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ResearchUpdate

Research and Statistics Group www.newyorkfed.org/research

John Leahy Joins Research Group's Resident Scholars Program

John Leahy has become a resident scholar of the Research Group through the end of 2008. He joins Eric Ghysels, resident scholar for 2008-09.

Professor Leahy is a professor of economics at New York University. He has also held teaching positions at Boston University and Harvard University and served as a visiting scholar at the Federal Reserve Banks of Kansas City, New York, and Philadelphia. Professor Leahy is well-known for his research on macroeconomics, economic theory, and behavioral economics. His work has appeared in the *American Economic Review*, the *Journal of Political Economy*, the *Quarterly Journal of Economics*, and the *Review of Economics and Statistics*. He is an associate editor of the *American Economic Review* and the *Review of Economics and Statistics*. In addition, Professor Leahy is a research associate at the National Bureau of Economic Research and was a research fellow of the Alfred P. Sloan Foundation.

The Research Group established its Program for Resident Scholars in 2004 to attract to the New York Fed, for a stay of at least six months, outstanding researchers with an international reputation. The scholars are selected from the top academic and policy institutions in areas related to the Bank's broad policy interests. Resident scholars pursue their own research agendas while participating fully in the Group's activities. They work closely with the director of research, contribute to policymaking discussions, and provide intellectual leadership by advising and collaborating with the Group's economists.

Also in this issue...

Previous resident scholars are Mark Gertler, the Henry and Lucy Moses Professor of Economics at New York University; Nobuhiro Kiyotaki, professor of economics at Princeton University; Suresh M. Sundaresan, the Chase Manhattan Bank Foundation Professor of Financial Institutions at Columbia Business School; and Jiang Wang, the Mizuho Financial Group Professor at MIT's Sloan School of Management. ■

Economic Policy Review Examines Economics of Payments from Eight Diverse Perspectives

As the global economy continues to grow, payments have increased in importance as a component of financial services—and their contribution to the economy is likely to rise as well. This rising trend is especially relevant for banks and central banks as providers of payment services. Bank customers often rely on credit provided by their institutions to complete payments, while banks themselves depend on very short-term credit supplied by central banks to make payments. Managing payments is therefore part of a larger risk management process in the financial sector because financial institutions providing credit must manage risk to prevent excessive exposure.

These developments are transforming the economics of payments into a rapidly growing area of research. In September 2008, the New York Fed published a special issue of the *Economic Policy Review* (vol. 14, no. 2) to deepen interest in this dynamic field as well as to spur further work on behavior in payments systems. The eight studies collected center on three broad themes: theoretical models of money and payments, empirical analyses of trends in large-value payments, and risk management in payments systems. The variety of approaches and techniques they employ illustrate the diversity of interests that economists are bringing to the study of payment activities.

The theoretical theme is examined in three articles. Two—"Intraday Liquidity Management: A Tale of Games Banks Play," by Morten L. Bech, and "An Economic Analysis of Liquidity-Saving Mechanisms," by Antoine Martin and James McAndrews—emphasize large-value payments systems. The authors explore banks' strategic incentives to submit payments on time in different economic environments. They consider how the incentives are affected by different central bank policies, such as the terms under which intraday credit is provided. In the third article, "Divorcing Money from Monetary Policy," Todd Keister, Antoine Martin, and James McAndrews evaluate alternative models of monetary policy implementation. This study also considers the relationship between the demand for intraday balances to meet payment needs and the reserve balances used by monetary authorities to accomplish their policy objectives.

Morten L. Bech, Christine Preisig, and Kimmo Soramäki bring an empirical perspective to developments in large-value payments over the past decade. Their contribution, "Global Trends in Large-Value Payments," points to ten major trends in the growth and evolution of payments, as well as three key drivers of the trends: technological innovation, structural changes in banking, and the evolution of central bank policies. The timing of large-value payments systems is considered by two additional empirical studies—"Changes in the Timing Distribution of Fedwire Funds Transfers" and "The Timing and Funding of CHAPS Sterling Payments." Both articles complement Bech's theoretical work by explaining how different central bank policies influence payment timing. The first, by Olivier Armantier, Jeffrey Arnold, and James McAndrews, focuses on Fedwire, the Federal Reserve's system; the second, by Christopher Becher, Marco Galbiati, and Merxe Tudela, examines CHAPS, the major U.K. system. The differences in payment timing between the two systems are found to be significant.

