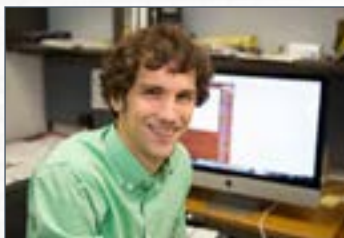


The Research Group

of the Federal Reserve Bank of New York



2017/2018



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Olivier Armantier, Microeconomic Studies Function
Workshop on Subjective Expectations

A Vast Portfolio of Research Assets

The New York Fed's Research and Statistics Group combines leading-edge academic research with rigorous policy analysis in an intellectually dynamic and collegial environment. This brochure offers an overview of our research and policy work and describes the distinctive culture and resources of the Group. It also details the responsibilities of our seven functions, identifies our current staff of economists, and highlights the economists' research interests and recent publications.

Our most important asset is our sixty-four Ph.D. economists, a concentration of expertise far larger than that of most university economics departments. Recognized as leading researchers in their fields, these individuals bring breadth and depth to their work in macroeconomics, banking, payments, finance, applied microeconomics, international economics, and regional analysis.

Our economists have compiled an impressive record of publishing in the most highly regarded economics and finance journals. Since 2001, ninety-one articles by New York Fed economists have appeared in the *American Economic Review*, *Econometrica*, the *Journal of Finance*, the *Journal of Financial Economics*, the *Journal of Political Economy*, the *Quarterly Journal of Economics*, the *Review of Economic Studies*, and the *Review of Financial Studies*. Of particular note is the fact that in 2015, two articles by our economists were awarded the *Journal of Finance*'s coveted Amundi Smith Breeden Prizes. Our economists' work is also extensively represented in the top field journals and in other important outlets.

New York Fed economists complement their publishing activity by serving on the editorial boards of leading journals.

Our Economists' Current and Recent Editorial Board Assignments

Tobias Adrian, *Annual Review of Financial Economics*

Nicola Cetorelli, *Rivista Bancaria*

Rajashri Chakrabarti, *Education Finance and Policy*

Richard Crump, *Journal of Empirical Finance*

Bianca De Paoli, *Journal of Money, Credit, and Banking*

Marco Del Negro, *Journal of Applied Econometrics*; *Journal of Business and Economic Statistics*; *Review of Economics and Statistics*

Domenico Giannone, *Journal of Business and Economic Statistics*; *International Journal of Forecasting*; *Journal of Applied Econometrics*; *Empirical Economics*

Marc Giannoni, *Journal of Business Economics and Statistics*; *IMF Economic Review*

Andrew Haughwout, *Journal of Regional Science*

Antoine Martin, *Journal of Money, Credit, and Banking*

Donald Morgan, *Journal of Money, Credit, and Banking*

Paolo Pesenti, *Journal of International Economics*

Ayşegül Şahin, *European Economic Review*

João Santos, *Journal of Financial Economic Policy*; *Journal of Financial Intermediation*; *Journal of Financial Services Research*; *Journal of Money, Credit, and Banking*

Argia Sbordone, *Macroeconomic Dynamics*

Andrea Tambalotti, *Review of Economic Dynamics*

Wilbert van der Klaauw, *Journal of Labor Economics*; *Journal of Business and Economic Statistics*; *LABOUR: Review of Labour Economics and Industrial Relations*



Andreas Fuster, Capital Markets Function
Workshop on Subjective Expectations



L-R: Richard Crump, Capital Markets Function, and James Vickery, Financial Intermediation Function

Our economists are also highly visible in the profession, presenting research at preeminent colleges and universities worldwide. They have given papers at the American Economic Association, the American Finance Association, the Bank for International Settlements, the Centre for Economic Policy Research, the International Monetary Fund, the National Bureau of Economic Research, the U.S. Treasury Department, and the world's central banks.

A FIRST-YEAR PLAN FOCUSING ON RESEARCH AND PUBLICATION

In the Research Group, we recognize how important it is for young economists to get their research agenda under way as quickly as possible. For new Ph.D. hires, the primary goal in the first year is to produce research and publish in the major journals. To that end, we have designed a first-year plan that allows new economists to devote a large majority of their time to developing publishable work. We provide additional support in the form of state-of-the-art computing capabilities, ready access to a wide range of economic data, and the assistance of highly trained research analysts.

In the first year, new Ph.D. economists also familiarize themselves with the New York Fed's policy missions by interacting with economists in their area and with other professionals Bankwide. They may contribute to a team working on a policy issue or help prepare a briefing on economic developments for the Bank's president and senior officers.

A COLLEGIAL CULTURE

The environment here fosters an extraordinary degree of collaboration and exchange. Economists regularly work together on policy initiatives, and this interaction encourages a lively team spirit that can be missing in academic departments. In addition, economists frequently coauthor articles and make joint presentations.

Adding to the collegial nature of the Research Group is the lack of a divide between senior and junior staff; there is virtually no hierarchy setting new economists apart from their more experienced colleagues.

AN ENVIRONMENT WHERE IDEAS FLOURISH

The Research Group benefits greatly from the New York Fed's proximity to top-tier universities. In recent years, the Group has cosponsored conferences with institutions such as Columbia, Harvard, NYU, and Princeton. Our economists frequently give seminars at these and other institutions.

Teaching Activity

Economists enjoy the opportunity to teach while on staff—whether they take a leave of absence from the Bank or teach part-time while here.

Our Economists' Recent Teaching Activities

Tobias Adrian, NYU, Princeton
Ozge Akinci, Columbia
Dong Beom Choi, Princeton
Meta Brown, University of Virginia
Richard Crump, NYU
Marco Del Negro, Georgetown, Yeshiva University, Centro de Estudios Monetarios Latinoamericanos
Andreas Fuster, NYU

Marc Giannoni, Columbia
Donald Morgan, Columbia, NYU
Benjamin Pugsley, Columbia
Ayşegül Şahin, NYU
Argia Sbordone, Columbia
Giorgio Topa, NYU
Joseph Tracy, NYU
James Vickery, NYU
Basit Zafar, Princeton



L-R: Kenneth Garbade, Money and Payments Studies Function, and Paul Volcker, Chairman of the Volcker Alliance, former Federal Reserve Chairman, and former President of the New York Fed, at the 2015 Roundtable on Treasury Markets and Debt Management



Michael Woodford, Columbia University, at a New York Fed–hosted conference honoring his contributions to economics

Sabbatical Program

Our sabbatical program offers economists opportunities to concentrate fully on their own research. The program enables individuals pursuing a specific plan of study to devote up to 100 percent of their time to qualifying work.

Under the program, economists with four or more years of service at the Bank can apply to take between two and twelve months of leave. They receive 90 percent of their salary while on the first six months of leave and 75 percent during the next six months. Economists can also work part-time while on sabbatical if the employment contributes to their professional development. For example, an economist can hold a visiting position at a university or other research institution, with limited teaching or other responsibilities.

Economists have taken advantage of the sabbatical program to work at such institutions as the Bank of Portugal, the Board of Governors of the Federal Reserve System, Columbia University, the European University Institute, New York University, Princeton, Stanford, the University of Bern, the University of Lausanne, the University of Virginia, and Yale.

Visiting Scholars Program

To help maintain a stimulating and supportive environment for staff economists, we regularly invite economists from major research institutions to be visiting scholars at the Bank. The visitors present their own work and make themselves available to discuss our economists’ current research.

A Gateway to Academia

The scope and seriousness of our research environment are reflected in our relationship with academia.

Many of our more senior economists come from university economics and finance faculties. In turn, a number of our economists have gone on to accept faculty positions at prestigious colleges and universities, including Boston College, Brandeis, Brown, Columbia, Dartmouth, Georgetown, New York University, Ohio State, the University of British Columbia, the University of California Santa Barbara, the University of Amsterdam, the University of Chicago, the University of Oxford, the University of Stockholm, and the University of Virginia.

Conferences

The New York Fed maintains an ambitious conference program, sponsoring or cosponsoring three to four major conferences and one or two workshops each year. During the 2015–16 academic year, these events addressed a range of important topics, including the effects of culture on the conduct of financial firms, policy directions in the linked economies of Europe and the United States, the goals and effectiveness of financial institution supervision, and the formation, modeling, and measurement of economic expectations. The Bank also joined with Columbia University to hold a conference honoring the contributions of Michael Woodford, the John Bates Clark Professor of Political Economy at Columbia, to the field of economics; speakers not only addressed how his work has helped shape Federal Reserve policy discussions and communications but

Visiting Scholars in 2016

David Autor , MIT	Jerry Hausman , MIT	Frank Schorfheide , University of Pennsylvania
Francesco Bianchi , Duke University	Michael Jacobides , London Business School	Christopher Sims , Princeton University
Mark Bills , University of Rochester	Charles Kahn , University of Illinois	James Stock , Harvard University
Richard Blundell , University College London	Nobuhiro Kiyotaki , Princeton University	Philip Strahan , Boston College
Jesus Fernandez-Villaverde , University of Pennsylvania	Arvind Krishnamurthy , Stanford Graduate School of Business	Adi Sunderam , Harvard Business School
Fernando Ferreira , University of Pennsylvania, Wharton School	John Leahy , University of Michigan	Robert Townsend , MIT
Mark Gertler , New York University	Daniel Paravisini , London School of Economics and Political Science	Jules van Binsbergen , University of Pennsylvania, Wharton School
Itay Goldstein , University of Pennsylvania	Enrico Perotti , University of Amsterdam	Stijn Van Nieuwerburgh , New York University, Stern School of Business
James Hamilton , University of California, San Diego	Bruce Preston , University of Melbourne	Michael Woodford , Columbia University
	Giorgio Primiceri , Northwestern University	Jonathan Wright , Johns Hopkins University

also presented important new work. In terms of both the breadth and the sheer number of conference offerings, few university economics departments can rival the Fed.

