#### NBER Household Finance Small Grant Proposal Credit Supply Over the Business Cycle: Evidence from Bankruptcy Flags

Tal Gross
Columbia University

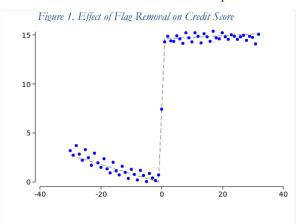
Matthew Notowidigdo
Northwestern University

Jialan Wang
University of Illinois (starting 6/2016)
Consumer Financial Protection Bureau (current)

The willingness of banks to lend during recessions has important implications both for consumer welfare and for aggregate output and consumption. While recent macro models have explored the

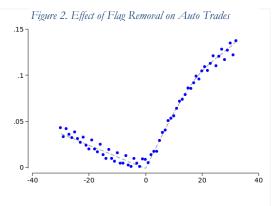
implications of a credit supply shock on output (e.g. Eggertsson and Krugman 2011, Guerrieri and Lorenzoni 2011), few papers have been able to cleanly identify and quantify the effects of credit supply during the last business cycle. In this paper, we exploit a unique feature of credit reporting regulations to trace out the relationship between credit score and credit supply from 2004 to 2014. We conduct this research using the CFPB Consumer Credit Panel (CCP), which contains a two percent random sample of all consumers with credit records in the U.S.

Our main goal in this paper is to measure the slope of the credit supply function with respect to



credit score. The Fair Credit Reporting Act requires that the record or "flag" of a Chapter 7 bank-ruptcy be removed ten years after the bankruptcy is adjudicated (seven years for Chapter 13). Because bankruptcy flags are an input into standard credit scoring models, former bankruptcy filers experience a discontinuous increase in credit scores when their flags are removed. We study over 200,000 bankruptcy filers in the CCP whose flags were removed between 2004 and 2014, and estimate how these credit score discontinuities affect the supply of credit using a regression-kink/regression-discontinuity design.

In preliminary results, we estimate that the removal of bankruptcy flags leads to a 15-point increase in credit score, 0.5 more trades, and a \$5,600-increase in balances over the first four quarters. Figure 1, above, presents the effect of flag removal on credit score, which represents the "first stage" of our design. The dots in the figure represent point estimates from a regression of consumer credit score on months since bankruptcy flag removal, controlling for calendar-month and cohort fixed effects. The dashed line plots a spline fitted to the same data. The figure suggests that former filers experience a sudden



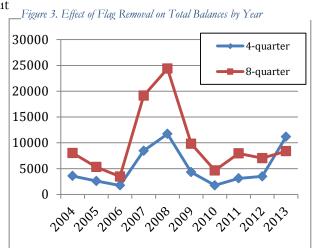
15-point increase in credit score immediately following bankruptcy flag removal.

Figure 2 presents one of our second-stage results: the effect of the increase in credit scores on auto trades. The figure suggests a clear kink in the number of auto loans on a consumer's credit report once bankruptcy flags are removed. By comparing the level of the estimated spline after flag removal to an extrapolated trend based on the pre-period, we estimate that consumers received an average of 0.09 additional auto loans in the first year after flag removal as a causal result of the increase in credit score. The CCP includes account-level data on balances, credit limits, and delinquen-

cies for most types of consumer credit including mortgages, auto loans, student loans, credit cards, and debt in collections. In addition, the dataset includes quarterly measures of credit score as well as credit inquiries, which we use as a measure of demand. Thus, we are able to measure the effects of the change in credit scores on a rich set of outcomes and disentangle the effects of credit supply from demand-driven hypotheses.

Our approach allows us to estimate the slope of the credit supply function over the last the business cycle by using consumers whose flags were removed in each year from 2004 to 2014, while controlling for aggregate time trends. Figure 3 presents the change in total debt balances four and eight quarters after flag removal for each year from 2004 to 2014. The figure suggests that total balances nearly always increase after a bankruptcy flag is removed, which is consistent with a positive relationship between credit supply and credit score. However, the magnitude of the effect varies dramatically over the business cycle. In 2008, the 15-point increase in credit score led to a \$12,000 increase in total balances after one year, while the same change in credit score led to only an \$1,800 increase in balances in 2006. The effect on credit inquiries varied little over the business cycle, suggesting that the results are driven by changes in the credit supply function as opposed to demand.

