

**Statement of Kevin Cronin  
Global Head of Equity Trading, Invesco Ltd.**

**“Examining the Efficiency, Stability, and Integrity of the U.S. Capital Markets”**

**Subcommittee on Securities, Insurance, and Investment  
Committee on Banking, Housing, and Urban Affairs  
&  
Permanent Subcommittee on Investigations  
Committee on Homeland Security and Governmental Affairs  
United States Senate**

**December 8, 2010**

Thank you, Chairman Reed, Ranking Member Bunning, Chairman Levin, Ranking Member Coburn and members of the Senate Subcommittee on Securities, Insurance, and Investment and the Senate Permanent Subcommittee on Investigations for the opportunity to speak here today. I am pleased to participate on behalf of Invesco at this hearing examining the efficiency, stability and integrity of the US capital markets. Invesco is a leading independent global asset management firm with operations in 20 countries and assets under management of approximately \$620 billion.

An efficient and effective capital formation process is essential to the growth and vitality of the U.S. economy. The most important aspect of the capital formation process is that it attracts long-term investors' capital. To accomplish this, it is critically important that the primary and secondary capital markets which facilitate the capital formation process are transparent and working in the best interests of investors. To that end, it is essential that sensible, consistent rules and regulations are in place governing the markets and that regulators have the tools to ensure fairness and integrity in the markets. Such a foundation fosters the confidence of long-term investors to provide the capital necessary for companies to create new and innovative services, products and technologies which in turn create additional jobs and advance our standards of living. We therefore commend the Subcommittees for holding this hearing to examine these critical issues.

Unfortunately, over the past several years long-term investor confidence has been undermined by a series of scandals, financial crises and economic tumult, including most recently the "flash crash" of May 6<sup>th</sup>. In order to recover long-term investor confidence, it is incumbent upon regulators to ensure that the securities markets are highly competitive and efficient as well as transparent and fair. The regulatory structure that governs the securities markets must encourage, rather than impede, liquidity, transparency, and price discovery. Consistent with these goals, Invesco strongly supports regulatory efforts to address issues that may impact the fair and orderly operation of the securities markets and investor confidence in those markets.

To be clear, investors, both retail and institutional, are better off now than they were just a few years ago. Competition in today's markets, which was virtually absent five years ago, has spurred trading innovation and enhanced investor access. Trading costs, certainly in the most liquid of securities, have been reduced and investors have more choice and control in how they execute their trades. Advances in technology have increased the overall efficiency of trading. These gains, however, haven't come without accompanying challenges. Some of these challenges were highlighted by the market events of May 6 and others are broader market structure issues that were raised in the SEC's concept release on market structure.

#### The Market Events of May 6<sup>th</sup>

The events of May 6 brought to the forefront several inefficiencies in the current market structure and highlighted the interdependency of the equity, options and futures

markets, particularly the connection between price discovery for the broader stock market and activity in the futures markets. Perhaps most significantly, the events of May 6 underscored the absence of an effective mechanism to dampen volatility at the single-stock level; the lack of consistency and synchronization of rules which govern trading at the various exchanges; the lack of clearly defined rules on the handling of clearly erroneous trades; the outsized impact trading algorithms and small market orders can have in the prices of securities in times of duress; and the fact that the market making mechanisms in place today provide virtually no liquidity to investors in times of market stress.

Several of these issues have already been addressed by regulators, including the need to establish mechanisms in single stocks to address extreme price moves and better procedures for resolving clearly erroneous trades. In addition, discussions are ongoing among regulators and market participants regarding the inconsistent practices of exchanges when dealing with major price movements. Invesco is a diversified investment manager and as such we participate in trading in many types of securities on many different exchanges and market venues. We believe it would serve our investors' interests as well as other long-term investors' interests to have better coordination, both at the regulator and exchange levels, between the options, futures, equities and credit markets.

### **Establishing Mechanisms to Address Extreme Price Moves**

Removing all instability and volatility from the equity markets is neither possible nor appropriate. However, establishing mechanisms to address extreme price moves in the markets and volatility related to inefficient market structure will be critical in preventing a repeat of the May 6 market event.

#### Circuit Breaker Rules and Clearly Erroneous Rules

Invesco supported the single stock circuit breaker proposals as a means to immediately mitigate the impact of sudden market volatility by implementing a trading pause for individual securities in times of market stress. As the circuit breakers are set to expire soon we would strongly encourage replacing them with a so-called "limit up/limit down" regime. Circuit breakers require a trading halt when the threshold price is reached which can be confusing and inefficient for investors. As we have seen over the past few months, the single stock circuit breakers have been triggered a number of times due to system errors or gaps in liquidity that cause an unnecessary disruption of trading. We believe a limit up/limit down regime would be a more effective means of accomplishing the same goal of having a more orderly process in place in times of duress.

