



Regulating HFTs and Dark Pools: Ensuring Investor Protection in the 21st Century Market

Over the past 5-10 years, secondary equity markets in Canada and the United States have undergone a massive transformation. Innovation and technology, combined with related structural changes, have improved the quality of secondary trading for the investing public. Different market trading venues, types of orders and order size, decimalization of market quotations, price and time priority, transparency of order flow and new market participants, including trading operations and facilities for trade execution and matching, have contributed to better prices for buy and sell orders, improved ability to mitigate the pricing impact of large orders, faster execution speed and better pre and post-trade price transparency.

How far have we come? To answer that, one only has to remember the 25-cent price spreads on stock exchanges, and the controversies about market specialists and pricing collusion on the U.S. exchanges.

Now, in a marketplace characterized by a rapid acceleration in transaction velocity and heady pace of innovation, market participants see both the opportunity for more efficient trading and positioning in equity securities, and the challenge for regulators in providing the necessary market protections to investors.

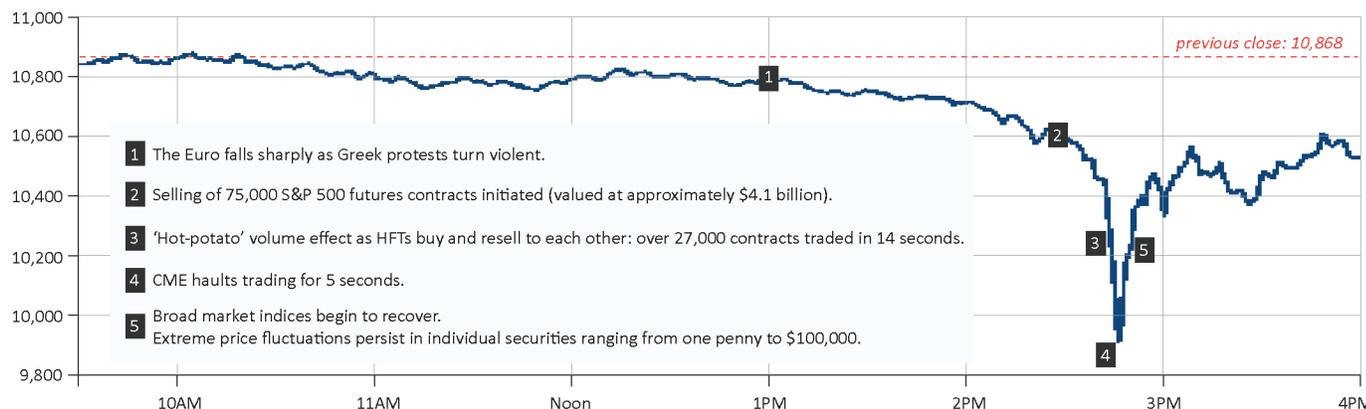
Over the last several months I have had the opportunity to learn more about the impact of dramatic changes in market structure at several conferences and seminars.

Despite the obvious progress in improving transactional efficiencies and the regulatory reform and oversight of equity markets, particularly leveling the playing field for small-sized transactions in terms of better price fills, improved transparency and lower transaction costs, a trepidation and concern still hangs over investors in respect of the integrity and fairness of markets. These concerns can be traced to two recent phenomena that have heavily influenced the marketplace, the proliferation of high-frequency trading and the emergence of “Dark Pools”, or dark marketplaces that compete with the stock exchanges and alternative trading systems by offering anonymity to large traders seeking to avoid showing their hand to others in order to avoid significant market impact.

High-Frequency Trading: A Leap Into the Future – or off a Cliff?

High-frequency trading has come to dominate trading in U.S. secondary markets, accounting for nearly 60% of market trading. In Canadian markets, high-frequency trading accounts for just less than half the overall trading. Retail investors have concerns this rapid and reflexive electronic trading driven by

The ‘Flash Crash’: May 6, 2010 Dow Jones Industrial Average



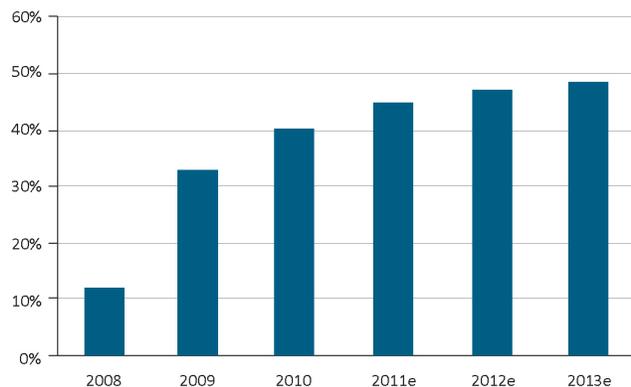
Source: SEC, CFTC, IIAC

complex algorithms puts small investors at a disadvantage by seizing opportunities in the market more quickly than the typical investor, reflecting faster access to transactional information and the advantage of interpreting and responding to trading patterns from sophisticated computer technology. Second, markets have seen the potential for these rapid-fire algorithmic trading systems to spin out of control, resulting in massive market dislocations and losses for investors. That was demonstrated in the “flash crash” of May 2010, when some share prices collapsed precipitously without warning and then suddenly rebounded, and again earlier this year when uncontrolled algorithmic trading at Knight Capital led to a loss of \$440 million.

