Research UPDATE

FEDERAL RESERVE BANK OF NEW YORK ■ NUMBER 2, 2011
Research and Statistics Group www.newyorkfed.org/research

Pennsylvania Program Has an Effective Approach to Mortgage Relief

Spurred by continuing high levels of mortgage foreclosures and a weakened housing market, federal policymakers are focusing on loan modifications to assist homeowers delinquent on their mortgages. Although it is too soon to assess the effectiveness of these modifications, a recent study suggests that a more established, state-level program—one with a different take on mortgage relief—could inform policymakers' future efforts to help unemployed borrowers facing foreclosure.

Authors James Orr, John Sporn, Joseph Tracy, and Junfeng Huang explain that direct government lending to a carefully screened group of unemployed borrowers has proven to be an effective method for reducing foreclosures. They point to the successful track record of the Pennsylvania Homeowners' Emergency Mortgage Assistance Program, or "HEMAP," in providing temporary income support to homeowners unable to pay their mortgages while unemployed.

For more than twenty-five years, HEMAP has aided Pennsylvania borrowers who become delinquent because of job loss or other financial hardship beyond their control. Most participants retain their homes while paying off the loans—a measure of the program's success, observe Orr and his coauthors. The effectiveness of this type of assistance is likely linked to the program's careful screening process, which limits participation to applicants with a solid mortgage payment history and a high likelihood of resuming their full mortgage payments within two years. The program appears to offer these applicants a useful alternative to a loan modification. Moreover, the taxpayer cost of a HEMAP loan can be substantially lower than that of other relief initiatives.

The authors examine the structure and performance of the Pennsylvania program and offer a comparison with federal mortgage relief programs. They also suggest a number of refinements to HEMAP that policymakers might wish to consider when implementing a similar program, such as improving the targeting and timing of benefits and tightening the loan approval criteria. Such steps should help lower the risk of loan defaults and reduce the size of loans needed by borrowers.

"Help for Unemployed Borrowers: Lessons from the Pennsylvania Homeowners' Emergency Mortgage Assistance Program," *Current Issues in Economics and Finance*, vol. 17, no. 2, is available at www.newyorkfed.org/research/current_issues/ci17-2.html. A podcast interview with the authors is also available. ■

Also in this issue…

New in the *Economic Policy Review*

The *Review* recently published a special issue featuring papers on some of the Federal Reserve's policy responses to the financial crisis.

- In "Central Bank Dollar Swap Lines and Overseas Dollar Funding Costs," Linda S. Goldberg, Craig Kennedy, and Jason Miu describe the events leading up to the introduction of the Federal Reserve's dollar swap lines. They discuss changes to the facilities as funding conditions evolved and consider the facilities' effects on market activity.
- "The Federal Reserve's Commercial Paper Funding Facility," by Tobias Adrian, Karin Kimbrough, and Dina Marchioni, examines the creation and performance of the CPFF and outlines the evolution and importance of the commercial paper market before and during the facility's implementation.
- In "Large-Scale Asset Purchases by the Federal Reserve: Did They Work?" Joseph Gagnon, Matthew Raskin, Julie Remache, and Brian Sack review the Federal Reserve's experience with the implementation of its LSAP program between late 2008 and March 2010.

Papers are available at www.newyorkfed.org/research/epr/2011.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.

Most Downloaded Publications

Listed below are the most sought-after Research Group articles and papers from the New York Fed's website and from the Bank's page on the Social Science Research Network site (www.ssrn.com/link/FRB-New-York.html).

New York Fed website, second-quarter 2011:

- "Shadow Banking," by Zoltan Pozsar, Tobias Adrian, Adam Ashcraft, and Hayley Boesky (*Staff Reports*, no. 458, July 2010) – 4,776 downloads
- "Why Are Banks Holding So Many Excess Reserves?" by Todd Keister and James McAndrews (*Staff Reports*, no. 380, July 2009) – 3,252 downloads
- "Understanding the Securitization of Subprime Mortgage Credit," by Adam B. Ashcraft and Til Schuermann (*Staff Reports*, no. 318, March 2008) – 2,889 downloads

SSRN website, second-quarter 2011:

- "Understanding the Securitization of Subprime Mortgage Credit," by Adam B. Ashcraft and Til Schuermann (*Staff Reports*, no. 318, March 2008)—388 downloads
- "The Corporate Governance of Banks," by Jonathan R. Macey and Maureen O'Hara (*Economic Policy Review*, vol. 9, no. 1, April 2003)—225 downloads
- "Determinants and Impact of Sovereign Credit Ratings," by Richard Cantor and Frank Packer (*Economic Policy Review*, vol. 2, no. 2, October 1996)—168 downloads

For lists of the top-ten downloads, visit www.newyorkfed.org/research/top_downloaded/topdownloads.html.

