## Price Distortions in High-Frequency Markets

Jakub Steiner Northwestern University

Colin Stewart University of Toronto

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## ABSTRACT

Advances in trading technology have made it possible for traders to very quickly buy and resell financial assets. How does this increase in trading frequency affect prices? In a traditional rational expectations framework, since prices reflect underlying fundamentals, trading frequency typically does not play a significant role. We show that this result is very sensitive to small errors in the beliefs of market participants. In particular, if, when forming expectations about future prices, a small fraction of agents fail to perfectly distinguish among all states, prices generally fail to respond to relevant changes in fundamentals when the trading frequency is high. We study this question within a simple model of a dynamic beauty contests based on Morris and Shin (2002) and Allen, Morris, and Shin (2006).