The volume's final two papers consider the theme of risk management, applying the economic reasoning associated with risks in credit arrangements to the specific case of payments. "Understanding Risk Management in Emerging Retail Payments," by Michele Braun, James McAndrews, William Roberds, and Richard Sullivan, emphasizes emerging retail systems while "An Economic Perspective on the Enforcement of Credit Arrangements: The Case of Daylight Overdrafts in Fedwire," by Antoine Martin and David C. Mills, focuses on the risk associated with central bank intraday lending to banks.

The articles are available at www.newyorkfed.org/research/epr/index.html.

Publications and Papers

The Research and Statistics Group produces a wide range of publications:

- *The Economic Policy Review*—a policy-oriented journal focusing on economic and financial market issues.
- *EPR Executive Summaries*—online versions of selected *Economic Policy Review* articles, in abridged form.
- *Current Issues in Economics and Finance*—concise studies of topical economic and financial issues.
- *Second District Highlights*—a regional supplement to *Current Issues*.
- *Staff Reports*—technical papers intended for publication in leading economic and finance journals, available only online.
- *Publications and Other Research*—an annual catalogue of our research output.

New Lending Facility Is Designed to Improve Liquidity Conditions in the Interbank Funding Markets

In response to ongoing pressure on term funding rates in the interbank funding markets, in December 2007 the Federal Reserve began auctioning funds directly to depository institutions. By introducing the Term Auction Facility (TAF), the Fed sought to improve liquidity conditions in a key funding environment, observe Olivier Armantier, Sandra Krieger, and James McAndrews, authors of "The Federal Reserve's Term Auction Facility" (*Current Issues in Economics and Finance*, July 2008).

Their study explains that when the interbank funding markets run smoothly, primary dealers (banks and brokers that trade U.S. government and other securities with the New York Fed) distribute to banks reserves provided by the Federal Reserve, facilitating transactions in the larger economy. Banks in turn base their willingness to lend to one another on their creditworthiness and on their own ability to access the funding markets. During crisis periods, however, a sudden reduction in that willingness or ability disrupts the markets and financial intermediation more broadly.

In December 2007, the Federal Reserve introduced the Term Auction Facility to auction funds directly to banks.

Crisis conditions began to emerge in the interbank funding markets in the late summer of 2007, following deteriorating performance in much of the market for mortgage-backed securities. Interest rate premiums on unsecured bank funding for one month or longer rose dramatically while the volume of unsecured term (longer than overnight) funding contracted. The persistence of high term rates kept interest rates elevated on a range of instruments, such as home mortgages and corporate loans. Moreover, an increasing dependence on overnight borrowing contributed to higher volatility in overnight interest rates, subjecting banks to greater uncertainty about funding costs. Thus, the short-term money markets were not operating efficiently.

To inject more liquidity into the interbank funding markets, in August 2007 the Fed made several changes to its discount window, a backstop source of liquidity used by banks mainly during market disruptions. However, the changes generated little additional borrowing. As strain on term funding rates persisted into the fall, the central bank devised another way to provide liquidity to the markets.

In December 2007, the Federal Reserve introduced the Term Auction Facility to auction funds directly to banks. Sound institutions, note the authors, can use the TAF to obtain longer term funding on a collateralized basis through periodic auctions. The facility originates and distributes lending of fixed amounts of funds in a fashion similar to the Fed's open market operations (through which the aggregate level of balances available in the banking system, and thus the federal funds rate, are affected). At the same time, the TAF lends on a collateralized basis by using the discount window and its collateral management operations. The facility differs from the discount window, however, in its use of a competitive auction format and a market-determined interest rate.

Armantier, Krieger, and McAndrews describe the first ten TAF auctions conducted between December 17, 2007, and April 21, 2008. The first eight auctions attracted significant bidding competition for funds. In addition, the number of participants has generally been strong—suggesting that many banks are recognizing the usefulness of the auctions, according to the study. The new facility has also been allocating funds at rates generally consistent with market rates. These results lead the authors to conclude that the Term Auction Facility can be an important tool in mitigating difficulties in the funding markets.

