Pre-trade transparency in call auctions: quantity discovery vs. price discovery

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Abstract

This paper examines the effects of pre-trade transparency on the efficiency of call auctions. We compare the call auction mechanisms on two major European stock exchanges, Euronext (Paris) and Xetra (Frankfurt). The French exchange offers a very transparent auction mechanism, which discloses five levels of limit orders, and has a fixed closing time. The Xetra system is more opaque and randomizes the ending time. Consistent with recent theoretical work, we find that the transparent auction mechanism attracts a greater share of total trading volume. Moreover, we document a stronger increase in cross-asset correlations of trading volume and returns in the closing auction for the transparent market, which indicates a larger presence of more uninformed liquidity traders in the French call auctions. We document a significantly higher overnight return reversal for the transparent market, indicating that there might be a trade-off between quantity discovery and price efficiency.