The conferences draw an elite group of speakers and panelists from leading universities and business schools—including, in 2015-16, Jess Benhabib, John Cochrane, Roger Farmer, Jordi Galí, Robert Hall, Robert E. Lucas, Charles Manski, Matthew Rabin, Nouriel Roubini, and Luigi Zingales. For economists in the Research Group, these events provide an opportunity to interact with top academics in their own and other fields.

In addition, many Fed conferences provide a forum where policymakers join with both academics and industry representatives to share their perspectives on economic problems. The exchanges among these groups have allowed Fed economists to convey their concerns about financial industry vulnerabilities to industry practitioners, and to engage academics in the exploration

of policy questions not easily addressed through standard models. Not surprisingly, the dialogue generated at the conferences has often proved very fruitful, setting the direction for new research, calling attention to critical data shortages, or underscoring the need for further reforms.

Seminars

The Research Group actively encourages participation in seminars and conferences. Ample funds are available for economists to travel to conferences in the United States and abroad. The Bank also provides travel support for those wishing to work with coauthors outside the Bank.

In addition, we offer a seminar series that attracts a broad group of distinguished speakers. We present several seminars a week—a clear indication of our commitment to the series.

DATA ASSETS AND ALLIANCES

New York Fed economists have exceptional opportunities to join with others in the coordinated study of specialized economic data.

Center for Microeconomic Data

The New York Fed’s Center for Microeconomic Data, inaugurated in December 2013, has become an important hub for research on the expectations and behavior of individual economic agents. Bank economists affiliated with the Center develop and use microeconomic data and microeconomic techniques to examine key decisions taken by households and firms and to investigate the effects of fiscal and monetary policy on these groups.

Two large data collection projects anchor the Center: the FRBNY Consumer Credit Panel and the Survey of Consumer Expectations. The Consumer Credit Panel gathers detailed quarterly data on the liabilities of a nationally representative sample of U.S.

households. The data set is used to calculate national and regional measures of individual- and household-level credit balances and delinquencies by product type, including mortgages, credit cards, auto loans, and student loans. The Survey of Consumer Expectations collects information on a wide variety of household expectations regarding inflation, future earnings, household income, house prices, access to credit, layoff risk, and U.S. economic conditions overall. A third project, launched in early 2016, is gathering data from a panel of small businesses to shed light on trade credit, business formation, and firm dynamics.

While central banks are often thought to specialize in macroeconomic analysis, the data and research emerging from the Center for Microeconomic Data contribute importantly to the Fed’s economic insight and policy decisions. The Center’s regular releases on household credit conditions and the consumer outlook are also followed closely by government policymakers and the media, and have helped

New York Fed Seminar Series: Selected Presentations, 2016

- “Lead and Crime,” *Anna Aizer, Brown University*
- “Importing Political Polarization? The Electoral Consequences of Rising Trade Exposure,” *David Autor, MIT*
- “Trading and Information Diffusion in Over-the-Counter Markets,” *Ana Babus, Federal Reserve Bank of Chicago*
- “Financial Regulation in a Quantitative Model of the Modern Banking System,” *Juliane Begenau, Harvard Business School*
- “The Finance-Uncertainty Multiplier,” *Nicholas Bloom, Stanford University*
- “Earnings and Consumption Dynamics: A Nonlinear Panel Data Framework,” *Richard Blundell, University College London*
- “Pipeline Risk in Leveraged Loan Syndication,” *Max Bruche, Cass Business School*

- “Liquidity Risk, Bank Networks, and the Value of Joining the Federal Reserve System,” *Charles Calomiris, Columbia Business School*
- “Are Small-Scale VARs Useful for Business Cycle Analysis? Revisiting Non-Fundamentalness,” *Fabio Canova, European University Institute*



Seminar speaker
Juliane Begenau,
Harvard Business School

- “Competitive Search in Money Markets and Implementation of Monetary Policy,” *Francesca Carapella, Board of Governors of the Federal Reserve System*
- “Precautionary Savings and Aggregate Demand,” *Edouard Challe, Ecole Polytechnique and CREST*
- “A New Approach to Regime Switching,” *Yoosoon Chang, Indiana University*
- “Liquidity Transformation in Asset Management: Evidence from the Cash Holdings of Mutual Funds,” *Sergey Chernenko, Ohio State University*
- “Identification of Preferences in Network Formation Games,” *Aureo de Paula, University College London*
- “Culture and the Inter-generational Transmission of Human Capital,” *David Figlio, Northwestern University*

- “Partial Identification of the Distribution of Treatment Effects: Bounds on the Distribution of Returns to Schooling,” *Brigham Frandsen, Brigham Young University*
- “Breaking the Spell with Credit-Easing: Self-Confirming Credit Crises in Competitive Search Economies,” *Gaetano Gaballo, Banque de France*
- “Financial Heterogeneity and Monetary Union,” *Simon Gilchrist, Boston University*
- “Investor Flows and Fragility in Corporate Bond Funds,” *Itay Goldstein, University of Pennsylvania, Wharton School*
- “Spurious Inference in Reduced-Rank Asset-Pricing Models,” *Nikolay Gospodinov, Federal Reserve Bank of Atlanta*
- “Firming Up Inequality,” *Fatih Guvenen, University of Minnesota*



Seminar speaker
Richard Blundell,
University College London

- “Changing Business Dynamism: Volatility of Shocks vs. Responsiveness to Shocks,” *John Haltiwanger, University of Maryland*
- “Liquidity Provision and Equity Funding of Banks,” *Martin Hellwig, Max Planck Institute for Research on Collective Goods*

- “Asset Allocation in Bankruptcy,” *Benjamin Iverson, Northwestern University*
- “High School Closures in New York City: Impact on Students’ Academic Outcomes, Attendance, and Mobility,” *Jim Kemple, Research Alliance and NYU*
- “Learning in Crowded Markets,” *Peter Kondo, London School of Economics*
- “Understanding Trends in Nonstandard Work and the ‘Gig’ Economy,” *Alan Krueger, Princeton University*
- “Internal Migration in Dual Labor Markets,” *Joan Llull, Universidad Autònoma de Barcelona and BGSE*
- “The Impact of Extended Reproductive Time Horizons: Evidence from Israel’s Expansion of Access to IVF,” *Corinne Low, University of Pennsylvania, Wharton School*
- “Ripple Effects of Noise on Corporate Investment,” *Adrien Matray, Princeton University*

- “Signaling Effects of Monetary Policy,” *Leonardo Melosi, Federal Reserve Bank of Chicago*
- “Interest Rate Steering by the Central Bank,” *Francesco Papadia, Bruegel*
- “Government Intervention and Arbitrage,” *Paolo Pasquariello, University of Michigan, Ross School of Business*
- “Export Markets and Labor Reallocation in a Low-Income Country,” *Nina Pavcnik, Dartmouth College*
- “Secular Financial Trends and Technological Progress,” *Enrico Perotti, University of Amsterdam*
- “Heterogeneity and Persistence in Returns to Wealth,” *Luigi Pistaferri, Stanford University*
- “Foreclosure Clusters and the Concentration of High-Cost Lending,” *Stephen L. Ross, University of Connecticut*
- “Savings Gluts and Financial Fragility,” *Tano Santos, Columbia Business School*

- “The End of Men? Gender Differences in the High-Skill Labor Market since 1980,” *Henry Siu, University of British Columbia*
- “The Banking View of Bond Risk Premia,” *David Sraer, University of California, Berkeley, Haas School of Business*
- “Social Networks and Housing Markets,” *Johannes Stroebel, New York University, Stern School of Business*
- “Consumption and House Prices in the Great Recession,” *Gianluca Violante, New York University*
- “Housing Supply, Speculation, and Cycles,” *Wei Xiong, Princeton University*
- “Frictions in DSGE Models: Revisiting New Keynesian vs. New Classical Results,” *Eran Yashiv, Tel Aviv University*
- “A New Dilemma: Capital Controls and Monetary Policy in Sudden Stop Economies,” *Eric R. Young, University of Virginia*

shape public debate on issues such as the nation’s growing student debt burden. Moreover, the Center’s work has served as a catalyst for new research by academic economists, who often partner with our economists on studies of this rich body of household and firm data.

International Banking Research Network

Another important initiative of interest to new economist hires is the International Banking Research Network (IBRN), a community of central bank researchers who study global banks and their activities. Established in 2012 by a New York Fed economist and researchers from Austria, Germany, and the United Kingdom, the IBRN seeks to improve policy discussion by using bank-level regulatory data in the joint analysis of key questions. Researchers in the network have access to the “micro” data underlying the Bank for International Settlements’ international banking statistics, a resource that allows them to design experiments and achieve results not possible with studies that draw lessons exclusively from the experience of a single country.

The IBRN’s first project, undertaken in 2013 and implemented by eleven countries, explored how funding shocks affecting parent banks were transmitted to foreign countries through cross-border banking activities. The network’s second project, begun in 2014, examined the effects of macroprudential policy changes on global banks’ lending and funding in their home countries and abroad. Researchers from sixteen central banks, the Bank for International Settlements, the International Monetary Fund, and the European Systemic Risk Board participated in the project, which illuminated why banks in different countries may have responded differently to policies enacted in the wake of the global financial crisis. Currently, the network is focusing its efforts on the little-understood subject of international monetary spillovers. Research teams are investigating the channels through which countries’ conventional and unconventional monetary policy actions are affecting international as well as domestic lending.

New York Census Research Data Center

The Research Group, on behalf of the New York Fed, helped establish a U.S. Census Bureau Research Data Center in New York City. The Bank is a founding member of the consortium that supports the facility, joining other leading universities and research organizations in New York State.

The presence of the Research Data Center in the New York area supports an important strand of empirical research in the Bank and the region. At the Data Center, researchers who have completed a rigorous project review process can access in a secure facility selected



Victoria Williams,
Executive Services

confidential economic and demographic microdata gathered by the U.S. Census Bureau.

