

ACADEMIC SEMINAR

The Reinsurance Network Among U.S. Property-Casualty Insurers: Microstructure, Insolvency Risk, and Contagion

Reinsurance is the primary source of interconnectedness in the insurance industry. As such, reinsurance connectivity provides a transmission mechanism for financial shocks and exposes insurers to contagion and potential systemic risk. In this paper, connectivity within the U.S. property-casualty (P/C) reinsurance market is modeled as a network. We extend the prior insurance network literature by modeling the network of all insurers in the market (primary insurers and reinsurers) not just primary insurers. We analyze all bilateral reinsurance counterparty relationships (domestic and foreign) of U.S. P/C insurers, and we model both intra and inter-group transactions. Our analysis of contagion and insolvency risk reveals that even the failure of the top 10 in-degree or in-strength reinsurers with 100 percent loss given default would not lead to widespread insolvencies in the U.S. P/C insurance industry.



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Dr. Tao Sun is an Assistant Professor at Department of Finance, University of Wisconsin – La Crosse. He received his Ph.D. degree in Risk Management and Insurance from Temple University. His current research interests include systemic risk in the insurance industry, insurance economics, risk modeling, mortality/longevity risk management, and corporate risk management. Dr. Sun has publications in top tier journals in risk management, insurance and actuarial science, including the Journal of Risk and Insurance, and Insurance: Mathematics and Economics. He serves as referee for the Journal of Risk and Insurance, Insurance: Mathematics and Economics, Risk Management and Insurance Review, the North American Actuarial Journal, and the Journal of Insurance Issues.

Date: 28 September 2016 (Wednesday)

Time: 9:00am - 10:30am

Venue: SEK210, 2/F, Simon & Eleanor Kwok Bldg.

Language: English (via Skype)

*** All are Welcome ***