

OCTOBER 19-20, 2023

New Perspectives on Consumer Behavior in Credit and Payments Markets



Conference Organizers

Neil Bhutta

Ronel Elul

Andrew Hertzberg

Robert Hunt

Lauren Lambie-Hanson

Slava Mikhed

About the Consumer Finance Institute

Launched in 2017, the Consumer Finance Institute (CFI) is a strategic initiative of the Federal Reserve Bank of Philadelphia. It builds on decades of investment in expertise and research on the nature and functioning of consumer credit and payments markets. CFI includes Philadelphia Fed economists, research fellows, other researchers at the Bank, and visiting scholars.

CFI studies credit and payment markets to understand how they affect consumers and the economy, and produces state-of-the-art, policy-relevant research available to all. It also convenes academic experts, the financial industry, and the general public to collaborate on research and generate insights into fostering healthy household finances, a stable financial system, and a resilient regional and national economy.

Thursday, October 19

2:30 p.m.–3:00 p.m. **Registration**

3:00 p.m.–3:30 p.m. **Opening Remarks**

Roc Armenter, Executive Vice President, Director of Research, and
Director of the Consumer Finance Institute, Federal Reserve Bank of Philadelphia

3:30 p.m.–5:00 p.m. **Panel 1: Credit Market Spillovers**

Dual Credit Markets: Income Risk, Household Debt, and Consumption

PRESENTER: Michal Zator, University of Notre Dame
(Coauthors: David A. Matsa, Northwestern University; Brian T. Melzer, Dartmouth College)
DISCUSSANT: Stephanie Moulton, Ohio State University

Mortgage Lock-In, Mobility, and Labor Reallocation

PRESENTER: Lu Liu, University of Pennsylvania
(Coauthor: Julia Fonseca, University of Illinois Urbana–Champaign)
DISCUSSANT: Morris Davis, Rutgers University

5:00 p.m.–7:00 p.m. **Reception**

Friday, October 20

8:30 a.m.–9:00 a.m. **Breakfast and Registration**

9:00 a.m.–10:30 a.m. **Panel 2: Credit Need and Credit Risk**

Credit When You Need It

PRESENTER: Jing Xian Ng, University of Pennsylvania
(Coauthors: Benjamin L. Collier, Temple University; Daniel A. Hartley, Federal Reserve
Bank of Chicago; Benjamin J. Keys, University of Pennsylvania)
DISCUSSANT: Amine Ouazad, Rutgers University

Can Credit Rating Affect Credit Risk? Causal Evidence from an Online Lending Marketplace

PRESENTER: Alexander Wirth, University of Michigan
(Coauthor: Amiyatosh Purnanandam, University of Michigan)
DISCUSSANT: Emily Williams, Harvard University

Friday, October 20 *(continued)*

10:30 a.m.–11:00 a.m. **Break**

11:00 a.m.–12:30 p.m. **Panel 3: Alternative Data and Fintech Lending**

Open Banking and Customer Data Sharing: Implications for Fintech Borrowers

PRESENTER: Rachel Nam, Goethe University Frankfurt

DISCUSSANT: Uday Rajan, University of Michigan

Invisible Primes: Fintech Lending with Alternative Data

PRESENTER: Dimuthu Ratnadiwakara, Louisiana State University

(Coauthors: Marco Di Maggio, Harvard Business School)

DISCUSSANT: Vitaly Meursault, Federal Reserve Bank of Philadelphia

12:30 p.m.–1:45 p.m. **Lunch**

1:45 p.m.–2:30 p.m. **Panel 4: Credit Access Constraints**

Using the Courts for Private Debt Collection: How Wage Garnishment Laws Affect Civil Judgments and Access to Credit

PRESENTER: Scott Fulford, Consumer Financial Protection Bureau

(Coauthor: Eva Nagypal, Consumer Financial Protection Bureau)

DISCUSSANT: Tal Gross, Boston University

2:30 p.m. **Closing Remarks and Adjourn**

Roc Armenter

Executive Vice President, Economist, and Director of Research and the Consumer Finance Institute
Federal Reserve Bank of Philadelphia

Roc Armenter is executive vice president, economist, and director of Research and the Consumer Finance Institute. As director of Research, he heads a staff of economists and analysts who conduct research on macroeconomics, monetary policy, banking, payments, finance, and the regional economy. He also is the Bank's chief economic advisor, attends the meetings of the Federal Open Market Committee in Washington, D.C., with the Bank's president, and makes regular presentations on the economy to the Bank's board of directors.

