Topic 2: Investor Protection and Market Integrity
J. Michael Evans │ Introductory Presentation

One of the most important technological developments has been the emergence of new trading strategies, such as algorithmic and high frequency trading. Can you give an overview of the key new trading strategies? What are the driving forces behind this development?

As a market practitioner, I have been asked to begin this portion of our panel by providing an overview of some of the automated trading strategies that have grown rapidly in the past decade.

First, let me begin by asking a basic question: What do we mean by Algorithmic and High Frequency Trading?

Unfortunately, there is no generally agreed upon definition of "Algorithmic Trading" and "High Frequency Trading". However, I will try to root our discussion today in a set of broad definitions.

Algorithmic Trading is a computer-driven process in which an algorithm replicates decisions previously made by traders and investors in relation to the composition, timing, format and destination of orders.

High Frequency Trading strategies are by their nature algorithmic, so the definition of Algorithmic and High Frequency Trading overlap. In speaking with our clients, different people will have different thresholds for when an Algorithmic Trading strategy becomes a High Frequency Trading strategy.

Instead of drawing a bright line between the two, I'd offer this definition: At some point when the computer-driven process of entering or canceling orders is carried out over sub-second intervals, the activity crosses into the High Frequency Trading space.

To better understand why these strategies have developed, let me briefly provide some historical context.

Part of the story is well-known to everyone in this room. Over the last two decades, increased computing power, improved telecommunications infrastructure, and falling processing costs have accelerated the presence of automation in just about every human enterprise – including the securities business.

Today, technology and automation have been brought to bear on nearly every phase of the investment process. However, the impact of this trend on market structure was first felt in the US, and it started over a decade ago. I'd highlight four developments that drove this evolution:

— In 1999, the SEC's Regulation ATS, which enhanced competition in the US Securities markets by formalizing electronic communication networks and crossing networks as alternatives to incumbent exchanges;

— In 2001, the NYSE introduced decimalization, or the pricing of stocks in penny increments, which tightened the spreads at which stocks trade;

— In 2005, the SEC's Regulation NMS, which essentially mandated exchanges to provide fast, automated executions in order to be considered part of the "National Market System";

— And throughout this period, the de-mutualization of the exchanges, which further spurred competition and innovation in the industry.

In the wake of these changes, the size of the average trade fell dramatically, from a couple of thousand shares to a few hundred. Equities volumes doubled. Quoted spreads compressed dramatically. Message traffic to the exchanges and other platforms increased. And importantly, clients began to place a premium on speed of execution.

Along with these changes, we began to see Algorithmic and High Frequency Trading strategies deployed in noticeably greater volumes in 2005 – 2007. This transformation has been most pronounced in cash equities and listed derivatives, but it is increasingly evident in fixed income.

Today, in the US, it has been estimated that 50-60% of a traditional Asset Managers equity transactions are conducted using these Algorithmic Trading techniques.

To varying degrees we see these same factors leading to an increase in Algorithmic and High Frequency Trading in other regions. For example, in Europe the big catalyst was the first MiFID Directive which abolished concentration rules and encouraged the establishment of alternative trading venues. This kind of fragmentation in turn encourages automated strategies that are able to consume data from multiple trading venues and make fast routing decisions off the back of that data.

So, what purpose do Algorithmic and High Frequency Trading serve?

Automation has fundamentally changed the way that our clients access markets. Considering this, there are many uses for these strategies. However, for purposes of this discussion, I would group the use of these strategies into two broad categories.

First, many historical market-making strategies have simply migrated to operate as automated strategies. Having fast access to the markets is deemed critical by market participants in their daily trading activities. This can be viewed as a natural evolution of the market making process as a result of technological progress.

Second, Algorithmic and High Frequency Trading enables clients to efficiently realize adjustments to their portfolios. When a trader at an investment manager is presented with an order, they face a decision on how to execute the trade: give their order to a broker-dealer, or use an algorithm. There are many flavors of algorithm. For example, there are algorithms designed to trade as slowly as possible for clients who want to invest passively and minimize market impact. There are also algorithms designed to transact quickly if a client believes a change in the securities price is imminent. Clients choose the algorithm that best suits their needs at the time.

In response to this need, every broker now offers a wide variety of algorithms, designed to fit differing market conditions and order characteristics. As a result, the brokerage community now spends a good deal of time working together with clients to select the best algorithm from their offering to match the client's objectives.

These strategies have enabled market participants to access these increasingly fast and automated markets, and to handle larger volumes of transactions with fewer people.

In outlining the development and purpose of these automated trading strategies, I have touched on some of the positives. But let me be clear: the role of these strategies in the market continues to evolve, and as their significance grows, issues arise.

Particularly with High Frequency Trading, we have heard questions and concerns from our regulators and from our clients. Some of the most prevalent questions are as follows:

— If only a few players can afford the infrastructure to consume the fast private data feeds from the exchanges, and act as quickly as the HFT players, is there an unlevel playing field?

— Is displayed liquidity too fleeting?

— Should High Frequency traders who provide significant volume also have obligations to the market in times of duress?

— Do High Frequency traders exacerbate market volatility?

— Are High Frequency traders unfairly and systemically front-running larger sized orders?

Let me first say that like any trading tool, automated trading strategies can be problematic if used incorrectly or with bad intentions. Trading that is illegal is illegal at any speed. The challenge that we all face in the market is that regulation must evolve at the same speed as the technology in order to identify and address bad behavior.

Beyond that, there are a few important, related principals that we feel should be adhered to:

— industry practices such as co-location and enhanced market data feeds should be made available to all investors and at prices that are transparent;

— to the extent some investors are afforded structural advantages, those advantages should be accompanied by the obligation to provide liquidity to the market to the extent it is reasonable under the circumstances; and

— as a manner of good risk management, new technologies must be accompanied by a robust framework to prevent erroneous orders and other problems that create market disruptions.

Moreover, we support further research to assess the impact of Algorithmic and High Frequency Trading strategies on:

— market liquidity and other elements that contribute to better functioning markets;

— the price formation process; and

— stability and volatility, especially during times of increased market stress.

At the end of the day, insider dealing and market manipulation remain illegal whether committed by open outcry, by telephone, by computer or by whatever technology comes next. We strongly support regulatory intervention that relates to improper trading activity, behavior of market actors, and market structure rather than the technology utilized. This approach will help ensure that benefits of new technologies for efficiency and liquidity can be fully realized.

Thank you, and with that I will hand it over to Wu Xiaoling.