The New York Fed’s consortium membership entitles Research Group economists to use the facility to conduct research with no additional lab fees or the need to travel.

A RICH COMPUTING ENVIRONMENT

Our state-of-the-art Research Computing Environment offers economists a broad spectrum of technology resources, the ability to take advantage of real and financial data series, and electronic access to academic journals. Dedicated information technology and automation support services are available to meet researchers’ individual needs.

EXTENSIVE PROFESSIONAL SUPPORT

A superb group of administrative, computer, editorial, design, and library professionals help economists achieve their research objectives.

Joining this group of support personnel are roughly forty research analysts, who offer skilled and energetic assistance gathering data, conducting statistical analysis, and preparing materials for presentations.

Our RAs are typically recent college graduates who intend to pursue a Ph.D. in economics. Seventy percent of the Research Group’s RAs in the last five years have gone on to graduate school, many to top-five programs in economics. In addition, our RAs did extraordinarily well this year in the competition for National Science Foundation fellowships, securing four of the roughly thirty awards given for graduate study in the field of economics.

WIDE INTERNET EXPOSURE

Personal web pages residing on the New York Fed’s public site, www.newyorkfed.org/research/economists/, heighten economists’ visibility in the academic, policy, and business communities.

The pages feature the economist’s biography and field of interest as well as links to curricula vitae, publications and working papers, and social-media output. These pages are among the most visited on our website.

LIBERTY STREET ECONOMICS BLOG

The *Liberty Street Economics* blog, which celebrated its fifth anniversary in 2016, provides a way for our economists to bring their research to the attention of a broader public. The posts, written in an accessible style, attract large numbers of readers and receive frequent attention from the media and financial bloggers in particular.

Liberty Street Economics typically publishes three posts per week, with up to seven posts in weeks when key topics are explored in detail. To generate dialogue with the public, it also publishes reader

comments and author responses. For the twelve months ended in July 2016, the blog featured roughly 130 economics posts.

THE ECONOMIC POLICY REVIEW

While economists are encouraged to publish in external journals, they also reach a large and influential audience by publishing in the Bank’s *Economic Policy Review*. The review features new policy-oriented research by New York Fed economists, papers by affiliated economists, and the proceedings of Bank-sponsored conferences.

Key Features of the Research Computing Environment

■ **A high-performance computing environment of Linux clusters.** In Research, parallel computing is performed by multiple clusters with high-speed networks connecting hundreds of processors. Application servers support parallel and serial work with standard and specialized econometric software resources available in the office or remotely.

■ **Data.** A full range of economic and financial data is available for independent research projects as well as for use in monetary policy initiatives associated with a wide variety of research topics.

■ **Robust data-storage solutions.** Our Research Storage Area Network, with the capacity to store hundreds of terabytes of data, supports analysis of large data sets on the Bank’s network and is protected by access controls, backups, and contingency locations.

■ **Access to software resources.** Numerous econometric software packages and modules are available, including MATLAB, Stata-MP, Mathematica, SAS Grid, Python, Julia, Fortran, the R programming language, EViews, GAUSS, and ArcGIS. Technical word-processing packages, such as Scientific Workplace and WinEdt, are fully supported. Efficient and easy-to-use versioning packages such as SmartGit are readily available.

■ **A separate Research network for collaboration with external colleagues.** The flexible Research Accessible Network (RAN) supports economists’ academic work and collaboration by providing convenient access to Internet resources from inside the Bank as well as access to Research Group resources from outside the Bank through the Internet. This network also supports access to a high-performance computing cluster.

■ **Access to cloud computing.** For academic research projects, external high-performance clusters and graphics processing units (GPUs) are available and are integrated with the RAN cluster.

■ **Access to the Bank’s secure network.** The Bank’s secure internal network can be used to conduct important policy work as well as to access e-mail, internal Federal Reserve System websites, and productivity applications and utilities.

■ **Versatile workstation options.** A customizable environment of Windows, Linux, and Mac desktop, laptop, and virtual solutions can be combined to meet economists’ research needs. A virtual workstation option affords simultaneous access to the Bank network and the RAN through one device. A variety of peripherals—including large monitors, secure external hard drives,

high-end color printers, and secure USB drives—complement these workstation features.

■ **Convenient remote access.** An array of automated tools streamlines research conducted at home or while traveling; BlackBerry devices are available for mobile communication.

■ **A committed team of technical support specialists.** The Business and Technology Support Services Staff provides local, specialized services dedicated to the computing needs of Research economists. They work alongside economists and are available via PC, e-mail, and phone. In addition, the team works closely with the National Service Desk, which is available 24/7, to provide integrated solutions for the Research Group’s network computing business needs.

Resident Scholars Program

Our Program for Resident Scholars attracts to the Bank outstanding researchers with international reputations. We are very pleased to host Kenneth D. West as resident scholar for 2016-17.

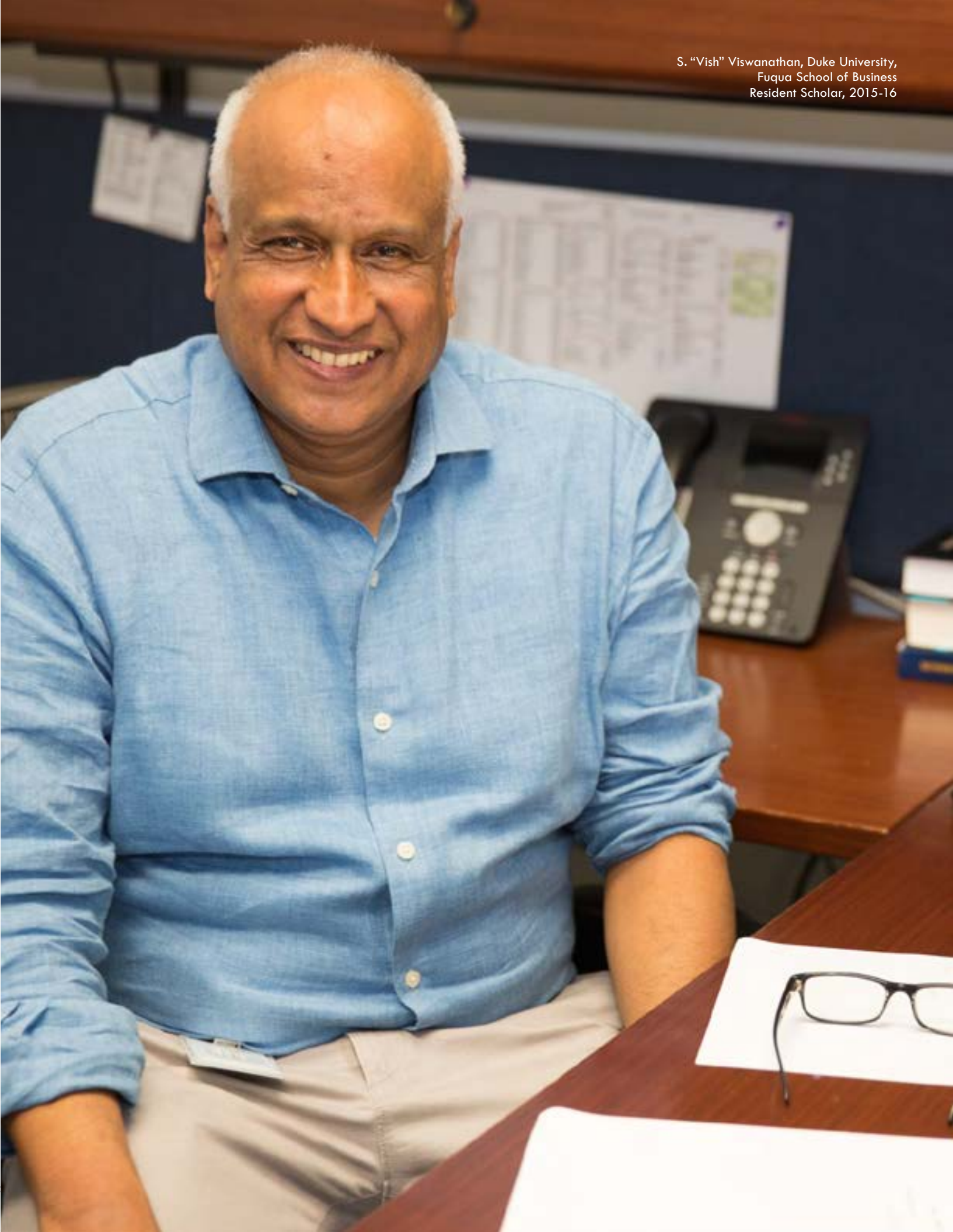
Kenneth D. West is the John D. MacArthur and Ragnar Frisch Professor of Economics at the University of Wisconsin-Madison. Professor West has published widely in the fields of macroeconomics, finance, international economics, and econometrics. He has held visiting positions at the European Central Bank, the Reserve Bank of Australia, the Bank of Brazil, the Einaudi Institute for Economics and Finance, the Board of Governors of the Federal Reserve System, and the Federal Reserve Banks of Atlanta, St. Louis, and Kansas City. Professor West has been a co-editor of the *Journal of Money, Credit, and Banking* since 2001 and previously served as co-editor of the *American Economic Review*. He is a Fellow of the Econometric Society and has been the recipient of the Alfred P. Sloan Research Fellowship, the John M. Stauffer National Fellowship in Public Policy at the Hoover Institution, and the Social Science Research Council's Abe Fellowship for international multidisciplinary research. Prior to joining the University of Wisconsin-Madison, Professor West taught at Princeton.

Resident scholars, selected from the top academic and policy institutions in areas related to the Bank's broad policy interests, join the Bank for a stay of at least six months. They are considered members of the Research Group and are given access to resources on the same basis as other key Bank staff.

