

VIRTUAL EVENT

The Fifth Workshop on
Credit Card Lending,
Consumer Finance and the
AI Revolution

 JUNE 27-28, 2024

The Fifth Workshop on Credit Card Lending, Consumer Finance and the AI Revolution

The Federal Reserve Bank of Philadelphia and the Supervisory Research and Policy Forum (SURF) are organizing the **Fifth Workshop on Credit Card Lending, Consumer Finance and the AI Revolution** on **June 27** followed by a **Regulatory Roundtable** on June 28. The Workshop is open to the general public while the regulatory roundtable is open to members of regulatory agencies ONLY. This year's workshop and regulatory roundtable will be held virtually to foster international participation.

As in prior years, the workshop will give regulators, industry experts, and the academic community an opportunity to share their knowledge, research, experiences, and views. The workshop will include keynote speakers, expert panels, and industry/academic presentations.

This year's workshop focuses on important topics that are likely to shape the consumer finance industry over the next few years: the state of consumer finance with a focus on credit card lending, financial innovation and other novel developments and research in open banking, the role of payment networks, fintech competition, and data privacy, and the current and future implications of innovations and adoption of machine learning and artificial intelligence (ML/AI) in consumer finance.

The pace of innovation in consumer finance has accelerated in recent years, especially in the area of revolving consumer credit and payments. Innovations around open banking, the role of payment networks, data use and a better understanding of consumer behavior, and emerging views and challenges around privacy will be some of the areas of conversation in this edition of the conference.

Recent advances in machine learning and artificial intelligence (ML/AI) have the potential to transform every facet of consumer lending. The pace of innovation and the adoption of ML/AI technologies is generating new challenges and opportunities. The conference will delve into these topics as well as the potential transformational impact of the ML/AI revolution.

As in prior years, a **Regulatory Roundtable** will follow the workshop. The roundtable is for members of regulatory agencies only. The Regulatory Roundtable is jointly organized by the Supervisory Research and Policy Forum (SURF), the Office of the Comptroller of the Currency (OCC), and the Federal Deposit Insurance Corporation (FDIC) and will facilitate the exchange of ideas across regulatory bodies. A detailed agenda for the Regulatory Roundtable will be distributed by email to members of regulatory agencies registered for the main conference.

NOTE: SURF is an initiative of the Federal Reserve Bank of Philadelphia with the primary mission of fostering communication and collaboration across regulators, policymakers, and subject-matter experts in risk management, supervision, and regulation of financial institutions.

Agenda

Thursday, June 27

First Conference Module: Consumer Finance and Revolving Credit

CHAIR: Raluca Roman, Principal Financial Economist, Federal Reserve Bank of Philadelphia

8:00 a.m.–8:05 a.m.

Conference Login

8:05 a.m.–8:15 a.m.

Welcome Remarks, Introduction to the Workshop

Robert Hunt, Senior Vice President and Associate Director, Consumer Finance Institute, Federal Reserve Bank of Philadelphia

8:15 a.m.–9:00 a.m.

Keynote Address: Looking at the Future of the Credit Card Market

Sumit Agarwal, Low Tuck Kwong Distinguished Professor of Finance, Economics and Real Estate, National University of Singapore

9:00 a.m.–10:00 a.m.

Frontiers of Research in Consumer Finance

To Pay or Autopay? Fintech Innovation and Credit Card Payments

Jialan Wang, Associate Professor of Finance, Gies College of Business, University of Illinois Urbana-Champaign

Regulating Competing Payment Networks

Lulu Wang, Assistant Professor of Finance, Kellogg School of Management, Northwestern University

10:00 a.m.–10:15 a.m.

Break

10:15 a.m.–11:15 a.m.

Risks and Opportunities in Consumer Finance

Consumer Surveillance and Financial Fraud

Devesh R. Raval, Deputy Director, Federal Trade Commission

Customer Data Access and Fintech Entry: Early Evidence from Open Banking

Will Gornall, Associate Professor of Finance, Sauder School of Business, University of British Columbia

11:15 a.m.–12:30 p.m.

Panel: The Future of Consumer Finance

CHAIR: Paolina Medina, Assistant Professor of Finance, University of Houston

Jane Barratt, Chief Advocacy Officer, MX.com

Kenneth J. Benton, Principal Consumer Regulations Specialist, Federal Reserve Bank of Philadelphia

Miguel Jose Guilherme Themes, Head of Division, Central Bank of Brazil

Fredes Montes, Senior Financial Sector Specialist, World Bank

José L. Negrín Muñoz, General Director Financial System, Banco de Mexico

Karine Themejian, Deputy Head of Market Innovation and Integration Division, European Central Bank

Agenda

Thursday, June 27

12:30 p.m.–1:15 p.m.

