



High Frequency Trading, Automated Trades and Financial Regulation

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High frequency trading is a recent innovation in financial intermediation that does not fit neatly into a standard liquidity-provision framework. While the net contribution of high frequency trading to market dynamics is still not fully understood, their mere presence has already shaken the confidence of traditional market participants in the stability and fairness of the modern financial market system as a whole.

In a series of studies on HFTs and the trading ecosystem, Prof. Kirilenko found that the HFT industry in the US was dominated by an oligopoly of fast and aggressive incumbents who earned high and persistent profits while taking little risk. The lack of competitive market dynamics lead to concerns over price discovery/formation process in markets with HFTs and the finding that it's not the HFTs per se, but the responses of slow traders to their presence that affect prices and liquidity in the market. A recently completed study on trading platform latency, i.e. how long a trading platform takes to process certain types of messages, revealed that latency and volatility are highly correlated.

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Since HTFs trade a lot, they also message the most and are capable to understand and compute the distribution in latency throughout the day. This explains why many regulators and policymakers are focusing on latency measures to slow things down so as to remove this advantage of HFTs, e.g. minimum quote life, adjusting time stamps. Policy-wise, he recommended mandatory disclosure of information on latency by trading platforms on an ongoing basis.

Mr. Winkler discussed the preliminary findings of the internal research on the contribution of HFT to liquidity in European equity markets. This looked at the extent of order duplication across a number of trading venues and revealed that there are more duplicated orders for HFTs (around 30%) compared to non-HFTs (around 10%). This is turn lead to the need to reflect on different ways to measure liquidity in fragmented equity markets so as to account for duplicated orders, i.e. net liquidity. The results of the event study and regression analysis pointed towards a stronger reduction in gross liquidity than in net liquidity, hence towards the presence of 'ghost liquidity.

Prof. Van Achter indicated that HTFs can trigger cascades and spirals, due to their highly correlated algorithmic trading strategies, thereby exacerbating market shocks, particularly in stressful times. From a welfare perspective, the evidence shows that there is overinvestment in speed, with traders both on buy and sell sides competing to be the fastest. It may also be problematic if HFTs succeed in crowding out long-term risk-bearers, slower traders from the market. On the regulatory measures at EU level, he welcomed the introduction of circuit breakers/trading halts in MiFID II, and in particular, the provisions on the calibration to the liquidity of asset classes and the wide-market coordination of circuit breakers. Prof Kirilenko voiced concerns over the use of circuit breakers as there is no need to shut down the entire market and stated that that trade pauses (5s) when you cannot submit/modify/cancel orders should suffice.

Prof. Menkveld noted that HFTs do connect buyers and sellers that happen to arrive at different times on different trading venues, which is critical for a good functioning in the securities markets. Nonetheless, one should not overlook the fact that there are two categories of HFTs, the so-called 'HF makers', but also the 'HF bandits'. He also admitted that there is a lot of complaining from the buy side about HFTs, especially from institutional investors, and encouraged further 'good faith' discussions on how best to cope with these technological and market changes are needed. After all, HFTs need to have the buy side around, with their occasional trade orders, to actually make a profit.

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