Neil Bhutta

Special Advisor, Consumer Finance Institute
Federal Reserve Bank of Philadelphia

Neil Bhutta is a special advisor in the Consumer Finance Institute at the Federal Reserve Bank of Philadelphia. Before joining the Bank in 2022, he was at the Board of Governors of the Federal Reserve in the Division of Research and Statistics. At the Board, his research and policy work were focused on consumer and real estate finance, including interagency rulemakings related to consumer financial protection and fair lending, production of the Board's Survey of Consumer Finances, and contributions to the Federal Reserve's regular assessment of financial stability. Bhutta's current research focuses on financial literacy and household financial decisions, as well as racial disparities in household wealth and credit access. His research has been published in leading academic journals and in a variety of Federal Reserve publications. He has a Ph.D. in economics from the Massachusetts Institute of Technology and a bachelor's degree in economics and physics from Emory University.

Morris Davis

Paul V. Profeta Chair of Real Estate and Academic Director of the Center for Real Estate Studies
Rutgers Business School, Rutgers University

Morris Davis is the Paul V. Profeta Chair of Real Estate and the academic director of the Center for Real Estate Studies at Rutgers Business School. Previously, he was the James A. Graaskamp Chair of Real Estate in the Department of Real Estate at the University of Wisconsin–Madison and was the academic director of the James A. Graaskamp Center for Real Estate. Davis is an adjunct scholar at the American Enterprise Institute, a senior scholar of the Opportunity and Inclusive Growth Institute of the Federal Reserve Bank of Minneapolis, and an independent director of the AGNC Investment Corp. mortgage REIT. Earlier in his career, he was an economist at the Federal Reserve Board, where he routinely briefed then-Fed Chair Alan Greenspan on housing and macroeconomics. Davis has published on issues related to the U.S. housing markets and has developed price indexes for land in residential use. He is regularly interviewed by NPR

Marketplace, Bloomberg Radio, the *Wall Street Journal*, and the *New York Times* on house prices and housing markets and is a frequent lecturer at universities and central banks around the world. Davis has a Ph.D. in economics from the University of Pennsylvania.

Ronel Elul

**Senior Economic Advisor and Economist, Research Department
Federal Reserve Bank of Philadelphia**

Ronel Elul is a senior economic advisor and economist at the Federal Reserve Bank of Philadelphia. He studies household economics, focusing on the interplay between the theoretical and the actual. In addition to this research, he is part of the Federal Reserve's stress testing program on consumer lending risk. Elul works with the researchers at the Philadelphia Fed and sees the opportunity to combine research and policy work. He joined the Bank in 2003 and contributes to the Consumer Finance Institute's biennial consumer credit conference and the Board of Governors' financial stability briefings. He has taught at Brown University, New York University, and the University of Pennsylvania as a visiting professor. He has a Ph.D. in economics from Yale University and a B.A. in applied mathematics from the University of California, Berkeley.

Scott Fulford

**Senior Economist
Consumer Financial Protection Bureau**

Scott Fulford is a senior economist at the Consumer Financial Protection Bureau (CFPB), where he develops the Making Ends Meet survey. He is also the author of the book *The Pandemic Paradox: How the COVID Crisis Made Americans More Financially Secure*. His academic and policy research examines the economic problems families face and how they use financial products to help deal with them. Before joining the CFPB, Fulford taught economics and international studies at Boston College. He has a Ph.D. in economics from Princeton University.

