Daniel Herbst

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CONTACT INFORMATION

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ACADEMIC APPOINTMENTS

2018 -	Assistant Professor, Department of Economics, University of Arizona
2019 - 2020	Visiting Scholar, MIT Golub Center for Finance and Policy

EDUCATION

2018	PhD in Economics, Princeton University
2010	AB in Applied Math - Economics, Brown University

FIELDS OF INTEREST

Labor Economics, Public Economics, Consumer Finance

FELLOWSHIPS, AWARDS, AND HONORS

2017 - 2018	National Academy of Education/Spencer Dissertation Fellowship
2016	Towbes Prize for Outstanding Teaching
2016 - 2017	Richard A. Lester Fellowship for Industrial Relations
2013 - 2014	Louis A. Simpson Graduate Fellowship
2014	Princeton IES Summer Fellowship
2010	*magna cum laude* with Honors in Economics, Brown University
2009	*Phi Beta Kappa* (Junior Year), Brown University

TEACHING EXPERIENCE

Fall 2021/2023	Instructor, ECO696H *Labor Economics* (PhD Course)
2019 – 2023	Instructor, ECO481 *Economics of Wage Determination*
2019 – 2024	Instructor, ECO382 *Labor and Public Policy*
Summer 2014/15/16	Instructor, Advanced Math Camp, Princeton MPA program

PROFESSIONAL ACTIVITIES

Referee for *American Economic Review, American Economic Review: Insights, American Economic Journal: Applied Economics, Econometrica, Economics of Education Review, Industrial and Labor Relations Review, Quantitative Economics, Quarterly Journal of Economics, Journal of Labor Economics, Journal of Human Resources, Journal of Policy Analysis and Management, Journal of Political Economy, Review of Economics and Statistics,* and *Review of Economic Studies*

2010 - 2012	Assistant Economist, Federal Reserve Bank of New York
2010	Research Associate, NERA Economic Consulting
2009	Intern, Federal Reserve Board

INVITED TALKS AND PRESENTATIONS

2018 - 2024 AEA Annual Research Conference, APPAM Annual Research Conference, Arizona State University, CFPB Research Conference, Eastern Economic Association Conference, Econometric Society Winter Meetings, FDIC Consumer Research Symposium, Dartmouth University, Federal Reserve Board, IIPF Annual Congress, IPA and GPRL Annual Research Gathering, IZA Economics of Education Workshop, Jain Family Institute, JPMorgan Chase Institute Conference on Economic Research, Kansas State University, MIT Golub Center, National Academy of Education Research Conference, National Tax Association Research Conference, NBER Education Group Spring Meeting, NBER Public Economics Group Fall Meeting, NBER Insurance Group Fall Meeting, NBER Summer Institute Household Finance Meetings, Princeton University NLSE Workshop, RAND Corporation, Rutgers University, SOLE Annual Meeting, University of Arizona, University of Bristol, UCLA, UC Merced, University of Hong Kong, Vanderbilt University

PUBLICATIONS

2024 **"Opportunity Unraveled: Private Information and Missing Markets for Human Capital"** (with Nathaniel Hendren) *Forthcoming at the American Economic Review*

Investing in college carries high returns but comes with considerable risk. Financial products like equity contracts can mitigate this risk, yet college is typically financed through non-dischargeable, government-backed student loans. This paper argues that adverse selection has unraveled private markets for college-financing contracts that mitigate risk. We use survey data on students' expected post-college outcomes to estimate their knowledge about future outcomes and quantify the threat of adverse selection in markets for equity contracts and several state- contingent debt contracts. We find students hold significant private knowledge of their future earnings, academic persistence, employment, and loan repayment likelihood, beyond what is captured by observable characteristics. Our empirical results imply that a typical college-goer must expect to pay back $1.64 in present value for every $1 of equity financing to cover the financier's costs of covering those who would adversely select their contract. We estimate that college-goers are not willing to accept these terms so that private markets unravel. Nonetheless, our framework quantifies significant welfare gains from government subsidies that would open up these missing markets and partially insure college-going risks.

2023 **"The Impact of Income-Driven Repayment on Student Borrower Outcomes"** *AEJ: Applied Economics* 15.1 (2023): 1-25.