The article is available at www.newyorkfed.org/research/current_issues/ci14-5.html.

Editor's note: At the end of third-quarter 2008, the TAF remains an important tool used by the Fed to address the market turmoil. More information on the facility and results for all auctions can be found at www.federalreserve.gov/monetarypolicy/taf.htm.

Other New Publications

- *Facts & Trends*—a new Bank publication that presents key facts on issues of interest to governments, community advocates, institutions, and practitioners in the Federal Reserve's Second District. The first set of articles in the series will have a shared focus on subprime mortgage conditions around the region. The articles will complement the dynamic maps of nonprime mortgage conditions currently available on the New York Fed's website.

  The first issue—"A Look at New Jersey's Subprime Mortgages in Foreclosure"—traces patterns of regional variation in, and neighborhood concentration of, owner-occupied subprime mortgages in foreclosure.

  The article is available at www.newyorkfed.org/newsevents/news/regional_outreach/2008/facts_trends.pdf; the maps can be found at www.newyorkfed.org/mortgagemaps/.

Website Features Most Downloaded Publications

Visitors to a newly created web page can link to the top ten Research Group articles and papers downloaded from the New York Fed's website as well as from the Bank's page on the Social Science Research Network site.

The web page is designed to showcase the work of our economists that is most in demand, to give you a sense of what others in the field are reading, and to share some publications of interest that you may have missed. In fact, articles that remain among the favorites were often published several years ago.

In the third quarter, the three most downloaded articles from our site were:

- "Understanding the Securitization of Subprime Mortgage Credit," by Adam B. Ashcraft and Til Schuermann (Staff Report no. 318, March 2008) – 4,177 downloads;
- "Divorcing Money from Monetary Policy," by Todd Keister, Antoine Martin, and James McAndrews (*Economic Policy Review* 14, no. 2, September 2008) – 1,899 downloads;
- "The Yield Curve as a Predictor of U.S. Recessions," by Arturo Estrella and Frederic S. Mishkin (*Current Issues in Economics and Finance* 2, no. 7, June 1996) – 1,891 downloads.

The three most downloaded articles from our page on the SSRN site (www.ssrn.com/link/FRB-New-York.html) were:

- "Understanding the Securitization of Subprime Mortgage Credit," by Adam B. Ashcraft and Til Schuermann (Staff Report no. 318, March 2008) – 2,155 downloads;
- "The Consolidation of the Financial Services Industry: Causes, Consequences, and Implications for the Future," by Allen N. Berger, Rebecca S. Demsetz, and Philip E. Strahan (Staff Report no. 55, December 1998) – 2,109 downloads;
- "An Empirical Analysis of Stock and Bond Market Liquidity," by Tarun Chordia, Asani Sarkar, and Avanidhar Subrahmanyam (Staff Report no. 164, March 2003) – 1,728 downloads;

The page will be updated quarterly. For the full lists of top-ten downloads, visit www.newyorkfed.org/research/top_downloaded/index.html.

New Titles in the *Staff Reports* Series

The following new staff reports are available at www.newyorkfed.org/research/staff_reports.

MACROECONOMICS AND GROWTH

No. 334, July 2008
Interpreting the Great Moderation: Changes in the Volatility of Economic Activity at the Macro and Micro Levels
Steven J. Davis and James A. Kahn

Davis and Kahn review evidence on the Great Moderation together with evidence on volatility trends at the micro level to develop a possible explanation for the decline in aggregate volatility since the 1980s and its consequences. Their explanation stresses improved supply-chain management, particularly in the durable goods sector and, less important, a shift in production and employment from goods to services. The study provides evidence that better inventory control made a substantial contribution to declines in firm-level and aggregate volatility. Consistent with this view, if one looks past the turbulent 1970s and early 1980s, much of the moderation reflects a decline in high-frequency (short-term) fluctuations. While these developments represent efficiency gains, they do not imply (nor is there evidence for) a reduction in economic uncertainty faced by individuals and households.

