



Quantitative Finance > Trading and Market Microstructure

How does the market react to your order flow?

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We present an empirical study of the intertwined behaviour of members in a financial market. Exploiting a database where the broker that initiates an order book event can be identified, we decompose the correlation and response functions into contributions coming from different market participants and study how their behaviour is interconnected. We find evidence that (1) brokers are very heterogeneous in liquidity provision -- some are consistently liquidity providers while others are consistently liquidity takers. (2) The behaviour of brokers is strongly conditioned on the actions of {it other} brokers. In contrast brokers are only weakly influenced by the impact of their own previous orders. (3) The total impact of market orders is the result of a subtle compensation between the same broker pushing the price in one direction and the liquidity provision of other brokers pushing it in the opposite direction. These results enforce the picture of market dynamics being the result of the competition between heterogeneous participants interacting to form a complicated market ecology.

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