

Is Laissez-fair Fairest?

September 2nd 2010

In the debate about high frequency trading, the arguments that HFT has distorted the market can be divided into two categories.

- One set of arguments suggests that HFT firms are playing within the rules, but that the rules are wrong. Blame for this is often laid at the feet of market operators or regulators.
- Another set of arguments suggest that HFTs are playing outside of the rules, and that the rules are not being adequately enforced. Blame for this is often laid at the feet of market operators or regulators.

I have shared my own (broadly positive) opinions on HFT previously, but the propensity of others to blame market operators for changes to the nature of the markets lead me to question the approach to surveillance and enforcement in our (now) competitive market landscape.

An easy observation is that no-one is sufficiently well informed to reliably spot market manipulation:

- As an MTF operator, we are only responsible for conduct of participants on our MTF. Assuming that a devious participant smart enough to manipulate the market would be also smart enough to disguise their intentions by using multiple MTFs or exchanges, we can only hope to catch the stupid ones.
- Secondly, the data we have for our own MTF only identifies the participant entering the order. If we identify a set of orders or trades that constitute (in our judgement) suspicious activity by a participant, we cannot know (without calling them to ask) whether they are attributable to one end-client or many. So a surveillance system looking for certain patterns of behaviour typically generates many “false positives” that turn out to be unconnected trades by a number of different end clients. Add to that the fact that end clients (whether asset managers, hedge funds or high-frequency prop trading) can and do split their business amongst multiple brokers, and it becomes harder still to identify what individual participants are doing.
- So if somebody wanted to monitor trading activity across all venues, they would need to combine “attributed” (identifying the owner) and “privileged” (including non-public information on hidden and iceberg orders) data from all the venues. This just isn’t possible today.

This situation is a few years old, but the US Flash Crash has recently prompted regulators to try and tackle it – with the SEC having made the most detailed proposals. Broadly speaking, there are two proposed technical solutions to the problem of fragmented/incomplete data.

1. Markets should be told by brokers who the underlying client is. A “client identifier” will be included with each order sent to market. It will not be disseminated in the market data, but will be available for surveillance purposes. This would allow individual markets to better identify behaviour of individual clients, irrespective of how many brokers they use.
2. There should be a “consolidated audit trail” to which all markets (and not just equity markets) will contribute their attributed data feed - including every order, amendment, cancellation and trade for every broker and identifying the underlying client for each. The entity receiving this consolidated information could then be responsible for surveillance across the multiple venues.

There are, however, some practical problems with these proposals:

- Markets will have to amend their interface protocols to accommodate the new client identifier
- It's not clear if there's an existing convention for client identifiers (e.g. BIC codes) that will cover all of the intended firms, or whether a new standard needs to be defined (and then a directory maintained).
- Markets will then need to develop a secure (and presumably standardised) way of publishing the attributed and privileged data to the consolidated audit trail.
- The consolidated audit trail for US security and derivative markets has been estimated by the SEC to cost \$4billion to set up, and a further \$3billion each year to operate. For many participants, that seems like too high a price to pay for an unquantifiable improvement in market quality (although I note that a number of vendors have approached the SEC with lower-cost proposals).

Assuming the practical problems can be overcome, there are still some other thorny issues to resolve:

- Given our fragmented regulatory landscape, who will undertake surveillance using the consolidated audit trail?
- Do the regulators have the necessary expertise, or might they outsource the function (as recently [proposed](#) to the SEC by Senator Edward Kaufman)?
- And if the individual undertaking the analysis is smart enough to make sense of the consolidated audit trail and understand the trading strategies behind a (presumably anonymous) participant's behaviour, how do we reassure participants that their intellectual property will be safeguarded if that individual decides it's time to become a trader?

And that brings me to my real question – Do regulators, market operators, participants or academics actually agree on what constitutes illegal or immoral behaviour?

I believe there is consensus with respect to insider dealing and front-running of client orders, but what about practices that *might* amount to “market manipulation” depending on the *intent* of the participant?

The falling costs and lower latencies stimulated by competition amongst markets have changed trading behaviours dramatically – and many of the practices (such as high order cancellation rates, the presence of orders at multiple price points, the presence of orders on both sides of the book, or speedy position reversals) that might have previously been associated with market manipulation are now routinely exhibited by legitimate trading strategies (whether market making or the algorithmic execution of client orders).

I tried to explain this difficulty to a (non UK) regulator, who first told me that we should identify orders submitted where “the participant doesn't really want to trade”. This is tricky for market operators, since our markets only accept firm orders (there is no risk-free option to post into the order book during continuous trading), and because our mind-reading skills are not as developed as regulators apparently suppose. And if the risk of trading truly is the most effective disincentive to submitting “misleading” orders, then is competition amongst market participants the best way of achieving a fair market?

He responded that we should discourage speculative orders priced far from the prevailing BBO – but in my mind that's just a recipe for shallow and volatile markets. I would argue, for example, that rather than attack the use of “stub quotes”, the correct response to the Flash Crash should be to

encourage *more* participants to place “speculative” orders so that competition amongst them creates a deeper and more stable market.

What about “momentum ignition”, described by the SEC as the practice of “spoofing” algorithms or human traders into crossing the spread by “stepping ahead” of them in the order book, or printing small trades at the Bid or Offer, thus creating momentum which increases transaction costs for customer orders... How can regulators or market operators draw a line between “igniting momentum” and the (presumably legitimate) practice of detecting an imbalance in supply and demand and stepping ahead to profit from the anticipated price movement? Most brokers seem to take the view that it is their responsibility (and not regulators’ or market operators’) to protect their clients, improving their algorithms such that they are less prone to being spoofed and consequently trading “at the wrong price”.

Setting aside the obvious abuses of insider dealing and front running, if markets are competitive by nature, is it realistic to “protect” participants from one another? And if there are limitations to how “safe” we can make the market, how do we at least ensure that they are “fair” (so that no one participant or group enjoys an innate advantage over another)? Before we design the all-singing, all-dancing technical solution to the problem of policing fragmented markets, we need to be clear about what we’re trying to achieve. What would it take to identify and police all types of “manipulative” trading strategy, how effective can the policing be, and do market participants think it’s worth bearing the cost? And to what extent should we rely on surveillance and enforcement to create a fair market, versus competition amongst participants seeking best execution for themselves or their clients?

[We invite feedback from brokers, competitors, regulators and institutional investors on our approach and our views.](#)

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P.S.

- Turquoise takes great pride in its sophisticated surveillance capabilities, places great emphasis on the quality of its marketplace, and takes its regulatory responsibilities very seriously. We raise this topic because we think it is a market-wide issue which we cannot address alone.
- Turquoise has retained its number one position in the dark for a third successive month, slightly increasing its share of dark trading.
- Our migration to Millennium Exchange takes place next month. Please let us know if you need our assistance in making preparations. The dress rehearsals are on September 11th and 18th.