The scholars pursue their own research while providing intellectual leadership by advising and collaborating with our economists. They present their own work at Research Group seminars and attend presentations by others. Resident scholars also work closely with the director of research and have the opportunity to contribute to the Bank's main policymaking discussions on such topics as monetary policy and macroeconomics, international economics, banking regulation, capital markets, financial stability, and applied microeconomics.

Former Resident Scholars

Peter Diamond , Institute Professor Emeritus, MIT	Simon Gilchrist , Professor of Economics, Boston University	Suresh M. Sundareshan , Chase Manhattan Bank Foundation Professor of Financial Institutions, Columbia Business School
Mark J. Flannery , BankAmerica Eminent Scholar in Finance, University of Florida	Nobuhiro Kiyotaki , Professor of Economics, Princeton University	Robert Townsend , Elizabeth and James Killian Professor of Economics, MIT, and Research Professor, University of Chicago
Douglas Gale , Silver Professor and Professor of Economics, New York University	John Leahy , Professor of Economics, New York University	S. "Vish" Viswanathan , F. M. Kirby Professor of Investment Banking, Fuqua School of Business, Duke University
Mark Gertler , Henry and Lucy Moses Professor of Economics, New York University	Christopher Sims , Professor of Economics, Princeton University	Jiang Wang , Mizuho Financial Group Professor, MIT Sloan School of Management
Eric Ghysels , Edward M. Bernstein Distinguished Professor of Economics, University of North Carolina at Chapel Hill		



Our Economists at a Glance: Current Research

Our economists engage in a variety of innovative research projects, some reflecting their independent research interests and others grounded in their policy work for the Bank. Here are just a few examples:

Jaïson Abel—Empirical research on the microfoundations of urban agglomeration economies and the spatial distribution of human capital.

Sushant Acharya—Theoretical research on international policy spillovers and capital controls during global liquidity traps.

Tobias Adrian—Research on market liquidity and high-frequency trading.

Gara Afonso—Theoretical research on liquidity in financial markets during distressed periods; theoretical and empirical research on the U.S. interbank market.

Mary Amìti—Empirical research on the effects of financial shocks on exports.

Olivier Armantier, Giorgio Topa, Wilbert van der Klaauw, and Basit Zafar—Field experiments on expectations updating and the links between expectations and behavior.



Sushant Acharya

Meta Brown—Empirical research on the effects of student loans on young people's consumption patterns.

Rajashri Chakrabarti—Empirical research on education issues and policies and their effects on schools, students, and teachers.

Richard Crump—Econometric research on asset price dynamics, with a focus on risk premium modeling and forecasting.

Giacomo De Giorgi—Household behavior and firm growth in emerging markets.

Marco Del Negro—Forecasting and policy analysis using dynamic stochastic general equilibrium models.

Bianca De Paoli—Theoretical research on the design of monetary policy in small open economies; macroprudential policies.

Keshav Dogra—Theoretical research on the costs and benefits of debt relief and macroprudential policy at the zero lower bound.

Thomas Eisenbach—Research on the effect of horizon-dependent risk aversion on individual behavior and equilibrium asset prices.

Stefano Eusepi—Research on the implications of different theories of expectations formation for monetary and fiscal policy design.

Andreas Fuster—Empirical research on mortgage markets, the Fed's mortgage-backed securities purchases, and the pricing of prepayment risk.

Kenneth Garbade—Historical evolution of the market for U.S. Treasury securities.

Domenico Giannone—Forecasting using large data sets.

Marc Giannoni—Research on optimal monetary policy in the face of uncertainty and on the estimation of macroeconomic models using large data sets.

Fatih Karahan—Theoretical and empirical research on geographical mobility and the interaction between the housing and labor markets.

Gizem Kosar—Structural, theoretical, and empirical research on taxes and labor supply.

Donghoon Lee—Empirical research on consumer credit, the mortgage market, student loans, and household finance.

David Lucca—Research on the economics of supervision for large, complex financial institutions.



Gara Afonso

Donald Morgan—Theoretical and empirical research aimed at defining and detecting predatory lending by banks.

Paolo Pesenti—The use of open-economy simulation models for policy analysis; commodity price forecasting.

Laura Pilossoph—Empirical and theoretical research on the sources of long-term unemployment and on the connection between assortative matching and income inequality.



Marc Giannoni

Maxim Pinkovskiy—Empirical research on inequality and welfare measures and on the determinants of economic growth; analysis of macroeconomic and labor market impacts of health policy, including the Affordable Care Act.

Benjamin Pugsley—Research on the behavior of young and small firms and how they affect aggregate economic conditions.

Ayşegül Şahin—Theoretical and empirical research on labor market dynamics with an emphasis on the most recent downturn's potential long-term labor market effects.

João Santos—Theoretical research on the determinants of systemic risk in the banking sector and on the design of regulation to address systemic risk; empirical research on bank lending activity and bank liquidity risk.

Andrea Tambalotti—General equilibrium modeling of constraints on the leverage of financial intermediaries and their role in the housing and credit boom.

Giorgio Topa—Empirical research on referrals in the labor market, on social interactions, and on subjective expectations; survey data collection and empirical research on job search behavior.

Wilbert van der Klaauw—Empirical research on the effect of Social Security reform on savings and retirement behavior, welfare reform, family structure dynamics, and child development; new data collection and empirical research on household debt and subjective expectations.



Benjamin Pugsley

The Research Group's Policy Work

Our economists engage in policy-oriented analysis of a wide range of important issues. Their analysis helps guide the Federal Reserve's assessment of the economy, formulation of monetary policy, and monitoring of financial system stability.

Our seven research functions apply their particular expertise to a variety of policy responsibilities:

Capital Markets contributes to the formulation and implementation of monetary policy and the monitoring of market and financial stability by developing new analytical tools and providing rigorous analysis to senior Bank management. Recent work by the staff analyzes transparency in over-the-counter markets, dealer positioning, liquidity in fixed-income markets, the pricing of the term structure of interest rates and credit, the inflationary expectations embedded in financial market prices, the vulnerability of financial institutions to systemic risk, the links between financial intermediary balance sheet management and asset price dynamics, and the economics of supervision for large, complex financial institutions.

The **Financial Intermediation** staff conducts research and policy analysis on issues relating to financial intermediation and financial markets, including the behavior and health of financial institutions, financial market innovation, and the development of appropriate supervisory tools and techniques. Economists examine these issues from both a macroeconomic and a microeconomic perspective, with an emphasis on the performance and stability of financial markets and core institutions. Recently, they have studied the evolution of the banking industry, frictions in the mortgage securitization process, bank funding patterns, the role of central bank liquidity provision, credit derivatives and other financial innovations, and risk management and corporate governance issues.

International Research economists conduct research and policy analysis on global macroeconomic, trade, and finance issues affecting the economy and monetary policy of the United States. Recent topics examined include international policy coordination, unconventional monetary policies, cross-border financial flows, commodity prices, and risk premiums in international bond and currency markets.

In **Macroeconomic and Monetary Studies**, economists advise senior Bank management on monetary policy issues through regular briefings in advance of each FOMC meeting. They monitor and analyze current economic and financial conditions and assess risks to the outlook. Economists provide forecasts and nowcasts for the U.S. economy using modern statistical and structural methodologies, including a new nowcasting platform and the Bank's own estimated DSGE model, to accompany more traditional judgmental forecasts. Economists draw on their subject matter expertise to inform measurement and policy analysis. In recent work, Function



Meta Brown, Microeconomic Studies, at a briefing



L-R: Gara Afonso, Capital Markets, and Anna Kovner, Financial Intermediation

economists have introduced new measures of labor market slack using firm- and household-level data on job-to-job transitions and earnings growth, and they have used the Bank's DSGE model to estimate the economy's natural rate of interest, which provides a useful reference point for setting monetary policy. Other notable efforts include quantifying the effects of changes in financial conditions on the economy, as well as producing a term structure of inflation expectations using a large set of survey measures.

Microeconomic Studies contributes to monetary policy formulation and financial stability by providing policy advice on a wide variety of subjects, ranging from auction design to state and local fiscal policy, with a special focus on consumer behavior. The Function also plays a unique role in the development of new micro data sets that enable the Bank to formulate accurate and fact-based policy responses, including the Consumer Credit Panel, the student loan data set, the Survey of Consumer Expectations, and—with the Regional Analysis Function—regional business surveys.

Money and Payments Studies analyzes the infrastructure at the heart of the financial system. Key elements of study are the interbank and money markets—such as the federal funds, repo, and other over-the-counter markets—as well as payments and settlement systems. Recent work includes analyzing activity in the federal funds markets, drafting policy proposals aimed at improving monetary policy implementation, investigating the stability of repo and other short-term funding markets, understanding the historical evolution of the financial sector, and examining the failure and resolution of large financial firms. The Function has also analyzed strategies for mitigating risk in payments and settlement systems.

The **Regional Analysis** staff analyzes and monitors regional economic conditions, with an emphasis on developments in the Second Federal Reserve District. Research findings are presented to Bank senior management as well as to the District's broader business, research, and policy communities and the public. Staff members produce the Empire State Manufacturing Survey and the Business Leaders Survey, monthly indexes of coincident economic indicators, and the Beige Book report. Recent areas of analysis include human capital and local economic development, the magnitude and sources of urban agglomeration economies, regional wage inequality, the relationship between prices and rents in New York City, the competitiveness

of Puerto Rico's economy, and the labor market for recent college graduates after the Great Recession.