These initial results show evidence of a credit crunch. The supply of credit became much more sensitive to credit score during the Great Recession for the population of post-bankruptcy, largely subprime consumers. While the number of delinquent trades increases by 0.02 in the first year after flag removal, we find little evidence that new credit substantially increases financial distress. Thus, the retention of information about past bankruptcies on credit reports may lead to inefficient credit provision ex post, and may have exacerbated consumption declines in both durable and nondurable goods among subprime borrowers during the Great Recession.



In ongoing work, we are exploring how the

boom and bust in credit supply during the previous business cycle differentially affected various forms of credit (e.g. mortgages, auto loans, and credit cards), various types of financial institutions (e.g. large vs. small, varying exposure to subprime borrowers), and various geographic areas. Furthermore, we will link our estimates of regional heterogeneity in the credit crunch to broader economic outcomes including house prices, consumption, and employment growth.

This paper contributes to the growing literature on the importance of the credit channel during the Great Recession and the relationship between credit and aggregate growth and consumption. By developing a credible instrument for changes in credit supply that can applied across time and to all types of credit, all types of lending institutions, and all areas of the country, our work also paves the way for future research exploring a broader set of economic outcomes.

This is a data-intensive project, and the proprietary dataset can only be accessed by CFPB-affiliated researchers and graduate research assistants. We are requesting \$14,850 in travel assistance from the NBER Household Finance Working Group to aid in the completion of this project. The CCP is a proprietary dataset procured by the CFPB, and contractual agreements prevent us from sharing the microdata publicly. We freely share the data sample and code with all CFPB-affiliated researchers, and will work with the CFPB and the data provider to explore ways to release aggregated data and detailed tables to the public. Future researchers can apply for research agreements with the CFPB to access the microdata.

#### **Budget**

Our primary funding needs are for graduate research assistants to travel to the CFPB headquarters in Washington, DC to analyze the data, and for researcher travel to the CFPB and conference presentations. Our preliminary results have been obtained with the help of a graduate research assistant from Northwestern, who has made two trips to the CFPB and whose travel costs form the basis of the estimates below.

Jialan Wang currently has access to the main analysis dataset (CCP) as an economist at the CFPB. She will maintain data access after starting an academic position at the University of Illinois in Urbana-Champaign starting in June 2016, and will make regular trips to CFPB headquarters in 2016 and 2017 to complete the project.

#### Total funding needs:

Research assistant travel for data analysis

\$10,100

We estimate two four-week trips during the summer and school year at \$300 for travel plus \$2000 for lodging, and five shorter trips at \$300 for travel plus four nights of hotel stay per trip at \$200 per night.

Researcher travel \$4,750

We estimate five trips for the researchers to visit the CFPB or to present the research at conferences, at \$300 for travel, \$50 for conference registration fees, plus three nights of hotel stay per trip at \$200 per night.

Funding requested from the NBER Household Finance Working Group:

For research assistant travel (\$10,100) and researcher travel (\$4,750)

\$14,850

### Tal Gross

CONTACT Information Dept. of Health Policy and Management

Mailman School of Public Health

Columbia University

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e-mail: tg2370@columbia.edu site: www.columbia.edu/~tg2370/ This Version: October 5, 2015

EMPLOYMENT

Mailman School of Public Health, Columbia University

Assistant Professor, 2010–Present

Department of Economics, University of Miami

Assistant Professor, 2009–2010

OTHER POSITIONS

National Bureau of Economic Research Faculty Research Fellow, 2013–Present

Columbia Population Research Center

Faculty Member, 2011–Present

Institute for Social and Economic Research and Policy

Faculty Fellow, 2011–Present

**EDUCATION** 

Massachusetts Institute of Technology

Ph.D., 2009

Advisors: David Autor, Jonathan Gruber, and Joshua Angrist

University of Chicago

A.B., 2003

Mathematics, Economics, and Statistics

FIELDS

Health Economics and Household Finance

ECONOMICS
PUBLICATIONS

"Health Insurance and the Consumer Bankruptcy Decision: Evidence from Medicaid Expansions," with Matthew Notowidigdo. *Journal of Public Economics*, 95(7–8), 2011.

