Scott R. Baker

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Personal

Born May 13, 1985; San Diego, California
US Citizen

Education

Stanford University; Stanford, California USA

Ph.D. Candidate, Economics, 2008-ongoing (expected graduation date: June 2014)
M.A., Economics, June 2011

University of California, Berkeley; Berkeley, California USA

B.A., Economics, with highest honors, May 2007
B.A., Political Science, with highest honors, May 2007

Committee References

Prof. Nicholas Bloom
Stanford University
650-725-7836; nbloom@stanford.edu

Prof. Caroline Hoxby
Stanford University
650-725-8719; choxby@stanford.edu

Prof. Luigi Pistaferri
Stanford University
650-724-4904; pista@stanford.edu

Prof. Ran Abramitzky
Stanford University
650-723-9276; ranabr@stanford.edu

Additional References

Prof. Steven J. Davis
University of Chicago, Booth
773-702-7312; steve.davis@chicagobooth.edu

Research Fields

Labor Economics

Teaching Experience

Teaching
Teaching Assistant for Paul Milgrom and Nicholas Bloom, Stanford University, Economics 149: The Modern Firm in Theory and Practice **Winter 2012, 2013**

Relevant Employment

Stanford University, *Research Assistant for Nick Bloom* **June 2009 - ongoing**

Intuit, *Data Scientist* **June 2011 - ongoing**

Scholarships, Honors, and Awards

- Outstanding Teaching Award, Winter 2012-2013
- Bradley Research Fellowship, 2012-2013
- Addington Prize in Measurement, 2012
- Shultz Graduate Fellowship in Economic Policy, 2010
- Stanford Graduate Fellowship, 2008-2009
- Earl Rolph Prize and Economics Departmental Citation, 2007

Professional Service

Refereeing
American Economic Review, AEJ: Applied, Economic Journal, Journal of Political Economy, Economic Letters, International Finance

Academic Presentations and Seminars
- "What Drives Job Search? Evidence from Google Search Data" - San Francisco Federal Reserve, AEA, Google, International Symposium on Labor Economics

- "Does Uncertainty Drive Business Cycles?" - IMF, AEA, Stanford Institute for Theoretical Economics
- "Measuring Economic Policy Uncertainty" - U. Chicago Applications Workshop, IFO Institute, Bank of England, Becker Friedman Institute, Norges Bank, Charles Street Symposium, BlackRock Investors, AEA
- "How Firm-Driven Shocks Impact Consumer Behavior" - AEA, Intuit
- "Web-Scraping Technologies for Economic Research" - American Enterprise Institute Workshop

Media Presentations and Products

- "Measuring Economic Policy Uncertainty" - Bloomberg TV, Al Jazeera America, CEPR Vox, Bloomberg News Op-Ed, SIEPR Policy Brief
- "Intuit Consumer Spending Index" - Bloomberg TV, CNBC, Yahoo Finance
- "Effects of the 1986 IRCA on Crime" - SIEPR Policy Brief

Academic Research Papers

(Job Market Paper) *Leverage-Driven Consumption Response to Household Income Shocks*

Abstract: This paper exploits a new employer-employee linked dataset with detailed household financial information on millions of households to investigate the interaction between household balance sheets, income, assets, and consumption during the Great Recession and the subsequent recovery. I find that, using shocks to individuals' employers as drivers of income, highly-leveraged households are more sensitive to income shocks, with a one standard deviation increase in leverage increasing the elasticity of consumption with respect to income by approximately 30%. I find similar results in which households with higher leverage ratios undertake larger consumption declines following negative shocks to asset prices. I use household-level data regarding savings and credit availability to show that these results cannot be fully explained by credit constraints, with highly-leveraged households with ample liquid assets and available credit remaining more sensitive to income and asset shocks than non-leveraged households.

Measuring Economic Policy Uncertainty (with Nick Bloom and Steve Davis)

Abstract: Many commentators argue that uncertainty about fiscal, monetary and regulatory policy slowed recovery from the 2007-2009 recession. To assess this view, we develop a new index of economic policy uncertainty (EPU) that draws on the frequency of newspaper references to policy uncertainty and other indicators. Our index spikes near tight presidential elections, after the Gulf wars, 9/11 attack and Lehman Bros. bankruptcy, and during the 2011 debt ceiling debate. Several pieces of evidence and analysis - including a human audit of 4,300 newspaper articles - indicate that our EPU index offers a good proxy for movements in policy-related economic uncertainty over time. Using micro data, we investigate the effects of EPU on investment and hiring, finding negative effects for firms heavily exposed to government contracts. At the macro level, positive innovations in our EPU index foreshadow declines in investment, output and employment in VAR models. Extending our measurement efforts back to 1900, we find that EPU rose dramatically in the Great Depression, but only from 1932 onwards when Hoover and then Roosevelt initiated a period of intense policy activism. We also find a secular rise in policy uncertainty since the 1960s, coincident with government fiscal and regulatory expansion.