No. 339, July 2008
The Advantage of Flexible Targeting Rules
Andrea Ferrero

This paper investigates the consequences of debt stabilization for inflation targeting. If the monetary authority perfectly stabilizes inflation while the fiscal authority holds constant the real value of debt at maturity, the equilibrium dynamics might be indeterminate. However, determinacy can be restored by committing to targeting rules for either monetary or fiscal policy that include a concern for stabilization of the output gap. In solving the indeterminacy problem, flexible inflation targeting appears to be more robust than flexible debt targeting to alternative parameter configurations and steady-state fiscal stances. If considerations beyond stabilization call for a combination of strict inflation and debt targeting rules, the indeterminacy result can be overturned if the fiscal authority commits to holding constant debt net of interest rate spending.

No. 342, September 2008
Central Bank Transparency and Nonlinear Learning Dynamics
Stefano Eusepi

Central bank communication plays an important role in shaping market participants' expectations. This paper studies a simple nonlinear model of monetary policy in which agents have incomplete information about the economic environment. It shows that agents' learning and the dynamics of the economy are heavily affected by central bank transparency about its policy rule. A central bank that does not communicate its rule can induce "learning equilibria" in which the economy alternates between periods of deflation coupled with low output and periods of high economic activity with excessive inflation. More generally, initial beliefs that are arbitrarily close to the inflation target equilibrium can result in complex economic dynamics, resulting in welfare-reducing fluctuations. On the contrary, central bank communication of policy rules helps stabilize expectations around the inflation target equilibrium.

No. 343, September 2008
Stabilizing Expectations under Monetary and Fiscal Policy Coordination
Stefano Eusepi and Bruce Preston

This paper analyzes how the formation of expectations constrains monetary and fiscal policy design. When agents are learning about the policy regime, there is greater need for policy coordination: the specific choice of monetary policy limits the set of fiscal policies consistent with macroeconomic stability—and simple Taylor-type rules frequently lead to expectations-driven instability. In contrast, non-Ricardian fiscal policies combined with an interest rate peg promote stability. Resolving uncertainty about the prevailing monetary policy regime improves stabilization policy, enlarging the menu of policy options consistent with stability. However, there are limits to the benefits of communicating the monetary policy regime: the more heavily indebted the economy, the greater the likelihood of expectations-driven instability.

No. 345, September 2008
What Drives Housing Prices?
James A. Kahn

Kahn develops a growth model with land, housing services, and other goods that is capable of explaining a substantial portion of the movements in housing prices over the past forty years. His paper introduces a Markov regime-switching specification for productivity growth in the nonhousing sector and uses micro data to calibrate a key cross-elasticity parameter that governs the relationship between productivity growth and home price appreciation. Combined with a realistic model of learning about the productivity process, the model is able to capture the medium- and low-frequency fluctuations of both price and quantity from the residential sector. The model suggests that the current downturn in the housing sector was triggered by a productivity slowdown that may have begun in 2004, an event that could reasonably have been viewed as highly unlikely by investors and mortgage issuers in the early part of the decade.

No. 346, September 2008
Financial Intermediaries, Financial Stability, and Monetary Policy
Tobias Adrian and Hyun Song Shin

In a market-based financial system, banking and capital market developments are inseparable. Adrian and Shin document evidence that balance sheets of market-based financial intermediaries provide a window on the transmission of monetary policy through capital market conditions. Short-term interest rates are determinants of the cost of leverage and are found to be important in influencing the size of financial intermediary balance sheets. However, except for periods of crises, higher balance-sheet growth tends to be followed by lower interest rates, and slower balance-sheet growth is followed by higher interest rates. This suggests that consideration might be given to a monetary policy that anticipates the potential disorderly unwinding of leverage. In this sense, monetary policy and financial stability policies are closely linked.