Tal Gross

**Associate Professor of Markets, Public Policy, and Law, Questrom School of Business, Boston University, and
Faculty Research Fellow, National Bureau of Economic Research**

Tal Gross is an associate professor of Markets, Public Policy, and Law at the Questrom School of Business at Boston University, and a faculty research fellow at the National Bureau of Economic Research. Before joining Boston University, he was an assistant professor of Health Policy and Management at Columbia University. Gross has a Ph.D. in economics from the Massachusetts Institute of Technology and an A.B. in economics, statistics, and mathematics from the University of Chicago.

Andrew Hertzberg

Economic Advisor and Economist, Research Department
Federal Reserve Bank of Philadelphia

Andrew Hertzberg is an economic advisor and economist at the Federal Reserve Bank of Philadelphia. He studies topics in consumer finance that have been traditionally set aside by the economics profession, such as whether the interaction between family members affects the way they spend and save, or what the effect is of being diagnosed with a mental illness on a person's long-term economic and financial outcomes. He also studies banking and online consumer lending. He received the *Journal of Finance* best paper prize in 2010 and 2011. In the first paper, he studied the way loan officers suppress information about the firms to whom they lend to protect their reputation. In the second paper, he showed that lenders react more to information about a corporate borrower if that is also seen by other lenders to the same firm. Hertzberg joined the Bank in 2017 as an economic advisor and economist. Prior to that, he was an assistant professor of finance at Columbia University and Northwestern University. He has a Ph.D. in economics from the Massachusetts Institute of Technology, an M.A. in economics from Queen's University at Kingston, and a B.Ec. in economics and econometrics from the University of Sydney.

Robert (Bob) M. Hunt

Senior Vice President and Associate Director of the Consumer Finance Institute
Federal Reserve Bank of Philadelphia

Robert (Bob) M. Hunt is senior vice president and associate director of the Consumer Finance Institute at the Federal Reserve Bank of Philadelphia. He is responsible for coordinating the Bank-wide portfolio of research and programming on consumer credit and payments as well as identifying priorities for investment in next generation, policy-relevant research on those topics. Hunt is also active in numerous System-wide groups related to payments research and policy. He also conducts research on consumer payments, consumer finance, and the economics of innovation. His work includes studies of payment cards, adoption of new payment technologies, antitrust issues in consumer payment networks, identity theft, regulation of credit cards, mortgage default, consumer credit reporting, credit counseling organizations, and the collections industry. In addition, he has published papers on topics in economic geography and intellectual property.

Before joining the Philadelphia Fed in 1998 as an economist in the Research Department, he worked for the U.S. Congressional Budget Office. He began his career as an industry risk analyst for Bank One, Indianapolis. Hunt has a Ph.D. in economics from the University of Pennsylvania and a bachelor's degree in political science and economics from Butler University.

Lauren Lambie-Hanson

Senior Advisor and Research Fellow, Consumer Finance Institute
Federal Reserve Bank of Philadelphia

Lauren Lambie-Hanson is a senior advisor and research fellow in the Consumer Finance Institute at the Federal Reserve Bank of Philadelphia. Her principal areas of research include many aspects of the residential mortgage market, access to credit, and community development. Her published research includes studies of the causes and consequences of foreclosures, biases in the appraisal process, reverse mortgages, the effects of the Community Reinvestment Act, and the increasing role played by institutional investors in the residential mortgage market. Recently, she coauthored a paper on how the COVID-19 pandemic affected mortgage credit supply and another paper documenting the substantial differences by race and ethnicity in mortgage refinancing activity during the pandemic. Those differences, in turn, have implications for future wealth accumulation across those groups. She has published articles in academic journals such as *American Economic Journal: Economic Policy*, *The Journal of Urban Economics*, and *Real Estate Economics*, as well as several book chapters.

As a subject matter expert in mortgage risk, foreclosures, and real estate economics, she was elected to the board of directors of the American Real Estate and Urban Economics Association and was chair of its Women in Real Estate Network. Currently, she is a member of the *Journal of Housing Economics* editorial board and the Urban Institute Housing Finance Policy Center's Academic Research Council. Before joining the Philadelphia Fed in 2013, she worked in the Boston Fed's Research Department. She has a Ph.D. in urban and regional studies from the Massachusetts Institute of Technology and a master's degree in public policy from the University of California, Berkeley.