It is understandable that many market participants are asking if the regulatory protections are adequate.

High-frequency traders argue they provide significant liquidity and enhance the efficiency of equity markets by frequent trading at the touch or inside the quoted bid and offered price. In a recent discussion among the top five HFTs in the United States, the liquidity debate focused on the depth of liquidity behind the specific quotes provided by high-frequency players. Is there sustained liquidity behind the bid-offered price, or is the liquidity fleeting? In other words, is there a constant “flickering” in the quotes, suggesting liquidity is limited at certain transaction size for stated quotes and, once the order is hit or lifted, the bid-offered quotation shifts to another level? To encourage more liquidity in HFT order flow, the Nasdaq exchange some time ago revamped its passive pricing model to provide higher price rebates for passive orders with a relatively low order-to-trade ratio, proxying more liquidity depth behind specific orders. The recent study that the Canadian regulators have now underway to understand the impact of HFT trading on market liquidity should shed light on the concerns about HFT market participation.

Estimated High Frequency Trading in Canada
By Volume of Shares



Source: Aite Group

The recent market dislocations from out-of-control algorithmic systems, notably the May 2010 flash crash, have raised concerns with investors and regulators. Concerns were heightened with the more recent Knight Capital episode, which occurred despite a series of regulations embracing limit orders, circuit breakers

in the marketplace, specific requirements and responsibilities for HFTs and their sponsoring brokers for direct market access, and post-trade reconciliation.

In recent discussion among high-frequency traders and stock exchange executives, there seems to be a general consensus that regulations and close oversight of HFT operations will not in and of themselves guarantee that a technical problem will not arise. The HFTs have argued that the best protection is to complement the existing regulatory framework with the responsibility of the individual HFTs to do the required testing, and to recognize that systems, no matter how well constructed and tested, can go wrong, requiring HFTs to have in place appropriate contingency plans to take immediate remedial action if technical problems arise. For example, the evidence from the Knight Capital debacle was that the institution failed to respond quickly enough to remedy the technical problem.

Everybody Into the Dark Pool?

The rapid expansion of dark pools, or non-transparent trading activity, has also raised negative perceptions among small investors. Dark pools have grown rapidly in the United States to account for about one-third of overall trading activity. Initially set up to attract large-sized order flow to mitigate the pricing impact of large orders placed in “lit markets,” these pools of liquidity – not intended to be generally open to the public – have grown in recent years, particularly in the United States, reflecting much lower costs for trade execution than on stock exchanges and other lit markets. Regulations in the U.S. markets require the barest minimum price improvement, as low as one “mill” or 1/100th of a penny spread, to access the dark pool. This minimum price improvement has provided sufficient economic incentives to purchase order flow from intermediaries, offer price improvement and internalize the matching of these share orders within a dark pool. The stock exchanges have responded with competitive offerings to compete with dark pools for order flow through minimum transaction size and “mid-point” pricing. The U.S. exchanges have also emphasized a risk management focus on transactional innovations and new order types to enhance integrity and investor confidence.

The flow of share orders to dark pools has occurred on a much smaller scale in the major non-U.S. jurisdictions, notably Canada, Europe and Australia. Reflecting the IOSCO (International Organization of Securities Commissions) principle that the fragmentation of order flow from lit markets into dark pools damages the price discovery process and market efficiency, these jurisdictions have imposed rules that require significant price improvement to access a dark pool. In Canada, the CSA has put in place a far more stringent price improvement policy than south of the border – one full penny spread from the quoted price. However, the CSA has not imposed a minimum order size for access to dark pools, leaving that determination to be made by IIROC.

The Canadian restriction, however, brings its own controversy. It is argued, first, that most order flow attracted to dark pools is not drawn from lit markets, and therefore collateral damage to



the price discovery process is limited. Second, the restrictions on permitting order flow from lit markets to safeguard price discovery removes an important competitive price discipline from the stock exchanges and other lit markets. This concern is particularly important in the Canadian context with highly concentrated lit markets.

Conclusion: Regulators Need to Continue to Move Prudently

The enormous changes we have seen in equity markets over the past decade have brought significant benefits, but they have also presented enormous challenges to both investors and regulators to balance rapid innovation and change against the need for fairness and integrity. It must be acknowledged that regulators have risen to the challenge, opening markets to innovation and competition, while imposing restrictions to preserve fairness for all investors.

However, it is important to recognize that going forward, innovation will be relentless and change constant. Regulators will need to step slowly, surely and carefully in responding to these challenges, and to rely heavily on consultation with all participants in the market to put in place the right remedies to ensure both a high standard of integrity and improved market efficiencies that will continue to benefit investors and the economy.

Yours sincerely,

A handwritten signature in black ink, appearing to read "I. Russell", with a long horizontal flourish extending to the right.

Ian C. W. Russell, FCSI
President & CEO, IIAC
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