

# Author's Accepted Manuscript

Does high-frequency trading increase systemic risk?

Pankaj Jain, Pawan Jain, Thomas H. McNish



PII: S1386-4181(16)30218-X  
DOI: <http://dx.doi.org/10.1016/j.finmar.2016.09.004>  
Reference: FINMAR414

To appear in: *Journal of Financial Markets*

Received date: 1 May 2015  
Revised date: 21 July 2016  
Accepted date: 2 September 2016

Cite this article as: Pankaj Jain, Pawan Jain and Thomas H. McNish, Does high frequency trading increase systemic risk?, *Journal of Financial Markets* <http://dx.doi.org/10.1016/j.finmar.2016.09.004>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting galley proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## Does high-frequency trading increase systemic risk?<sup>☆</sup>

Pankaj Jain<sup>a1</sup>, Pawan Jain<sup>b2</sup>, Thomas H. McInish<sup>a\*</sup>

<sup>a</sup>Fogelman College of Business & Economics, The University of Memphis, Memphis, TN 38152, United States

<sup>b</sup>Department of Economics and Finance, College of Business, University of Wyoming, Laramie, WY 82071, United States

Email: pjain@memphis.edu

Email: jain1p@cmich.edu

Email: tmcinish@memphis.edu

\*Corresponding author. Tel.: +901 277 9202; fax: +901 678 3006.

### Abstract

In 2010, the Tokyo Stock Exchange, the largest stock exchange headquartered outside of the United States, introduced a new trading platform, Arrowhead. This platform was designed to reduce latency and increase co-located, high-frequency quoting and trading (HFQ) from zero to 36% of trading volume. During tail events representing extreme market conditions, low-latency correlated HFQ may lead to systemic risks such as flash crashes, which has not been sufficiently addressed in the literature. In this paper, our study provides a framework to assess whether HFQ increases systemic risks and point to the need for incorporating correlations and CoVaR methods in regulating these risks through circuit breakers and other regulations.

<sup>☆</sup> We thank for their comments: Campbell Harvey, Andrew Karolyi, Hendrik Bessembinder, Pamela Moulton, Robert Van Ness, Tarun Chordia, Amy Edwards, Nishant Dass, Adam Gehr, Hitoshi Takehara, Keiichi Kubota, Naoto Isaka, Venkatesh Panchapagesan, Susan Thomas, and Valeria Martinez, participants of the finance seminars, brown bag seminars and conferences at the University of Mississippi, the U.S. Securities and Exchange Commission, National Stock Exchange of India, Securities and Exchange Board of India, Central Michigan University, Worcester Polytechnic Institute, University of Wisconsin, Whitewater, Fairfield University, Kakatiya University in Turkey, Indian Institute of Management, Indore, Indian Institute of Management, Bangalore, 2012 Financial Management Association meeting in Atlanta, 2012 Midwest Finance Association meeting in New Orleans, and the 2011 Eastern Finance Association meeting in Savannah. We thank the Center of International Business Education and Research for financial support and Eastern Finance Association and Indian Institute of Management, Indore, for the Outstanding Paper awards.

<sup>1</sup>Fax: +901 678 1714.

<sup>2</sup>Tel.: +307 220 1900; fax: +307 766 5090.

Download English Version:

<https://daneshyari.com/en/article/5100702>

Download Persian Version:

<https://daneshyari.com/article/5100702>

[Daneshyari.com](https://daneshyari.com)