One thing is clear, whether the answer is circuit breakers or limit up/down, there absolutely must be coordination among futures, options and equity exchanges to ensure a consistent approach to extreme market movements.

The integrity of trading data is critical given the speed and volume of trading in the markets. Invesco therefore has strongly supported amendments to the rules relating to clearly erroneous executions to clarify the process for breaking erroneous trades and to provide uniform treatment across the exchanges for clearly erroneous execution reviews. We believe, however, the whole notion of taking trades off the tape is generally detrimental to investor confidence. We would propose that the exchanges instead clearly define and articulate the parameters that constitute erroneous trades and then program their systems to detect and reject trades outside of those parameters. We believe uncertainty surrounding the clearly erroneous rules and the risks associated with entering orders during the drop in stock prices likely contributed to the rapid and dramatic price declines on May 6. Ensuring that only good trades are reported to the tape will provide investors and liquidity providers an increased level of confidence regarding the trading data they need to participate in good and bad markets.

### Use of Market Orders

As was clearly illustrated by the events of May 6, when there is a vacuum of liquidity, smaller market orders can have an outsized impact on the prices of securities. As an institution, we have long understood the significant risk of using market orders particularly as the market has become more fragmented. We abandoned their use many years ago in favor of marketable limit and limit orders. In light of the events of May 6 and the continuing issues small market orders have had in the market (*i.e.*, electing newly imposed single-stock circuit breakers on WPO, CSCO, C, APC and others), Invesco strongly supports the examination of the current practices surrounding the use of market orders, particularly the use of “stop loss” orders. There can be nothing more erosive to the confidence of investors in the efficient workings of the market than to watch a small market order take a stock from \$50 to \$100,000.

### Trading Algorithms

The Joint CFTC-SEC Advisory Committee report on the market events on May 6<sup>th</sup> clearly shed negative light on the use of trading algorithms, particularly in times of market duress. While we agree that using a price agnostic algorithm in any environment incurs significant risk, we believe trading algorithms, when appropriately employed, can be highly effective tools in our best execution process. Algorithms allow us to approach our trades from a number of different pursuits giving us the speed, anonymity and access to liquidity that we need to be effective for our clients. That said if regulators feel compelled to act with respect to algorithms, we would encourage them to focus their efforts on broker dealer and venue order routing practices and any potential manipulative practices being employed by market participants through the use of algorithms.

## Responsibilities of Market Makers

The role of traditional liquidity providers such as market makers has taken on more significance since the events of May 6, as the sudden absence of liquidity in the markets played a critical role in the severe decline in stock prices. We recognize that the obligations market makers have in times of market duress likely succumb to innate self-preservation instincts – after all catching falling knives is generally not a good idea. Several ideas have been put forth to improve the operation of market makers that are worthy of further examination, including increasing obligations surrounding best price, depth of markets, and the maximum quoted spread obligation. Similarly, there should be an examination of the incentives that market makers currently have to make reasonable two-sided markets. Given the introduction of single stock circuit breakers and more clarity around the handling of clearly erroneous trades, it would appear that some of the risk of making markets in volatile times has been reduced. In any event, the goal of our capital markets has to be the provision of fair and orderly markets in good times and bad. We believe that market makers who have appropriate incentive and obligations are an important aspect of that.

## Ensuring May 6<sup>th</sup> Doesn't Happen Again

While many of the steps being taken by the various regulators and exchanges will greatly reduce the potential for another May 6<sup>th</sup> – the risk will not be entirely removed from these actions alone. The SEC, CFTC and SROs must be coordinated, diligent and measured in their efforts to create sensible regulation designed to minimize inefficiencies in market structure and advance surveillance and enforcement capabilities to thwart nefarious behavior.

One idea which deserves further consideration in that regard is the consolidated audit trail (CAT) or a similar solution to provide regulators the data they need to surveil markets on a timely basis. The proposed CAT would provide regulators with timely access to order and execution information for all securities within the National Market System (NMS). This would give regulators the ability to perform timely, detailed analysis of single stock or general market activity which would greatly enhance existing oversight and enforcement capability. Our expectation is that all information collected within the CAT or equivalent system will be absolutely secure with no possibility for leakage or manipulation and that the costs to create and maintain the CAT (or equivalent) will be much more reasonable than some of the published estimates.

## **Beyond May 6<sup>th</sup>**

While the events of May 6<sup>th</sup> highlighted some of the challenges of the current market structure they did not reveal all of them. Regulators should not lose sight of the broader market structure issues raised by the SEC's concept release examining the structure of the U.S. equity markets, including the adequacy of information provided to investors about their orders, the

impact of high frequency trading, and non-displayed liquidity. These issues are equally critical to investors' ability to trade efficiently under the current market structure.