INTERNATIONAL

No. 333, July 2008
Banking Globalization, Monetary Transmission, and the Lending Channel
Nicola Cetorelli and Linda S. Goldberg

Using quarterly information from all U.S. banks filing call reports between 1980 and 2005, Cetorelli and Goldberg find evidence of a lending channel for monetary policy in large banks, but only in those banks that serve the domestic market and have no international operations. The authors show that the large banks that operate globally rely on internal capital markets with their foreign affiliates to help smooth domestic liquidity shocks. They also show that the existence of such internal capital markets contributes to an international propagation of domestic liquidity shocks to lending by affiliated banks abroad. While these results indicate a substantially more active lending channel than is documented in Kashyap and Stein (2000), they also imply that the lending channel within the United States is declining in strength as banking becomes more globalized.

MICROECONOMICS

No. 332, July 2008
Human Capital and Economic Activity in Urban America
Jaison R. Abel and Todd M. Gabe

This paper examines the relationship between human capital and economic activity in U.S. metropolitan areas, extending the existing literature in two important ways. First, the authors utilize new data on metropolitan area GDP to measure economic activity. Using educational attainment as an indicator of human capital, they find that a one-percentage-point increase in the proportion of residents with a college degree is associated with a 2.3 percent increase in metropolitan area GDP per capita. Second, Abel and Gabe move beyond the conventional proxy for human capital—educational attainment—to develop new measures that reflect the types of knowledge within U.S. metropolitan areas. Their results show that knowledge associated with the provision of producer services and information technology are particularly important determinants of economic vitality in U.S. metropolitan areas.

No. 341, August 2008
Juvenile Delinquent Mortgages: Bad Credit or Bad Economy?
Andrew Haughwout, Richard Peach, and Joseph Tracy

Haughwout, Peach, and Tracy study early defaults among nonprime mortgages from the 2001 to 2007 vintages. After documenting a dramatic rise in such defaults and discussing their correlates, they examine two primary explanations: changes in underwriting standards that took place over this period and changes in the economic environment. The authors find that while credit standards were an important factor behind the rising probability of an early default, changes in the economy after 2004—especially a sharp reversal in house price appreciation—were the more critical factor. They also find that despite their rich set of covariates, much of the increase remains unexplained, even in retrospect. This finding helps explain why credit markets seemed surprised by the sharp increase in early defaults in the 2006 and 2007 nonprime vintages.

No. 344, September 2008
Have Amenities Become Relatively More Important than Firm Productivity Advantages in Metropolitan Areas?
Richard Deitz and Jaison R. Abel

Deitz and Abel analyze patterns of compensating differentials to determine whether a region's bundle of site characteristics has a greater net effect on household location decisions relative to firm location decisions in U.S. metropolitan areas over time. The authors estimate skill-adjusted wages and attribute-adjusted rents for 238 metropolitan areas in 1990 and 2000. They classify each metropolitan area based on whether amenities or firm productivity advantages dominate, and analyze the extent to which these classifications change between 1990 and 2000. Deitz and Abel then decompose compensating differentials into amenity and firm productivity advantage components and examine how these components change. Empirical results suggest that while the relative importance of amenities appears to have increased slightly between 1990 and 2000, firm productivity advantages continued to dominate amenities in the vast majority of metropolitan areas during this decade.

No. 347, September 2008
ESOP Fables: The Impact of Employee Stock Ownership Plans on Labor Disputes
Peter Cramton, Hamid Mehran, and Joseph Tracy

Cramton, Mehran, and Tracy examine the implications of employee stock ownership plans (ESOPs) for collective bargaining or, more generally, for cross ownership. They extend the signaling model of Cramton and Tracy (1992) to allow partial ownership by the union, and they demonstrate that ESOPs create incentives for unions to become weaker bargainers. The model predicts that ESOPs will lead to a reduction in strike incidence and in the fraction of labor disputes that involve a strike. U.S. bargaining data from 1970 to 1995 suggest that ESOPs do increase the efficiency of labor negotiations by shifting the composition of disputes away from costly strikes. Consistent with improved bargaining efficiency, the authors find that the announcement of a union ESOP leads to a 50 percent larger stock market reaction when compared with the announcement of a nonunion ESOP.

