
NATALIA EMANUEL

natalia@nataliaemanuel.com • 773.732.1037 • nataliaemanuel.com

EMPLOYMENT

Federal Reserve Bank of New York , Economist in Microeconomic Studies Function	2022-
Princeton University , Postdoctoral Researcher in the Industrial Relations Section	2021-2022
Behavioural Insights Team , <i>Research Fellow</i>	2014-2015
National Bureau of Economic Research , <i>Research Assistant for Larry Katz and Claudia Goldin</i>	2013-2014
Government Performance Lab at Harvard Kennedy School , <i>Research Fellow</i>	2011-2012

EDUCATION

Harvard University , Ph.D. in Economics, <i>funded by the National Science Foundation</i> Fields: Labor Economics, Public Finance	2021
Oxford University , M.Sc. in Evidence-Based Social Policy, <i>funded by the Marshall Scholarship</i>	2015
Yale University , B.A. in Economics with Distinction in the Major, Cum Laude	2013

PUBLICATIONS

Why do Women Earn Less than Men? Evidence from Bus and Train Operators (2022) *Journal of Labor Economics* 40:2. (with Valentin Bolotnyy)
Female workers earn \$0.89 on the male-worker dollar even in a unionized workplace where tasks, wages, and promotion schedules are identical for men and women by design. We use administrative time card data on bus and train operators to show that the earnings gap can be explained by female operators taking, on average, 3 fewer hours of overtime and 4 more hours of unpaid time-off per week than male operators. Female operators, especially those who are unmarried and have dependents, pursue schedule conventionality, predictability, and controllability more than male operators. Analyzing two policy changes, we demonstrate that while reducing schedule controllability can reduce the earnings gap, it can also make female workers worse off.

SELECTED WORKING PAPERS

The Power of Proximity: Office Interactions Affect Online Feedback and Quits, Especially for Women and Young Workers (with Emma Harrington and Mandy Pallais)

In an increasingly digital world, how much does sitting near coworkers matter? And which workers are most affected by proximity? We study the online interactions and quit decisions of software engineers at a Fortune 500 firm. When offices were open, engineers who sat in the same building as all their teammates received 21 percent more online feedback on their code than engineers with distant teammates. After offices closed for Covid-19, this advantage shrank by 15 percentage points. We find coworkers' online interactions complement, rather than substitute for, face-to-face contact so sitting near coworkers facilitates both online and in-person learning. Losing proximity particularly reduces online feedback given to young engineers and female engineers. Young engineers and female engineers are also more likely to quit the firm when they lose proximity to coworkers. Even Pre-Covid, gaining one distant teammate reduced online feedback among coworkers sitting together, suggesting that remote-work policies impact even workers who choose to go into the office.

Firm Frictions and the Payoff of High Pay: Elasticities of Labor Supply and Productivity with Respect to Wages (with Emma Harrington)

How do firms benefit from raising pay for low-wage workers? Focusing on a Fortune 500 retailer, we estimate the impact of higher wages on employee productivity, turnover, and recruitment among warehouse and call-center workers, using the quasi-randomness induced by sticky wage-setting policies. We document finite wage elasticities of turnover (between -3.0 and -4.5) and recruitment (between 3.2 and 4.2), which suggest the firm has some wage-setting power. Yet, on the margin, raising wages by \$1 increases productivity by more than \$1, giving the firm an incentive to pay more, even if they could pay lower wages. These responses to pay emerge both in a setting where the firm discretely raised wages and in a setting where its wages remained constant while other firms raised pay. These effects reflect both changes in worker selection and changes in behavior of existing workers. We estimate that over half of the turnover reductions and productivity increases arise from changes

in workers' behavior. Finally, our estimates suggest considerable gender heterogeneity: Men's turnover is more responsive to higher wages than women's. But turnover effects are swamped by women's stronger productivity response to higher pay. Together, the gender-specific elasticities suggest firms have an implicit incentive to set female wages above male wages and thus firm profits cannot explain the gender pay gap.

