

Chao Liu

Placement Director: Professor Alessandro Pavan 847-491-8266 alepavan@northwestern.edu
Placement Administrator: Lola May Ittner 847-491-8200 econjobmarket@northwestern.edu

Contact Information

Department of Finance
2211 Campus Drive
Evanston, IL 60208

Mobile: 847-910-2923
Email: chao.liu1@kellogg.northwestern.edu
Website: <https://chaoliu-kellogg.github.io/>

Fields

Research: Household Finance, Real Estate, Development Economics
Teaching: Household Finance, Corporate Finance, Causal Inference

Education

Ph.D., Finance, Kellogg School of Management (anticipated) 2024
Dissertation: Essays in Household Finance
Committee: Gregor Matvos (Chair), Paola Sapienza, Anthony DeFusco, John Mondragon
M.A., Economics, Peking University 2018
B.A., History and Economics, Peking University 2015

Honors, Grants & Awards

Kellogg Financial Institutions and Markets Research Center Research Grant 2021
Graduate Student Travel Grant, Northwestern University 2021
Doctoral Fellowship, Kellogg School of Management 2018-2023
Award for Integrity, Peking University 2016
China Economic Research Scholarship 2016
Graduate Academic Scholarship, Peking University 2015-2017
May Fourth Scholarship, Peking University 2013
Huaying Cultural & Educational Foundation Fellowship 2011-2015

Teaching Experience

Teaching Assistant, Northwestern University 2019-2023
Principles of Finance (undergraduate)
Teaching Assistant, Northwestern University 2019-2022
Accelerated Corporate Finance (MBA)
Teaching Assistant, Northwestern University 2021
Finance II (MBA)

Research Experience

Research Assistant, Gregor Matvos, Northwestern University 2021
Research Assistant, Anthony DeFusco, Northwestern University 2018-2019
Predoctoral Fellow, Paola Sapienza, Northwestern University 2017-2018
Research Assistant, Paola Giuliano, University of California, Los Angeles 2015-2016
Research Assistant, Se Yan, Peking University 2014-2015

Job Market Paper

“Language Frictions in Consumer Credit”

Abstract: This paper studies how language barriers between lenders and borrowers translate into differences in borrower outcomes in the U.S. mortgage market. I use survey data to infer and machine learning techniques to predict borrowers' English proficiency. I document significant descriptive differences in perceptions of mortgages, application experiences, and mortgage rates between limited English proficient (LEP) and non-LEP borrowers. To measure the causal effects of language frictions, I exploit a Federal Housing Finance Agency policy that provided translated mortgage documents in Spanish to mortgage lenders. After the policy change, LEP Hispanic borrowers had a streamlined application

process, contacted more lenders, understood mortgage contracts better, and enjoyed lower borrowing costs. Reducing language frictions also led to expanded access to credit, reduced loan risks, and a more competitive mortgage market for LEP borrowers. Overall, my findings highlight a cost-effective way to create a responsible inclusion of well-qualified LEP borrowers in the mortgage market.

Working papers

“Income Inequality, House Prices, and Housing Regulations” with Edmund Y. Lou and Wei Xiang

Abstract: This paper investigates the relationship between income inequality and house prices. We use U.S. county-level data from 1990 to 2018 and a novel instrument for the Gini coefficient to mitigate omitted variable bias and reverse causality. Our results show that a one standard deviation increase in the Gini coefficient corresponds to a 26% increase in house prices. We propose a supply-side channel, arguing that higher income inequality leads to increased residential land use regulation, thereby reducing housing supply as people prefer low-density neighborhoods. Consistent with this mechanism, our analysis shows that a one standard deviation increase in the Gini coefficient results in a 0.35 standard deviation increase in the Wharton residential land use regulation index, leading to 10% fewer housing units, 58% fewer building permits over the next decade, and a decrease in homeownership by 2 percentage points.

“The Very Long-Run Effect of Large-Scale Deworming in China” with Gordon G. Liu

Abstract: This paper studies the long-term impacts of an unprecedented large-scale schistosomiasis control campaign in China in the late 1950s. We present one of the first direct evidence of how an early-life deworming intervention affected life trajectories. The deworming program had a positive effect on the educational attainment of rural people. The effect was larger for people from a low socioeconomic background, suggesting that the program reduced educational inequality. Early-life exposure to the program had substantial effects on labor market success and economic status 50 years later, as well as on the second generation’s schooling.

