

# Discussion of "High Frequency Trading and the 2008 Short Sale Ban" by Jonathan Brogaard, Terrence Hendershott and Ryan Riordan

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  - 1 Brogaard, Hendershott and Riordan (BHR) study how the short selling activity by high frequency traders (HFT) affects price efficiency and stock market liquidity
  - 2 Using 2008 short sale ban as an exogenous source of cross-sectional variation BHR are able to address possible endogeneity by employing the instrumental regression framework. They find that the aggregate HFT's short selling decreases liquidity and increases pricing errors

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- The results of the BHR can be interpreted in two ways:
  - 1 This is a study of an impact of a short sale ban on liquidity and price discovery where authors disentangle the effect between HFT and non-HFT short selling
  - 2 This is a study of the impact of the HFT's shorting on liquidity and price discovery where a short sale ban provides a natural experiment environment and allows to address the endogeneity concerns



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- Scaling by the aggregate volume of short sales within a day allows to focus entirely on relative HFT and non-HFT contribution to liquidity

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  - ③ One can study the pre-ban and post-ban periods separately as a placebo test

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- In order to control for the time variation in the variables affecting both treated and control groups of stocks such as unobserved changes in the financial markets the panel regression specification with time fixed effects could be employed



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- I would use the interaction of the short interest with the free-float