Lunch Break

Second Conference Module: ML/AI Innovations and Implications for the Future of Consumer Finance and Revolving Credit

CHAIR: Nilim Roy, Principal Financial Economist, Federal Reserve Bank of Philadelphia

1:15 p.m.–1:20 p.m.

Afternoon Login

1:20 p.m.–2:00 p.m.

Keynote Address: Responsible AI in Credit Addressing the AI Trust Crisis

Scott Zoldi, Chief Analytics Officer, FICO

2:00 p.m.–3:00 p.m.

Innovations in ML/AI and Responsible Risk Management

A Prime on Large Language Models

Chris Callison Burch, Associate Professor of Computer and Information Science, University of Pennsylvania

Headlines from the National Institute of Standards and Technology Guidance for Managing Risks of AI and Generative AI

Reva Schwartz NIST and Patrick Hall, Assistant Professor, George Washington University

3:00 p.m.–3:15 p.m.

Break

3:15 p.m.–4:15 p.m.

The Future of AI and Responsible Data Use

Enabling the Responsible Use of Personal Data with Targeted Differential Privacy

Nitin Kohli, Staff Scientist, UC Berkeley Center for Effective Global Action

Demystifying AI: An Overview of Recent Trends and Developments

Nestor Maslej, Research Manager, Stanford Institute for Human Centered Artificial Intelligence

4:15 p.m.–5:45 p.m.

Panel: The ML/AI Revolution and its Impact on Consumer Finance

CHAIR: Patrick Hall, Assistant Professor, George Washington University

Chris Callison-Burch, Associate Professor of Computer and Information Science, University of Pennsylvania

Kelly Cochran, Deputy Director, FinRegLab

Mark Dredze, Associate Professor of Computer Science, John Hopkins University

Charles Elkan, Cofounder, ficc.ai

Evan Sekeris, Chief Model Risk Officer, Capital One

Agus Sudjianto, Former Head of Corporate Model Risk, Wells Fargo Reva Schwartz, Research Scientist, National Institute of Standards and Technology

Mark Warren, Managing Director, Citi

Scott Zoldi, Chief Analytics Officer, FICO

| Agenda

Friday, June 28

5:45 p.m.–5:50 p.m.

Day 1 Closing Remarks

Jose J. Canals-Cerda, Senior Special Advisor, Federal Reserve Bank of Philadelphia

Third Conference Module: Regulatory Roundtable, State of Revolving Credit, and Challenges and Opportunities of ML/AI Adoption

CHAIR: Jose J. Canals-Cerda

| Agenda

Friday, June 28

NOTE: This conference module is only for members of regulatory agencies. If you are a member of a regulatory agency and you registered with a valid agency email, you will receive a meeting invitation directly in your inbox.

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| 8:15 a.m.–8:20 a.m. | Regulatory Roundtable Login |
| 8:20 a.m.–8:55 a.m. | Keynote Address. |
| 8:55 a.m.–9:00 a.m. | Break |
| 9:00 a.m.–10:10 a.m. | ML/AI Adoption in Consumer Finance: An Interagency Discussion |
| 10:10 a.m.–10:15 a.m. | Break |
| 10:15 a.m.–10:45 a.m. | Staff Report on Credit Card Lending |
| 10:45 a.m.–10:50 a.m. | Break |
| 10:50 a.m.–12:10 a.m. | Regulatory Roundtable: Revolving Credit, a View from the Trenches |
| 12:10p.m.–12:10p.m. | Closing Remarks |

Organizing Committee

Fifth Workshop Organizing Committee

José J. Canals-Cerdá Supervision, Regulation, and Credit Department (SRC) and the Supervisory Research and Policy Forum (SURF)

Iris Gonzalez SRC and SURF

Raluca Roman Supervision, Regulation, and Credit Department (SRC) and the Supervisory Research and Policy Forum (SURF)

Nilim Roy Supervision, Regulation, and Credit Department (SRC) and the Supervisory Research and Policy Forum (SURF)

Academic Advisor:

Paolina Medina Assistant Professor of Finance, University of Houston

Fifth Regulatory Roundtable Organizing Committee

José J. Canals-Cerdá Supervision, Regulation, and Credit Department (SRC) and the Supervisory Research and Policy Forum (SURF)

Souphala Chomisengphet Director for Retail Credit Risk Analysis, Office of the Comptroller of the Currency.

Michael Clippinger Senior Financial Analyst, Federal Deposit Insurance Corporation (FDIC)

Yan Zhou Associate Director, Federal Deposit Insurance Corporation (FDIC)

We greatly appreciate the support of our Corporate Affairs, Strategic Communications & Digital Engagement, and Information Technology Services departments, in particular, Barbara Brynko, Abby Douglas, Johnny Haik, Bryan M. Littel, Sarah Masino, Lauren Murawski, and Joshua Rivera.