"The Effect of Insurance on the Use of Medical Services," with Michael Anderson and Carlos Dobkin. *American Economic Journal: Economic Policy*, 3(4), 2012.

"The Effect of Health Insurance on Emergency Department Visits: Evidence from an Age-Based Eligibility Threshold," with Michael Anderson and Carlos Dobkin. *Review* 

of Economics and Statistics, 96(1), 2014.

"Liquidity Constraints and Consumer Bankruptcy: Evidence from Tax Rebates," with Matthew Notowidigdo and Jialan Wang. Review of Economics and Statistics, 96(3), 2014.

"What Happens the Morning After? Access to Emergency Contraception and its Impact on Fertility and Abortion," with Jeanne Lafortune and Corinne Low. *Journal of Policy Analysis and Management*, 33(1), 2014.

"Dangerous Liquidity and the Demand for Health Care: Evidence from the 2008 Stimulus Payments," with Jeremy Tobacman. *Journal of Human Resources*, 49(2), 2014.

"How Many Pears Would a Pear Packer Pack if a Pear Packer Could Pack Pears at Quasi-Exogenously Varying Piece Rates? An Empirical Evaluation of Inter-temporal Labor Supply," with Tom Chang. *Journal of Economic Behavior & Organization*, 99, 2014.

"Public Health Insurance, Labor Supply, and Employment Lock," with Craig Garthwaite and Matthew Notowidigdo. Quarterly Journal of Economics, 129(2), 2014.

"Particulate Pollution and the Productivity of Pear Packers," with Tom Chang, Josh Graff Zivin, and Matthew Neidell. *American Economic Journal: Economic Policy*, accepted.

Public Health Casey MF, Gross T, Stensland KD, Wisnivesky J, Oh WK, Galsky MD. "The impact & Medical of regionalization of cystectomies for bladder cancer on racial disparities in utilization." *The Journal of Urology*, 2015.

Gross, T, Trenkamp, Brad. "Risk of Bankruptcy Among Applicants to Disability Insurance." Journal of Health Care for the Poor and Underserved, accepted.

Gross, T, Glied, Sherry, Muennig, Peter. "Widening mortality disparities by educational attainment among native-born Americans adults over 3 decades of follow up: the mystery deepens." *International Journal of Healthcare*, 2015.

Grants & Raymond Vernon Memorial Award (with Jeanne Lafortune and Corinne Low) for Honors best article in the *Journal of Policy Analysis and Management*, 2014.

Robert Wood Johnson Foundation, 2014, "Examining How Policy Changes such as Medicaid Expansion under the Affordable Care Act Affect Hospitals' Uncompensated

Care." Principal Investigator.

Early Career Teaching Award, Columbia University, Mailman School of Public Health, 2012.

Sloan Foundation, 2012, "Consumer Bankruptcy in the United States: A New Data Set." Co-Principal Investigator.

Russell Sage Foundation, 2012–2014, "The Great Recession and Fringe Banking." Principal Investigator.

MIT Undergraduate Economics Association Teaching Award, 2008.

George and Obie Shultz Fund, 2007, "How Many Pears Would a Pear Packer Pack? An Empirical Evaluation of Intertemporal Labor Supply." Co-Principal Investigator.

Phi Beta Kappa, 2003.

#### Referee SERVICE

American Economic Journal: Applied Economics; American Economic Journal: Economic Policy; American Economic Review; American Journal of Preventive Medicine; American Journal of Health Economics; Contemporary Economic Policy; Economic Journal; Forum for Health Economics & Policy; Health Economics; Health Services Research; Industrial Relations; International Economic Review; International Journal of Health Economics and Management; Journal of the European Economic Association: Journal of Environmental Economics and Management: Journal of Family and Economic Issues; Journal of Health Economics; Journal of Human Resources; Journal of Policy Analysis And Management; Journal of Political Economy; Journal of Public Economics; Medical Care Research and Review; North American Journal of Economics and Finance; Quantitative Economics; Quarterly Journal of Economics; Review of Economics and Statistics.