The Interplay of Research and Policy

Academic research and policy analysis can give rise to great synergies at the New York Fed. Many economists find that their policy work opens up new lines of inquiry for their research. A case in point is the work conducted by macroeconomist Benjamin Pugsley on the economic effects of shifting firm dynamics. While preparing a policy briefing for New York Fed President William Dudley on the impact of the financial crisis on young firms, Pugsley found evidence that the share of new businesses in many industries and markets had fallen significantly in the twenty-five years preceding the crisis. After linking this widespread decline in business formation to a shift in the age composition of U.S. firms overall, Pugsley changed the focus of his briefing to the potential for reductions in the share of new businesses to slow employment recoveries after recessions. This insight became the basis for "Grown-Up Business Cycles," Pugsley's study with his Bank colleague Ayşegül Şahin on the role that long-term changes in firm entry play in creating jobless recoveries. The study, which is now at the revise-and-resubmit stage at a leading journal, has also led to follow-up work with Şahin and Fatih Karahan relating the long-run declines to changes in the demographics of the labor market.

The complementarities between economists' policy assignments and research are also evident in a 2015-16 Research Group initiative to improve the understanding of bank supervision. Led by Beverly Hirtle and David Lucca, this policy project was prompted by the rec-

ognition that supervisory activities remain largely opaque to the outside world, not only because they involve confidential information but also because they have been so little studied by academics. Working with Fed colleagues Thomas Eisenbach, Anna Kovner, Andrew Haughwout, Paul Goldsmith-Pinkham, and Matthew Plosser and with MIT professor Robert Townsend, Hirtle and Lucca accessed new supervisory data to explore what bank supervisors do, what goals guide their work, and how their actions affect banks. Members of the research team then reported their findings in a series of four papers. The first paper looked at the structure, staffing, and implementation of supervisory activities at the New York Fed, while a second paper examined the factors that determine how supervisors allocate their efforts across the portfolio of banks they supervise. A third paper used computational linguistic techniques to identify the type and severity of issues that supervisors raise with bank management and boards of directors, and the fourth considered the relationship between the extent of the supervisory attention given to banks and the banks' risk level, asset growth, and profitability.

The papers were released in the Bank's working paper series and are being revised for academic journal publication. In addition, they were presented at the March 2016 Bank conference "Supervising Large, Complex Financial Institutions," which brought together senior policymakers, supervisors, and academics to examine the goals of supervision and to share strategies for measuring and improving the effectiveness of supervision. By presenting their work in a forum of this kind, the authors had an opportunity to see their research inform the policy discussion in a direct and concrete way.

Opportunities to Share Policy Work Externally

Our economists' research regularly finds many applications to policy work. These applications often take the form of new tools for assessing the state of the economy or for analyzing the forces behind a variety of economic developments. Economists who succeed in translating their research into tools of this kind will have significant opportunities to share their policy innovations with other researchers and the public.

In the last two years, for example, the Research Group has used the Bank's website and *Liberty Street Economics* blog to showcase new forecasting tools that our economists have developed. In April 2016, the Group began publishing on the web the Staff Nowcast, an estimate of current- and next-quarter GDP growth that is computed from a wide range of high-frequency economic data. In addition, the Group has been using the blog as a platform to present semi-annual forecasts of output and inflation from the Bank's DSGE

model. The authors of the DSGE posts analyze the key factors that shape the model projections; for example, in their May 2016 forecast, they evaluated the extent to which credit market turbulence had depressed output growth in the preceding quarters.

In a further effort to share the Bank's forecasting work with a broader public, our economists implemented the New York Fed's DSGE model in a free and open-source computing language called Julia and posted the code on Github, a popular web-based hosting service. This initiative gives the public greater insight into the important tools the New York Fed employs for prediction and policy analysis. Our economists, in turn, gain visibility in the research community and benefit from the feedback they receive from other researchers—feedback that can be used to validate or improve the DSGE model.

Other policy products have new public outlets, too. Responding to heightened interest in the drivers of oil price fluctuations, the Group started posting on the web the Oil Price Dynamics Report, a weekly assessment of whether supply or demand factors best explain price movements. The report's authors also published on the blog a deeper analysis that explores how model-identified oil supply shocks affect economic activity. In June 2015, the Group launched another new web feature, the *U.S. Economy in a Snapshot*. This concise monthly overview of U.S. macroeconomic and financial market developments reflects the type of summary information that our economists routinely prepare for internal briefings.

Additional policy products intended for a public audience are now in development.



Jason Bram, Regional Analysis, at a press briefing



Director of Research
Beverly Hirtle

Research Functions and Personnel

Director of Research Beverly Hirtle

Beverly Hirtle is an executive vice president and head of the Research and Statistics Group at the Federal Reserve Bank of New York. Appointed research director in September 2016, Beverly is responsible for the briefings in support of the Bank president’s participation in FOMC meetings and for the economic and financial policy analysis prepared by the Group. She is also a member of the Bank’s Management Committee.

Beverly joined the Bank in 1986 as an economist in the Domestic Financial Markets Function. Most recently, she was a senior vice president in the Financial Intermediation Function. Her career at the Bank also included a four-year assignment in a research-oriented unit within the Supervision Group charged with analyzing domestic and international supervisory policy issues.

Beverly has worked extensively on issues relating to bank capital adequacy and supervisory stress testing, and on the calibration of regulatory capital requirements. Among her other roles, Beverly was deputy chair of the Federal Reserve Model Oversight Group, which oversaw the design and implementation of the Comprehensive Capital Analysis and Review and Dodd-Frank Act stress tests. In addition, she served on the Operating Committee of the Large Institution Supervision Coordinating Committee, which coordinates the Federal Reserve’s supervision of large, complex financial institutions, and recently coauthored a paper describing the Bank’s supervision of these firms.

Beverly’s academic research includes work on stress testing and bank supervision, as well as bank holding company dividend and repurchase activity, disclosure and risk management, the impact of derivatives on bank risk and credit supply, and recent trends in retail banking activity. She has published in a number of journals, including the *Journal of Financial Intermediation*, the *Journal of Banking and Finance*, and the *Journal of Money, Credit, and Banking*.

Beverly holds a B.A. in economics and American studies from Amherst College and a Ph.D. in economics from MIT.



Associate Director of Research
Tobias Adrian

Associate Director of Research Tobias Adrian

Tobias Adrian, a senior vice president in the Research and Statistics Group, was appointed to the newly created position of associate director in June 2015. In this role, Tobias assumed increased responsibility for the Research Group's work on financial stability issues, overseeing and coordinating the work across the Group's functions as well as fostering collaboration with colleagues across the Bank, the Board of Governors, and the Federal Reserve System. Current financial stability priorities include the ongoing development of financial vulnerability analytics within Research and cross-bank work on market liquidity risk.

Tobias joined the Bank as an economist in 2003 and was named a senior economist in 2006, a research officer in 2008, an assistant vice president in 2009, a vice president in 2010, and a senior vice president in 2013. He also served as head of the Capital Markets Function from 2012 to 2015.

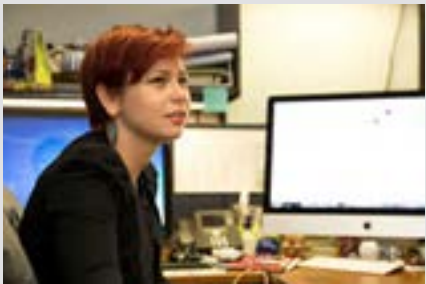
His research covers asset pricing, financial intermediation, and macroeconomics, with a focus on the aggregate implications of capital market developments. Recent research examines the role of financial vulnerabilities in the conduct of monetary policy, the importance of intermediary balance sheet management in asset valuations and systemic risk, and macroprudential policies.

Tobias has contributed to the formulation of the Bank's financial stability policy and is a regular contributor to monetary policy briefings. He has taught at MIT, Princeton University, and New York University and has published in the *Journal of Finance*, the *Journal of Financial Economics*, the *Review of Financial Studies*, and the *American Economic Review*. He holds a Ph.D. in economics from MIT and an M.Sc. in econometrics and mathematical economics from the London School of Economics.

Capital Markets

The Capital Markets Function conducts research and policy analysis on asset pricing and financial market liquidity and on the interaction between markets, institutions, and the macro-economy. A close working relationship with the Bank’s Trading Desk, well-established contacts with market participants, and strong ties to business school finance departments create a unique environment for financial market research.

- Recent research topics include:
- liquidity in equity, fixed-income, and derivatives markets,
 - the interaction between financial institutions’ balance sheets and market liquidity,
 - estimation of risk premia in equity, fixed-income, and derivatives markets,
 - analysis of financial market stress and the measurement of systemic risk,
 - risk management and stress test design,
 - macroprudential policy and monetary policy, and
 - the links between financial markets and the macroeconomy.



Nina Boyarchenko

Capital Markets Staff

- Tobias Adrian**
Ph.D., MIT, 2003
Interests: Asset pricing; financial intermediation; financial stability.
- Nina Boyarchenko**
Ph.D., Chicago, 2011
Interests: Asset pricing; macroeconomics; market liquidity.
- Richard Crump**
Ph.D., UC Berkeley, 2009
Interests: Econometric theory; financial economics.
- Fernando Duarte**
Ph.D., MIT, 2011
Interests: Asset pricing; macroeconomics; monetary policy.
- Michael Fleming**
Ph.D., Harvard, 1994
Interests: Market microstructure; financial intermediation; monetary policy.
- Andreas Fuster**
Ph.D., Harvard, 2011
Interests: Household finance; real estate finance; behavioral economics.
- David Lucca**
Ph.D., Northwestern, 2006
Interests: Asset pricing; macroeconomics; monetary policy.
- Or Shachar**
Ph.D., NYU, 2013
Interests: Market frictions; credit risk; financial econometrics.
- Peter Van Tassel**
Ph.D., Princeton, 2015
Interests: Asset pricing; financial econometrics; market microstructure.
- Erik Vogt**
Ph.D., Duke, 2014
Interests: Financial econometrics; asset pricing; volatility and liquidity risk.