Biographies



Sumit Agarwal

Low Tuck Kwong Distinguished Professor of Finance
National University of Singapore

Sumit Agarwal is the Low Tuck Kwong Distinguished Professor of Finance and a professor of economics and real estate at the National University of Singapore. He is also the managing director of the Sustainable and Green Finance Institute and the president of the Asian Bureau of Finance and Economic Research. Previously, Agarwal was a professor of finance at Georgetown University, a senior financial economist at the Federal Reserve Bank of Chicago, and a senior vice president at Bank of America. His research interests include household sustainability, financial institutions, household finance, behavioral finance, and real estate markets. Agarwal has published over 125 articles in leading economics and finance journals, coauthored six books, including *Why We Feel Blue When the Air Is Grey* and *Kiasunomics*, and coedited volumes on the impact of COVID-19 on Asian economies and household credit usage. His insights are regularly featured in media outlets such as CNA, BBC, CNBC, and Fox, and his research is cited in *The Wall Street Journal*, *The New York Times*, *The Economist*, and the U.S. President's Report to Congress. Agarwal also writes op-eds for *The Straits Times* and hosts the *Kiasunomics* podcast, focusing on household financial decision-making.



Jane Barratt

Chief Advocacy Officer
MX

Jane Barratt, chief advocacy officer of MX, is a long-time champion of financial strength. In her role at MX, Barratt works with government, regulatory bodies, financial institutions, and industry groups to ensure people have secure access to their financial data. She advocates for financial education through her courses on LinkedIn Learning. Before MX, Barratt was founder and CEO of GoldBean, and she spent two decades driving digital innovation and growth for Fortune 500 companies.



Ray Brastow

Manager and Senior Financial Economist
Federal Reserve Bank of Richmond

Ray Brastow is a manager and senior financial economist in the Supervision, Regulation, and Credit Department at the Richmond Fed. He serves in the LISCC Capital program, where he analyzes emerging retail credit risks and participates on large bank retail model and model risk management exams. His research has focused on issues in residential real estate, including principal-agent problems in sales markets, neighborhood externalities, and mortgage performance.

Biographies



Chris Callison-Burch

Associate Professor
University of Pennsylvania

Chris Callison-Burch is an associate professor of computer and information science at the University of Pennsylvania. His course on artificial intelligence (AI) has one of the highest enrollments at the university, with over 500 students taking the class each fall. He is best known for his research into natural language processing. Callison-Burch has more than 100 publications that have been cited over 25,000 times. Last summer, Callison-Burch testified before Congress about the relationship of generative AI and copyright law.



José Canals-Cerdá

Senior Special Advisor
Federal Reserve Bank of Philadelphia

José Canals-Cerdá is a senior special advisor in the Supervision, Regulation, and Credit Department at the Federal Reserve Bank of Philadelphia. After he joined the Bank in 2006, his unit set a goal to become the primary center of excellence on the analysis of consumer credit risk at the Federal Reserve System level. He has led quantitative benchmark studies and contributed his expertise to a diverse array of System projects by developing systems, models, and databases. Specifically, he was the principal developer of the System methodology for the stress testing of credit card portfolios, where he led a group of fellow Ph.D. economists and analysts. Canals-Cerdá has a Ph.D. in economics from the University of Virginia and a bachelor's degree in mathematics from the University of Valencia, Spain.



Kelly Thompson Cochran

Deputy Director and Chief Program Officer
FinRegLab

Prior to joining FinRegLab, Kelly Thompson Cochran helped to stand up the Consumer Financial Protection Bureau, where she served most recently as the assistant director for regulations. In that capacity, she oversaw rulemaking and guidance activities under the Dodd-Frank Act, the Electronic Fund Transfer Act, and various other federal consumer financial laws. Cochran previously was counsel at WilmerHale, where she advised financial institutions on a wide range of legal and regulatory matters, including product development, compliance, enforcement, and litigation. She also conducted research on financial services innovation, community reinvestment, and other topics at the University of North Carolina at Chapel Hill.

Biographies



Mark Dredze

John C Malone Professor, Computer Science
Johns Hopkins University

Mark Dredze is the John C Malone Professor of Computer Science at Johns Hopkins University and the director of research (Foundations of AI) for the JHU Data Science and AI Institute. He develops artificial intelligence systems based on natural language processing and explores applications to public health and medicine.

Dredze is affiliated with the Malone Center for Engineering in Healthcare and the Center for Language and Speech Processing, among others. He holds a joint appointment in the Biomedical Informatics & Data Science Section (BIDS), under the Department of Medicine (DOM), Division of General Internal Medicine (GIM) in the School of Medicine. He has a Ph.D. from the University of Pennsylvania.