Presentations 2015: RAND Corporation, Santa Monica, March; The New York Federal Reserve Bank, Research Department, May.

> 2014: American Economic Association Annual Meetings, Philadelphia, January; Cornell University, Department of Policy Analysis and Management, Ithaca, April; University of Texas at Austin, Department of Economics, Austin, October; Yale University, Department of Health Policy and Management, New Haven, November.

> 2013: American Economic Association Annual Meetings, San Diego, January; University of Illinois, College of Business, Champaign, April; International Banking, Economics, and Finance Association Summer Meeting, Seattle, June; NBER Summer Institute, Health Care Meeting, Cambridge, July; Vanderbilt University, Health Economics and Policy Seminar Series, Nashville, September; The Brookings Institution,

Washington, October; Annual Health Economics Conference, Philadelphia, October; Weill Cornell Medical College, The Center for Healthcare Informatics and Policy, New York City, October.

2012: American Economic Association Annual Meetings, Chicago, January; UCLA Center for Population Research, Los Angeles, January; NBER Summer Institute, Law and Economics Meeting, Cambridge, July; University of Chicago, Department of Economics, Hyde Park, October.

2011: International Health Economics Association 8<sup>th</sup> World Congress, Toronto, July; Philadelphia Federal Reserve, Philadelphia, September; National Tax Association Annual Meeting, New Orleans, November; University of Illinois, Institute of Government and Public Affairs, Chicago, November.

2010: University of Maryland, Department of Economics, College Park, February; Florida International University, Department of Economics, Miami, March; Federal Reserve Bank of Chicago, Chicago, May; Midwest Health Economics Conference, Chicago, May; American Society of Health Economists Meeting, Ithaca, June; NBER Summer Institute, Household Finance Meeting, Cambridge, July; Yale University, Department of Economics, New Haven, September; Lehigh University, Department of Economics, Bethlehem, October; Federal Reserve Board, Household and Real Estate Finance, Washington, November; National Tax Association Annual Meetings, Chicago, November.

2009: DePaul University, Department of Economics, Chicago, January; Emory University, School of Public Health, Atlanta, January; Cornell University, Department of Policy Analysis and Management, Ithaca, January; University of Illinois, Department of Agricultural and Consumer Economics, Urbana-Champaign, January; Urban Institute, Washington DC, January; Congressional Budget Office, Washington DC, January; Society of Labor Economists Meeting, Cambridge, May; American Law and Economics Association Meeting, San Diego, May; NBER Summer Institute, Health Economics Meeting, Cambridge, July.

#### Teaching

Research Methods: Large Scale Data Analysis (Masters level, Columbia course P8508) Fall 2015.

Health Systems Studio Core Curriculum (Masters level) Fall 2012 – Present.

Introduction to Health Economics (Masters level, Columbia course P6503) Spring 2011 – Present.

Microeconomics (Undergraduate, UM course ECO302) Fall 2009, Spring 2010

Introduction to Microeconomics (Undergraduate, MIT course 14.01) Lecturer, Spring  $2009\,$ 

Labor Economics and Public Policy (Undergraduate, MIT course 14.64) Teaching Assistant, Spring 2008

Labor Economics I (Graduate, MIT course 14.661) Teaching Assistant, Fall 2007

Public Economics (Undergraduate, MIT course 14.41) Teaching Assistant, Fall 2006 and Fall 2007

Introduction to Statistical Method in Economics (Undergraduate, MIT course 14.30) Teaching Assistant, Fall 2006

