WRITTEN TESTIMONY
TERRENCE A. DUFFY
EXECUTIVE CHAIRMAN & PRESIDENT
CME GROUP INC.
BEFORE THE
SENATE COMMITTEE ON
AGRICULTURE, NUTRITION AND FORESTRY
MAY 13, 2014

Good Morning, Chairwoman Stabenow, Ranking Member Cochran, and Members of the Committee. Thank you for the opportunity to testify today regarding high frequency trading in the futures markets. I am Terry Duffy, Executive Chairman and President of CME Group.[1]

High frequency trading has been the focus of substantial negative comments—much of which has been based on misinformation when it comes to futures markets. First, let me say that I strongly agree with regulators -- in both the futures and equities markets -- that the financial markets are not rigged. To the contrary, the futures markets today are more open and accessible than ever before.

It is important to take a step back and discuss the market as a whole. Futures markets have evolved from a floor-based model to an electronic model at the demand of our customers, who seek immediate execution and confirmation. CME Group responded to its diverse and global customer base including banks, hedge funds, asset managers, corporations, farmers and ranchers, commercial producers and merchandisers, and other constituents.

Our innovative implementation of electronic trading opened the markets in a profound way. It increased liquidity and tightened bid/ask spreads to the benefit of our customers. They rely on deep liquid markets to achieve their risk management and investment objectives.

---

[1] CME Group Inc. is the holding company for four exchanges in the U.S.: Chicago Mercantile Exchange, ("CME"), Board of Trade of the City of Chicago Inc. ("CBOT"), New York Mercantile Exchange, Inc. ("NYMEX"), and Commodity Exchange, Inc. ("COMEX") (collectively, the "CME Group Exchanges"). The CME Group Exchanges offer a wide range of benchmark products across all major asset classes, including derivatives based on interest rates, equity indexes, foreign exchange, energy, metals, agricultural commodities, and alternative investment products. The CME Group Exchanges serve the hedging, risk management, and trading needs of our global customer base by facilitating transactions through the CME® Globex® electronic trading platform, our open outcry trading facilities in New York and Chicago, and through privately negotiated transactions subject to exchange rules.

Without doubt, the increased speed of electronic trading has challenged us to ensure that our markets operate with integrity, and are fair and open to all customers. CME Group has been focused on this task for years, and we have worked closely with Congress, our regulators and customers to maintain a level playing field. We have created a market structure of which we are very proud. In particular:

- We use a central limit order book. A single integrated market allows for concentrated liquidity in one transparent location.
- The identity of traders and firms is protected from disclosure on all bids, offers and execution reports.
- Bids and offers are available to all participants and matched according to transparent exchange algorithms.
- Our market data is sent to everyone at once. While customers have several options in terms of how they can receive data from us, we do not restrict access. Having multiple connectivity options makes our markets accessible to a broader array of participants.
- No one can see orders prior to them hitting our match engine and being made available on the order book.
- We maintain a complete and comprehensive audit trail of every message, order and trade. Orders entered via automated systems and the traders who operate them are identified in the audit trail.
- We continually monitor our markets through sophisticated surveillance and monitoring technology backed by experienced investigators.

In addition to having built a market structure that promotes liquidity, efficiency, and accessibility to customers from banks, hedge funds, commercial producers and merchandisers to farmers and ranchers, CME promotes market stability through industry leading risk controls. We have developed an array of capabilities to manage risk and volatility and mitigate market disruptions, including those that might be caused by high frequency trading. These include:

- **Credit controls.** Pre-execution risk controls are provided that enable clearing firms to set credit limits for their executing firms. Our credit controls, which every clearing firm is required to use, can include order blocking, order cancellations and email notifications, which can be set at varying thresholds. We also employ a tool called Cancel on Disconnect that will cancel all resting orders for a market participant that gets disconnected from our system.

- **Price banding.** All orders are subject to price verification. Bids at prices well above or offers at prices well below the market fall outside of that contract's "band" and are rejected.

- **Maximum order quantity.** Every product has a pre-defined maximum quantity per order. This step ensures that the order is not exceeding this limit. If the maximum quantity is exceeded, the order is rejected.

- **Messaging controls.** These controls limit the rate at which firms can submit mass quotes and can block orders from entering the system if volume thresholds or order quantities are exceeded.

- **Stop-logic functionality.** Stop logic can automatically halt the market for a predetermined time period in order to help prevent extreme price deviations. When it was triggered on May 6, 2010, stop logic reversed the course of the Flash Crash by halting the market for enough time for liquidity to be replenished.

- **Velocity-logic functionality.** This is designed to guard against rapid price spikes. It is triggered by a pre-specified price movement over a defined (short) period of time. Like stop price logic, it places the markets in a "reserve state" where orders may be entered, modified or cancelled but not executed.

- **Circuit breakers.** In our equity index and energy products, circuit breakers halt trading for a period of time when a specified level is reached. In addition, daily price limits prevent trading at prices higher or lower than limits preset by CME.

- **Protection points.** Protection points act as controls against excessive price swings in illiquid markets. These points prevent market and stop orders from being filled at significantly aberrant prices because of the absence of sufficient liquidity.

Another service that CME Group provides to the marketplace is colocation. The criticism of colocation in some of the public coverage of this issue has failed to recognize that colocation actually equalizes access to the benefits of speed through proximity. it used to be that the benefit of speed from proximity was available only to traders who could buy real estate near an exchange, or where he or she thought the server would be.

Because of colocation facilities, such as ours, every trader now has access to colocation. This includes everyone from small retail participants to the largest of Wall Street banks. Everyone in our facility connects with the same length wire, so there are no unequal location advantages. This is one of the true benefits of our colocation services.

Finally, something that this Committee is deeply aware of – but has been largely ignored by the public – is that futures markets are very different from equities markets. Many of the recent complaints against high frequency trading in equity markets simply do not apply to the U.S. futures markets. We think the futures markets strike the right balance of regulating the market without inhibiting true price discovery. This balance of regulation and market surveillance – along with deep pools of liquidity – gives market participants the confidence they have come to expect as they rely on our markets to effectively manage their risk.

Thank you for your consideration of this important issue. We stand ready to be a resource to the Committee on these and other critical issues to the futures and derivatives marketplace.