Tiffany Eder

Senior Financial Institutional Policy Analyst II
Federal Reserve Board

Tiffany Eder is currently a senior financial institutional policy analyst in the LISCC Monitoring and Analysis Program at the Federal Reserve Board. She recently co-led the horizontal review in AI/ML development trends across LISCC firms. Previously, she was a senior quantitative analyst in the Financial Monitoring Group at the Philadelphia Federal Reserve Bank, where she contributed to quarterly reports that monitor consumer credit risk.

Eder has an M.A. in applied economics from Johns Hopkins University and a B.A. from George Washington University.



Will Gornall

Associate Professor
The University of British Columbia

Will Gornall is an associate professor of finance at the University of British Columbia and a leading researcher on the financing of innovation. Gornall's work focuses on the intersections of venture capital, banking, and financial technology. His work ranges from surveys of venture capitalists to theoretical models of how banks and private equity funds allocate money.

Biographies



Patrick Hall

Assistant Professor
George Washington University

Patrick Hall is an assistant professor of decision sciences at George Washington University, teaching classes on business analytics and data ethics. He conducts research in support of the NIST AI Risk Management Framework and advises several large financial institutions on matters of AI risk. Hall brought one of the first responsible AI products to market and is the author of *Machine Learning for High-Risk Applications*.



Matt Hammond

Senior Complex Financial Institutions Specialist
Federal Deposit Insurance Corporation

Matt Hammond is a senior complex financial institutions specialist within the Division of Complex Institution Supervision and Resolution at the Federal Deposit Insurance Corporation (FDIC). He is a commissioned examiner with 15 years of progressive experience with the FDIC. Hammond has extensive experience in the banking industry, with specific specialties in data analytics, risk assessment, and retail credit. His current position includes developing risk analytics on retail credit portfolios at complex financial institutions. Hammond's previous experience includes leading credit reviews at large and complex financial institutions with significant retail credit portfolios.



Bob Hunt

Associate Director, Consumer Finance Institute
Federal Reserve Bank of Philadelphia

Bob Hunt is the 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 Federal Reserve System-wide groups related to payments research and policy.

Biographies



Robert Ilik

LFBO Central Point of Contact
Federal Reserve Bank of Philadelphia

Robert Ilik currently serves as a central point of contact within large bank supervision at the Federal Reserve Bank of Philadelphia. He is responsible for directing supervisory activities for a large credit card institution. His prior regulatory experience includes managing a regional bank portfolio and conducting exams focused on capital planning, internal audit, enterprise risk management, and accounting and financial reporting. Before joining the Federal Reserve Bank of Philadelphia in 2011, Ilik held senior management positions at several global financial organizations. His responsibilities covered financial reporting, accounting policy, investment and loan accounting, capital management, and financial planning and analysis.

Ilik has an MBA from Saint Joseph's University and a B.S. in accounting from LaSalle University. He is a certified public accountant and a graduate of the ABA Stonier Graduate School of Banking. Ilik received his commissioned examiner credentials in June 2013.



Kavita Jain

Associate Director of the Novel Activities and Innovation Policy
Board of Governors of the Federal Reserve System

Kavita Jain is associate director of the Novel Activities and Innovation Policy function at the Board of Governors of the Federal Reserve System. She is the cochair of the Federal Reserve's Novel Activities Supervision Program. In this role, Jain oversees supervision of novel activities at supervised institutions, including overseeing specialists involved in examination and monitoring of novel activities.

Jain also leads the Innovation Policy Section, overseeing monitoring of emerging fintech-related developments and their impact on supervised firms as well as the overall regulatory perimeter, and developing appropriate regulatory responses.

Jain has over 20 years of experience working in financial services regulation. Before joining the Board in 2020, she was the director of the Office of Financial Innovation/Office of Emerging Regulatory Issues at the Financial Industry Regulatory Authority (FINRA). Jain has published several white papers and journal articles on emerging risks and topics related to fintech. She was named one of the leading women in fintech by Innovate Finance in 2019.

Biographies



Nitin Kohli

Staff Scientist

UC Berkeley Center for Effective Global Action

Nitin Kohli is a staff scientist at UC Berkeley's Center for Effective Global Action and principal investigator of the Data Privacy Lab, researching topics that span privacy, fairness, and manipulability of algorithms. Drawing upon the combination of technical, legal, and social science scholarship, Kohli develops theory, tools, and frameworks that safeguard individuals while attending to the social and political context of their use. In particular, Kohli utilizes techniques from applied mathematics — such as game theory and mechanism design, cryptography, and statistics — to not only construct mechanisms with provable guarantees but also show the inherent limitations and tradeoffs present in certain technologies that are deployed in particular a context. Kohli has a Ph.D. from the UC Berkeley School of Information and was awarded the International iSchools Best Doctoral Dissertation Award for his research on differential privacy.