Papers Presented

"The Intended and Unintended Consequences of NCLB [No Child Left Behind]," Rajashri Chakrabarti. University of Houston seminar, Houston, Texas, April 12. With Joydeep Roy. Also presented at the Federal Reserve Bank of New York–New York University Education Seminar Series, New York City, April 14, and a Columbia University seminar, New York City, April 21.

"Rare, Large Shocks in the Business Cycle," Vasco Cúrdia. Seventeenth International Conference on Computing in Economics and Finance. San Francisco, California, June 30. With Marco Del Negro and Daniel Greenwald.

"Rare, Large Shocks in the U.S. Business Cycle," Marco Del Negro. Seoul National University, Seoul, Korea, May 25. With Vasco Cúrdia and Daniel Greenwald.

"House Prices, Booms, and Current Account Deficits," Andrea Ferrero. 2011 Midwest Macroeconomics Meetings, hosted by the Vanderbilt University Department of Economics, Nashville, Tennessee, May 22. Also presented at the New York University Economics Alumni Conference, New York City, June 3, and the North American Summer Meetings of the Econometric Society, St. Louis, Missouri, June 11.

"Global Banks and International Shock Transmission: Evidence from the Crisis," Linda Goldberg. World Bank conference, Washington, D.C., May 19. With Nicola Cetorelli.

"Issues in International Banking," Linda Goldberg. Keynote address at the conference *Issues in International Banking*, Central Bank of the Netherlands, Amsterdam, the Netherlands, May 26.

"Liquidity Management of U.S. Global Banks: Internal Capital Markets in the Great Recession," Linda Goldberg. Central Bank of the Netherlands, Amsterdam, the Netherlands, May 25. With Nicola Cetorelli. Also presented at the NBER–Sloan Foundation Conference on the Global Financial Crisis, Bretton Woods, New Hampshire, June 3.

"Real-Time Inflation Forecasting in a Changing World," Jan Groen. Econometric Institute Seminar, hosted by Erasmus University, Rotterdam, the Netherlands, April 14. With Richard Paap and Francesco Ravazzolo.

"Global Bond Risk Premiums," Rebecca Hellerstein. Paris School of Economics and Sciences Po seminar, Paris, France, June 16.

"Bailouts and Financial Fragility," Todd Keister. Bank of England seminar, London, England, April 21.

"Constructive Ambiguity in Bailout Policy," Todd Keister. University of Pennsylvania, Wharton School Finance Department seminar, Philadelphia, Pennsylvania, April 5. Also presented at the Cornell–Penn State Conference on Macroeconomics, Pennsylvania State University, University Park, Pennsylvania, April 10.

"Crisis Program Evaluation and Challenges Ahead," Deborah Perelmuter. Bank of America–Merrill Lynch Conference for Asian Central Banks and Sovereign Wealth Funds, New York City, June 14.

Discussion of "International Recessions," by Fabrizio Perri and Vincenzo Quadrini. Paolo Pesenti. 2011 International Conference on Real and Financial Linkage and Monetary Policy, Institute for Monetary and Economic Studies, Bank of Japan, Tokyo, Japan, June 1.

Discussion of "Pricing-to-Market, Intra-Industry Reallocations, and Macroeconomic Dynamics," by Gianmarco Ottaviano. Paolo Pesenti. NBER International Seminar on Macroeconomics, Central Bank of Malta, St. Julian's, Malta, June 18.

"Bank Liquidity Standards and the Cost of Liquidity to Corporations," João Santos. University of Porto School of Economics and Business seminar, Porto, Portugal, June 8.

"Did the Rise of CLOs Lead to Riskier Lending?" João Santos. Financial Management Association European Conference, Porto, Portugal, June 9. With Vitaly Bord.

