Order Flow Segmentation, Liquidity and Price Discovery: The Role of Latency Delays^{*}

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Abstract

Latency delays—known as "speed bumps"—are an intentional slowing of order flow by exchanges. Supporters contend that delays protect market makers from high-frequency arbitrage, while opponents warn that delays promote "quote fading" by market makers. We construct a model of informed trading in a fragmented market, where one market operates a conventional order book, and the other imposes a latency delay on market orders. We show that informed investors migrate to the conventional exchange, widening the quoted spread; the quoted spread narrows at the delayed exchange. The overall market quality impact depends on the nature of the delay: "short" latency delays lead to improved trading costs for liquidity investors, but worsening price discovery; sufficiently "long" delays improve both.

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