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Limit Order Placement by High-Frequency Traders

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The recent high profile court cases in the U.S., UK and China on high frequency trading (HFT) have further elevated the concerns about HFT. In particular, a core issue in the ongoing debate is the impact of HFT on market liquidity. Market participants have long argued that the liquidity provided by HFT traders is illusory and difficult to access, which has been dubbed as "phantom liquidity."

Using a unique dataset with a complete history of limit order placement, execution, and cancellations on NASDAQ, for the past two years Dr. Hui Zheng, Senior Lecturer at the University of Sydney and Senior Researcher at the Capital Markets CRC, has been working with Prof. Avanidhar Subrahmanyam from UCLA on a joint research, the first study to date focusing on the liquidity provision by HFT traders.

The study shows that HFT firms more effectively use order cancellation to strategically manage their limit orders in anticipation of short-term price movements. HFT firms increase their liquidity provision during periods of high volatility; their liquidity provision is less affected by order imbalance shocks.

Overall, the study finds that HFT limit orders exert a stabilizing influence on markets, and provides an explanation to the unfavourable impact of new policies adopted in Canada and Italy which universally curbed all HFT activities. Martin Wheatley, CEO of the Financial Conduct Authority, recently stated that "a priority challenge for HFT specifically, which I'm not sure has yet been honestly assessed by all players, is where the balance lies between the potential benefits against costs".

The study by Dr. Zheng and Prof. Subra provides vital perspectives for market regulators to consider when assessing the overall costs and benefits of HFT regulation.