"Stigma in Financial Markets: Evidence from Liquidity Auctions and Discount Window Borrowing during the Crisis," Asani Sarkar. Forty-Sixth Annual Conference of the Western Finance Association, Santa Fe, New Mexico, June 21. With Olivier Armantier, Eric Ghysels, and Jeffrey Shrader.

"The Empirical Content of Models with Multiple Equilibria in Economies with Social Interactions," Giorgio Topa. University of Padua seminar, Padua, Italy, May 24. With Alberto Bisin and Andrea Moro.

"Measuring Mismatch in the U.S. and U.K. Labor Markets," Giorgio Topa. IZA seminar, Bonn, Germany, March 15. With Ayşegül Şahin, Joseph Song, and Gianluca Violante. Also presented at a Sciences Po seminar, Paris, France, March 16; a University of Bologna seminar, Bologna, Italy, March 18; a University of Venice seminar, Venice, Italy, May 23; and a Bocconi University seminar, Milan, Italy, May 26.

"Real Estate Investors, the Leverage Cycle, and the Housing Market Crisis," Wilbert van der Klaauw. University of California at Los Angeles Housing Economics and Research Conference, Los Angeles, California, April 30. With Donghoon Lee.

"Is Libor Accurate? Transaction-Level Evidence from Term Funding Markets," James Vickery. Financial Intermediation Research Society Meetings, Sydney, Australia, June 6. With David Skeie and Dennis Kuo. Also presented at the Forty-Sixth Annual Conference of the Western Finance Association, Santa Fe, New Mexico, June 21.

"Design of Contingent Capital with a Stock Price Trigger for Mandatory Conversion," Zhenyu Wang. Seventh Annual Credit Risk Conference, cosponsored by Moody's Corporation and the London Business School, London, England, May 10. With Suresh Sundaresan. Also presented at a Financial Intermediation Research Society conference, Sydney, Australia, June 6.

"Valuing the Treasury's Capital Assistance Program," Zhenyu Wang. Financial Intermediation Research Society conference, Sydney, Australia, June 8. With Paul Glasserman. ■

Recently Published

Jaison Abel. 2011. "Agglomeration of Knowledge," with Todd Gabe. *Urban Studies* 48, no. 7 (May): 1353-71.

Tobias Adrian and Jan Groen. 2011. "Financial Amplification of Foreign Exchange Risk Premia," with Erkko Etula. *European Economic Review* 55, no. 3 (April): 354-70.

Mary Amiti. 2011. "Trade Finance and the Great Trade Collapse," with JaeBin Ahn and David E. Weinstein. *American Economic Review* 101, no. 3 (May): 298-302.

Meta Brown. 2011. "Real-Time Search in the Laboratory and the Market," with Christopher Flinn and Andrew Schotter. *American Economic Review* 101, no. 2 (April): 948-74.

Nicola Cetorelli and Linda Goldberg. 2011. "Global Banks and International Shock Transmission: Evidence from the Crisis." *IMF Economic Review* 59, no. 1 (April): 41-76.

Adam Copeland. 2011. "Inventories and the Automobile Market," with George Hall and Wendy Dunn. *RAND Journal of Economics* 42, no. 1 (spring): 121-49.

Sagiri Kitao. 2011. "Financing Medicare: A General Equilibrium Analysis," with Orazio Attanasio and Giovanni L. Violante. In John B. Shoven, ed., *Demography and the Economy*. Chicago: University of Chicago Press.

David Lucca. 2011. "Domestic Political Survival and International Conflict: Is Democracy Good for Peace?" with Sandeep Baliga and Tomas Sjöström. *Review of Economic Studies* 78, no. 2 (April): 458-86.

Antoine Martin. 2011. "Monetary Policy Implementation Frameworks: A Comparative Analysis," with Cyril Monnet. In Ed Nosal, Christopher Waller, and Randall Wright, eds., "Money, Credit, and Liquidity: Part 1," special issue, *Macroeconomic Dynamics* 15, suppl. 1: 145-89.

Hamid Mehran. 2011. "Bank Capital and Value in the Cross-Section," with Anjan Thakor. *Review of Financial Studies* 24, no. 4 (April): 1019-67.

