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Placement Director: Gabriel Chodorow-Reich — chodorowreich@fas.harvard.edu — 617-496-3226
Administrative Director: Brenda Piquet — bpiquet@harvard.edu — 617-495-8927

Education

Harvard University
Ph.D. in Economics, 2019 to 2025 (expected)
M.A. in Economics, 2021

Tsinghua University, China
B.S. in Mathematics and Physics, highest distinction, 2019
B.A. in Economics with Certificate in Finance (secondary major), 2019

Harvard University
Visiting undergraduate student, Jan – Sep 2018

University of California, Berkeley
Visiting undergraduate student, Aug – Dec 2017

Fields

Macroeconomics, Finance, Behavioral Economics

References

Professor Xavier Gabaix
xgabaix@fas.harvard.edu

Professor Ludwig Straub
ludwigstraub@g.harvard.edu

Professor Gabriel Chodorow-Reich
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Professor Jeremy Stein
jeremy_stein@harvard.edu

Fellowships & Awards

Alfred P. Sloan Foundation Pre-Doctoral Fellowship in Behavioral Macroeconomics, awarded through NBER, 2024
John R. Meyer Dissertation Fellowship, Harvard Joint Center for Housing Studies, 2023
Desmond and Whitney Shum Fellowship, Harvard Fairbank Center for Chinese Studies, 2023
Invited young economist to the 7th Lindau Nobel Meeting on Economic Sciences, 2022
Certificate of Distinction in Teaching (x2), Harvard University, 2021-22
Chi-Sun Yeh Prize for Best Undergraduate Student in Physics, Tsinghua University, 2019

Teaching

Econ 2010d Economic Theory (1st-year PhD macro), Harvard University, Spring 2022
Teaching Fellow for Professors Adrien Bilal and Xavier Gabaix, Evaluation: 4.88/5 [PDF]
Econ 2410a Macro-Finance: Rational and Behavioral (PhD field), Harvard University, Fall 2021
Teaching Fellow for Professor Xavier Gabaix, Evaluation: 5/5 [PDF]
Economics of Online Platforms and the Sharing Economy (undergraduate), Tsinghua University, Spring 2019
Teaching Assistant for Professor Alexander White

Job Market Paper

Thinking about the Economy, Deep or Shallow? (with Pierfrancesco Mei)

We propose a theory of shallow thinking to capture people's limited understanding of the long causal chains involved in shock propagation. We cast general equilibrium as a system of causal relations in a directed cyclic graph. Estimation from our qualitative survey suggests that, on average, people think about only 2.6 steps of propagation, overlooking much of the graph and significantly deviating from rational expectations. Our theory implies that longer causal chains have diminishing influence on beliefs. Applying shallow thinking to a New Keynesian model with active monetary policy reconciles several puzzles about long-term interest rates and inflation: (i)

long-term interest rates underreact to cost-push shocks but overreact to monetary policy shocks; (ii) inflation expectations negatively predict bond excess returns; (iii) news about future cost-push shocks triggers inflation; and (iv) more persistent cost-push shocks lead to higher inflation. Notably, (iii) and (iv) contradict the predictions of rational expectations. In a real business cycle model, relative to rational expectations, shallow thinking amplifies and prolongs output fluctuations from productivity shocks and predicts negative future stock excess returns.

Publication

Platform Competition and Interoperability: The Net Fee Model (with Mehmet Ekmekci and Alexander White)
Accepted at ***Management Science***

Working Papers

Network Lerner Index: Demand and Distortions across Industries
Revise and Resubmit at ***Review of Economic Studies***

What determines demand elasticities and distortions across industries, acknowledging that firms' demand and pricings are interdependent in input-output networks? I propose a modeling approach of competition in markups, which micro-founds demand elasticities and markups via "network Lerner indexes" based on the network structure of the economy in general equilibrium. At the equilibrium, each firm's markup depends on four industry-level network statistics—cycle, substitution in production, substitution in consumption, and impact on consumer price, in addition to its market share. Empirical analysis of Compustat firms from 1997 to 2019 confirms the theory predictions. Taking into account the sectoral heterogeneity explains about three times more variations in markups. Under the theory-predicted markups, the loss in total factor productivity (TFP) due to misallocation is about 13% over the sample period, which is four times larger than the implied TFP loss that ignores sectoral heterogeneity.