Chandita Kotoky

Capital Markets Risk Supervising Examiner

Federal Reserve Bank of New York

Chandita Kotoky is a capital markets risk supervising examiner in the LISCC Retail team at the Federal Reserve Bank of New York. She has close to two decades in the industry, working with large banks and payment networks, focusing primarily on retail credit risk management and strategy. She has an MBA from Duke University and an M.S. in economics from the Delhi School of Economics, India.



Claire Labonne

Senior Financial Economist

Federal Reserve Bank of Boston

Claire Labonne is a senior financial economist at the Federal Reserve Bank of Boston. Her research interests include unsecured credit markets, financial inclusion, and banking supervision. Labonne joined the Boston Fed in 2017 after five years as an economist at Banque de France, where she conducted research and took part in Basel Committee and European Central Bank working groups on macroprudential policy. She has a Ph.D. in economics from the Paris School of Economics and an M. Sc. in economics and finance from ENSAE ParisTech.

Biographies



Phillip Li

Senior Quantitative Risk Specialist
Federal Deposit Insurance Corporation

Phillip Li is a senior quantitative risk specialist for the Division of Complex Institution Supervision & Resolution (CISR) at the Federal Deposit Insurance Corporation (FDIC). He provides support for onsite and offsite reviews of models for retail and wholesale credit risk, CCAR, stress testing, and artificial intelligence and machine learning. Before the FDIC, he was a researcher at the Office of Financial Research and a senior financial economist at the Office of the Comptroller of the Currency (OCC). While at the OCC, Li served as a modeling expert in large and midsize bank examinations, with scopes covering model development, validation, and risk management of retail and wholesale credit risk, Basel II, and stress testing. He has also published numerous papers in leading scholarly journals, including the *American Economic Review*, *Journal of Housing Economics*, and *Journal of Credit Risk*. Li has both a Ph.D. in economics and a master's degree in statistics from University of California at Irvine and a bachelor's degree in economics from the University of California at Berkeley.



Alisabeth Lindley

Associate Deputy Comptroller for Credit Risk
Office of the Comptroller of the Currency

Alisabeth Lindley is the associate deputy comptroller for credit risk in Systemic Risk Identification and Support at the Office of the Comptroller of the Currency. She supervises subject matter experts for commercial, retail credit, mortgage banking, and the Shared National Credits program. She has held examiner positions in supervision at the OCC in both retail credit and consumer compliance. Before joining the OCC in 2013, she held various positions in the industry, primarily in auditing and consulting roles. She has a M.Ed. in adult learning and development from Regis University and a B.S. in International Business from Oklahoma City University.



Nestor Maslej

Research Manager
Stanford's Institute for Human-Centered Artificial Intelligence (HAI)

Nestor Maslej is a research manager at Stanford's Institute for Human-Centered Artificial Intelligence (HAI). In this position, he manages the AI Index and Global AI Vibrancy Tool. In developing tools that track the advancement of AI, Maslej hopes to make the AI space more accessible to policymakers, business leaders and the lay public. Maslej's work on AI, namely the AI Index, has been cited in newspapers across the globe, and his publications have likewise informed AI policymaking worldwide.

He also speaks frequently about trends in AI, having briefed high-level U.S. policymakers, testified in front of both the Canadian and Italian parliaments, and presented to CEOs from a plethora of industries. Maslej is also a fellow at the Centre for International Governance Innovation (CIGI), where he regularly writes opinion pieces on developments in AI.

Before joining HAI, Maslej worked in Toronto as an analyst in several startups. He has a master's in comparative government from the University of Oxford and an A.B. in social studies from Harvard.

Biographies



Paolina C. Medina

Assistant Professor

Bauer College of Business, University of Houston

Paolina C. Medina is an assistant professor of finance at the Bauer College of Business of the University of Houston. She conducts research on household finance using field experiments and observational data, with a focus on understanding how psychological biases in consumer behavior affect financial market outcomes. She worked at Banco de Mexico for three years in the retail financial services group.

Medina has a Ph.D. in managerial economics from Northwestern University and a B.A. in economics from ITAM.



Fredesvinda Montes

Senior Financial Sector Specialist

The World Bank

Vinda Montes is senior financial sector specialist at the World Bank. She joined the World Bank in 2007 as a credit reporting systems specialist and since then has supported policy reforms in more than 80 countries worldwide, involving the development or enhancement of credit reporting systems, payment systems, financial consumer protection, digital identification, e-KYC, data protection, open finance, privacy, and cybersecurity.