Hamid Mehran. 2011. "The Value of Bank Capital and the Structure of the Banking Industry," with Franklin Allen and Paolo Fulghieri. *Review of Financial Studies* 24, no. 4 (April): 971-82.

João Santos. 2011. "Bank Corporate Loan Pricing Policy following the Subprime Crisis." *Review of Financial Studies* 24, no. 6 (June): 1916-43.

Asani Sarkar. 2011. "Liquidity Dynamics and Cross-Autocorrelations," with Avanidhar Subrahmanyam and Tarun Chordia. *Journal of Financial and Quantitative Analysis* 46, no. 3 (June): 709-36.

Giorgio Topa and Wilbert van der Klaauw. 2011. "Measuring Consumer Uncertainty about Future Inflation," with Wändi Bruine de Bruin and Charles Manski. *Journal of Applied Econometrics* 26, no. 3 (April-May): 454-78.

James Vickery. 2011. "Credit Ratings and Security Prices in the Subprime MBS Market," with Adam Ashcraft, Paul Goldsmith-Pinkham, and Peter Hull. *American Economic Review* 101, no. 3 (May): 115-9. Papers and Proceedings of the 123rd Annual Meeting of the American Economic Association.

Tanju Yorulmazer. 2011. "Crisis Resolution and Bank Liquidity," with Viral V. Acharya and Hyun Song Shin. *Review of Financial Studies* 24, no. 6 (June): 2166-205.

Basit Zafar. 2011. "Can Subjective Expectations Data Be Used in Choice Models? Evidence on Cognitive Biases." *Journal of Applied Econometrics* 26, no. 3 (April-May): 520-44.

Basit Zafar. 2011. "How Do College Students Form Expectations?" *Journal of Labor Economics* 29, no. 2 (April): 301-48. ■

New Titles in the *Staff Reports* Series

Macroeconomics and Growth

No. 491, April 2011
FOMC Communication Policy and the Accuracy of Fed Funds Futures
Menno Middeldorp

Over the last two decades, the Federal Open Market Committee (FOMC) has become increasingly communicative and transparent. According to policymakers, one of the goals of this shift has been to improve monetary policy predictability. Previous academic research has found that the FOMC has indeed become more predictable. Here, Middeldorp contributes to the literature in two ways. First, instead of simply looking at predictability before and after the Fed's communication reforms in the 1990s, he identifies three distinct periods of reform and measures their separate contributions. Second, he corrects the interest rate forecasts embedded in fed funds futures contracts for risk premiums, in order to obtain a less biased measure of predictability. His results suggest that the communication reforms of the early 1990s and the "guidance" provided from 2003 significantly improved predictability, while the release of the FOMC's policy bias in 1999 had no measurable impact. Finally, Middeldorp finds that FOMC speeches and testimonies significantly lower short-term forecasting errors.

No. 495, May 2011
Sectoral Price Facts in a Sticky-Price Model
Carlos Carvalho and Jae Won Lee

Carvalho and Lee develop a multi-sector sticky-price DSGE (dynamic stochastic general equilibrium) model that can endogenously deliver differential responses of prices to aggregate and sectoral shocks. Input-output production linkages induce across-sector pricing complementarities that contribute to a slow response of prices to aggregate shocks. In turn, input-market segmentation at the sectoral level induces within-sector pricing substitutability, which helps the model deliver a fast response of prices to sector-specific shocks. Estimating the factor-augmented vector autoregression specification of Boivin, Giannoni, and Mihov (2009) on data generated by a parameterized version of their model, the authors find results that resemble what they obtain with disaggregated data for the U.S. economy. They then employ Bayesian methods to estimate the model using aggregate and sectoral data, and find that it accounts extremely well for a wide range of sectoral price facts.

No. 496, May 2011
Central Bank Transparency, the Accuracy of Professional Forecasts, and Interest Rate Volatility
Menno Middeldorp

Central banks worldwide have become more transparent. An important reason is that democratic societies expect more openness from public institutions. Policymakers also see transparency as a way to improve the predictability of monetary policy, thereby lowering interest rate volatility and contributing to economic stability. Most empirical studies support this view. However, there are three reasons why more research is needed. First, some (mostly theoretical) work suggests that transparency has an adverse effect on predictability. Second, empirical studies have mostly focused on average predictability before and after specific reforms in a small set of advanced economies. Third, less is known about the effect on interest rate volatility. To extend the literature, Middeldorp uses the Dincer and Eichengreen (2007) transparency index for twenty-four economies of varying income and examines the impact of transparency on both predictability and market volatility. He finds that higher transparency improves the accuracy of interest rate forecasts for three months ahead and reduces rate volatility.