BANKING AND FINANCE

No. 335, July 2008
The Effect of the Term Auction Facility on the London Inter-Bank Offered Rate
James McAndrews, Asani Sarkar, and Zhenyu Wang

This paper examines the effects of the Federal Reserve's Term Auction Facility (TAF) on the London Inter-Bank Offered Rate (LIBOR). The particular question investigated is whether the announcements and operations of the TAF are associated with downward shifts of the LIBOR; such an association would provide one indication of the TAF's effectiveness in mitigating liquidity problems in the interbank funding market. The study's empirical results suggest that the TAF has helped to ease strains in this market.

No. 336, July 2008
A Study of Competing Designs for a Liquidity-Saving Mechanism
Antoine Martin and James McAndrews

Martin and McAndrews study two designs for a liquidity-saving mechanism (LSM), a queuing arrangement used as part of an interbank settlement system. They consider an environment in which banks must decide to send, queue, or delay their payments after observing a noisy signal of a liquidity shock. With one design—a balance-reactive LSM—banks can set a balance threshold below which payments are not released from the queue. Banks can choose their threshold in such a way that the release of a payment from the queue is conditional on the liquidity shock. With the second design—a receipt-reactive LSM—a payment is released from the queue if an offsetting payment is received, regardless of the liquidity shock. The authors find that these two designs have opposite effects on different types of payments. They also show that parameter values will determine which design provides higher welfare.

No. 337, July 2008
Should There Be Intraday Money Markets?
Antoine Martin and James McAndrews

This paper considers the case for an intraday market for reserves. Martin and McAndrews discuss the separate roles of intraday and overnight reserves and argue that an intraday market could be organized in the same way as the overnight market. The authors present arguments for and against a market for intraday reserves when the marginal cost of overnight reserves is positive. They also consider how reserves should be supplied when the cost of overnight reserves is zero. In that case, the distinction between overnight and intraday reserves becomes blurred, raising an important question: What is the role of the overnight market?

No. 338, July 2008

Financial Intermediary Leverage and Value-at-Risk

Tobias Adrian and Hyun Song Shin

Adrian and Shin study a contracting model for the determination of leverage and balance sheet size for financial intermediaries that fund their activities through collateralized borrowing. The model gives rise to two features: First, leverage is procyclical in the sense that leverage is high when the balance sheet is large. Second, leverage and balance sheet size are both determined by the riskiness of assets. For U.S. investment banks, the authors find empirical support for both features of the model—that is, leverage is procyclical, and both leverage and balance sheet size are determined by measured risks. In a system context, increased risk reduces the debt capacity of the financial system as a whole, giving rise to amplified de-leveraging by institutions by way of the chain of repo transactions in the financial system.

No. 340, August 2008

Pricing the Term Structure with Linear Regressions

Tobias Adrian and Emanuel Moench

Adrian and Moench develop an affine term structure model from a conditionally linear pricing kernel, without making distributional assumptions about shocks. Assuming pricing factors to be observable, they estimate the model by way of three-stage ordinary least squares, which can be interpreted as dynamic Fama-MacBeth regressions. The authors derive cross-equation restrictions for bond yields, which they do not impose in the estimation, but instead test. They can easily estimate specifications with large numbers of pricing factors, including volatility factors. The authors uncover specifications that give rise to lower pricing errors than do commonly advocated specifications, both in- and out-of-sample. Efficiency can be obtained by way of the generalized method of moments estimator.

No. 348, September 2008

CoVaR

Tobias Adrian and Markus K. Brunnermeier

Adrian and Brunnermeier define CoVaR as the value at risk (VaR) of financial institutions conditional on other institutions being in distress. The increase of CoVaR relative to VaR measures spillover risk among institutions. The authors estimate CoVaR using quantile regressions and document significant CoVaR increases among financial institutions. They identify six risk factors that allow institutions to offload tail risk and show that such hedging reduces the wedge between CoVaR and VaR. Adrian and Brunnermeier argue that financial institutions should report CoVaR in addition to VaR, and they draw implications for risk management, regulation, and systemic risk. They define co-expected shortfall as a sum of CoVaRs. ■

Recently Published

Gauti Eggertsson. 2008. "Great Expectations and the End of the Depression." *American Economic Review* 98, no. 4 (September): 1476-1516.