Vinda was lead secretariat to the International Committee on Credit Reporting (ICCR) from its inception in 2009 until January 2018, and from 2018 to 2021, she cochaired the Financial Inclusion Global Initiative (FIGI) working group on cybersecurity for financial infrastructure and the FIGI working group on Digital Identity. In 2016, she coauthored the book, *Responsible Finance and Credit Reporting Systems*.

She was previously legal director at Experian Spain, and she served on the board to World Central Kitchen from 2013 to 2018 and as founding executive director from 2010 to 2013.

Montes has a law degree from the Universidad Complutense and a master's degree in data protection and new technologies law from Universiteit Instelling Antwerpen, Belgium, and she studied political science at Universidad Nacional de Educación a Distancia in Madrid.



Jose Luis Negrin

General Director, Financial Sector Affairs

Banco de México

Jose Luis Negrin has held several positions at Banco de México, where he is now the general director of Financial Sector Affairs. His current responsibilities include issuing and supervising many of Banco de México's regulations, as well as financial inclusion, transparency, and competition analysis of the Mexican financial system and authorization of banks and fintechs under the central bank's authority.

Negrin has a Ph.D. in economics from Rice University and has taught courses in economic and financial regulation and industrial organization. He has publications in the areas of regulation, payment systems, financial inclusion, and competition.

Biographies



Jackie Nugent

Deputy Lead, Novel Activities Supervision Program
Federal Reserve

Jackie Nugent is a deputy lead of the Federal Reserve's Novel Activities Supervision Program. She leads a specialized team that examines novel activities of supervised institutions. Nugent started her Fed career almost 20 years ago as an examiner but has since held leadership roles in various capacities, including oversight of specialty risk examination areas and management of the Federal Reserve Bank of Kansas City Applications function. Nugent's novel activities-related historical experience also includes leadership of the Reserve Bank's Payments System Research and Strategies Team and establishment of its regional fintech supervision team.

Outside the Fed, Nugent's industry experience includes banking and wealth management. She has an MBA (finance and information technology) and a B.A. in psychology from the University of Kansas.



Pratik Patel

Senior CFI Specialist
Federal Deposit Insurance Corporation

Pratik Patel is currently a senior CFI specialist within Division of Complex Institution Supervision and Resolution at the Federal Deposit Insurance Corporation (FDIC). Patel is a commissioned risk management examiner with approximately 23 years of risk management and bank supervision experience with the FDIC and the Federal Housing Finance Agency (FHFA). Patel has extensive banking experience, particularly in performing financial risk analysis and assessing safety and soundness and risk management practices at financial institutions, ranging from community banks to complex insured depository institutions.



Raluca A. Roman

Principal Economist
Federal Reserve Bank of Philadelphia

Raluca A. Roman is a principal economist at the Federal Reserve Bank of Philadelphia and joined the bank in July 2018. From 2015 to 2018, she was a research economist at Federal Reserve Bank of Kansas City. She has a Ph.D. in finance from the University of South Carolina, an M.B.A. with a concentration in finance from the University of Bridgeport, and a B.A. in economics from Alexandru Ioan Cuza University (Romania).

Roman's research areas include a variety of topics related to banking and financial institutions, consumer finance (including retail credit, consumer behavior, and consumer market trends), corporate finance, and international finance. She has published a variety of research articles in academic journals and co-authored the books *The Economic and Financial Impacts of the COVID-19 Crisis Around the World: Expect the Unexpected* (2023, Elsevier) and *TARP and other Bank Bailouts and Bail-Ins Around the World: Connecting Wall Street, Main Street, and the Financial System* (2020, Elsevier).

Roman has presented her research and discussed the research of others at numerous finance and regulatory conferences. She also has more than seven years of professional experience in banking and corporate finance, including at UBS Investment Bank and MasterCard International.

Biographies



Anne Romatowski

Markets and Policy Fellow
Consumer Financial Protection Bureau

Anne Romatowski is a markets and policy fellow focused on artificial intelligence in the Office of Markets at the Consumer Financial Protection Bureau (CFPB). Romatowski also chairs the automated decision-making workstream in the office of the CFPB's chief technologist. Before joining the CFPB, she worked for over 15 years on topics related to consumer finance across the public, private, and nonprofit sectors, at organizations including New York City's Office of Consumer and Worker Protection, JPMorgan Chase, and Morgan Stanley. Romatowski has an MBA and master of international affairs from Columbia and a bachelor's degree from Harvard.