Traditional student loan payments fall on borrowers early in their careers and provide no insurance against earnings shocks. By contrast, Income-Driven Repayment (IDR) lowers monthly minimums to a share of borrower income until debt is repaid or some forgiveness period has been reached, increasing short-run liquidity at the potential cost of long-run debt forgiveness or distorted labor supply. In this paper, I use an administrative panel of student loans to estimate IDR's effect on short- and long-run borrower outcomes and predict its fiscal costs. Exploiting variation in loan-servicing calls, I find that enrolling in IDR results in 22pp

fewer delinquencies and $368 lower balances within eight months of take-up. Three years later, IDR enrollees are 2.0pp more likely to hold mortgages, 1.8pp more likely to move to a higher-income zip code, and hold 0.2 more credit cards than non-enrollees. By contrast, I find no effects on unemployment deferments, a proxy for borrower employment status. I also find that most enrollees exit IDR and return to standard repayment after just one year, meaning the predicted incidence of debt forgiveness under IDR is close to zero. Taken together, my results suggest IDR provides short-term liquidity benefits but limited lifetime insurance value, carrying minimal long-run fiscal costs or labor supply distortions.

2020 **"Unions and Inequality Over the Twentieth Century: New Evidence from Survey Data"** (with Henry Farber, Ilyana Kuziemko, Suresh Naidu), *The Quarterly Journal of Economics* 136.3 (2021): 1325-1385.

It is well-documented that, since at least the early twentieth century, U.S. income inequality has varied inversely with union density. But moving beyond this aggregate relationship has proven difficult, in part because of the absence of micro-level data on union membership prior to 1973. We develop a new source of micro-data on union membership, opinion polls primarily from Gallup (N ≈ 980, 000), to look at the effects of unions on inequality from 1936 to the present. First, we present a new time series of household union membership from this period. Second, we use these data to show that, throughout this period, union density is inversely correlated with the relative skill of union members. When density was at its peak in the 1950s and 1960s, union members were relatively less-skilled, whereas today and in the pre-World War II period, union members are equally skilled as non-members. Third, we estimate union household income premiums over this same period, finding that despite large changes in union density and selection, the premium holds steady, at roughly 15–20 log points, over the past eighty years. Finally, we present a number of direct results that, across a variety of identifying assumptions, suggest unions have had a significant, equalizing effect on the income distribution over our long sample period.

2015 **"Peer effects on worker output in the laboratory generalize to the field"** (with Alexandre Mas), *Science* 350.6260 (2015): 545-549.

We compare estimates of peer effects on worker output in laboratory experiments and field studies from naturally occurring environments. The mean study-level estimate of a change in a worker's productivity in response to an increase in a co-worker's productivity (γ) is $\gamma = 0.12$ (SE = 0.03, N = 34), with a between-study standard deviation of τ^2=0.16. The mean estimated g γ-values are close between laboratory and field studies ($\gamma_{lab} - \gamma_{field}$= 0.04, P = 0.55, n_{lab} = 11, n_{field} = 23), as are estimates of between-study variance τ^2 ($\tau^2_{lab} - \tau^2_{field}$ = -0.003, P = 0.89). The small mean difference between laboratory and field estimates holds even after controlling for sample characteristics such as incentive schemes and work complexity ($\gamma_{lab} - \gamma_{field}$ = 0.03, P = 0.62, $n_{samples}$ = 46). Laboratory experiments generalize quantitatively in that they provide an accurate description of the mean and variance of productivity spillovers.

WORKING PAPERS

2024 **"Equity and Incentives in Household Financing"** (with Constantine Yannelis and Miguel Palacios)

We conduct a field experiment to identify adverse selection, moral hazard, and liquidity effects in equity-like contracts called income-share agreements (ISAs), which provide individuals with up-front financing in exchange for a share of future earnings. Our experiment randomly varies contract offers across two dimensions: (1) the share of income owed, and (2) a flat monthly payment. Comparing "decliners" across treatment groups—those who faced different menus of options but ultimately chose the same pre-offer contract terms–identifies adverse selection. At the same time, because these two treatment contracts offer the same earnings disincentive (income-share reduction) but different liquidity benefits (flat monthly payment), estimating their treatment effects relative to control borrowers allows us to separately identify moral hazard and liquidity effects. Preliminary results suggest those with private knowledge of poor earnings prospects are adversely selected into income-contingent contracts.