

We understand from our meetings with exchanges that by around 2:30, the exchanges were finding that their order books were thinning out as the markets became less liquid, while at the same time some investors were executing hedging strategies to protect themselves against a market decline. In the few minutes before 2:40 pm, two exchanges, Nasdaq and BATS declared “self-help” with respect to the New York Stock Exchange (NYSE) Arca Equities, an electronic trading platform. Self-help permits one trading center to bypass the quotes of another trading center if the affected center repeatedly fails to respond to orders within a one-second time period.

Around 2:40 pm, a number of individual securities listed on NYSE went into slow mode. Our current understanding is that, over the next five minutes, more than 10 additional individual securities entered into slow mode. These slow modes, or “liquidity replenishment points,” occur to enable market participants to interact with quotes and orders manually to enhance liquidity and reduce volatility.

From 2:40 to 2:45:28, the E-Mini declined by 58.25 points, reaching an intraday low of 1,056 – a decline of 5.2 percent. From the CFTC’s preliminary review of detailed intraday trading records and special call information, we understand that between 2:42 and 2:45, some of the most active traders limited their trading activity in the E-Mini futures contract. At 2:45:28, the CME’s stop-spike mechanism’s 5-second pause took effect. Following that pause, the contract’s price began to move upward.

We will continue to review the May 6 events, and in particular how S&P futures traded in relation to the cash markets and to exchange traded funds keyed to the same index. One of the highest volume

exchange traded funds is the SPDR<sup>1</sup>, which has a market capitalization of just less than \$100 billion. Preliminary findings from the exchanges indicate the SPDR, which tracks the S&P 500, and the E-Mini futures contract were highly converged until the E-Mini started to rebound and the SPDR continued to decline another percent. In fact, we also saw that some stocks in the S&P 500 dropped faster than either the futures or the SPDR, such as 3M, and that, through the rally, the SPDR ETF was more volatile than the E-Mini. The S&P 500 and Nasdaq 100 cash indices reported their bottoms in the 2:46 minute.

By 2:49, the ETFs on the E-Mini, Dow Jones and S&P 500 had rebounded. By 2:50, the broad-based equity indices had recovered to near their 2:30 levels.

Through our review, we have learned that there were about 250 participants in the S&P E-Mini futures contract during the timeframe the market sold off. Of the 250, we have more closely focused our examination to date on the top ten largest longs and top ten shorts. The vast majority of these traders traded on both sides of the market, meaning they both bought and sold during that period – acting, essentially, as liquidity providers. One of these accounts was using the E-Mini contract to hedge and only entered orders to sell. That trader entered the market at around 2:32 and finished trading by around 2:51. The trader had a short futures position that represented on average nine percent of the volume traded during that period. The trader sold on the way down and continued to do so even as the price level recovered. This trader and others have executed hedging strategies of similar size previously.

Exchanges and market participants have stated their belief that it is unlikely that a “fat finger” mistake caused the heavy volatility of May 6. To date the CFTC staff review produced no evidence indicating that a “fat finger” was the catalyst.

Despite high volatility, the clearing and settlement for trading that took place on May 6 at CME and ICE US worked effectively and without incident, including the movement of funds that took place during the intra-day settlement cycle. The amount that the CME collected and paid to its clearing members as a result of the mark-to-market calculation for all CME contracts was slightly more than \$4 billion; the amount collected and paid by ICE US to its clearing members was approximately \$750 million. All margin calls were met on time, although there were no intra-day margin calls during the price spike. Clearing and settlement for trading that took place on CME and ICE US on Friday, May 7, 2010, also worked well.

## **Review by the CFTC in Coordination with the SEC**

Since Thursday, the CFTC and the SEC have been actively coordinating efforts to review that day's unusual market activity. The agencies' market oversight and trading divisions have been in regular communication, exchanging insights, ideas and expertise.

This morning, the CFTC and SEC jointly announced the formation of a CFTC-SEC Advisory Committee on Emerging Regulatory Issues, which was proposed last fall as part of the SEC-CFTC Harmonization report. The Committee will take up as its first task a formal review of the events of last Thursday and make recommendations as appropriate. The Joint Advisory Committee, made up of market practitioners, academics and former regulators, will begin meeting shortly and will issue its

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<sup>1</sup> S&P 500 Depositary Receipt.

review as soon as possible. The staff of the CFTC and SEC will provide to the Committee and Congress joint preliminary findings regarding last Thursday's market events on Monday.

### **Next Steps**

Independent from Thursday's events, the CFTC currently is considering the implications of co-location and high-frequency trading. We also are considering a rule related to account identification so that the CFTC can collect better and more-detailed information on each trader in the futures markets.

Last Thursday's events remind us of the need for one of the critical components of financial reform: bringing transparency to the over-the-counter derivatives markets so that regulators can also see what occurred in those markets.

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