Lingxuan "Sean" Wu

lingxuanwu@g.harvard.edu
Cell 857-829-7449
https://www.lingxuanwu.me

HARVARD
UNIVERSITY

Littauer Center G4	Placement Director: Jeremy Stein	jeremy_stein@harvard.edu	617-496-6455
1805 Cambridge St	Placement Director: Gabriel Chodorow-Reich	chodorowreich@fas.harvard.edu	617-496-3226
Cambridge MA 02138	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	Professor Ludwig Straub
	xgabaix@fas.harvard.edu	ludwigstraub@g.harvard.edu
	Professor Gabriel Chodorow-Reich	Professor Jeremy Stein
	chodorowreich@fas.harvard.edu	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 the propagation of macroeconomic shocks. Our theory predicts that deeper causal relations have less influence on beliefs. Our estimation suggests that, on average, people understand only about three steps of propagation. In a New Keynesian model with shallow thinking, (i) long-term nominal interest rates overreact to monetary policy shocks but underreact to cost-push shocks; (ii) inflation expectations negatively predict bond excess returns, controlling for yields; (iii) cost-push shocks are more inflationary than under rational expectations; and (iv) more

persistent cost-push shocks lead to higher inflation, contrary to the prediction of rational expectations. In a real business cycle model, in response to productivity shocks, (i) output displays a hump-shaped, more persistent response; (ii) investment, labor hours, and the stock price show amplified reactions; and (iii) investment negatively predicts stock excess returns.

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 goods. 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.

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

Is more competition the key to mitigating dominance by large tech platforms? Could regulation of such markets be a better alternative? We study the effects of competition and interoperability regulation in platform markets. To do so, we propose an approach of competition in net fees, which is well-suited to situations where users pay additional charges, after joining, for on-platform interactions. Compared to existing approaches, the net fee model expands the tractable scope to allow variable total demand, platform asymmetry and merger analysis. Regarding competition, we find that adding more platforms to the market may lead to the emergence of a dominant firm. In contrast, we find that interoperability can play a key role in reducing market dominance. Broadly speaking, our results favor policy interventions that assure the formidability of the competition that dominant platforms face.

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?
Conference	2022 University of Zurich PhD Macro Workshop
Academic Service	Referee for *American Economic Review: Insights, Journal of Economic Theory, 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