Nilim Roy

Principal Financial Economist, Risk Assessment, Data Analysis, and Research (RADAR) Group
Federal Reserve Bank of Philadelphia

Nilim Roy is principal financial economist at the Risk Assessment, Data Analysis, and Research (RADAR) Group at the Federal Reserve Bank of Philadelphia. Before his current role in supervisory stress testing and modeling for the banking industry, Roy provided customized risk assessment solutions to a broad range of financial institutions as a banking and lending custom modeling team lead at Equifax, Inc.

Over the past two decades, Roy has held various positions at Citi, JPMorgan Chase, and American Express, where he provided risk and marketing analytic solutions for strategy and policy development. His work touched various aspects of the consumer credit life cycle, from marketing to CRM to acquisitions risk to credit policy and collections strategy.

Roy has a Ph.D. in economics from the State University of New York at Stony Brook and an M.S. and B.S. in applied math and statistics from the Indian Statistical Institute, India.



Debra Saito

Officer
Federal Reserve Bank of New York

Debra Saito is an officer in supervision at the Federal Reserve Bank of New York (FRBNY) and currently serves as the CPC for American Express. In 18 years with the FRBNY, Saito has served as G&C lead, business line specialist team lead, financial analyst, model risk specialist, Basel coordinator, wholesale credit risk specialist, risk coordinator, and relationship manager at institutions that include MetLife, Citi, BNYM, Barclays, Deutsche Bank, MUFJ, and smaller Japanese banks.

Before the Fed, Saito worked in international development, managing technical assistance and infrastructure projects in Central America and the Caribbean that were funded by the Japanese government.

Biographies



Reva Schwartz

Research Scientist

National Institute of Standards and Technology (NIST) Information Technology Laboratory

Reva Schwartz is a research scientist at the Information Technology Laboratory (ITL) at the National Institute of Standards and Technology (NIST). She serves as principal investigator on bias in artificial intelligence and leads the NIST ARIA program, which seeks to advance measurement science for the risks and impacts of generative AI.

A sociotechnical researcher, her research focuses on real-world testing methodologies for evaluating the societal impacts of AI systems and driving understanding of sociotechnical systems. She has advised federal agencies about how experts interact with automation to make sense of information in high-stakes settings.



Evan Sekeris

Chief Model Risk Officer

Capital One

Evan Sekeris has been working in various capacities in risk management for the past 20 years, most recently as the chief model risk officer at Capital One. Before Capital One, Sekeris was at PNC, where he led the model validation team responsible for all models used by the bank, and at MUFG, where he was the head of nonfinancial risk for the Americas.

Earlier in his career, he was a partner at Oliver Wyman, responsible for the nonfinancial risk platform for the Americas and was Aon's global head of financial institutions risk consulting. Sekeris started his risk career as a regulator at Boston and then the Richmond Fed. There, he was responsible for the coordination of the supervision of operational risk models for US-based AMA banks and the team that crafted the Federal Reserve's operational risk stress testing model for CCAR.

Sekeris has a Ph.D. from UCLA and an M.A. and a B.A. from the Universite Catholique de Louvain.



Agus Sudjianto

Executive Vice President

Wells Fargo

Agus Sudjianto is an executive vice president, head of model risk, and a member of the management committee at Wells Fargo, where he is responsible for enterprise model risk management.

Before his current position, Sudjianto was the modeling and analytics director and chief model risk officer at Lloyds Banking Group in the United Kingdom. Before joining Lloyds, he was an executive and head of quantitative risk at Bank of America.

He was previously a product design manager in the powertrain division of Ford Motor Company.

Sudjianto holds several U.S. patents in both finance and engineering. He has published numerous technical papers and is a coauthor of *Design and Modeling for Computer Experiments*. His technical expertise and interests include quantitative risk, particularly credit risk modeling, machine learning, and computational statistics.

He has doctoral and masters degrees in engineering and management from Wayne State University and the Massachusetts Institute of Technology.

Biographies



Karine Themejian

European Central Bank

Karine Themejian is deputy head of the European Central Bank's Market Innovation and Integration Division in the Directorate General Market Infrastructure and Payments. She focuses on payments and takes part in this context in the definition of the Eurosystem catalyst position on the relevant topics. She also coordinates the secretariat of the Euro Retail Payments Board (ERPB), which contributes to the further development of an integrated, innovative, and competitive market for euro retail payments in the European Union.



Guilherme Thémes

**Head of Division, Financial System Regulation Department
Banco Central do Brasil**

Guilherme Thémes is an economist and specialist in financial and payments services, with more than 15 years of experience in the Brazilian banking industry and the public sector. At the Central Bank of Brazil, he is the regulation manager, leading the conduction of studies and proposals to regulate different financial and payments products to consumers; aspects of behavioral, conduct, and customer relationships; and rules for fraud prevention, cybersecurity, and the cloud. He has also worked on the forefront of innovative projects such as the regulation of open banking and open finance, and the creation of the payment institutions framework. Thémes has a master's degree in economic policy from the University of Illinois.