International

No. 499, June 2011
Global Bond Risk Premiums
Rebecca Hellerstein

This paper examines time-varying measures of term premiums across ten developed economies. It shows that a single factor accounts for most of the variation in expected excess returns over time, across the maturity spectrum, and across countries. Hellerstein constructs a global return forecasting factor that is a GDP-weighted average of each country's local return forecasting factor and shows that it has information not spanned by the traditional level, slope, and curvature factors of the term structure, or by the local return forecasting factors. Including the global forecasting factor in the model produces estimates of spillover effects that are consistent with a conceptual understanding of these flows, both in direction and magnitude. These effects are illustrated for three episodes: the period following the Russian default in 1998, the bond conundrum period from mid-2004 to mid-2006, and the period since the onset of the global financial crisis in 2008.

Microeconomics

No. 489, April 2011

Expectations of Inflation: The Biasing Effect of Thoughts about Specific Prices

Wändi Bruine de Bruin, Wilbert van der Klaauw, and Giorgio Topa

Relatively little is known about how individuals form the inflation expectations they report on consumer surveys. The authors present two studies to examine whether individuals who consider specific price changes when forming their inflation expectations report more extreme and disagreeing inflation expectations due to focusing on specific extreme price changes. In Study 1, participants who were instructed to recall *any* price changes or to recall the *largest* price changes both thought of various items for which price changes were perceived to have been extreme. They reported more extreme year-ahead inflation expectations and showed more disagreement than did a third group that had been asked to recall the *average* change in price changes. Study 2 asked participants to report their year-ahead inflation expectations, without first prompting them to recall specific price changes. Half of participants nevertheless thought of specific prices when generating their inflation expectations. Those who thought of specific prices reported more extreme and more dispersed inflation expectations because they were biased toward items associated with more extreme perceived price changes. The authors' findings provide new insights into expectation formation processes and have implications for the design of survey-based measures of inflation.

No. 500, June 2011

Determinants of College Major Choice: Identification Using an Information Experiment

Matthew Wiswall and Basit Zafar

This paper studies the determinants of college major choice using a unique "information" experiment embedded in a survey. Wiswall and Zafar ask respondents about their beliefs—about their own expected earnings and other major-specific outcomes conditional on various majors, about the population distribution of these characteristics, as well as whether they believe they will graduate with each major. Then they provide students with information on the true population distribution of these characteristics, and observe how this new information causes respondents to update their beliefs. The experimental design creates unique panel data. The authors show that respondents make substantial errors in population beliefs, and logically revise their self-beliefs in response to the information. Subjective beliefs about future major choice are positively and strongly associated with beliefs about self-earnings, ability, and spouse's earnings. However, cross-sectional estimates are severely biased upward because of the positive correlation of tastes with earnings and ability. The experimental variation in beliefs allows the authors to identify a rich model of college major choice, with which they estimate the relative importance of earnings and earnings uncertainty on the choice of college major versus other factors.

No. 501, June 2011

Stereotypes and Madrassas: Experimental Evidence from Pakistan

Adeline Delavande and Basit Zafar

Madrassas (Islamic religious seminaries) are thought to be responsible for fostering Islamic extremism and violence and for indoctrinating their students in narrow worldviews. However, little is known about the behavior of madrassa students, and how other groups in their communities interact with them. To investigate, the authors collect unique experimental and survey data from madrassas and other educational institutions in Pakistan. They randomly match male students from institutions of three distinct religious tendencies and socioeconomic backgrounds—madrassas, Islamic universities, and liberal universities—and observe their actions in several experiments of economic decisionmaking. First, the authors find a high level of trust among all groups, with students enrolled at madrassas being the most trusting and exhibiting the highest level of unconditional other-regarding behavior. Second, within each group, they fail to find evidence of in-group bias or systematic out-group bias in either trust or tastes. Third, the authors find that students of liberal universities underestimate the trustworthiness of madrassa students.