## Matthew J. Notowidigdo

#### ASSOCIATE PROFESSOR OF ECONOMICS NORTHWESTERN UNIVERSITY

#### PERSONAL INFORMATION

Address: 2001 Sheridan Road

Evanston, Illinois 60208-2600

Phone: 847-491-8230

Email: noto@northwestern.edu

Webpage: http://faculty.wcas.northwestern.edu/noto

#### EMPLOYMENT / PROFESSIONAL AFFILIATIONS

| 2014 –      | Associate Professor of Economics,   |
|-------------|---|
|             | Department of Economics, Northwestern University                                  |
| 2015 –      | Board of Editors, American Economic Journal - Economic Policy                     |
| 2014 –      | Associate Editor, Quarterly Journal of Economics                                  |
| 2011 –      | Faculty Research Fellow (Labor Studies, Health Care, and Public Economics),       |
|             | National Bureau of Economics Research   |
| 2005 –      | Consultant, Boston Red Sox  |
| 2010 - 2014 | Neubauer Family Assistant Professor of Economics,                                 |
|             | University of Chicago Booth School of Business                                    |
| 2009 - 2010 | Consultant, Miami Dolphins  |
| 2004 - 2005 | Associate, Fixed Income Division, Lehman Brothers                                 |
| 2000 – 2001 | Consultant, Information Technology Division, Morgan Stanley                       |
| EDUCATION   |   |
| 2005 – 2010 | Ph.D., Economics, Massachusetts Institute of Technology                           |
| 2003 – 2004 | M.Eng., Computer Engineering, Massachusetts Institute of Technology               |
| 1999 – 2003 | B.S., Computer Science and B.S., Economics, Massachusetts Institute of Technology |
| 1999 – 2003 |   |

#### **PUBLICATIONS**

"Long-Term Unemployment and the Great Recession: The Role of Composition, Duration Dependence, and Non-Participation" (with Kory Kroft, Fabian Lange, and Lawrence F. Katz). *Journal of Labor Economics*, *forthcoming*.

"Should Unemployment Insurance Vary With the Unemployment Rate? Theory and Evidence" (with Kory Kroft), *Review of Economic Studies*, *forthcoming*.

"Liquidity Constraints and Consumer Bankruptcy: Evidence from Tax Rebates" (with Tal Gross and Jialan Wang), *Review of Economics and Statistics*, 96(3): 431-443, July 2014.

"Public Health Insurance, Labor Supply, and Employment Lock" (with Craig Garthwaite and Tal Gross), *Quarterly Journal of Economics*, 129(2): 653-696, May 2014.

"Income and Health Spending: Evidence from Oil Price Shocks" (with Daron Acemoglu and Amy Finkelstein), *Review of Economics and Statistics*, 95(4): 1079-1095, October 2013. [Lead Article]

"Duration Dependence and Labor Market Conditions: Evidence from a Field Experiment" (with Kory Kroft and Fabian Lange), *Quarterly Journal of Economics*, 128(3): 1123-1167, August 2013.

- "What Good is Wealth Without Health? The Effect of Health on the Marginal Utility of Consumption" (with Amy Finkelstein and Erzo Luttmer). *Journal of the European Economic Association*, 11: 221-258, January 2013.
- "Health Insurance and the Consumer Bankruptcy Decision: Evidence from Expansions of Medicaid" (with Tal Gross), *Journal of Public Economics*, 95(7-8): 767-778, August 2011.
- "Peer Effects in the Workplace: Evidence from Random Groupings in Professional Golf Tournaments" (with Jon Guryan and Kory Kroft), *American Economic Journal: Applied Economics*, 1(4), pp. 34-68, October 2009.
- "Approaches to Estimating the Health State Dependence of the Utility Function" (with Amy Finkelstein and Erzo Luttmer), *American Economic Review, Papers and Proceedings*, 99(2), pp. 116-121, May 2009.

#### WORKING PAPERS

- "The Effect of Wealth on Individual and Household Labor Supply: Evidence from Swedish Lotteries" (with David Cesarini, Erik Lindqvist, and Robert Ostling). November 2015. *Under review*.
- "Housing Booms and Busts, Labor Market Opportunities, and College Attendance" (with Kerwin Kofi Charles and Erik Hurst). November 2015. *Under review*.
- "The Economic Consequences of Hospital Admissions" (with Carlos Dobkin, Ray Kluender, and Amy Finkelstein), October 2015.
- "Medicaid Expansions and Hospital Access: Evidence from the First Year of the ACA" (with Craig Garthwaite, Tal Gross, and John Graves). September 2015. *Under review*.
- "Hospitals as Insurers of Last Resort" (with Craig Garthwaite and Tal Gross). August 2015. *Under review*.
- "The Incidence of Local Labor Demand Shocks." March 2013.

