

The Legal Intelligencer

A Solution to Market Volatility or a Short-Term Fix?

SEC Approves 'Limit Up-Limit Down' Mechanism, Marketwide Circuit Breakers

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On May 31, the Securities and Exchange Commission approved two proposals submitted by the national securities exchanges and the Financial Industry Regulatory Authority (FINRA) with the goal of addressing extraordinary volatility in individual securities and the broader U.S. stock market.

The first proposal establishes a "limit up-limit down" mechanism that will prevent trades in individual stocks from occurring outside of specified price bands. The second proposal modifies the existing marketwide circuit breakers, which temporarily halt trading or prematurely close the market in the event of extreme market declines, with new circuit breakers that are designed to better account for today's high-speed electronic trading systems.

SEC Chairman Mary L. Schapiro noted that "the initiatives we approved are the product of a significant effort to devise a sophisticated, yet workable and effective way to protect our markets from excessive volatility." Both proposals have been approved for one-year pilots that are scheduled to take effect on Feb. 4, 2013. Questions remain, however, as to how effectively the new mechanisms will address volatility in the U.S. stock markets and whether they will be able to prevent future "flash crashes" on the major exchanges.

The History of Stock Market Protections

On the afternoon of May 6, 2010, the U.S. equity markets rapidly and unexpectedly plunged, only to recover within minutes. The Dow Jones Industrial Average, alone, declined over 1,000 points, roughly 9 percent of its overall value, but recovered well before trading ended for the day. This "flash crash" resulted in a large number of trades being executed at temporarily depressed prices, including many that were not only more than 60 percent away from pre-decline prices but had to be unwound by the exchanges and FINRA. When the dust settled and the trading day finally closed as normal, worried investors and policymakers started to search for the cause of the flash crash and ways to prevent similar events from happening in the future.

While acknowledging that the causes of the flash crash were complex and the product of multiple interacting forces, the SEC laid primary blame for the flash crash on the relationship between the constantly evolving securities traders and a stock market that had failed to evolve with them. Of particular concern is the relatively unchecked but mainstream use by traders of computerized trading programs employing pre-established trading formulas. In theory, these computerized programs could trigger a "death cycle" for the market as the computer program would sell stock

in response to poor market conditions, further worsening the market and leading to more selling, which could eventually snowball into market declines out of proportion with economic reality within minutes, if not seconds.

The first response by the exchanges, FINRA and the SEC to the flash crash was to develop a single-stock circuit breaker program, which began in June. This pilot program is set to expire on July 31. The secondary responses to the flash crash consist of the recently proposed "Plan to Address Extraordinary Market Volatility," which contains "limit up-limit down" mechanisms for the U.S. stock market (the Market Volatility Plan) and the new marketwide circuit breakers for the U.S. stock market.

An Overview of the New Proposals

- The "Limit Up-Limit Down" Mechanism.

The Market Volatility Plan creates a marketwide "limit up-limit down" mechanism that is intended to address extreme market volatility in National Market System (NMS) stocks by preventing trades in individual NMS stocks that occur outside of specified price bands. These "limit up-limit down" requirements are coupled with trading pauses to allow securities to make fundamental price moves, but they prevent trades in response to erroneous transactions or momentary gaps in liquidity.

Under the Market Volatility Plan, each NMS stock will be given a lower price band and an upper price band. The price bands will be calculated by securities information processors, and each price band will be based on a reference price that equals the average price of reported transactions for the stock over the immediately preceding five-minute trading period. The processors will multiply the reference price by a certain percentage (depending on the type of security) to determine the price bands. The reference price and the price bands for each stock will be updated continuously throughout the trading day, with all reference prices remaining in effect for at least 30 seconds.

If, at any time during the trading day, the purchase price or sale price for a security is outside of its price band, the security will enter a "limit state," which means trading in the stock will be prevented. This trading pause can be avoided if all trades outside of the price bands are executed or canceled in their entirety within 15 seconds, indicating the trades are genuine. This 15 second exception is intended to avoid a market response to erroneous trades or momentary gaps in liquidity. If the security does not exit the limit state within 15 seconds, the exchanges will declare a five-minute trading pause on the security. By coupling the price bands with trading pauses, the goal of the Market Volatility Plan is to reduce volatility by giving the market a chance to "catch its breath" between trades involving large price shifts.