Lu Liu

Assistant Professor of Finance
The Wharton School of the University of Pennsylvania

Lu Liu is an assistant professor of Finance at the Wharton School of the University of Pennsylvania. Her recent work studies household decisions in housing and mortgage markets including mortgage contract choices; selling, moving, and refinancing decisions; the frictions and tradeoffs that households face in the process; and how these inform policy and market design. Her research has been published in the *American Economic Review*; she was also presented with the Arthur Warga Award for Best Paper in Fixed Income, the CEPR Household Finance Best Student Paper Award, and the Michael J. Barclay Young Scholar Award. She has a Ph.D. in finance from Imperial College London and an M.Sc. in financial economics from the University of Oxford.

Vitaly Meursault

***Machine Learning Data Scientist and Economist, Research Department
Federal Reserve Bank of Philadelphia***

Vitaly Meursault is the machine learning data scientist and economist in the Research Department at the Federal Reserve Bank of Philadelphia. He uses machine learning to study questions in economics and finance. His current work at the Bank focuses on extracting economically meaningful signals from language, combining his economist training with his interest in history. One of his research goals is to develop applications of natural language processing for regulatory purposes because regulators often make decisions based on large amounts of text. Meursault has a Ph.D. in financial economics from Carnegie Mellon University, a master's degree in financial economics from the European University at St. Petersburg, and an undergraduate degree in history from St. Petersburg State University.

Slava Mikhed

***Senior Advisor and Research Fellow, Consumer Finance Institute
Federal Reserve Bank of Philadelphia***

Slava Mikhed is a senior advisor and research fellow in the Consumer Finance Institute (CFI) at the Federal Reserve Bank of Philadelphia. His areas of research include consumer finance, personal bankruptcy, health economics, and urban economics. He produced numerous studies of consumer bankruptcy by assembling and integrating unique data from Canada. His current research explores the ways in which income shocks, peer effects, health insurance, and identity theft affect consumer credit and payments.

Mikhed's research has been published in *The Review of Financial Studies*, *Journal of Banking and Finance*, *Journal of Housing Economics*, and *The Journal of Real Estate Finance and Economics*. In addition, he has been the lead organizer of CFI's premier biennial conference on new research on consumer credit and payments. He has a Ph.D. in economics from the University of Alberta, an M.A. in economics from the Center for Economic Research and Graduate Education Economics Institute, an M.A. in economics from Economics Education and Research Consortium, and a B.A. in economics from the National University of Kyiv-Mohyla Academy.

Stephanie Moulton

***Professor and the Associate Dean for Faculty and Research, John Glenn College of Public Affairs,
The Ohio State University, and Visiting Scholar, Federal Reserve Bank of Philadelphia***

Stephanie Moulton is a professor and the associate dean for Faculty and Research in the John Glenn College of Public Affairs at the Ohio State University, a faculty affiliate of the Center for Financial Security at the University of Wisconsin, and a visiting scholar at the Federal Reserve Bank of Philadelphia. She specializes in

the design, implementation, and evaluation of housing and consumer finance policies and programs, with an emphasis on vulnerable populations. She was principal investigator for numerous studies related to consumer finance, with funding from entities, including the U.S. Social Security Administration, the U.S. Department of Housing and Urban Development, the John D. and Catherine T. MacArthur Foundation, the Russell Sage Foundation, and the National Foundation for Credit Counseling.

Rachel Nam

Ph.D. Candidate

Graduate School of Economics, Finance, and Management, Goethe University Frankfurt

Rachel Nam is a Ph.D. candidate from Goethe University Frankfurt's graduate school of Economics, Finance, and Management and a junior researcher at the Leibniz Institute for Financial Research SAFE. She is studying how technology transforms the provision of financial services and its impacts on consumers and firms. Her research interests lie primarily in fintech, cryptocurrency, blockchain and decentralized finance, and household and consumer finance. In early 2023, she was a visiting Ph.D. researcher at the London School of Economics and Political Science in the Department of Finance.