#### HONORS / AWARDS

| 2014        | Hicks-Tinbergen Award for outstanding article published in the <i>Journal of the European</i> |
|-------------|---|
|             | Economic Association during the two preceding years   |
| 2013        | Excellence in Refereeing Award, Quarterly Journal of Economics                                |
| 2013        | Excellence in Refereeing Award, American Economic Review                                      |
| 2013        | National Science Foundation Grant SES-1326722 (with David Cesarini)                           |
| 2012        | Excellence in Refereeing Award, Journal of the European Economic Association                  |
| 2012        | Empirical Microeconomics Jamboree, Duke University (selected participant)                     |
| 2010        | W. E. Upjohn Institute Dissertation Award, co-winner  |
| 2008 - 2010 | NBER Health and Aging Pre-doctoral Fellowship   |
| 2008        | Lindau Nobel Laureate Meetings (selected participant)   |
| 2006 - 2007 | MIT Department of Economics Graduate Fellowship   |
| 2004        | Carleton B. Tucker Award for Outstanding Teaching   |
| 2003        | Phi Beta Kappa  |
| 2003        | Tau Beta Pi   |

#### PROFESSIONAL ACTIVITIES

Referee for American Economic Journal: Applied Economics, American Economic Journal: Economic Policy, American Economic Journal: Macroeconomics, American Economic Review, Econometrica, Economic Journal, Economics and Human Biology, Industrial and Labor Relations Review, IZA Journal of Labor Economics, Journal of Applied Econometrics, Journal of Economic Geography, Journal of the European Economic Association, Journal of Health Economics, Journal of Human Resources, Journal of Labor Economics, Journal of Law and Economics, Journal of Policy Analysis and Management, Journal of Political Economy, Journal of Public Economics, Journal of Sports Economics, Journal of Urban Economics, Labour Economics, Management Science, National Science Foundation, Public Finance Review, Quarterly Journal of Economics, Regional Science and Urban Economics, Review of Economic Studies, Review of Economics and Statistics, Review of Economics of the Household, Scandinavian Journal of Economics, Science, Sloan Foundation.

#### University Service and Professional Service

- 2015 Society of Labor Economists Program Committee, Northwestern University Feinberg School of Medicine Search Committee, Northwestern University Institute for Policy Research Special Lectures Committee
- 2014 Society of Labor Economists Program Committee

#### GRADUATE STUDENTS SUPERVISED (INITIAL PLACEMENT IN PARENTHESES)

- 2016 Stephanie Chapman, Northwestern University (TBD)
- 2016 Yana Gallen, Northwestern University (TBD)
- 2016 Ricardo Santiago Pique Cebrecos, Northwestern University (TBD)
- 2016 Ariell Zimran (TBD)
- 2015 Samuel Kingsley, Chicago Booth (University of Chicago Pritzker School of Medicine)
- 2015 Yao Lu, University of Chicago (Analysis Group consulting)
- 2014 Alice Chen, Chicago Booth (USC Sol Price School of Public Policy)
- 2014 Marshall Steinbaum, University of Chicago (Washington Center for Equitable Growth)
- 2014 David Toniatti, Chicago Booth (Analysis Group consulting)
- 2012 Christian Goldammer, University of Chicago (TGG Group consulting)

#### CONFERENCE PRESENTATIONS AND INVITED TALKS

- American Economic Association Annual Meetings, Stanford Economics Department, Stanford Graduate School of Business, Chicago Booth School of Business, Maryland Economics Department, Carnegie Mellon Economics Department, CREI, London School of Economics, Bocconi, NBER Summer Institute (Labor Studies), University of Texas at Austin, The Wharton School, Purdue University, University of Chicago (Becker Friedman Institute Conference).
- 2014 University of Notre Dame Economics Department, Berkeley Haas School of Business, Columbia University Economics Department, University of Iowa, Sloan Foundation Workshop, Brookings Institution, UCLA Economics Department, Northwestern University Kellogg School of Management, Federal Reserve Bank of New York, University of Chicago Economics Department, University of Houston / Rice University Economics, NBER Labor Studies meeting, UCSD Economics Department.
- 2013 University of Chicago Economics Department, Wisconsin Economics Department, Northwestern University Economics Department, Princeton University, MIT Economics Department, UC-Davis Economics Department, UC-Berkeley Economics Department, Society of Labor Economists