Peter Van Tassel

Recent Publications and Papers

- Tobias Adrian.** “CoVaR,” with Markus K. Brunnermeier. *American Economic Review* 106, no. 7 (2016).
- “Financial Intermediaries and the Cross-Section of Asset Returns,” with Erkki Etula and Tyler Muir. *Journal of Finance* 69, no. 6 (2014). Winner of the 2015 Amundi Smith Breeden Prize for distinguished paper.
- Nina Boyarchenko.** “Ambiguity Shifts and the 2007-2008 Financial Crisis.” *Journal of Monetary Economics* 59, no. 5. Carnegie-NYU-Rochester Conference Series on Public Policy (2012).
- Richard Crump.** “Regression-Based Estimation of Dynamic Asset Pricing Models,” with Tobias Adrian and Emanuel Moench. *Journal of Financial Economics* 118, no. 2 (2015).
- Fernando Duarte.** “How to Escape a Liquidity Trap with Interest Rate Rules,” Federal Reserve Bank of New York *Staff Reports*, no. 776 (2016).
- Michael Fleming.** “Dealer Financial Conditions and Lender-of-Last-Resort Facilities,” with Viral Acharya, Warren B. Hrungrung, and Asani Sarkar. *Journal of Financial Economics*, forthcoming.



Or Shachar

- Andreas Fuster.** “Securitization and the Fixed-Rate Mortgage,” with James Vickery. *Review of Financial Studies* 28, no. 1 (2015).
- David Lucca.** “The Pre-FOMC Announcement Drift,” with Emanuel Moench. *Journal of Finance* 70, no. 1 (2015). Winner of the 2015 Amundi Smith Breeden Prize for best paper.
- Or Shachar.** “Why Do Closed-End Bond Funds Exist? An Additional Explanation for the Growth in Domestic Closed-End Bond Funds,” with Edwin J. Elton, Martin J. Gruber, and Christopher R. Blake. *Journal of Financial and Quantitative Analysis* 48, no. 2 (2013).
- Peter Van Tassel.** “Merger Options and Risk Arbitrage.” Federal Reserve Bank of New York *Staff Reports*, no. 761 (2016).
- Erik Vogt.** “Nonlinearity and Flight to Safety in the Risk-Return Trade-Off for Stocks and Bonds,” with Tobias Adrian and Richard Crump. Federal Reserve Bank of New York *Staff Reports*, no. 723 (2016).



Richard Crump

Financial Intermediation

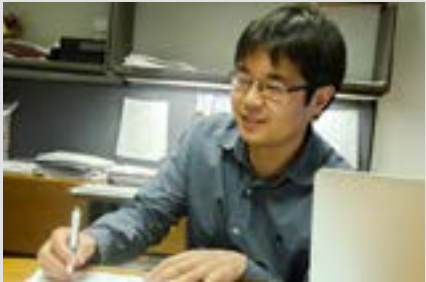
The Financial Intermediation staff conducts research and policy analysis on a host of issues relating to financial intermediation and financial markets, including the behavior and health of financial institutions, financial market innovation, and the development of appropriate supervisory tools and techniques. Economists examine these issues from both a macroeconomic and a micro-economic perspective, with an emphasis on the performance and stability of financial markets and core institutions.

- Recent research topics include:
- the effectiveness of bank supervision,
 - the evolution of the banking industry,
 - the implications of credit securitization,
 - the changes in bank funding patterns,
 - the role of central bank liquidity provision,
 - credit derivatives and other financial innovations, and
 - issues related to banks' risk management and corporate governance.

Financial Intermediation Staff

Gara Afonso
Ph.D., London School of Economics and Political Science, 2008
Interests: Financial economics; liquidity; financial stability; interbank markets.

Nicola Cetorelli
Ph.D., Brown, 1996
Interests: Banking; industrial organization; corporate finance; bank finance and real activity.



Dong Beom Choi

Dong Beom Choi
Ph.D., Princeton, 2012
Interests: Financial economics; banking; monetary policy transmission; financial stability.

Paul Goldsmith-Pinkham
Ph.D., Harvard, 2015
Interests: Consumer finance; networks; econometrics.

Beverly Hirtle
Ph.D., MIT, 1986
Interests: Bank capital; stress testing; banks' dividend and stock repurchase behavior; public disclosure by banks and supervisors.

Sean Hundtofte
Ph.D., Yale, 2016
Interests: Household finance; financial intermediation; behavioral economics; real estate.

Anna Kovner
Ph.D., Harvard, 2008
Interests: Corporate finance; banking; venture capital and private equity.

Hamid Mehran
Ph.D., University of North Carolina, 1990
Interests: Corporate finance.

Donald Morgan
Ph.D., Wisconsin, 1989
Interests: Household finance; personal bankruptcy; information frictions and macroeconomic activity.

Stavros Peristiani
Ph.D., Columbia, 1984
Interests: Banking and finance; real estate finance; theoretical and applied econometrics.

Matthew Plosser
Ph.D., Chicago, 2012
Interests: Banking; corporate finance; private equity and entrepreneurial activity.



Anna Kovner

João Santos
Ph.D., Boston University, 1995
Interests: Corporate finance; banking; banking regulation and the design of financial systems, institutions, and contracts.

James Vickery
Ph.D., MIT, 2004
Interests: Banking and financial institutions; mortgage markets and real estate finance; household finance; corporate finance.

Recent Publications and Papers

Gara Afonso. "Trade Dynamics in the Market for Federal Funds," with Ricardo Lagos. *Econometrica* 83, no. 1 (2015).

Nicola Cetorelli. "Banking Globalization and Monetary Transmission," with Linda Goldberg. *Journal of Finance* 67, no. 5 (2012).

"Credit Quantity and Credit Quality: Bank Competition and Capital Accumulation," with Pietro Peretto. *Journal of Economic Theory* 147, no. 3 (2012).

Dong Beom Choi. "Heterogeneity and Stability: Bolster the Strong, Not the Weak." *Review of Financial Studies* 27, no. 6 (2014).

"Sooner or Later: Timing of Monetary Policy with Heterogeneous Risk Taking," *American Economic Review, Papers and Proceedings* 106, no. 5 (2016).

Paul Goldsmith-Pinkham. "Consumer Bankruptcy and Financial Health," with Will Dobbie and Crystal Yang. NBER Working Paper no. 21032 (2015).

Beverly Hirtle. "Supervisory Stress Tests," with Andreas Lehnert. *Annual Review of Financial Economics* 7 (2015).



James Vickery

Anna Kovner. "How Do Global Banks Scramble for Liquidity? Evidence from the Asset-Backed Commercial Paper Freeze of 2007," with Viral V. Acharya and Gara Afonso. *Journal of Financial Intermediation*, forthcoming.

Hamid Mehran. "Bank Capital and Value in the Cross-Section," with Anjan Thakor. *Review of Financial Studies* 24, no. 4 (2011).

Donald Morgan. "The Benefits of Geographic Diversification in Banking," with Céline Meslier, Katherine Samolyk, and Amine Tarazi. *Journal of International Money and Finance*, forthcoming.

Stavros Peristiani. "The Information Value of the Stress Test," with Donald Morgan and Vanessa Savino. *Journal of Money, Credit, and Banking* 46, no. 7 (2014).

Matthew Plosser. "Buyout Activity: The Impact of Aggregate Discount Rates." *Journal of Finance*, forthcoming.

"The Federal Reserve and Market Confidence," *Federal Reserve Bank of New York Staff Reports*, no. 773 (2016).

João Santos. "Does the Securitization of Corporate Loans Lead to Riskier Lending?" with Vitaly Bord. *Journal of Money, Credit, and Banking* 47, no. 2-3 (2015).

James Vickery. "Securitization and the Fixed-Rate Mortgage," with Andreas Fuster. *Review of Financial Studies* 28, no. 1 (2015).

"The Rescue of Fannie Mae and Freddie Mac," with W. Scott Frame, Andreas Fuster, and Joseph Tracy. *Journal of Economic Perspectives* 29, no. 2 (2015).



Hamid Mehran

International Research

The International Research Function conducts research and policy analysis on international economics, examining issues in open-economy macroeconomics, global finance, and trade. Staff research is published in academic journals and Federal Reserve publications and is designed to contribute to the Bank’s overall perspective on international issues.

- Recent research topics include:**
- macroeconomic spillovers and policy interdependence,
 - capital mobility and financial integration,
 - European and Japanese economic issues, and
 - commodity prices.



Ozge Akinci

International Research Staff

- Ozge Akinci**
Ph.D., Columbia, 2012
Interests: Open-economy macroeconomics, financial crises, and macroprudential policies.
- Bianca De Paoli**
Ph.D., London School of Economics and Political Science, 2006
Interests: International finance; monetary economics; macroprudential policies.
- Jan Groen**
Ph.D., Erasmus University Rotterdam, 2000
Interests: International finance; applied econometrics; macroeconomics; financial economics.
- Thomas Klitgaard**
Ph.D., Stanford, 1985
Interests: European and Japanese economic issues; capital flows; international trade; exchange rates.
- Paolo Pesenti**
Ph.D., Yale, 1991
Interests: Global macroeconomic adjustment; financial and currency crises.



Jan Groen

Recent Publications and Papers

- Ozge Akinci.** “Global Financial Conditions, Country Spreads, and Macroeconomic Fluctuations in Emerging Economies.” *Journal of International Economics* 91, no. 2 (2013).
- Bianca De Paoli.** “Coordinating Monetary and Macroprudential Policies,” with Matthias Paustian. *Journal of Money, Credit, and Banking* 45, forthcoming.
- Jan Groen.** “Real-Time Inflation Forecasting in a Changing World,” with Richard Paap and Francesco Ravazzolo. *Journal of Business and Economic Statistics* 31, no. 1 (2013).



