Ultra-fast trading firms hit headwinds in race to be first

News analysis

Opportunities to make money from faster speeds are drying up as the technology spreads, say Hal Weitzman and Telis Demos

In Aurora, a blue-collar town 35 miles south-west of Chicago, CME Group, the US’s biggest futures exchange, is building a vast data centre that will enable thousands of customers to trade at lightning speed.

When it opens next year, the 425,000 sq ft "co-location" facility will allow traders to place their computers next to the exchange’s matching engine, shaving a millisecond off trade execution times that are already measured in tiny fractions of a second. Traders will, in industry parlance, benefit from the "lowest latencies" available.

The facility is a powerful symbol of how high-frequency trading – in which computers trade automatically using algorithms at speeds faster than people can match – is reshaping finance and how exchanges are doing their utmost to capture the business.

Yet, while new and cheaper technology has enabled ultra-fast traders to grab greater market share, the cost of being the very fastest has been rising, to such a degree that only very big or specialised firms can afford to compete in the race to cut trading times by ever-smaller fractions of a second.

Just a few firms, such as Chicago-based Getco, have deep enough pockets to stay ahead of the pack. For the rest, the importance of speed has begun to diminish. Most HFT traders have become less interested in getting deals done as fast as possible than in developing profitable strategies that predict at what levels the markets are likely to be trading.

"We are seeing some high-frequency traders becoming old-fashioned quants," says Jose Marques, head of global electronic equity trading at Deutsche Bank. Quant funds traditionally use computers to look for price patterns in trading.

A natural development from the move since the 1980s from the open-outcry trading pits to electronic, screen-based trading, high-frequency trading (HFT) has come to play an increasingly dominant role in financial markets. It comprised more than 60 per cent of shares traded in US equity markets in 2002 and makes up much futures trading as well as a smaller proportion of the options market.

"HFT is cannibalising itself, since it is driving out the very traders it needs to feed off," says Karim Taleb, of Robust Methods, a New York trading firm. In response, most traders are already turning to other strategies less dependent on speed.

Increasingly, they are investing in technology that enables them to try to predict where markets will move. Cameron Smith, general counsel at Quantlab, a proprietary trading firm, says: "The reality is you need to have some sort of model that sees something that others don’t!"

Many Chicago trading firms, which specialised in futures, are looking to extend into options and equities, where they can use their expertise in asymmetric trading, where dealers respond to news events such as Federal Reserve interest rate decisions.

Traders have also moved further into agricultural commodities and metals futures markets.

Some firms have indeed become more like "quant" funds, leaving their computers to find patterns in trading, while investing more in human research to obtain an edge. Ultimately, that would mean trading times slowing in mature markets over the coming years: from microseconds, to minutes, hours, and even days.

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