- Annual Meetings, NBER Great Recession Conference, Michigan State University, Cornell University, University of Toronto Economics Department.
- Econometric Society Annual Meeting, Demography Workshop (Chicago), Utah Winter Business Economics Conference, Duke University, Einaudi Institute for Economics and Finance (Rome), NBER Summer Institute (Public Economics and Labor Studies), Institute for International Economic Studies (Stockholm), Harvard University, University of Illinois at Urbana-Champaign, The Ohio State University, Becker-Friedman Institute.
- NBER PE Meetings (Stanford), W. E. Upjohn Institute, University of Michigan Economics Department, Harris School of Public Policy (Chicago), Dartmouth Economics Department, Society of Economic Dynamics Conference (Brussels, Belgium), Federal Reserve Board (Washington, D.C.), University of Virginia.
- 2010 Northwestern Economics Department, Northwestern Kellogg Management and Strategy,
  Berkeley Economics Department, Harvard Kennedy School, Chicago Booth, Wharton Real
  Estate, Stanford Economics, Stanford GSB, Berkeley Haas School of Business, Yale School of
  Management, Brown Economics Department, NBER Summer Institute (Health Care), University
  of Chicago Economics Department, National Tax Association Annual Meeting, Federal Reserve
  Bank of Philadelphia, Wisconsin Economics Department.

## JIALAN WANG (王嘉兰)

# Economist Consumer Financial Protection Bureau 4025 Connecticut Ave NW Unit 801 Washington, DC 20008 (202) 713-3388

https://sites.google.com/site/jialanw/home jialanw@gmail.com

| EXPERIENCE                          | University of Illinois at Urbana-Champaign Consumer Financial Protection Bureau (Maternity leave 2014-15) The Wharton School Business Economics and Public Policy Olin Business School Washington University in St. Louis |   | Assistant Professor of Finance         | June 2016 -   |  |  |
|-------------------------------------|---|---|--|---------------|--|--|
|                                     |   |   | Economist                              | 2012- Present |  |  |
|                                     |   |   | Visiting Assistant Professor           | 2014          |  |  |
|                                     |   |   | Assistant Professor of Finance         | 2010- 2012    |  |  |
| EDUCATION                           | Ph.D  | Financial Economics                       | Massachussetts Institute of Technology | 2010          |  |  |
|                                     | B.S.  | Mathematics                               | California Institute of Technology     | 2003          |  |  |
| RESEARCH<br>FIELDS                  | Household Finance, Corporate Finance, Behavioral Economics  |   |  |               |  |  |
| POLICY<br>EXPERTISE                 | Payday Lending and Small Dollar Credit, Consumer Credit Cards   |   |  |               |  |  |
| PUBLICATIONS                        | **Publications "Liquidity Constraints and Consumer Bankruptcy: Evidence from Tax Rebates" **Review of Economics and Statistics, 96(3), 2014. (with Tal Gross and Matt Notowidigdo)  |   |  |               |  |  |
|                                     | "Superstar Extinction" Quarterly Journal of Economics, May 2010. (with Pierre Azoulay and Joshua Graff Zivin)   |   |  |               |  |  |
|                                     | "Secrets of the Academy: The Drivers of University Endowment Success" <u>Journal of Economic Perspectives</u> 22, Summer 2008. (with Joshua Lerner and Antoinette Schoar)   |   |  |               |  |  |
| WORKING                             | "Minimum Payments and Debt Paydown in Consumer Credit Cards" (with Ben Keys)  |   |  |               |  |  |
| PAPERS                              | "The Effect of Income Timing on Short-Term Borrowing: Evidence from Social Security Recipients" (with Jesse Leary)  |   |  |               |  |  |
|                                     | "Information Disclosure and Payday Lending in Texas" (with Kathleen Burke and Jesse Leary)  |   |  |               |  |  |
| SELECTED<br>RESEARCH<br>IN PROGRESS |   | Over the Business Cycle thew Notowidigdo) | :: Evidence from Bankruptcy Flags" (v  | vith Tal      |  |  |
| IN FRUGRESS                         | "The Evolution of Consumer Bankruptcy: Five New Facts" (with Jonathan Fisher, Tal Gross, and Matthew Notowidigdo)   |   |  |               |  |  |