### Fragmentation

There are today at least 13 for-profit exchanges. Competition between exchanges is fierce resulting in new innovations and different ways for investors to seek and provide liquidity. This is a welcome development from our perspective provided that the rules and regulations which govern the various exchanges are consistent and not incongruent with the goals of fairness and equal access for investors. We believe that the notion of exchanges having their own SROs is outdated and potentially disruptive to the efficient operation of securities markets. Therefore Invesco would support a move to a single SRO for all exchanges. It is interesting to note that exchange competition has also spurred an electronic arms race where the race to microseconds will soon cede to nanoseconds. It has also dramatically changed the revenue models of exchanges to a point where so called "maker-taker" models thrive and fees for cancelled trades are routinely waived for the most active participants.

While Invesco believes that speed is an important variable to consider in the execution of trades, it is clearly not the only one which long-term investors should consider as they seek best execution. Some of our fundamental fund managers may take months to research a particular company before they are ready to buy its stock; buying those shares in one millionth of a second isn't exactly the manager's top priority. Buying the shares at the "right" price which is understood through a robust price discovery process wherein there is real understanding about the underlying supply and demand in the shares is much more appealing. If this happens in seconds or days is at best a secondary consideration. Invesco believes that there is a point where speed and robust price discovery diverge – a concept that must be understood by exchanges as they race to trading in one billionth of a second.

There are also 40 different trading venues/dark pools and over 200 broker dealers who internalize customer order flow in the market today. The non-displayed liquidity traded in dark pools and with internalizing broker-dealers is estimated to be as much as 30 percent of the shares traded in the U.S. This fragmentation has the potential to seriously undermine the price discovery process essential to efficient market structure. As an institutional investor with larger-sized orders, Invesco utilizes dark pools and institutional crossing networks as essential elements of our best execution process. While our use of these venues may contribute to the fragmentation of the markets, until we create a more efficient market structure for the execution of institutional sized orders, these venues allow institutional investors to avoid transacting with market participants who seek to profit from the impact of the public display of large orders to the detriment of funds and their shareholders.

This vast network of exchanges and venues has resulted in a very complicated web of conflicted order routing and execution practices by broker dealers and execution venues. Institutions like Invesco are in a position to get the routing data from broker-dealers and

trading venues to perform an analysis of the effectiveness of trading in the various venues. However we are concerned that many investors do not have this level of transparency. We believe that improved information about order routing and execution practices would allow investors to make better informed investment decisions.

### High Frequency Trading

Today as much as 50%-60% of trading activity in U.S. equity markets is attributed to High Frequency Traders (HFT). Given the recent ascendance of HFT there is not a lot known about their practices and very little regulatory oversight. It can certainly be argued that some high frequency trading activity provides real liquidity to the markets. In fact, Invesco believes there are many beneficial high frequency trading strategies and participants which provide valuable liquidity and efficiencies to the markets. For example strategies such as statistical arbitrage help maintain pricing efficiencies in the markets. On the other hand, we are concerned that some strategies could be considered as improper or manipulative activity. Some of these strategies, such as the so-called order anticipation or momentum ignition strategies provide no real liquidity or utility to the markets, rather they prey on institutional and retail orders creating an unnecessary tax on investors.

While there has been a recent case brought by regulators against this kind of improper activity, we are concerned that the ability of regulators to monitor and detect nefarious behavior by these market participants is lacking. We therefore believe there is an immediate need for more information about high frequency traders and the practices of high frequency trading firms.

Additionally, regulators must address the increasing number of order cancellations in the securities markets. It has been theorized that as many as 95% of all orders entered by high frequency traders are subsequently cancelled. Order cancellations related to making markets is one thing, but orders sent to the market with no intention of being executed before they are cancelled is quite another. These orders tax the market's technological infrastructure and under the right circumstances could overwhelm the systems capability to process orders causing massive system failures and trading disruptions.

Efficient trading markets require many different types of investors and participants to thrive. It is important to note that where the interests of long-term investors and short-term professional traders diverge, the SEC has repeatedly emphasized that its duty is to uphold the interests of long-term investors. We need to ensure that there are no abusive practices within high frequency trading which contravene the interests of long-term investing.

### **Conclusion**

We believe investors, both retail and institutional, are better off now than they were just a few years ago. That said long-term investor confidence is critical to the efficient operation

of the capital formation process in the U.S. To restore potentially damaged investor confidence, regulators must ensure that the securities markets are highly competitive, transparent and efficient and that the regulatory structure that governs the securities markets is consistent, congruent and encourages, rather than impedes, liquidity, transparency, and price discovery.