

Title: Price Impact of Aggressive Liquidity Provision

Abstract:

This paper analyzes brief episodes of extremely high-intensity quotes turnover and revision- "bursts" in quotes- in the U.S. equity market. We find significant price impact associated to this market-maker initiated event, approximately 50% higher than that during equivalent periods of high-intensity trade arrival and about five times higher than during non-burst periods. Bursts in quotes are concurrent with short-lived structural break in the informational relationship between market makers and market takers. During bursts, market makers no longer passively impound information from order flow into quotes- a departure from traditional market microstructure paradigm. Rather, market makers significantly impact prices during bursts in quotes. Further analysis shows that there is asymmetry in adverse selection between the bid and ask sides of the limit order book and only a sub-population of market makers enjoy an informational advantage during bursts. Our results call attention to the need for a new microstructure perspective in understanding modern high-frequency limit order book markets.