Ken Ueda

**Senior Financial Economist
Office of the Comptroller of the Currency**

Ken Ueda has been employed with the Office of the Comptroller of the Currency since 2018 and is currently a senior financial economist. His current work relates to credit cards, unsecured personal loans, and climate change-related threats to the consumer finance industry. His work consists primarily of bank examinations, indirect supervision, and independent research in these topics. He has a Ph.D in economics from the University of Maryland-College Park.

Biographies



Jialan Wang

Associate Professor
University of Illinois at Urbana-Champaign

Jialan Wang is an associate professor of finance at the University of Illinois at Urbana-Champaign and a research associate at the National Bureau of Economic Research (NBER). She has previously held positions at the Olin School of Business at Washington University in St. Louis, the Consumer Financial Protection Bureau, and the Wharton School. Her research focuses on household finance, behavioral economics, and fintech. Her research has been published in peer-reviewed journals such as the *Quarterly Journal of Economics*, *American Economic Review*, and *Journal of Financial Economics*. She has a Ph.D. in financial economics from MIT and a B.S. in mathematics from Caltech.



Lulu Wang

Assistant Professor
Kellogg School of Management

Lulu Wang is an assistant professor in finance at the Kellogg School of Management. His research interests include household finance, industrial organization, and corporate finance. His recent research studies competition between card payment networks.



Mark Warren

Managing Director, Risk Modeling Utility
Citi

Mark Warren is the managing director of Citi's Risk Modeling Utility, which is responsible for the development, delivery, and monitoring of all credit risk models across Citi's consumer lending portfolios globally. The responsibility spans two core activities; granting and managing credit to individual customers and delivering loss forecasts for stress testing (e.g., CCAR), loan loss reserving (e.g., CECL), and business planning.

Warren rejoined Citi in 2018 as head of risk modeling innovation and technology in Citi's US branded cards business. Before that, Warren held a variety of positions at Barclays, including director of credit risk, in which he was responsible for stress testing, loss forecasting, and loan loss reserving; director of risk analytics, in which he was responsible for risk decision models and risk data management; and director of Barclaycard Decision Science, in which he was responsible for all risk modeling across Barclaycard's 12 international portfolios.

Before his 13 years at Barclays, Warren managed similar analytic teams at CitiFinancial International, The Associates, and BASES Worldwide Market Research.

Warren has a Ph.D. in political science from the University of Texas at Austin and a B.A. from Cornell University.

Biographies



Wei Zhang

Deputy Assistant Director, Office of Consumer Credit, Payments, and Deposits Markets (CCPD)
Consumer Financial Protection Bureau

Wei Zhang joined the Consumer Financial Protection Bureau (CFPB) in June 2012 as the credit card program manager and was responsible for the market monitoring of credit card market in CCPD before his appointment to the current role. He has been a leading author of all five of the bureau's biennial reports to Congress on the credit card market since its first report in 2013. In addition to credit card market, he also covers consumer credit reporting market as well as AI/ML in his section of CCPD. He regularly briefs the bureau's leadership, responds to media/Congressional inquiries, advises other bureau offices, and speaks at industry conferences on matters related to those markets.

Before joining the CFPB, he was a financial analyst in the large bank supervision division at the Office of the Comptroller of the Currency (OCC), supporting credit card examinations and supervision activities. Zhang had held a diverse set of leadership roles in marketing, analytics, risk management, and financial analysis during his over 12 years with nation's largest financial institutions before he joined the government services. He has a master's in business administration and a B.A. in accounting.



Yan Zhou

Associate Director of Data Analytics
Federal Deposit Insurance Corporation

Yan Zhou has over 25 years of experience in capital markets, financial analysis and modeling, risk management, examination, and resolution planning. She currently serves as the associate director of data analytics for the Division of Complex Institution Supervision and Resolution at the Federal Deposit Insurance Corporation (FDIC), overseeing various data and analytics initiatives supporting risk monitoring, policy analysis, supervision, and resolution of large and complex financial institutions. Before the FDIC, she held various positions, including managerial roles at FHFA, Fannie Mae, Freddie Mac, and Capital One. Yan has an M.B.A. in finance and an M.S. in computer science.



Scott Zoldi

Chief Analytics Officer
FICO

Scott Zoldi is chief analytics officer at FICO, responsible for artificial intelligence (AI) and analytic innovation across FICO's product and technology solutions. While at FICO, he has authored more than 130 analytic patents, with 98 granted and 40 pending. Zoldi is an industry leader at the forefront of Responsible AI and an outspoken proponent of AI governance and regulation.