Banking and Finance

No. 490, April 2011
Robust Capital Regulation
Viral Acharya, Hamid Mehran, Til Schuermann, and Anjan Thakor

Banks' leverage choices represent a delicate balancing act. Credit discipline argues for more leverage, while balance-sheet opacity and ease of asset substitution argue for less. Meanwhile, regulatory safety nets promote ex post financial stability, but also create perverse incentives for banks to engage in correlated asset choices and to hold little equity capital. As a way to cope with these distorted incentives, the authors outline a two-tier capital framework for banks. The first tier is a regular core capital requirement that helps deter excessive risk-taking incentives. The second tier, a novel aspect of the study's framework, is a special capital account that limits risk taking but preserves creditors' monitoring incentives.

No. 492, May 2011
Bank Capital Regulation and Structured Finance
Antoine Martin and Bruno M. Parigi

Martin and Parigi construct a model in which bank capital regulation and financial innovation interact. Innovation takes the form of pooling and tranching of assets and the creation of separate structures with different seniority, different risk, and different capital charges, a process that captures some stylized features of structured finance. Regulation is motivated by the divergence of private and social interests in future profits. Capital regulation lowers bank profits and may induce banks to innovate in order to evade the regulation itself. The authors show that structured finance can improve welfare in some cases. However, innovation may also be adopted to avoid regulation, even in cases where it decreases welfare.

No. 493, May 2011
Efficient, Regression-Based Estimation of Dynamic Asset Pricing Models
Tobias Adrian, Richard K. Crump, and Emanuel Moench

Adrian, Crump, and Moench study regression-based estimators for beta representations of dynamic asset pricing models with affine and exponentially affine pricing kernel specifications. These estimators extend static cross-sectional asset pricing estimators to settings where prices of risk vary with observed state variables. The authors identify conditions under which four-stage regression-based estimators are efficient and also present alternative, closed-form linearized maximum likelihood estimators. They provide multi-stage standard errors necessary to conduct inference for asset pricing tests. In empirical applications, the authors find that time-varying prices of risk are pervasive, thus favoring dynamic cross-sectional asset pricing models over standard unconditional specifications.

No. 494, May 2011
Are Credit Default Swaps Associated with Higher Corporate Defaults?
Stavros Peristiani and Vanessa Savino

Using a proportional hazard model of bankruptcy and Merton's contingent claims approach, Peristiani and Savino estimate the probability of default for U.S. nonfinancial firms. Their analysis does not generally find a persistent link between CDS and default over the entire period 2001-08, but does reveal a higher probability of default for firms with CDS over the last few years of that period. Further, the authors find that firms trading in the CDS market exhibited a higher Moody's KMV expected default frequency during 2004-08. These findings are consistent with those of Hu and Black, who argue that agency conflicts between hedged creditors and debtors would increase the likelihood of corporate default. In addition, the paper highlights other explanations for the higher defaults of CDS firms. Consistent with "fire-sale" spiral theories, the authors find a positive link between institutional ownership exposure and corporate distress, with CDS firms facing stronger selling pressures during the recent financial turmoil.

No. 497, May 2011

A Note on Bank Lending in Times of Large Bank Reserves

Antoine Martin, James McAndrews, and David Skeie

The amount of reserves held by the U.S. banking system reached $1.5 trillion in April 2011. Some economists argue that such a large quantity of bank reserves could lead to overly expansive bank lending as the economy recovers, regardless of the Federal Reserve's interest rate policy. In contrast, Martin, McAndrews, and Skeie show that the size of bank reserves has no effect on bank lending in a frictionless model of the current banking system, in which interest is paid on reserves and there are no binding reserve requirements. They also examine the potential for balance-sheet cost frictions to distort banks' lending decisions. The authors find that large reserve balances do not lead to excessive bank credit and may instead be contractionary.