Linda Goldberg. 2008. "Pass-Through of Exchange Rates to Consumption Prices: What Has Changed and Why?" with José Manuel Campa. In Takatoshi Ito and Andrew K. Rose, eds., *International Financial Issues in the Pacific Rim: Global Imbalances, Financial Liberalization, and Exchange Rate Policy*, 139-76. East Asia Seminar on Economics 17. NBER conference volume. Chicago: University of Chicago Press.

Andrew Haughwout, Richard Peach, and Joseph Tracy. 2008. "Juvenile Delinquent Mortgages: Bad Credit or Bad Economy?" *Journal of Urban Economics* 64, no. 2 (September): 246-57.

Rebecca Hellerstein. 2008. "Who Bears the Cost of a Change in the Exchange Rate? Pass-Through Accounting for the Case of Beer." *Journal of International Economics* 76, no. 1 (September): 14-32.

Paolo Pesenti. 2008. "Would Protectionism Defuse Global Imbalances and Spur Economic Activity? A Scenario Analysis," with Hamid Faruqee, Douglas Laxton, and Dirk Muir. *Journal of Economic Dynamics and Control* 32, no. 8 (August): 2651-89.

Ayşegül Şahin. 2008. "Aggregate Implications of Indivisible Labor, Incomplete Markets, and Labor Market Frictions," with Per Krusell, Toshihiko Mukoyama, and Richard Rogerson. *Journal of Monetary Economics* 55, no. 5 (July): 961-79. Proceedings of *Labor Markets, Macroeconomic Fluctuations, and Monetary Policy,* Carnegie-Rochester Conference Series on Public Policy.

João Santos. 2008. "The Decision to First Enter the Public Bond Market: The Role of Firm Reputation, Funding Choices, and Bank Relationships," with Galina Hale. *Journal of Banking and Finance* 32, no. 9 (September): 1928-40.

Wilbert van der Klaauw. 2008. "Social Security and the Retirement and Savings Behavior of Low-Income Households," with Kenneth Wolpin. *Journal of Econometrics* 145, no. 1-2 (July): 21-42. ■

Papers Presented by Economists in the Research and Statistics Group

"Financial Intermediary Leverage and Value at Risk," Tobias Adrian. Oesterreichische Nationalbank Research Workshop on the Economics of Financial Stability, Vienna, Austria, July 8. With Hyun Song Shin.

"Risk Spillovers of Financial Institutions," Tobias Adrian. NBER Summer Institute Workshop on Risks of Financial Institutions, Cambridge, Massachusetts, July 10. With Markus K. Brunnermeier.

"Pricing the Term Structure with Linear Regressions," Tobias Adrian and Emanuel Moench. Stanford Institute for Theoretical Economics, Stanford, California, July 26.

"Liquidity and Congestion," Gara Afonso. Society for Economic Dynamics annual meeting, Cambridge, Massachusetts, July 11. Also presented at the Joint European Meeting of the European Economic Association and the Econometric Society, Milan, Italy, August 30.

"Measuring the Impact of Securitization on Imputed Bank Output," Adam Ashcraft and Charles Steindel. NBER Summer Institute Conference on Research in Income and Wealth, Cambridge, Massachusetts, July 15.

"Aggregation and the PPP Puzzle in a Sticky-Price Model," Carlos Carvalho. NBER Summer Institute International Finance and Macroeconomics Workshop, Cambridge, Massachusetts, July 7. With Fernanda Nechio.

"Heterogeneous Price-Setting Behavior and Aggregate Dynamics: Some General Results," Carlos Carvalho. Society for Economic Dynamics annual meeting, Cambridge, Massachusetts, July 12. With Felipe Schwartzman. Also presented at the Joint European Meeting of the European Economic Association and the Econometric Society, Milan, Italy, August 27.

"Credit Frictions and Optimal Monetary Policy," Vasco Cúrdia. Banque de France–CEPREMAP conference on DSGE Modeling and Monetary Policy, Paris, France, September 11.

"Optimal Monetary Policy under Sudden Stops," Vasco Cúrdia. Society for Economic Dynamics annual meeting, Cambridge, Massachusetts, July 12.

