JINPENG SHI

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Research Interests

Labor Economics, Applied Econometrics, Genoeconomics

Education

George Mason University	2021 – Present
Ph.D. in Economics	
University of Barcelona	2019 – 2021
M.Sc. in Economics	
University of Copenhagen	2020 – 2021
Erasmus Exchange	
Jilin University of Finance and Economics	2013 – 2017
B.Sc. in Economics	

Job Market Paper

Returns to Skills, Technological Change, and Intergenerational Mobility (draft coming soon)
Abstracts:

The dramatic technological advance of artificial intelligence has sparked heated discussions regarding the future of work and concerns about the equity and efficiency trade-off in our society. To shed light on the future policy design and evaluate its long-run impact on the equality of opportunity, we draw evidence from the historical U.S. census and representative income surveys. Specifically, we ask how the adoption of technological advances would influence and distort the intergenerational transmission process (e.g., income, occupation, etc.) by changing the relative returns of skills over time through the labor market. While recent literature has successfully documented the skill content in the progress of computerization (Autor, Levy, Murnane 2003) and its consequence on the distribution of labor earnings, little is known regarding the implications of technological change on intergenerational mobility through the channel of labor market. Our results extend the skill-biased technological change literature by offering first-hand empirical evidence on how the adoption of new technology either bolsters or impedes the equitable growth of our society.

Working Papers

A Theory of Intergenerational Mobility: Heterogeneous Returns and Social Capital
Abstracts:

Recent empirical evidence has documented the importance of social capital in shaping the economic opportunities in the labor market. We build on Becker et al. (2018) to formally theorize the role of social capital by endogenizing return to human capital. We introduce complementarity between family wealth and human capital in earning function. Our model prediction provides empirical relevant estimates of intergenerational elasticity, and is able to sustain high persistence without having to assume convexity between earnings and

human capital. Our model highlights how social capital can exacerbate economic inequalities under imperfect labor market, the effect is more pronounced for the bottom of income distribution. We also point out that public intervention programs that overlook the role the social network among the disadvantaged may be insufficient to eradicate economic disparity across generations.

Innovation In Product Iteration

Abstracts:

This paper develops a dynamic model to examine firms' strategic innovation decisions in markets where product quality and brand reputation play a pivotal role. Focusing on a two-period duopoly framework, the model highlights the trade-offs firms face in allocating resources between incremental product updates and riskier breakthrough innovations. Consumers derive utility not only from product quality but also from brand reputation, which is endogenized as a function of past sales. This interplay between quality competition and reputation dynamics is crucial in shaping firms' profit-maximization strategies. The model extends the work of Goettler and Gordon (2011, 2014) by introducing endogenous brand reputation and differentiating types of innovation investments. Through comparative statics and equilibrium analysis, the findings provide insights into how leading and following firms navigate innovation decisions to maintain or improve their market position.

Learning From Randomness

Work In Progress

When District Attorneys Decide: Election Cycles and Prosecuting Behaviors (draft coming soon)

Uniformly Fast And Efficient Optimization In Genome-wide Association Studies

Publishing Via Networking

Awards, Honors, and Scholarships

IHS Humane Studies Fellowship	2024
Graduate Research Assistantship, George Mason University	2021-2025
Vice Rector Scholarship, University of Barcelona	2021
Erasmus Scholarship, University of Barcelona	2020
Merit Scholarship, Jilin University of Finance and Economics	2015, 2016

Teaching Experience

Econ 831 Mathematical Economics II (PhD Micro) — Spring 2024, 2025
Teaching Assistant

Econ 496/Econ 695 Economics and Biosocial Data — Spring 2024
Teaching Assistant

Skills

Programming
Matlab, Python, R, Stata, HTML/CSS

Languages
Chinese (Native), English (Fluent), Spanish