#### JIALAN WANG

|         |   |   | <b>O</b>                                    |  |  |
|---------|---|---|---|--|--|
|         | RESEARCH<br>IN PROGRESS                     | "Judicial Bias and Small Business Lending" (with Benjamin Iverson an  | d Adrien Matray)                            |  |  |
| (CONT.) |   | "Credit Card Shopping" (with Hong Ru, Antoinette Schoar)  |   |  |  |
|         |   | "The Demand for Lottery Tickets and Consumer Financial Outcomes" (with Kent Smetters and Mary Zaki)   |   |  |  |
|         |   | "Regulation and Lender Strategy in the Credit Card Market" (with Felix Oberholzer)  |   |  |  |
|         |   | "Unsecured Credit and Local Employment Shocks" (with Ben Keys and Jeremy Tobacman)  |   |  |  |
|         |   | "Medicare, Retirement, and Consumer Borrowing" (with Tal Gross)   |   |  |  |
|         | OTHER<br>PUBLICATIONS                       | "CFPB Data Point: Payday Lending" 2014. (with Kathleen Burke, Jona Jesse Leary)   | than Lanning, and                           |  |  |
|         |   | "Payday Loans and Deposit Advance Products: A White Paper of Initial Data Findings" 2013.   |   |  |  |
|         |   | "Evolution of Digital Organisms at High Mutation Rates Leads to Survi<br>Nature, July 2001. (with Claus Wilke, Charles Ofria, Richard E. Lenski<br>Adami)   |   |  |  |
|         | TEACHING<br>EXPERIENCE                      | The Wharton School: BEPP 305: Risk Management   | 2014  |  |  |
|         | LAFERIENCE                                  | Olin Business School: Finance 340: Capital Markets and Financial Management   | 2010-2012                                   |  |  |
|         | FELLOWSHIPS,<br>HONORS, AND<br>AWARDS       | MIT Sloan Fellowship<br>Doctoral Award in Business, State Farm Companies Foundation<br>Axline Merit Scholarship, Caltech<br>Upperclass Merit Award, Caltech   | 2004-2010<br>2007<br>2000-2003<br>2001-2002 |  |  |
|         | CONFERENCES<br>AND INVITED<br>PRESENTATIONS | University of Washington; Columbia; University of Illinois at<br>Urbana-Champaign; University of Colorado; Carnegie Mellon;<br>NBER Law and Economics (scheduled); Federal Reserve Bank of<br>Philadelphia (scheduled)      | 2016  |  |  |
|         |   | University of Delaware; NBER Law and Economics; Federal<br>Reserve Bank of Cleveland; FDIC Consumer Research Symposium;<br>RAND BeFi Conference; Southern Economics Association Annual<br>Conference; Federal Reserve Board | 2015  |  |  |
|         |   | American Economic Association Annual Meeting; University of<br>Pennsylvania; Federal Reserve Bank of New York; Boulder<br>Conference on Consumer Financial Decision Making  | 2014  |  |  |
|         |   | Federal Reserve Bank of Philadelphia  | 2013  |  |  |
|         |   | Federal Reserve Board of Governors; Consumer Financial  | 2012  |  |  |

Protection Bureau; University of New South Wales; Australian National University; National University of Singapore; Singapore

Management University; American Law and Economics

Association Annual Conference

| CONFERENCES<br>AND INVITED<br>PRESENTATIONS | Federal Reserve Bank of St Louis; Hong Kong University of Science and Technology; SWUFE  | 2011 |
|---|--|------|
| (CONT.)                                     | Federal Reserve Bank of New York; George Washington<br>University; McGill University; Securities and Exchange<br>Commission; University of Southern California; University of<br>Toronto; University of British Columbia; Washington University St.<br>Louis | 2010 |
|   | Brown School of Public Health; European Financial Management<br>Association  | 2007 |

JIALAN WANG

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