Bianca De Paoli

- Thomas Klitgaard.** “The Balance of Payments Crisis in the Euro Area Periphery,” with Matthew Higgins. Federal Reserve Bank of New York *Current Issues in Economics and Finance* 20, no. 2 (2014).
- Paolo Pesenti.** “Endogenous Exchange Rate Pass-Through and Self-Validating Exchange Rate Regimes,” with Giancarlo Corsetti. In Ricardo J. Caballero and Klaus Schmidt-Hebbel, eds., *Economic Policies in Emerging-Market Economies, Festschrift in Honor of Vittorio Corbo*. Santiago, Chile: Central Bank of Chile (2015).



Thomas Klitgaard

Macroeconomic and Monetary Studies

Economists in the Macroeconomic and Monetary Studies Function conduct scholarly research on macroeconomics and monetary economics for publication in academic journals. They also provide rigorous analysis of current economic, fiscal, and monetary conditions and advise senior Bank management on monetary policy.

Recent research topics include:

- forecasting and policy analysis using DSGE models,
- estimates of the natural rate of interest and their use in monetary policy,
- the Federal Reserve’s balance sheet risk,
- learning and heterogeneous beliefs in macroeconomics,
- relationships between expectations, disagreement, and uncertainty,
- monetary policy and inequality,
- international spillovers and policy coordination at the zero lower bound,
- nowcasting and forecasting using large macroeconomic data sets,
- models of the boom and bust in debt and house prices,
- labor market churn and job and worker flows,
- trends in labor force participation and the dynamics of the U.S. labor market,
- firm heterogeneity and aggregate employment fluctuations,
- duration dependence, long-term unemployment, and firm hiring,
- wage dynamics over the business cycle,
- demographics and firm dynamics, and
- positive assortative matching and income inequality.



Keshav Dogra

Macroeconomic and Monetary Studies Staff

Sushant Acharya

Ph.D., Maryland, 2013

Interests: Macroeconomics; monetary economics; information frictions in macroeconomics and learning.

Marco Del Negro

Ph.D., Yale, 1998

Interests: Macroeconomics; time series econometrics; DSGE models.

Keshav Dogra

Ph.D., Columbia, 2015

Interests: Macroeconomics; monetary economics; fiscal policy.

Domenico Giannone

Ph.D., Université Libre de Bruxelles, 2004

Interests: Forecasting; monetary policy; business cycles.

Marc Giannoni

Ph.D., Princeton, 2001

Interests: Macroeconomics; monetary economics; time series econometrics.

Jonathan McCarthy

Ph.D., Wisconsin, 1992

Interests: Macroeconomics; inventories; investment; housing; consumption.

Richard Peach

Ph.D., Maryland, 1983

Interests: Housing and real estate finance; federal fiscal policy.

Laura Pilossoph

Ph.D., Chicago, 2013

Interests: Macroeconomics; applied macroeconomics; labor economics.

Benjamin Pugsley

Ph.D., Chicago, 2012

Interests: Macroeconomics; firm dynamics; entrepreneurship.



Laura Pilossoph

Robert Rich

Ph.D., Brown, 1988

Interests: Macroeconomics; time series econometrics.

Ayşegül Şahin

Ph.D., University of Rochester, 2002

Interests: Macroeconomics; labor economics.

Argia Sbordone

Ph.D., Chicago, 1993

Interests: Macroeconomics; monetary economics; inflation dynamics.

Andrea Tambalotti

Ph.D., Princeton, 2004

Interests: Macroeconomics; monetary economics.

Recent Publications and Papers

Sushant Acharya. “Dispersed Beliefs and Aggregate Demand Management.” Unpublished paper, University of Maryland, May 2013.

Marco Del Negro. “Dynamic Prediction Pools: An Investigation of Financial Frictions and Forecasting Performance,” with Raiden B. Hasegawa and Frank Schorfheide. *Journal of Applied Econometrics* 192, no. 2 (2016).

“Time-Varying Structural Vector Autoregressions and Monetary Policy: A Corrigendum,” with Giorgio E. Primiceri. *Review of Economic Studies* 82, no. 4 (2015).

Keshav Dogra. “Liquidity Traps, Debt Relief, and Macroprudential Policy: A Mechanism Design Approach.” Unpublished paper, Columbia University, December 2014.



Sushant Acharya

Domenico Giannone. “Prior Selection for Vector Autoregressions,” with Michèle Lenza and Giorgio Primiceri. *Review of Economics and Statistics* 97, no. 2 (2015).

Marc Giannoni. “Inflation in the Great Recession and New Keynesian Models,” with Marco Del Negro and Frank Schorfheide. *American Economic Journal: Macroeconomics* 7, no. 1 (2015).

Jonathan McCarthy. “Has the Response of Investment to Financial Market Signals Changed?” In Per Gunnar Berglund and Leanne J. Ussher, eds., *Recent Developments in Macroeconomics*. Eastern Economic Association conference volume, forthcoming.

Richard Peach. “How Does Slack Influence Inflation?” with Robert Rich and Anna Cororaton. Federal Reserve Bank of New York *Current Issues in Economics and Finance* 17, no. 3 (2011).

Laura Pilossoph. “Statistical Discrimination and Duration Dependence in the Job Finding Rate,” with Gregor Jarosch. Unpublished paper, July 2014.

Benjamin Pugsley. “The Role of Startups in Structural Transformation,” with Robert Dent, Fatih Karahan, and Ayşegül Şahin. *American Economic Review, Papers and Proceedings* 106, no. 5 (2016).

Robert Rich. “The Measurement and Behavior of Uncertainty: Evidence from the ECB Survey of Professional Forecasters,” with Joshua Abel, Joseph Song, and Joseph Tracy. *Journal of Applied Econometrics* 31, no. 3 (2016).

Ayşegül Şahin. “The Decline of the U.S. Labor Share,” with Michael Elsby and Bart Hobijn. *Brookings Papers on Economic Activity*, Fall (2013).



Ayşegül Şahin

“Mismatch Unemployment,” with Joseph Song, Giorgio Topa, and Giovanni Violante. *American Economic Review* 104, no. 11 (2014).

Argia Sbordone. “Optimized Taylor Rules for Disinflation When Agents Are Learning,” with Timothy Cogley and Christian Matthes. *Journal of Monetary Economics* 72 (2015).

Andrea Tambalotti. “A Simple Model of Subprime Borrowers and Credit Growth,” with Alejandro Justiniano and Giorgio E. Primiceri. *American Economic Review, Papers and Proceedings* 106, no. 5 (2016).

Microeconomic Studies

The Microeconomic Studies Function contributes to the Bank’s monetary and financial policy missions through the construction and analysis of a wide array of micro data sets and the application of relevant microeconomic theory and state-of-the-art econometric techniques. In addition, staff conduct long-term research in applied microeconomic topics, including labor economics, public finance, consumer finance, housing, urban economics, and health economics.

- Recent research topics include:
- analysis of household balance sheets and consumer credit,
 - student loans,
 - survey measurement of household inflation expectations,
 - subjective expectations formation, updating, and links to economic behavior,
 - skill and locational mismatch in the labor market,
 - vacancy posting behavior of firms,
 - personal bankruptcy,
 - analysis of macroeconomic and labor market impacts of health policy, including the Affordable Care Act,
 - subjective beliefs and educational choices,
 - design and comparison of belief elicitation techniques,
 - spatial and temporal variation in vacant-land prices,
 - selection and income distribution dynamics, and
 - simulated maximum-likelihood estimation for discrete choice models.

Microeconomic Studies Staff

Mary Amiti
Ph.D., London School of Economics and Political Science, 1997
Interests: Trade finance; trade liberalization and productivity, wages, the wage skill premium, and product quality; exchange rate pass-through.



Fatih Karahan

Olivier Armantier
Ph.D., University of Pittsburgh, 1999
Interests: Industrial organization; econometrics; experimental economics; applied microeconomics; game theory.

Meta Brown
Ph.D., NYU, 2001
Interests: Labor economics; public finance; consumption and saving; household finance.

Rajashri Chakrabarti
Ph.D., Cornell, 2004
Interests: Public economics and public policy; labor economics and the economics of education; applied microeconomics; applied econometrics.

Giacomo De Giorgi
Ph.D., University College London, 2007
Interests: Labor economics; consumption and saving; development economics; household finance; climate change.

Stefano Eusepi
Ph.D., University of Warwick, 2004
Interests: Macroeconomics; monetary economics; nonlinear dynamics.

Andrew Haughwout
Ph.D., Pennsylvania, 1993
Interests: Household finance; public finance; housing; urban and regional economics.

Fatih Karahan
Ph.D., Pennsylvania, 2012
Interests: Business cycles; consumption and savings; housing; labor economics.

Gizem Kosar
Ph.D., Johns Hopkins, 2015
Interests: Labor economics; public economics; applied theory.

Donghoon Lee
Ph.D., Pennsylvania, 2001
Interests: Housing economics; household finance; labor economics.



Meta Brown

Maxim Pinkovskiy
Ph.D., MIT, 2013
Interests: Public economics; health economics; applied microeconomics; economic growth and development; econometrics.

Giorgio Topa
Ph.D., Chicago, 1996
Interests: Labor and urban economics; consumer and business expectations; social interactions and local spillovers; spatial econometrics.

Joseph Tracy
Executive Vice President and Senior Advisor to the Bank President; Ph.D., Chicago, 1984
Interests: Housing and real estate finance; urban economics; unions and collective bargaining.

Wilbert van der Klaauw
Ph.D., Brown, 1992
Interests: Labor economics; public policy; household finance; applied econometrics.

Basit Zafar
Ph.D., Northwestern, 2008
Interests: Labor economics; economics of education; experimental economics; household finance.

Recent Publications and Papers

Mary Amiti. “Importers, Exporters, and Exchange Rate Disconnect,” with Oleg Itskhoki and Jozef Konings. *American Economic Review* 104, no. 7 (2014).

“Trade, Firms, and Wages: Theory and Evidence,” with Donald R. Davis. *Review of Economic Studies* 79, no. 1 (2012).

