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Securities and Exchange Commission
100 F St. NW
Washington, DC 20549-9303
Rule-comments@sec.gov

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Dear Securities and Exchange Commission:

Here are my comments on the proposed expansion of the circuit breakers that were imposed after the “flash crash” of May 6, 2010. I have long warned about how our markets need better protection from trading glitches and support in principle the concept of circuit breakers. I also support expanding the circuit breakers to more stocks. However, the current circuit breakers certainly need some refinement. We are in great danger of declaring “Mission Accomplished” without fixing the real problems that will blow up in our faces during a future period of market stress.

We must fix the erroneous trade problem!

The original circuit breakers were imposed on a pilot basis on only the S&P 500 stocks. So far, the circuit breakers have been tripped three times by erroneous trades in WPO, C, and APC. **This is a false**

¹ I am also a public member of the boards of the Edga and Edgx exchanges. These comments reflect my own views and not necessarily those of the Edga or Edgx exchanges or Georgetown University.

positive rate of 100%. It is a mystery to me how such erroneous prints can happen in our Regulation NMS world in which exchanges are supposed to honor the best quotes of other exchanges. Somebody is <bleeping> up here. And there has been no public explanation of what the problems are. Our exchanges (and their trade reporting facilities) should filter out such trades BEFORE they get printed to the tape.

If we do not fix this problem, then anyone can shut down trading in a given stock by printing an erroneous trade. This raises serious manipulation possibilities. Even without outright manipulation, it can be very problematic when trading in an active stock is halted for no good reason because of an erroneous trade. It is an embarrassment to the U.S. capital markets when one of our most active stocks such as Citigroup can be halted by a single erroneous print.

Exchanges should list circuit breaker events on their web sites.

Since these circuit breakers are experimental, it is important that information about them be made widely available so researchers can easily investigate the impact of the circuit breakers. The exchanges should be encouraged to maintain a web page that lists the dates, times, and other relevant information of all circuit breaker events.

Exchanges should notify market participants when circuit breakers are triggered in their email blasts to traders.

Most exchanges send email notifications to those requesting notification of system related events. However, not all of them send out such notifications when the circuit breakers are triggered. The exchanges should be encouraged to do so. This will help to attract liquidity when circuit breakers have been triggered, as well as to improve the transparency of the markets.

The pilot should be conducted with proper experimentation and controls.

It is not clear at all what the perfect parameters are for the circuit breakers. Smaller stocks often have wider bid-ask spreads than larger stocks. It thus makes sense to have wider bands for smaller stocks. But how wide? Similarly, what is the optimal length of time for a trading pause? 10 seconds? Or 10 minutes? Should standing limit orders be cancelled in order to purge potential erroneous orders from the market, or should they be allowed to remain to provide liquidity when the market re-opens? Is it better for the market to have a futures-style limit up/down restriction instead of a halt?

A pilot program, by definition, is experimental. While we are experimenting with the market, we should do the experiments in a scientific manner. The exchanges should work with the Commission to implement a scientifically designed experimental protocol that would include appropriate control stocks and provide the data needed to make the right policy decisions.

Don't forget the open, close, and after-hours trading!

The current pilot is not active during the first and last few minutes of the standard trading day, which is the time of the highest volatility. Our markets are just as vulnerable to a runaway algo or other major system glitch during these times as well. The circuit breakers should be quickly extended to these time periods, as well as to the after-hours trading as well.

Halting trading in index products may produce chaotic interactions that could increase volatility.

The SEC and CFTC need to give some serious thought to the issues involved in halting trading in index-based products. These basket products are widely used as hedging as well as trading vehicles. Halting trading in an index-based product could set off a chaotic set of interactions that could increase volatility. For example, suppose that an erroneous low print is reported in an aerospace ETF that tracks an index of aerospace stocks. The erroneous print is now the last official price for the ETF and is widely disseminated by all of the data vendors. That bad price could then trigger a number of trading strategies, including ones which would seek to sell all of stocks in the index to arbitrage the stock and ETF prices.

Obviously, the solution is to fix the erroneous print problem. But even when there are not erroneous prints, halting trading in an index could trigger unanticipated and volatile trading in the constituent as well as other stocks. Traders desperate to hedge a position in a halted ETF may start shorting other related instruments. This is clearly a complex area that needs to be considered carefully as the circuit breakers are expanded.

Respectfully submitted,

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