Monetary Transmission and Portfolio Rebalancing: A Cross-Sectional Approach (with Xu Lu)
Revise and Resubmit at ***Journal of Financial Economics***

We propose that institutional investors' portfolio rebalancing across asset classes contributes to the stock market's puzzlingly large response to monetary shocks. We identify this channel through a cross-sectional approach and find that, ceteris paribus, a stock with 10% higher ownership by "rebalancers" experiences a 3.7bp larger loss to a 10bp positive monetary shock around FOMC announcements. Our quantity-based model shows that the aggregate market reaction relates to cross-sectional return differences due to rebalancing via a ratio of two demand elasticities. Rebalancing demand accounts for about one-third to two-thirds of the market reaction attributed to expected excess returns. We consider a set of exercises to corroborate our mechanism: (1) a quasi-experimental setting exploiting within-firm variations using dual-class shares, (2) stronger price reactions after quarter/month-end FOMC meetings when rebalancing is more imminent, and (3) placebo tests discriminating between rebalancing institutions and pure-equity institutions.

A Theory of Land Finance and Investment-Led Growth

Governments often heavily invest in infrastructure during early growth stages, while continuously expanding land supply to the private sector, as observed in the experiences of China, Singapore, and 19th-century US. To analyze these phenomena, I develop a growth model that incorporates both land and productive public capital. A benevolent government should optimally front-load public investment but maintain a constant land supply, which balances between fundraising through controlled supply and avoiding welfare loss from reduced land utilization. This optimal allocation can be implemented without necessitating government or private sector borrowing, or in a time-consistent manner. However, when a government is simultaneously discretionary and borrowing-constrained, a gradual increase in land supply becomes a reality, accounting for actual historical experiences. The mechanism is supported by preliminary empirical evidence from a panel of Chinese cities, showing that cities managed by officials nearing the end of their tenure and facing elevated borrowing costs tend to supply more land. Finally, I introduce a practical indexed

land contract linking land supply to the provision of public capital. This contract can restore the optimal allocation, potentially serving as a template to improve real-world practices.

Mental Macro-Finance Models: Evidence and Theory

How do people understand business-cycle comovements of macro-finance variables? I develop an empirical and theoretical framework to investigate people's mental models, extending the univariate Coibion and Gorodnichenko (2015) regression to address multivariate relations. Forecast revisions of related variables predict forecast errors, with coefficients sharing the same sign as the cross-variable relations, for consensus and individual forecasts. I present a new moment of cross predictability across variable pairs, and propose a theory with misperception of cross-variable relations, whose calibrated value is less than one half. Taking into account variable comovements and misperception thereof is also crucial for interpreting previous univariate findings.

Work in Progress

HANK Meets Tobin: Aggregate Demand with Inelastic Asset Markets (with Adrien Auclert, Matthew Rognlie, and Ludwig Straub)
Presented at SED 2022

This paper develops a unified framework to study the role of household heterogeneity and inelastic asset markets for New-Keynesian economics. Two sets of "sufficient statistics" emerge from our analysis: Average *marginal propensities to save* across assets and *pass-through coefficients* across assets, where the latter characterize how much of a given dollar investment in an asset is ultimately passed through to aggregate demand. We develop a qualitative and a quantitative framework to answer questions such as: How do inelastic asset markets change the transmission of demand shocks as well as monetary and fiscal policy? Can redistribution towards savers stimulate demand since they invest more? More generally how does the paradox of thrift emerge? Does saving generate investment, or investment generate saving?

Seminars & Conferences

2024 IMIM Rising Star Workshop (virtual, scheduled)
2022 University of Zurich PhD Macro Workshop

Academic Service

Referee for *American Economic Review: Insights, Journal of Economic Theory, Journal of the European Economic Association, Quarterly Journal of Economics*

Research Grants

Michael S. Chae Macroeconomic Policy Fund (co-PI with Pierfrancesco Mei), Harvard University, 2024
Institute for Humane Studies Publication Accelerator Grant (grant no. IHS017072), 2023
Molly and Domenic Ferrante Fund (co-PI with Pierfrancesco Mei), Harvard University, 2022
NET Institute Summer Grant, 2021

Languages

Chinese (native); English (fluent)

Software skills

Stata, Python, MATLAB

Hobbies

Skiing (member of Tsinghua University Ski Team, 2018-19), Tennis, Badminton, Running