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Education

The University of Chicago, 2014 to present
Ph.D. Candidate in Economics
Thesis Title: "Partially Directed Search in the Labor Market"
Expected Completion Date: June 2020

B.S. in Economics and Finance, Tsinghua University, 2014

References:

Robert Shimer (Chair)
Department of Economics
The University of Chicago
(773) 702-9015
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Fernando Alvarez
Department of Economics
The University of Chicago
(773) 702-4412
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Greg Kaplan
Department of Economics
The University of Chicago
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Teaching and Research Fields

Primary fields: Macroeconomics
Secondary fields: Labor Economics

Teaching Experience

The University of Chicago:
Winter, 2018, Theory of Income II (Phd Macro), TA for Prof. Robert Shimer
Fall, 2017, Macroeconomics, TA for Prof. John Huizinga
Spring, 2017, Macroeconomics, TA for Prof. Thomas Winberry
Spring, 2017, Theory of Income III (Phd Macro), TA for Prof. Robert Shimer
Winter, 2017, The Elements of Economic Analysis II, TA for Michele Carter
Fall, 2016, Inequality: A Macro Perspective, TA for Prof. Greg Kaplan
Spring, 2016,The Elements of Economic Analysis I, TA for Prof. Grace Tsiang
Winter, 2016, Theory of Income II (Phd Macro), TA for Prof. Robert Shimer
Fall, 2015, Theory of Income I (Phd Macro), TA for Prof. Fernando Alvarez

Research Experience

2018, The University of Chicago, RA for Prof. Robert Shimer
2017, The University of Chicago, RA for Prof. Greg Kaplan
2016 - 2017, The University of Chicago, RA for Prof. Thomas Winberry

Honors, Scholarships and Fellowships

2019 - 2020 Dissertation Fellowship
2014 - 2019 Social Science Fellowship
2015 Lee Prize for Macro Core

Job Market Paper

"Partially Directed Search in the Labor Market"

Abstract: I study the labor market implications of limited information inherent in the job search process. I build an equilibrium search model where workers have partial information regarding the payoffs of jobs. Workers pay a cost to direct job search that is proportional to the divergence between the chosen search strategy and a benchmark random search strategy. With this cost, workers apply to every job with a positive probability, but apply to high-payoff jobs with higher probabilities. I embed this partially directed search behavior into an equilibrium wage posting model where firms and workers match bilaterally. Partially directed search leads to monopsony power: firms extract a markdown due to the cost of directing search. Efficiency of the market equilibrium depends on whether the markdowns are equally distributed across firms. The dispersion of markdowns arises endogenously with intermediate levels of search cost. In these cases, the unproductive firms are bounded by workers' outside options and extract lower markdowns. Workers apply to unproductive firms too often compared with the efficient allocation. A minimum wage redistributes from the unproductive firms to workers, but worsens the inefficiency by further increasing the markdown dispersion; progressive corporate income taxation redistributes from the productive firms to workers, and restores efficiency by decreasing the markdown dispersion. Lastly, I provide a micro-foundation for this cost based on information acquisition with rational inattention.

Research Papers

"Market Power through the Lens of Trademarks" w/ Kyle Kost and Jeremy Pearce

Abstract: This paper explores the link between market power and brands using comprehensive data on trademarks from the U.S. Patent and Trademark Office (USPTO). We construct a novel dataset that links the life-cycle of a trademark to its full set of owners and dates of registration, transfer, and cancellation. We document the macroeconomic trends in brand ownership and the microeconomic impact of brand transactions on markups at the firm-level. Using reallocation measures from Davis et al. (1996), we find an increase in brand reallocation since 1960. We then build a bridge from the trademark firms to their balance sheet information. We find that after a trademark purchase event, the buying firm's sales and costs both increase, but sales increase more, indicating a rising profit margin. Lastly, we build a quantitative model to evaluate the link between the brand ownership distribution at the micro-level and the aggregate markup. With this model, we discuss an identification strategy with trademark transactions linked to price and sales data at the product level.

"Matching in Teams and Wages: A Quantitative Framework" w/ Jeremy Pearce

Abstract: This paper explores sorting and the wage structure through the lens of teams. A firm collects workers of differing roles to produce in teams, subject to a noisy team assembly cost. The equilibrium captures the intuition behind the classic Becker (1973) matching model, yet this model requires fewer restrictions on the production function. Further, it allows for a tractable framework for analyzing large teams in firms. The model admits applications, such as wage inequality and tax policy. The production externality in teams and team assembly cost provide both a new framework for standard applications and tractability. We discuss two applications through the lens of this framework: the effect of production complementarities on the distribution of wages and the spillover effect of taxation on co-workers.

"Partially Directed Search and Sorting in the Labor Market"

Abstract: I study the matching between heterogeneous workers and heterogeneous firms with search and matching frictions and limited ability to direct search. In the competitive equilibrium, firms post wages to attract different workers. Due to search and matching frictions, workers face a trade-off between job finding probability and wage. Due to limited ability to direct search, equilibrium has both sorting and mismatch. I show the equilibrium can be characterized by a programing problem where firms purchase applicants as inputs from labor market. The limited ability to seek better alternatives give rise to frictional monopsony power of firms. Through simulation, I show a reduction in cost directing search leads to increase in wage inequality and more rent sharing from firms to workers.