'Working' Remotely? Selection, Treatment and the Market Provision of Remote Work (with Emma Harrington)

How does remote work affect productivity and how productive are workers who choose remote jobs? We decompose these effects using data from the call-centers of a US Fortune 500 retailer. The retailer employed both remote and on-site workers prior to Covid-19 and went entirely remote during the lockdown. In a difference-in-difference design around the Covid-19 lockdown, formerly on-site workers became 6-10% more productive after going remote relative to already-remote workers. However, during the lockdown, workers who originally chose remote jobs answered 18-21% fewer calls than those who originally chose on-site ones, indicating adverse selection into remote work. Our results suggest that adverse selection made remote work the exception rather than the rule in call-center jobs prior to the pandemic. We discuss implications of the Covid-19 lockdown for adverse selection and the consequent future of remote work.

Tripping Through Hoops: The Effect of Violating Compulsory Government Procedures (with Helen Ho)

Millions of Americans must navigate complex government procedures under the threat of punishment. Violating these requirements can lead to poverty traps or deepening legal system involvement. We use a field experiment to estimate the effect of failing to appear for court on subsequent legal contact. The treatments reduce failure to appear by 39 percent. Using treatment assignment to identify the causal impact of minor procedural violations, we find no effect on arrests. However, for lower-level cases, violations increase fines and fees paid by 60 percent or \$80, equivalent to a high-interest loan, showing that minor procedural violations can be costly.

FELLOWSHIPS & HONORS

- 2021 Upjohn Institute Dissertation Award Honorable Mention
- 2020 Horowitz Foundation Dissertation Prize
 - Lab for Economic Applications and Policy Grant
 - FDR Foundation Summer Support
 - Institute for Quantitative Social Science Research Grant
 - Lab for Economic Applications and Policy Grant – *with Emma Harrington*
 - Professional Development Fund
- 2019 Bradley Foundation Award
- 2018 Lab for Economic Applications and Policy Grant – *with Emma Harrington & Hannah Shaffer*
Rappaport Institute for Greater Boston – *with Valentin Bolotnyy*
- 2017 JPAL North America Pilot Grant – *with Helen Ho*
JPAL North America Travel Grant – *with Helen Ho*
Access to Justice Travel Grant – *with Helen Ho*
- 2014 National Science Foundation Graduate Research Fellowship – *3 years full funding for doctorate*
- 2013 Marshall Scholarship – *full funding to study at Oxford*
Yale Jefferson Award for Public Service
Charles H. Dickerman Award for best Yale undergraduate thesis in economics
- 2012 Heinz Government Service Fellowship

PUBLICATIONS OUTSIDE ECONOMICS

Mortality Among White, Black, and Hispanic Male and Female State Prisoners, 2001-2009. (2016) *SSM - Population Health* 2:10-13 (with Wildeman, Christopher, E. Ann Carson, Daniela Golinelli, and Margaret E. Noonan)

State-Level Variation in the Imprisonment-Mortality Relationship, 2001-2010. (2016) *Demographic Research* 34:359-372 (with Wildeman, Christopher, Margaret E. Noonan, Daniela Golinelli, and E. Ann Carson)

Cumulative Risks of Foster Care Placement for Danish Children. (2014) *PLoS ONE* 9(10): e109207 (with Peter Fallesen and Christopher Wildeman)

The Prevalence of Confirmed Maltreatment Among US Children, 2004-2011. (2014) *JAMA Pediatrics*. (with Christopher Wildeman, John M. Leventhal, Emily Putnam-Hornstein, Jane Waldfogel, and Hedwig Lee)

Cumulative Risks of Foster Care Placement for American Children, 2000-2011. (2014) *PLoS ONE* 9(3): e92785 (with Christopher Wildeman)

PROFESSIONAL SERVICE & TEACHING

Referee Service: Quarterly Journal of Economics, Journal of Political Economy, Review of Economic Studies, Management Science, Journal of Public Economics, American Economic Review: Insights, Journal of Labor Economics, Journal of the European Economic Association, Oxford Bulletin of Economics and Statistics, Child Maltreatment, Children and Youth Services Review, National Science Foundation

Harvard Undergrad. Sophomore Seminar: Women in the Workforce, *Course Designer & Instructor* Spring 2020

Harvard Transitioning To Research: Course for PhD Third Years, *Course Designer & Co-Instructor* Fall 2020