Work in Progress

“Quantifying the Effect of Mortgage Broker Licensing Regulations” with Tianshi Mu

Abstract: We analyze the impact of mortgage broker licensing requirements on brokers, borrowers, and the market structure. By exploiting state-level variations in licensing regulations within the same Metropolitan Statistical Area (MSA), our preliminary findings show a decrease in broker employment, a larger share of college-educated brokers due to specific educational requirements, and a lower foreclosure rate for mortgages originated through brokers in more regulated counties. In response to licensing regulations, banks tend to open new branches, potentially easing the problem of access to credit. However, licensing regulations also result in higher interest rates for mortgages originated directly through retailers, as the decreased number of brokers diminishes upstream competition.

“Regulating Asset Resales: Evidence from Taiwan’s Housing Market” with Shi Gu and Edmund Y. Lou

Abstract: We investigate the impact of resale restrictions on asset prices and sales volumes by exploiting a resale ban on presale properties in Taiwan’s real estate market. Our preliminary results show that resale restrictions substantially reduce asset prices and sales volumes. The decline in sales volumes stems from the resale ban itself, as well as a decrease in initial sales when resale is not allowed. These impacts are more pronounced in regions with higher speculation levels and for properties with longer resale restriction periods. Our ongoing research explores whether developers in greater capital needs are more inclined to reduce prices to facilitate sales.

“Liability Systems and Innovation: Evidence from 19th Century England” with Jinlin Wei

Abstract: How do limited liability regimes affect the innovation of firms? The transition from unlimited liability to limited liability provides protection for the shareholders of firms and encourages them to increase risky investments, like innovation. We are digitizing the lists of joint-stock companies in England from historical archives between 1852 and 1860

and match patents with firms. Utilizing the changing employee size thresholds for the eligibility of adopting limited liability, we estimate how limited liability encouraged the entry of new firms and the innovative activities of firms. We expect that the impacts will be driven by firms that are characterized by large-scale production and large fixed capital investments in machines. This research aims to unravel the intricate relationship between liability structures and innovation, providing insights into how legal frameworks can shape and propel the corporate pursuit of innovation.

Conferences & Presentations

2024:

SFS Cavalcade North America, MFA, SWFA, FDIC Consumer Research Symposium, Peking University (Guanghua, PHBS), Shanghai Advanced Institute of Finance, Chinese University of Hong Kong, City University of Hong Kong, Lingnan University

2023:

Urban Institute, Lake Forest College, Federal Reserve Bank of Chicago, Freddie Mac, Inter-Finance PhD Seminar, Kellogg School of Management Northwestern University (Finance Brownbag)

2022:

Federal Housing Finance Agency, Kellogg School of Management Northwestern University (Finance Brownbag)

2021:

Kellogg School of Management Northwestern University (Finance Brownbag)

2020:

Department of Economics Northwestern University (Development Lunch), School of Public Health Peking University (Youth Academic Salon), Kellogg School of Management Northwestern University (Finance Brownbag)

2018:

Shanghai Academy of Social Sciences, National School of Development Peking University (Health Economics Seminar)

2017:

China Center for Economic Research Summer Institute

Refereeing

Health Economics, Emerging Markets Finance and Trade

References

Professor Gregor Matvos (Chair)
Department of Finance
Kellogg School of Management
2211 Campus Drive
Evanston, IL 60208
gregor.matvos@kellogg.northwestern.edu

Professor Paola Sapienza
Department of Finance
Kellogg School of Management
2211 Campus Drive
Evanston, IL 60208
paola-sapienza@kellogg.northwestern.edu

Professor Anthony DeFusco
Department of Finance
Wisconsin School of Business
975 University Avenue
Madison, WI 53715
anthony.defusco@wisc.edu

Doctor John Mondragon
Research advisor
Federal Reserve Bank of San Francisco
101 Market St
San Francisco, CA 94105
john.mondragon@sf.frb.org