

VALENTIN BOLOTNY
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I will be a Hoover Fellow at Stanford University's Hoover Institution starting in September, 2019.

Personal Information:

Born in Ukraine. U.S. Citizen.

Education:

PhD, Economics, Harvard University, 2019

Committee: Andrei Shleifer, Edward Glaeser, Nathaniel Hendren, Claudia Goldin, Lawrence Katz
BA, Economics, International Relations, Stanford University, with Honors and Distinction, 2011

Research Experience and Other Employment:

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| Spring 2016 | Harvard University, Teaching Fellow for Undergrad Corporate Finance (Ec1745) |
| 2014-2016 | Harvard University, Resident Tutor in Economics and Fellowships for Eliot House |
| 2011-2013 | Federal Reserve Board, Sr. Research Assistant for Division of Financial Stability |

Professional Activities:

Refereeing: *Quarterly Journal of Economics*, *Journal of Urban Economics*, *Journal of Finance*,
Review of Economic Studies

Consulting: World Bank, Massachusetts Department of Transportation (MassDOT)

Honors, Scholarships, and Fellowships:

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| 2017 | Foundations of Human Behavior Initiative, Pershing Square Research Grant |
| 2016 | US Department of Transportation University Transportation Centers (UTC) Grant; Warburg Prize; Bradley Foundation Grant; Rappaport Institute for Greater Boston Research Fellowship |
| 2014 | 5 th Lindau Nobel Laureate Meeting on Economic Sciences, Attendance Scholarship |
| 2013 | National Science Foundation Graduate Research Fellowship; Paul & Daisy Soros New American Fellowship |
| 2011 | Firestone Medal for Excellence in Undergraduate Research |

Select Presentations:

“The Immigrant Doctors Project: Research Activism in Practice,” *Carleton College*, April 18th, 2018.

“Budget Constraints and Rent Extraction in Public Infrastructure Procurement,” Western Economic
Association International (WEAI) Conference, *Universidad Catolica de Chile*, January 3rd, 2017.

“Cost Estimates, Winning Bids, and Final Project Costs: Why Do They Differ?” Review, Evaluate,
Accelerate, and Deploy Innovation (READi) Committee Meeting, *Massachusetts Department of
Transportation (MassDOT)*, January 7th, 2016.

Working Papers:

**Bolotny, Valentin and Emanuel, Natalia. 2019. “Why Do Women Earn Less Than Men?
Evidence from Bus and Train Operators”**

Female workers earn \$0.89 for each 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, 1.5 fewer hours of overtime and 1.3 more hours of unpaid time-off per week than male operators. Female operators, especially those who 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 workers—particularly female workers—worse off.

Barreira, Paul, Basilico, Matthew, and Bolotnyy, Valentin. 2018. “Graduate Student Mental Health: Lessons from American Economics Departments”

We study the mental health of graduate students at Economics PhD programs in the U.S. Using clinically validated surveys, we find 18% of graduate students experiencing moderate or severe symptoms of depression and anxiety — more than three times the population average — and 11% reporting suicidal ideation in a two-week period. The average PhD student reports greater feelings of loneliness than does the average retired American. Only 26% of Economics students report feeling that their work is useful always or most of the time, compared with 70% of Economics faculty and 63% of the working age population. Depression and symptoms of anxiety increase with time in the program: 25% of students in years 5+ of their programs experience moderate or severe symptoms of depression or anxiety compared with 14.5% of first-year students. Many students with significant symptoms of mental distress are not in treatment. We provide recommendations for students and faculty on ways to improve student work conditions, productivity, and mental health.

Bolotnyy, Valentin and Bratu, Cristina. 2018. “The Intergenerational Mobility of Immigrants and the Native-Born: Evidence from Sweden”

We use administrative Swedish data to show that, conditional on parent income, immigrant children have similar incomes and higher educational attainment in adulthood than native-born Swedes. This result, however, masks the fact that immigrant children born into poor families are more likely than similar natives to both reach the top of the income distribution and to stay at the bottom. Immigrant children from high-income families are also more likely than natives to regress to the economic bottom. Notably, however, children from predominantly-refugee sending countries like Bosnia, Syria, and Iran have higher intergenerational mobility than the average immigrant child in Sweden.

Bolotnyy, Valentin and Vasserman, Shoshana. 2018. “Scaling Auctions as Insurance: A Case Study in Infrastructure Procurement”

The U.S. government spends about \$165B per year on highways and bridges, or about 1% of GDP. Much of it is spent through “scaling” procurement auctions, in which private construction firms submit unit price bids for each piece of material required to complete a project. The winner is determined by the lowest total cost -- given government estimates of the amount of each material needed -- but, critically, they are paid based on the realized quantities used. This creates an incentive for firms to skew their bids -- bidding high when they believe the government is underestimating an item's quantity and vice versa -- and raises concerns of rent-extraction among policymakers. For risk averse bidders, however, scaling auctions provide a distinctive way to generate surplus: they enable firms to limit their risk exposure by placing lower unit bids on items with greater uncertainty. To assess this effect empirically, we develop a structural model of scaling auctions with risk averse bidders. Using data on bridge maintenance projects undertaken by the Massachusetts Department of Transportation (MassDOT), we present evidence that bidding behavior is consistent with optimal skewing under risk aversion. We then estimate bidders' risk aversion, the risk in each auction, and the distribution of bidders' private costs. Finally, we simulate equilibrium item-level bids under counterfactual settings to estimate the fraction of MassDOT spending that is due to risk and evaluate alternative mechanisms under consideration by MassDOT. We find that scaling auctions provide substantial savings to MassDOT relative to lump sum auctions and suggest several policies that might improve on the status quo.

Publications:

Beltran, Daniel O., Bolotnyy, Valentin, and Klee, Elizabeth C. 2015. “Un-Networking: The Evolution of Networks in the Federal Funds Market,” *Federal Reserve Board of Governors Finance and Economics Discussion Paper Series*, 2015-055.

Using a network approach to characterize the evolution of the federal funds market during the Great Recession and financial crisis of 2007-2008, we document that many small federal funds lenders began reducing their lending to larger institutions in the core of the network starting in mid-2007. But an abrupt change occurred in the fall of 2008, when small lenders left the federal funds market en masse and those that remained lent smaller amounts, less frequently. We then test whether changes in lending patterns within key components of the network were associated with increases in counterparty and liquidity risk of banks that make up the core of the network. Using both aggregate and bank-level network metrics, we find that increases in counterparty and liquidity risk are associated with reduced lending activity within the network. We also contribute some new ways of visualizing financial networks.

Bolotnyy, Valentin. 2014. “The Government-Sponsored Enterprises and the Mortgage Crisis: The Role of the Affordable Housing Goals,” *Real Estate Economics*, Vol: 42, Issue 3.

I use regression discontinuity analysis to measure the effect of one of the Affordable Housing Goals, the Underserved Areas Goal (UAG), on the number of whole single-family mortgages purchased by Fannie Mae and Freddie Mac (GSEs) in undeserved census tracts for 1996–2002. Focusing additionally on tracts that became UAG-eligible in 2005–2006, I measure the effect of the UAG during peak years for the subprime market. The results suggest a small UAG effect and challenge the view that the goals caused the GSEs to supply substantially more credit to high-risk borrowers than they otherwise would have supplied during the subprime boom.