All trading centers of NMS stocks, i.e., the exchanges, are required by the Market Volatility Plan to establish written policies and procedures to prevent trades at prices that are below the lower price band or above the upper price band for each NMS stock.

The Market Volatility Plan is being implemented as a one-year pilot program in two phases. The first phase is set to begin Feb. 4, 2013, and will impact only NMS stocks in the S&P 500 Index, the Russell 1000 Index and certain specified exchange traded products. The second phase will begin six months later and will impact all NMS stocks.

- New Marketwide Circuit Breakers.

Marketwide circuit breakers have been in place since the "Black Monday" stock market crash in October 1987. Marketwide circuit breakers are forced trading pauses that are triggered in response to certain predetermined single-day market declines. The original circuit breakers employed "fixed point" trading curbs that temporarily halted trading market-wide if the Dow Jones Industrial Average dropped below a predetermined amount of points in a single day. The original marketwide circuit breakers were triggered only once, after the "mini-crash" that occurred on Oct. 27, 1997.

One of the SEC's major responses to the 1997 "mini-crash" was to substantially revise the marketwide circuit breakers by replacing the "fixed-point" trading curbs with "market-proportion" trading curbs. Under the market-proportion trading curbs system, each circuit breaker has a trigger point that is set at a certain percentage of total market value. These current circuit breakers, which were adopted more than 14 years ago, in April 1998, are still in place today. The current marketwide circuit breakers provide for specified trading halts at three different levels of market declines, 10 percent, 20 percent and 30 percent from predetermined quarterly levels. The values of the levels are calculated at the beginning of each calendar quarter, using a percentage of the average closing value of the Dow Jones Industrial Average for the month prior to the beginning of the quarter.

The new marketwide circuit breakers vary from the existing circuit breakers in a number of important ways, including: (i) replacing the Dow Jones Industrial Average with the broader S&P 500 Index as the reference index; (ii) recalculating the values of the triggers daily instead of each calendar quarter; (iii) reducing the percentages of market decline triggers from 10 percent, 20 percent, and 30 percent to 7 percent, 13 percent and 20 percent, respectively, from the prior day's closing price; (iv) shortening the length of the trading halts that do not close the market for the day to a uniform 15 minutes, as opposed to the previous halts which ranged from 30 minutes to two hours; and (v) modifying the times when a trading halt may be triggered so that there are only two relevant trigger time periods, those that occur before 3:25 p.m. and those that occur on or after 3:25 p.m., as opposed to various times throughout the day.

Effective Feb. 4, 2013, the revised marketwide circuit breakers are set to become operative on a one-year pilot basis. The SEC will observe the marketwide circuit breakers during this pilot period, especially their interaction with the new "limit up-limit down" mechanism, in order to determine whether to modify or approve the new marketwide circuit breakers on a permanent basis.

Are the New Proposals a Solution or a Short-Term Fix?

The goal of the Market Volatility Plan and the new marketwide circuit breakers is to address extraordinary volatility in the U.S. stock market and prevent future flash crashes. However, questions still remain as to the effectiveness of these measures. As noted above, similarly designed marketwide circuit breakers have been in effect since 1998 but did little to prevent the flash crash in 2010.

Although the newly adopted circuit breakers are designed to incorporate lessons learned from the flash crash and are more dynamically tailored to present market conditions, it is difficult to say whether the new circuit breakers will be any more effective than their predecessors. Also, commentators on the Market Volatility Plan have expressed concerns about the Market Volatility Plan, including the complexity of the new reference price and price band system, the length of the limit state and the correct percentages for each price band. Moreover, several portions of the Market Volatility Plan remain subject to further review by the exchanges and FINRA as part of the pilot program.

Although traders have largely responded favorably to the proposals, the one-year pilot period will be critical to determining the effectiveness of the mechanisms in real time. It will also be interesting to see how the market adjusts to the new mechanisms and whether the mechanisms will create new trading patterns intended to avoid triggering their requirements. Looking back at the history of market protections, policymakers have had to revise stock market protections every few years in response to a new market event and, to date, no market protections have stood the test of time. Will the limit up-limit down mechanism and new circuit breakers be any different?

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