Chaojun Wang

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Employment

2017 – Assistant Professor of Finance, Wharton School of the University of Pennsylvania

Education

2017	Stanford University, Ph.D. in Statistics, Ph.D. Minor in Economics
2012	École Polytechnique (France), Diplôme de l'École Polytechnique
2008	Lycée Faidherbe (France), Classe Préparatoire (Mathematics, Physics and CS)

Presentations

2018 Conferences: Econometric Society Winter Meeting, Columbia Financial Networks Conference, Rodney White Center Conference, Mid-Atlantic Research Conference, Review of Economic Dynamics Conference, CityU of Hong Kong Finance Conference, Econometric Society Summer Meeting

Seminars: George Mason Business School, Johns Hopkins University Carey Business School, University of Chicago (Guest Lecture), New York Fed, Princeton Economics

2017 Conferences: SITE, Cowles Annual Conference on General Equilibrium, WFA, SFS Cavalcade North America, NYU Search Theory Workshop, West Coast Search and Matching Workshop, Philadelphia Search and Matching Workshop, Annual NSF Conference on Network Science in Economics, Young Scholars Finance Consortium

Seminars: Wharton, Chicago Booth, MIT Sloan, Chicago Economics, Northwestern Kellogg, London School of Economics, CMU Tepper, UT Austin McCombs, UNC Kenan-Flagler, WUSTL Olin, the University of British Columbia Sauder School of Business, USC Marshall, Indiana Kelley

2016 Conferences: NYU Stern Microstructure Conference, Paris Dauphine Market Microstructure, Jerusalem School in Economic Theory (poster session), European Finance Association Doctoral Tutorial, European Economic Association Annual Congress, European Society European Meeting, Coalition Theory Network Workshop (Moscow)

Seminars: Stanford Graduate School of Business, Indiana University Department of Economics

2015 World Congress of the Econometric Society, Econometric Society Winter Meeting

2014 Issac Newton Institute workshop -- Systemic Risk: Models and Mechanisms (poster session)

Awards

2018	Marshall Blume Prize in Financial Research, Rodney White Center
2017	Best Job Market Paper in Finance Theory, Finance Theory Group
	Best PhD student paper, Young Scholars Finance Consortium
	Cubist Systematic Strategies Ph.D. Candidate Award, Western Finance Association
2015	Teaching Assistant Award, Department of Statistics at Stanford University
2010	Silver Medal, International Mathematics Competition for University Students
2009	Silver Medal, International Mathematics Competition for University Students
2007	Finalist for the national French team, International Physics Olympiads

Referee Work

American Economic Review, Review of Financial Studies, Journal of Economic Theory, Journal of Monetary Economics, Management Science

Teaching

FNCE 100: Corporate Finance (Wharton)
ENGR 60: Engineering Economics (Stanford University)
Session leader for STATS 60: Introduction to Statistical Methods (Stanford University)
Oral examiner in mathematics in the preparatory program at Lycée Michelet (Paris, France)

Other Skills *Software:* R, Matlab, Java, C#, Fortran
Languages: Chinese Mandarin (native), English (fluent), French (fluent)

Working Papers

Why Trade Over-the-counter? When Investors Want Price Discrimination *(with Tomy Lee)*, 2018

Despite the availability of low-cost exchanges, over-the-counter (OTC) trading is pervasive for most assets. We explain the prevalence of OTC trading using a model of adverse selection, in which informed and uninformed investors choose to trade over-the-counter or on an exchange. OTC dealers' ability to price discriminate allows them to imperfectly cream-skim the uninformed investors from the exchange. Assets with lower adverse selection risk are predicted to have a higher share of trades executed over-the-counter, as observed in practice. Having an OTC market can reduce welfare while increasing total trade volume and decreasing average bid-ask spread. Specifically, for assets that are mostly traded over-the-counter (such as swaps and bonds), having the OTC market actually harms welfare. Our results justify recent policies that seek to end OTC trading in such assets.

Core-Periphery Trading Networks, 2017

Core-periphery trading networks arise endogenously in over-the-counter markets as an equilibrium balance between trade competition and inventory efficiency. A small number of firms emerge as core dealers to intermediate trades among a large number of peripheral firms. The equilibrium number of dealers depends on two countervailing forces: *(i)* competition among dealers in their pricing of immediacy to peripheral firms, and *(ii)* the benefits of concentrated intermediation for lowering dealer inventory risk through dealers' ability to quickly net purchases against sales. For an asset with a lower frequency of trade demand, intermediation is concentrated among fewer dealers, and interdealer trades account for a greater fraction of total trade volume. These two predictions are strongly supported by evidence from the Bund and U.S. corporate bond markets. From a welfare viewpoint, I show that there are too few dealers for assets with frequent trade demands, and too many for assets with infrequent trade demands.

Efficient Contracting in Network Financial Markets *(with Darrell Duffie)*, 2017

We model bargaining in over-the-counter network markets over the terms and prices of contracts. Of concern is whether bilateral non-cooperative bargaining is sufficient to achieve efficiency in this multilateral setting. For example, will market participants assign insolvency-based seniority in a socially efficient manner, or should bankruptcy laws override contractual terms with an automatic stay? We provide conditions under which bilateral bargaining over contingent contracts is efficient for a network of market participants. Examples include seniority assignment, close-out netting and collateral rights, secured debt liens, and leverage-based covenants. Given the ability to use covenants and other contingent contract terms, central market participants efficiently internalize the costs and benefits of their counterparties through the pricing of contracts. We provide counterexamples to efficiency for less contingent forms of bargaining coordination.

RESEARCH IN PROGRESS

Inefficient Monitoring by Financial Intermediaries (with Triwit Ariyathugun)

Dealer Inventory and Liquidity in Corporate Bond Markets *(with Nathan Foley-Fisher & Stefan Gissler)*

How Decentralized is the German Bund OTC Market? *(with Calebe de Roure)*

March, 2019