Effects of the 1986 Immigration Reform and Control Act on Crime

Abstract: In the late 1970's, rates of illegal immigration into the United States increased dramatically. This increase led to pressure on the federal government to find some way of dealing with the immigrants, culminating in the 1986 Immigration Reform and Control Act (IRCA). This paper seeks to examine the effects that the 1986 IRCA, which legalized over 2.5 million illegal aliens, had on the commission of crime in the United States. I find evidence that IRCA applicants are associated with higher crime rates prior to legalization and that, subsequent to legalization, this association disappears. I find drops in crime of approximately 1%-4% associated with one percent of the population being legalized, primarily due to a drop in property crimes. This fall in crime is equivalent to 80,000-320,000 fewer crimes committed each year due to legalization. Finally, I calibrate a labor market model of crime using empirical wage and employment data and find that much of the drop in crime can be attributed to greater job market opportunities among those legalized by the IRCA.

What Drives Job Search? Evidence from Google Search Data (with Andrey Fradkin)

Abstract: The large-scale unemployment caused by the Great Recession has necessitated unprecedented increases in the duration of unemployment insurance (UI). While it is clear that the weekly payments are beneficial to recipients, workers receiving benefits have less incentive to engage in job search and accept job offers. We construct a job search index based on Google data which provides the first high-frequency, state-specific measure of job search activity. We demonstrate the validity of our measure by benchmarking it against the American Time Use Survey and the comScore Web Panel, and also by showing that it varies with macro drivers of search activity. We test for search activity responses to policy shifts and changes in the distribution of unemployment benefit duration. We find that search activity is greater when a claimant's UI benefits near exhaustion. Furthermore, search activity responses to the passage of bills that increase unemployment benefits duration are negative but short-lived in most specifications. Using daily data, we estimate that an increase by 1% of the population of unemployed receiving additional benefits results in a decrease in aggregate search activity of 1.7% lasting only one week.

Does Uncertainty Drive Business Cycles? Disasters as Natural Experiments (with Nick Bloom)

Abstract: A growing body of evidence suggests that uncertainty is counter cyclical, rising sharply in recessions and falling in booms. But what is the causal relationship? To identify this we construct cross country panel data on stock market levels and volatility as proxies for the first and second moments of business conditions. We then build a panel of indicators for natural disasters, terrorist attacks and unexpected political shocks, and use these to instrument our stock market proxies for first and second moment shocks. Using this approach in regressions for annual GDP growth we find that: (i) both the first and second moments are highly significant, and (iii) second moment shocks account for about 60% of explained variation in GDP growth and first moment shocks for about 40%. We also run a micro to macro simulation model with disaster shocks, to generate simulated data and test our empirical estimation strategy on the simulated data. We find in our simulated data that using exogenous disasters to instrument stock levels and volatility is works well, suggesting that using macro shocks to instrument stock market levels and returns can identify the impact different moment shocks on economic growth.

Congressmen's Political Power and Federal Contracting in their Districts (with Roy Mill)

Abstract: Officials elected by well-defined constituencies have an incentive to use their power to divert economic resources from the general public pool, generating rents for their constituencies. Constituencies reciprocate by reelecting officials who are most successful in reallocating resources in their favor. Differences in power between Congressmen of different parties, levels of seniority, and committee memberships thus distort the national governments allocation from a socially optimal one. In the United States, members of the House of Representatives are elected at the congressional district level, geographic areas of approximately 700,000 people. We use data on all US federally awarded contracts and grants since 2002 to measure how the relative power of Congressmen affects the amount of money sent to their districts or states, controlling for time-invariant individual characteristics and national trends. We find that political power, opportunity, strategic behavior, ideology, and committee membership all play important roles in the allocation of federal contracts across congressional districts. We intend to score representatives campaign contributions according to how local their donors are, and see whether more locally-supported representatives exhibit a stronger link between power and funds directed to their home district.

Data Science Work

Intuit

Quickbooks Online Attach Prediction

Analyzed Quickbooks Online data in order to develop methods for predicting QBO user attach and cancellation rates. Constructed model of financial characteristics of most likely customers and improved accuracy of attach and retention forecasts.

Intuit Consumer Spending Index

Developed the Insuit Consumer Spending Index in order to track consumption of American households. Leveraged external public datasets in the reweighting and renormalization of Mint.com data in order to drive the first utilization of Mint.com data for the creation of spending data representative of national spending trends rather than solely Mint.com user spending trends. Drove tens of millions of impressions on print and television media.