No. 498, May 2011

A Model of Liquidity Hoarding and Term Premia in Inter-Bank Markets

Viral V. Acharya and David Skeie

Financial crises are associated with reduced volumes and extreme levels of rates for term interbank loans, reflected in the one-month and three-month Libor. Acharya and Skeie explain such stress by modeling leveraged banks' precautionary demand for liquidity. Asset shocks impair a bank's ability to roll over debt because of agency problems associated with high leverage. In turn, banks hoard liquidity and decrease term lending as their rollover risk increases over the term of the loan. High levels of short-term leverage and illiquidity of assets lead to low volumes and high rates for term borrowing. In extremis, interbank markets can completely freeze.

No. 502, June 2011

Corporate Governance and Banks: What Have We Learned from the Financial Crisis?

Hamid Mehran, Alan Morrison, and Joel Shapiro

Recent academic work and policy analysis give insight into the governance problems exposed by the financial crisis and suggest possible solutions. Mehran, Morrison, and Shapiro begin this paper by explaining why governance of banks differs from governance of nonfinancial firms. They then look at four areas of governance: executive compensation, boards, risk management, and market discipline. The authors discuss promising solutions and areas where further research is needed. ■

Research and Statistics Group Publications and Papers: April–June 2011

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

ECONOMIC POLICY REVIEW, VOL. 17

No. 1, May 2011
Special Issue: Federal Reserve Policy Responses to the Financial Crisis

Overview
Patricia C. Mosser

Central Bank Dollar Swap Lines and Overseas Dollar Funding Costs
Linda S. Goldberg, Craig Kennedy, and Jason Miu

Commentary
Stijn Claessens

The Federal Reserve's Commercial Paper Funding Facility
Tobias Adrian, Karin Kimbrough, and Dina Marchioni

Large-Scale Asset Purchases by the Federal Reserve: Did They Work?
Joseph Gagnon, Matthew Raskin, Julie Remache, and Brian Sack

Forthcoming

Subprime Foreclosures and the 2005 Bankruptcy Reform
Donald P. Morgan, Benjamin Iverson, and Matthew Botsch

CURRENT ISSUES IN ECONOMICS AND FINANCE, VOL. 17

No. 2

Help for Unemployed Borrowers: Lessons from the Pennsylvania Homeowners' Emergency Mortgage Assistance Program
James Orr, John Sporn, Joseph Tracy, and Junfeng Huang

No.3

How Does Slack Influence Inflation?
Richard Peach, Robert Rich, and Anna Cororaton

STAFF REPORTS

No. 489, April 2011
Expectations of Inflation: The Biasing Effect of Thoughts about Specific Prices
Wändi Bruine de Bruin, Wilbert van der Klaauw, and Giorgio Topa

No. 490, April 2011
Robust Capital Regulation
Viral Acharya, Hamid Mehran, Til Schuermann, and Anjan Thakor

No. 491, April 2011
FOMC Communication Policy and the Accuracy of Fed Funds Futures
Menno Middeldorp

No. 492, May 2011
Bank Capital Regulation and Structured Finance
Antoine Martin and Bruno M. Parigi

No. 493, May 2011
Efficient, Regression-Based Estimation of Dynamic Asset Pricing Models
Tobias Adrian, Richard K. Crump, and Emanuel Moench

No. 494, May 2011
Are Credit Default Swaps Associated with Higher Corporate Defaults?
Stavros Peristiani and Vanessa Savino

No. 495, May 2011
Sectoral Price Facts in a Sticky-Price Model
Carlos Carvalho and Jae Won Lee

No. 496, May 2011
Central Bank Transparency, the Accuracy of Professional Forecasts, and Interest Rate Volatility
Menno Middeldorp

No. 497, May 2011
A Note on Bank Lending in Times of Large Bank Reserves
Antoine Martin, James McAndrews, and David Skeie

No. 498, May 2011
A Model of Liquidity Hoarding and Term Premia in Inter-Bank Markets
Viral V. Acharya and David Skeie

No. 499, June 2011
Global Bond Risk Premiums
Rebecca Hellerstein

No. 500, June 2011
Determinants of College Major Choice: Identification Using an Information Experiment
Matthew Wiswall and Basit Zafar

No. 501, June 2011
Stereotypes and Madrassas: Experimental Evidence from Pakistan
Adeline Delavande and Basit Zafar

No. 502, June 2011
Corporate Governance and Banks: What Have We Learned from the Financial Crisis?
Hamid Mehran, Alan Morrison, and Joel Shapiro