

Accepted Manuscript

Systemic risk network of Chinese financial institutions

Libing Fang, Boyang Sun, Huijing Li, Honghai Yu



PII: S1566-0141(17)30511-3
DOI: [doi:10.1016/j.ememar.2018.02.003](https://doi.org/10.1016/j.ememar.2018.02.003)
Reference: EMEMAR 546

To appear in:

Received date: 20 December 2017
Revised date: 26 January 2018
Accepted date: 22 February 2018

Please cite this article as: Libing Fang, Boyang Sun, Huijing Li, Honghai Yu , Systemic risk network of Chinese financial institutions. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Ememar(2017), doi:[10.1016/j.ememar.2018.02.003](https://doi.org/10.1016/j.ememar.2018.02.003)

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 proof before it is published in its final 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.

Systemic Risk Network of Chinese Financial Institutions¹Libing Fang^a, Boyang Sun^a, Huijing Li^b, Honghai Yu^{a,*}^a School of Management and Engineering, Nanjing University, Nanjing, China^b I.H. Asper School of Business, University of Manitoba, Winnipeg, Canada**Abstract:**

The Chinese stock market crash in June 2015 has demonstrated necessary to improve understanding of systemic risk from the perspective of financial network. This study constructs a tail risk network to present overall systemic risk of Chinese financial institutions, given the macroeconomic and market externalities. Employing the Least Absolute Shrinkage and Selection Operator (LASSO) method of high-dimensional models, our results show that firm's idiosyncratic risk can be affected by its connectedness with other institutions. The risk spillover effect from other companies is the main driving factor of firm-specific risk, comparing with macroeconomic state, firm characteristics and historical price movement. The number of connections between institutions significantly increases during June 2014 to June 2016. Moreover, we utilize the Kolmogorov-Smirnov statistic to test significance of systemic risk beta based on tail risk and further rank the systemic risk contribution. Regulators could detect those firms that are most threatening to the stability of system.

Key words: Systemic risk contribution, Tail risk network, Firm-specific risk, VaR**JEL:** C30; D85; G20

¹ We are grateful to the editors and anonymous reviewers for their helpful comments, which greatly improved the earlier draft. This work was supported by the National Science Foundation of China [grant numbers 71472085, 71401071, 71672081, 71771117 and 71720107001].

* Corresponding Author: #22 Hankou Road, Gulou District, Nanjing, China, 210093. Tel: +86-25-83597501, Fax: +86-25-83685630, Email Address: hhyu@nju.edu.cn (Honghai Yu).

Download English Version:

<https://daneshyari.com/en/article/7349974>

Download Persian Version:

<https://daneshyari.com/article/7349974>

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