### YINGJU MA

#### **OFFICE CONTACT INFORMATION**

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#### HOME CONTACT INFORMATION

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CURRENT POSITIONS PREVIOUS POSITIONS	<ul> <li>Laboratory for Economic Analysis and Design, MIT Research Fellow 2023 –</li> <li>Luohan Academy Senior Economist 2023 –</li> <li>Department of Economics, MIT Visiting Scholar 2024/4 –</li> <li>Luohan Academy (Ant Group, Alibaba Group) Economist 2019 – 2023</li> </ul>			
References	Professor Xavier Giroud Columbia Business School 665 W 130th St, Kravis Hall 771 New York, NY 10027 xavier.giroud@gsb.columbia.edu Professor Robert M. Townsend MIT Department of Economics 50 Memorial Dr, E52-538 Cambridge, MA 02139 rtownsen@mit.edu	Professor Ichiro Obara UCLA Department of Economics 405 Hilgard Ave, Bunche 9381 Los Angeles, CA 90095 iobara@econ.ucla.edu Professor Neng Wang Cheung Kong Graduate School of H 1 East Chang'an St, Dongcheng Dis Beijing, China, 100006 nwang@ckgsb.edu.cn		
<b>DOCTORAL</b> STUDIES	University of California, Los Angeles (UCLA) Ph.D., Economics, 2019 DISSERTATION: "Essays on Information Economics: Information Markets, Social Learning, and Information Design"			
PRIOR EDUCATION	Peking University, CCER M.A., Economics Zhejiang University B.Sc., Mathematics		2012 2009	
FIELDS	Primary Fields: Finance, Digital Ec Secondary Fields: Economic Theor			

# **RESEARCH1. "Fintech Access and Consumption Smoothing" (Job Market Paper)PAPERS**(with Xavier Giroud, Neng Wang, and Long Chen)

We identify and quantify the effect of access to Fintech consumer credit service on consumption using granular data from a nearly one billion consumer population on China's leading digital payment platform. We find that, despite sharp declines in consumption following the pandemic shock, consumers who used Fintech credit maintained a 28.7% higher monthly consumption in the six months afterward, indicating a consumption-smoothing effect. The effect persists at 22.0% on average over the two-year period. We explain the effect with two channels: the income channel, where the consumption-smoothing effect is stronger among low-income consumers and those from less developed regions, and the financial literacy channel, with a more significant effect for consumers with lower financial literacy. Fintech credit users do not show high delinquency rates but invest less in their wealth management account. Additionally, we find that the Fintech credit usage helps explain city-level variations in retail sales.

# **2.** "Regulating Information and Competition: Evidence from Fintech SME Loans"

(with André Sztutman and Robert M. Townsend)

How do market power and information availability affect the efficiency of emerging informational-rich lending markets? Leveraging data from a major lending provider for SMEs in China and an interest rate discount policy, we analyze the presence of selection in lending markets and how it interacts with market power. Our findings reveal a decrease in the average probability of loan repayment following interest rate reductions, indicating advantageous selection. Alternative explanations, such as moral hazard, observable heterogeneity, and dynamic portfolio optimization, cannot fully account for that pattern. Building on our estimated demand elasticities and selection effects, we assess the welfare implications of information-sharing and procompetition policies, finding that among a restricted simple set of policies, ensuring competition and mandating information to be shared across financial providers results in the largest welfare gains.

#### 3. "Monopoly and Competition of Foundation Models"

I consider the generation and provision of information products, such as generative artificial intelligence models, in the information markets. Sellers of information must make an investment to deliver quality experiments. The level of investment determines the informativeness of the best experiment a seller can provide. Heterogeneous buyers face a decision problem with the uncertainty of the true state and can purchase experiments to augment their private information. Sellers design a menu of experiments and prices for the market. I characterize the optimal menu given any investment level and derive the optimal investment. When two sellers compete with investment, we study an equilibrium in which two sellers split the market. Each seller specializes in

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generating a more informative signal about one of the states. Under a general assumption of cost structures, the monopoly seller always provides more informative experiments and to more buyers than in the case of duopoly competition.