"Expectations, Learning, and Business Cycle Fluctuations," Stefano Eusepi. Fourteenth International Conference on Computing in Economics and Finance, Paris, France, June 28. With Bruce Preston.

"When Does Determinacy Imply Expectational Stability?" Stefano Eusepi. Society for Economic Dynamics annual meeting, Cambridge, Massachusetts, July 10. With James Bullard.

"Current Account Dynamics and Monetary Policy," Andrea Ferrero. Joint European Meeting of the European Economic Association and the Econometric Society, Milan, Italy, August 29. With Mark Gertler and Lars E. O. Svensson.

"Revisiting Useful Approaches to Data-Rich Macroeconomic Forecasting," Jan Groen. Joint European Meeting of the European Economic Association and the Econometric Society, Milan, Italy, August 31. With George Kapetanios. Also presented at the NBER–National Science Foundation Time Series Conference, Aarhus, Denmark, September 13.

"The Effect of Employee Stock Options on Bank Investment Choice, Borrowing, and Capital," Hamid Mehran. Bank of Italy seminar, Rome, Italy, July 14. With Joshua Rosenberg. Also presented at the CESifo Venice Summer Institute Workshop on Executive Pay, Venice, Italy, July 16, and the symposium "Financial Intermediaries and Markets at the Cross-Roads: Economic and Legal Perspectives on Financial Stability, Liquidity, and Corporate Control," cosponsored by the University of Amsterdam, York University, the European Corporate

Governance Institute, and the Review of Finance and held at the University of Amsterdam, Amsterdam, the Netherlands, September 26.

"What Do We Know about Executive Compensation at Privately Held Firms?" Hamid Mehran. CESifo Venice Summer Institute Workshop on Executive Pay, Venice, Italy, July 16. With Rebel Cole.

"Labor-Market Matching with Precautionary Savings and Aggregate Fluctuations," Ayşegül Şahin. Fourteenth International Conference on Computing in Economics and Finance, Paris, France, June 27. With Per Krusell and Toshihiko Mukoyama.

"Labor Supply in a Frictional Labor Market," Ayşegül Şahin. University of Southern California Marshall School of Business seminar, Los Angeles, California, September 26. With Per Krusell, Toshihiko Mukoyama, and Richard Rogerson.

"Revisiting the Welfare Effects of Eliminating Business Cycles: The Case of Short-Term and Long-Term Unemployment," Ayşegül Şahin. Society for Economic Dynamics annual meeting, Cambridge, Massachusetts, July 12. With Per Krusell, Toshihiko Mukoyama, and Anthony A. Smith, Jr.

"Does Banks' Corporate Control Benefit Firms? Evidence from U.S. Banks' Control over Firms' Voting Rights," João Santos. Financial Intermediation Research Society Finance Conference, Anchorage, Alaska, July 6. With Kristin Wilson.

"Financial Innovation and Corporate Default Rates," Asani Sarkar and Chenyang Wei. Indian School of Business seminar, Hyderabad, India, August 10. With Samuel Maurer and Luu Nguyen. Also presented at a Bank for International Settlements seminar, Basel, Switzerland, August 27.

"Trend Inflation and Inflation Persistence in the New Keynesian Phillips Curve," Argia Sbordone. Einaudi Institute for Economics and Finance seminar, Rome, Italy, June 25.

"Subprime Credit Securitization," Til Schuermann. RiskMetrics Group conference, New York City, September 11. ■

Research and Statistics Group Publications and Papers: July-September 2008

Publications are available at www.newyorkfed.org/research/publication_annuals/index.html.

ECONOMIC POLICY REVIEW, VOL. 14

No. 1, July 2008

Signal or Noise? Implications of the Term Premium for Recession Forecasting
Joshua V. Rosenberg and Samuel Maurer

Poverty in New York City, 1969-99: The Influence of Demographic Change, Income Growth, and Income Inequality
Mark K. Levitan and Susan S. Wieler

Why the U.S. Treasury Began Auctioning Treasury Bills in 1929
Kenneth D. Garbade

No. 2, September 2008

Special Issue: The Economics of Payments

Introduction
James McAndrews

Intraday Liquidity Management: A Tale of Games Banks Play
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