Olivier Armantier. “Discount Window Stigma during the 2007-2008 Financial Crisis,” with Eric Ghysels, Asani Sarkar, and Jeffrey Shrader. *Journal of Financial Economics* 118, no. 2 (2015).



Andrew Haughwout

“The Rich Domain of Risk,” with Nicolas Treich. *Management Science* 62, no. 7 (2016).

Meta Brown. “Financial Education and the Debt Behavior of the Young,” with John Grigsby, Wilbert van der Klaauw, Jaya Wen, and Basit Zafar. *Review of Financial Studies*, forthcoming.

“Do Informal Referrals Lead to Better Matches? Evidence from a Firm’s Employee Referral System,” with Elizabeth Setren and Giorgio Topa. *Journal of Labor Economics* 21, no. 1 (2016).

Rajashri Chakrabarti. “Housing Markets and Residential Segregation: Impacts of the Michigan School Finance Reform on Inter- and Intra-District Sorting.” *Journal of Public Economics* 122 (2015).

Giacomo De Giorgi. “Indirect Effects of an Aid Program: How Do Cash Transfers Affect Non-Eligibles’ Consumption?” with Manuela Angelucci. *American Economic Review* 99, no. 1 (2009).

“Understanding Social Interactions: Evidence from the Classroom,” with Michele Pellizzari. *Economic Journal* 124, no. 579 (2014).

Stefano Eusepi. “Central Bank Communication and Expectations Stabilization,” with Bruce Preston. *American Economic Journal: Macroeconomics* 2, no. 3 (2010).

“Expectations, Learning, and Business Cycle Fluctuations,” with Bruce Preston. *American Economic Review* 101, no. 6 (2011).

Andrew Haughwout. “Second Chances: Subprime Mortgage Modification and Redefault,” with Ebiere Okah and Joseph Tracy. *Journal of Money, Credit, and Banking* 48, no. 4 (2016).

Fatih Karahan. “The Role of Startups in Structural Transformation,” with Robert Dent, Benjamin Pugsley, and Ayşegül Şahin. *American Economic Review, Papers and Proceedings* 106, no. 5 (2016).



Wilbert van der Klaauw

Gizem Kosar. “An Anatomy of U.S. Personal Bankruptcy under Chapter 13,” with Hulya Eraslan, Wenli Li, and Pierre-Daniel Sarte. Federal Reserve Bank of Philadelphia working paper no. 14-33, October 2014.

Donghoon Lee. “Simulated Maximum Likelihood Estimation for Discrete Choices using Transformed Simulated Frequencies,” with Kyungchul Song. *Journal of Econometrics* 187, no. 1 (2015).

Maxim Pinkovskiy. “Lights, Camera, . . . Income! Illuminating the National Accounts–Household Surveys Debate,” with Xavier Sala-i-Martin. *Quarterly Journal of Economics* 131, no. 2 (2016).

Giorgio Topa. “Working Hard in the Wrong Place: A Mismatch-Based Explanation to the U.K. Productivity Puzzle,” with Christina Patterson, Ayşegül Şahin, and Giovanni L. Violante. *European Economic Review* 84 (2016).

Joseph Tracy. “Is the FHA Creating Sustainable Homeownership?” with Andrew Caplin and Anna Cororaton. *Real Estate Economics* 43, no. 4 (2015).

Wilbert van der Klaauw. “Land Use Regulation and Welfare,” with Andrew Haughwout and Matthew Turner. *Econometrica* 82, no. 4 (2014).

Basit Zafar. “Preferences and Biases in Education Choices and Labor Market Expectations: Shrinking the Black Box of Gender,” with Ernesto Reuben and Matthew Wiswall. *Economic Journal*, forthcoming.

“The Price Is Right: Updating of Inflation Expectations in a Randomized Price Information Experiment,” with Olivier Armantier, Scott Nelson, Giorgio Topa, and Wilbert van der Klaauw. *Review of Economics and Statistics* 98, no. 3 (2016).

Money and Payments Studies

Money and Payments Studies analyzes the infrastructure and institutions at the heart of the financial system. Important elements of study are the interbank, interdealer, and money markets—such as the federal funds market, the repo market, and other over-the-counter (OTC) markets—as well as payments and settlement systems. Economists focus on the institutional details underlying the organization of the financial system and their role in understanding such issues as funding and market liquidity, financial stability, and the design of micro- and macroprudential policy.

- Recent research topics include:**
- analyzing activity in short-term funding markets under normal conditions and during periods of market stress,
 - preparing recommendations for international oversight of the setting of standards for financial rates and indexes, including standards for Libor reform,
 - evaluating the implementation of monetary policy associated with the payment of interest on bank reserves when very large levels of reserves exist in the banking system,
 - studying short-term funding markets for financial institutions, including the tri-party repo market and the money market mutual funds market, and
 - studying vulnerabilities of the financial system to runs and fire sales and how these vulnerabilities change over time.
- Research themes include:**
- the functioning of interbank lending markets,
 - the effects of the Federal Reserve’s liquidity facilities on interbank markets and short-term interest rates,
 - the implementation of monetary policy,
 - bank runs and crises of confidence in financial markets, and
 - systemic risk and liquidity in large-value payment systems.



Thomas Eisenbach

Money and Payments Studies Staff

- Marco Cipriani**
Ph.D., NYU, 2002
Interests: Financial economics; market microstructure; money and banking; experimental economics.
- Adam Copeland**
Ph.D., University of Minnesota, 2002
Interests: Industrial organization; applied microeconomics; financial intermediation.
- Thomas Eisenbach**
Ph.D., Princeton, 2011
Interests: Financial economics; microeconomic theory; behavioral economics.
- Kenneth Garbade**
Ph.D., Princeton, 1975
Interests: U.S. Treasury securities; risk management; relative value analysis.
- Gabriele La Spada**
Ph.D., Princeton, 2015
Interests: Financial economics; financial econometrics.
- Antoine Martin**
Ph.D., University of Minnesota, 2001
Interests: Financial intermediation; payment economics; money and banking.



Gabriele La Spada

Recent Publications and Papers

- Marco Cipriani.** “Estimating a Structural Model of Herd Behavior in Financial Markets,” with Antonio Guarino. *American Economic Review* 104, no. 1 (2014).
- “The Minimum Balance at Risk: A Proposal to Mitigate Systemic Risks Posed by Money Market Funds,” with Patrick McCabe, Michael Holscher, and Antoine Martin. *Brookings Papers on Economic Activity*, Spring (2013).
- Adam Copeland.** “Price Setting in an Innovative Market,” with Adam Shapiro. *Review of Economics and Statistics* 98, no. 3 (2016).
- Thomas Eisenbach.** “Anxiety in the Face of Risk,” with Martin Schmalz. *Journal of Financial Economics* 121, no. 2 (2016).



Kenneth Garbade

- “Sooner or Later: Timing of Monetary Policy with Heterogeneous Risk-Taking,” with Dong Choi and Tanju Yorulmazer. *American Economic Review, Papers and Proceedings* 106, no. 5 (2016).
- Kenneth Garbade.** *Treasury Debt Management under the Rubric of Regular and Predictable Issuance: 1983-2012*, New York: Federal Reserve Bank of New York (2015).
- Gabriele La Spada.** “Competition, Reach for Yield, and Money Market Funds.” *Federal Reserve Bank of New York Staff Reports*, no. 753 (2015).
- Antoine Martin.** “Repos, Fire Sales, and Bankruptcy Policy,” with Gaetano Antinolfi, Francesca Carapella, Charles Kahn, David Mills, and Ed Nosal. *Review of Economic Dynamics* 18, no. 1 (2015).



Antoine Martin

Regional Analysis

The Regional Analysis Function engages in research on issues of interest to the Second Federal Reserve District in support of the Bank’s monetary policy and outreach objectives. The Function also analyzes and monitors economic developments in the region and shares the information obtained with stakeholders in the Bank and throughout the District.

Recent research topics include:

- human capital and local economic development,
- the microfoundations of urban agglomeration economies,
- regional wage inequality,
- skill upgrading in the manufacturing sector,
- the geography of the housing boom and bust,
- the relationship between home prices and rents in New York City,
- the economics of natural disasters,
- the competitiveness of Puerto Rico’s economy, and
- the labor market for recent college graduates after the Great Recession.

Regional Analysis Staff

- Jaison Abel**
Ph.D., Ohio State, 1999
Interests: Industrial organization; economics of innovation; public finance; urban and regional economics.
- Jason Bram**
M.B.A., NYU, 1992
Interests: Regional economics; survey research; consumer confidence; housing markets; consumer behavior.
- Richard Deitz**
Ph.D., Binghamton University, 1995
Interests: Regional economics; urban economics; labor economics; public finance; household finance.



Richard Deitz



Jaison Abel

Recent Publications and Papers

Jaison Abel. “Agglomeration and Job Matching among College Graduates,” with Richard Deitz. *Regional Science and Urban Economics* 51 (2015).

Jason Bram. “To Buy or Not to Buy? The Changing Relationship between Manhattan Rents and Home Prices.” Federal Reserve Bank of New York *Current Issues in Economics and Finance* 18, no. 9 (2012).

Richard Deitz. “Do the Benefits of College Still Outweigh the Costs?” with Jaison Abel. Federal Reserve Bank of New York *Current Issues in Economics and Finance* 20, no. 3 (2014).



Jason Bram

Federal Reserve Bank of New York Research Series

- **Liberty Street Economics** — a blog that enables our economists to engage with the public on important issues quickly and frequently.

<http://libtystreeteconomics.newyorkfed.org/>

- The **Economic Policy Review** — a policy-oriented journal focusing on economic and financial market issues.

<https://www.newyorkfed.org/research/epr/index.html>

- **Staff Reports** — technical working papers intended for publication in leading economic and finance journals.

https://www.newyorkfed.org/research/staff_reports/index.html

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