Can ETFs Increase Market Fragility? Effect of Information Linkages in ETF Markets

Ayan Bhattacharya† and Maureen O’Hara‡

April 04, 2016

Abstract

We show how inter-market information linkages in ETFs can lead to market instability and herding. When underlying assets are hard-to-trade, informed trading may take place in the ETF. Underlying market makers, then, have an incentive to learn from ETF price when setting prices in their respective markets. We demonstrate that this learning is imperfect: market makers pick up information unrelated to asset value along with pertinent information. This leads to propagation of shocks unrelated to fundamentals and causes market instability. Further, if market makers cannot instantaneously synchronize their prices, inter-market learning can lead to herding, where speculators across markets trade in the same direction using similar signals, unhinged from fundamentals.

*First version: May 2015. For helpful suggestions and comments, we thank Gideon Saar.
†Samuel Curtis Johnson Graduate School of Management, Cornell University, Ithaca, NY 14853. Email: ab2278@cornell.edu.
‡Samuel Curtis Johnson Graduate School of Management, Cornell University, Ithaca, NY 14853. Email: mo19@cornell.edu.