Xian Ng

Ph.D. Candidate in Applied Economics

The Wharton School of the University of Pennsylvania

Xian Ng is a Ph.D. candidate in applied economics at the Wharton School of the University of Pennsylvania. He studies topics in household finance and real estate economics.

Amine Ouazad

Associate Professor, Department of Finance and Economics

Rutgers Business School, Rutgers University

Amine Ouazad is an associate professor in the Department of Finance and Economics at Rutgers Business School. His current research focuses on urban and real estate economics. His work on climate risk in mortgage markets was featured in Bloomberg, CBS, the *Financial Times*, the *New York Times*, Politico, the *Wall Street Journal*, and international media. His research was also cited in congressional hearings. Ouazad is also a senior fellow at the 21st Century Cities Initiative at Johns Hopkins university. Before joining Rutgers, he was

an associate professor at HEC Montreal, an associate professor at École Polytechnique, Paris, and an assistant professor at INSEAD. In 2020, he was appointed DLA Piper Distinguished Visiting Professor of Economics at Johns Hopkins University. He is also on the Scientific and Awards committees of the American Real Estate and Urban Economics Association, and the Scientific Committee of the Urban Economics Association.

Uday Rajan

**David B. Hermelin Professor of Business Administration and Professor of Finance
Ross School of Business, University of Michigan, Ann Arbor**

Uday Rajan is the David B. Hermelin Professor of Business Administration and a professor of Finance at the Ross School of Business at the University of Michigan, Ann Arbor. His research highlights informational frictions such as adverse selection and moral hazard and their effect on market transactions, with recent work on the role of credit ratings in the financial markets and on fintech competition in banking. His research has been published in the *American Economic Review*, *Journal of Finance*, *Journal of Financial Economics*, and *Review of Financial Studies*. He has received the Goldman Sachs Asset Management award for the best paper in the *Review of Finance* and the NYSE award for the best paper on equity trading at the Western Finance Association (WFA) meetings. Previously, he has been an editor of the *Review of Corporate Finance Studies*, an associate editor of the *Journal of Finance* and *Management Science*, and an editorial board member of *Marketing Science*. He also was a vice president of Fixed Income Research at Drexel Burnham Lambert, a president of the Finance Theory Group, a former director of the WFA, and is currently the vice president elect and a director of the Financial Intermediation Research Society. He has a Ph.D. in economics from Stanford University. He has received M.B.A. teaching awards at the Ross School and at Carnegie Mellon, and a Ph.D. teaching award at the Ross School.

Dimuthu Ratnadiwakara

**Assistant Professor of Finance
Louisiana State University**

Dimuthu Ratnadiwakara is an assistant professor of finance at Louisiana State University. His current research focuses on how new technologies have enabled the expansion of credit access to traditionally underserved populations and the impact of the growth of fintech lenders on incumbent banks. He has a Ph.D. in finance from the University of Houston.

Emily Williams

Assistant Professor, Business Administration Finance Unit
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Emily Williams is an assistant professor of business administration in the Finance Unit at Harvard Business School. Her research centers on financial intermediation, traditional intermediation and payments, the use of technology in financial intermediation, and the financial services offered to the underbanked. She has a Ph.D. in finance from London Business School, an M.A. in mathematics from Warwick University, and an M.B.A. from the Tuck School of Business at Dartmouth.

Alex Wirth

Ph.D. Candidate in Finance
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Alex Wirth is a Ph.D. candidate in finance at the Ross School of Business at the University of Michigan. His research interests include financial intermediation, household finance, corporate finance, and fintech. Before pursuing a Ph.D., he worked as a pricing actuary in health and disability insurance. He has undergraduate degree in actuarial science and finance from the University of Nebraska–Lincoln.

Michal Zator

Assistant Professor of Finance
Mendoza College of Business, University of Notre Dame

Michal Zator is an assistant professor of finance in Mendoza College of Business at the University of Notre Dame. His research lies at the intersection of corporate and household finance and labor economics. He has a Ph.D. from Northwestern University.