# 4. "Unveiling Big Tech Credit Risk: Real-time Adjustments, Ecosystem Advantages, and Algorithmic Bias"

(with Long Chen, Jon Frost, and Yi Huang)

Big tech companies are becoming increasingly active in finance around the world, including in credit markets. Their platform-based business model, information advantage, and the use of real-time big data and machine learning can benefit them in real-time credit risk assessment, contract enforcement and dynamic risk management. We show that the big tech lender actively manages credit risk with real-time adjustments in credit admission, line of credit, and interest rates. The big tech lender effectively maintains a low delinquency rate, even during shock. We explain the low risk with a mechanism of ecosystem dependency. Since borrowers' business operations rely on the digital platform ecosystem, the implied punishment of platform exclusion is a powerful incentive for borrowers to repay the loans. We further investigate whether the adjustment algorithm exhibits algorithmic discrimination against specific groups.

## **RESEARCH IN**"Personalized Recommendation and Consumer Experiences"**PROGRESS**(with <u>Alessandro Acquisti</u>)

#### "Optimal Risk Sharing of SMEs as Households" (with <u>Robert M. Townsend</u>)

"Estimating the Value of Data" (with <u>Daron Acemoglu</u>, <u>Nikhil Agarwal</u>, and <u>Tobias Salz</u>)

"Excessive Entry and Social Inefficiency in Information Market"

POLICY WRITINGS	"Data Economy: A New Stage of the Digital Economy" Coauthor, Luohan Academy Report, 2023	
	"Understanding Platform Value and Responsibility" Coauthor, Luohan Academy Report, 2023	
	"Understanding Big Data: Data Calculus in the Digital Era" Coauthor, Luohan Academy Report, 2021	

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#### TEACHING Experience

LECTURER	Business in the Digital Age, Alibaba Global Initiatives	
	Pricing and Strategy (UCLA Econ 106P, upper division)	
	Principles of Microeconomics (UCLA EconXL 1)	2015
	Principles of Macroeconomics (UCLA EconXL 2)	2015
TEACHING		
ASSISTANT	Microeconomics I (UCLA Econ 201A, PhD Core) Teaching Assistant to Prof. Ichiro Obara	
	Principles of Microeconomics (UCLA Econ 1)	
	Intermediate Microeconomics (UCLA Econ 11)	
	Microeconomic Theory (UCLA Econ 101)	
	Macroeconomic Theory (UCLA Econ 102)	2015
	Economics of Entrepreneurship (UCLA Econ 106E)	
	Financial Market: Forecasting Exchange Rate (UCLA Econ 123)	
	Economic Institutions in Western Europe (UCLA Econ 181)	2017
	Game Theory (PKU, MBA)	2010,11
	Behavior Economics (PKU)	2010,11
	Economics of Human Capital (PKU)	2011
Relevant	Leave of absence for parental obligation	2017-18
EXPERIENCES	Research Assistant to Professor Mihaela van der Schaar	
	Research Assistant to Professor Justin Yifu Lin	2011
Fellowships,	UCLA Economic Departmental Fellowship	2012 2012-17
HONORS, AND	UCLA Graduate Fellowship	
AWARDS	Peking University Kwang-Hua Graduate Research Award	2010 2010
	Peking University Distinguished Student	
	Peking University First Class Graduate Scholarship	
	Zhejiang University Distinguished Graduate Student	2009
<b>PROFESSIONAL</b> <b>ACTIVITIES</b>	Conferences and Events 2023 Annual Conference of Digital Economy Co-chair, Luohan Academy, 2023 Luohan Webinar (on the Digital Economy) Initiator and Organizer (2020 – 2023) Luohan Frontier Dialogue Organizer (2020 – 2023)	

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	<b>Presentations and Invi</b> North American Summe		Talksleeting of the Econometric Society2024	
	Ant Group Digital Finance Business Unit; Alibaba Group Data Governance Committee			2023
	Alibaba Research Council Academic Committee Meeting; BIS Research Seminar*; NBER Household Finance Winter Meeting*; Contract Theory Conference* (*Presented by co-author)			2022
CITIZENSHIP	Chinese	Gender:	Male	
LANGUAGES	English (fluent), Mandari	n (native)		