ResearchUPDATE

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Research and Statistics Group www.newyorkfed.org/research

Research Group Launches *Liberty Street Economics* Blog

The Research and Statistics Group recently launched a new blog, *Liberty Street Economics*, named after the street where the New York Fed is located. The blog complements our existing publications by providing a way for economists to engage with the public on issues quickly and frequently. The less technical style of the blog posts makes the insights from the economists' research accessible to an even broader audience.

Liberty Street Economics publishes reader comments and author responses in the hope of generating dialogue with the public. We encourage our *Research Update* followers to offer their comments.

The blog includes posts on diverse issues and from a wide variety of perspectives, featuring research by the Group's more than sixty economists. This staff of active researchers supports Fed policymaking by providing analytical insight into a range of public policy issues and pursuing research on fundamental questions in economics and finance. In the course of their work at the Bank, economists develop expertise on a wide range of economic issues: international economics, asset pricing, corporate finance, banking, macroeconomics, monetary economics, fiscal policy, microeconomics, regional economics, and more. The blog supports the Bank's commitment to sharing this research and analysis with the public in an accessible and timely way.

Recent posts include topics such as the decline in consumer indebtedness attributable to deleveraging—a process whereby consumers borrow less and pay off debt more quickly; how the rise in commodity prices will affect discretionary income; why central banks have discount windows; the tri-party repo market, which took on particular importance in relation to the failures and near-failures of several financial institutions; and potential causes of the recent rise in consumer inflation expectations.

The blog will publish new analytical posts twice per week, on Mondays and Wednesdays, except during holidays and the sensitive period leading up to, and just following, the FOMC meetings. On Fridays, the Research Library will provide a historical reading.

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libertystreeteconomics.newyorkfed.org/

Also in this issue…

Liquidity Facilities Make a Positive Contribution to Federal Reserve Income

After the onset of the financial crisis in August 2007, the Federal Reserve took a range of actions to mitigate disruptions in the financial markets. In addition to providing support for specific institutions and making direct purchases of assets, the central bank introduced new facilities or expanded existing ones to provide liquidity to the funding markets. While many researchers have found that the liquidity facilities helped foster stable financial conditions and preserve the flow of credit in the economy during the crisis, a recent study suggests that the programs also earned considerable income.

Authors Michael J. Fleming and Nicholas J. Klagge examine the effects of the liquidity facilities on the Federal Reserve's interest and fee income during the period of the facilities' greatest usage, August 2007 through December 2009. They estimate that the programs contributed $20 billion to the Fed's interest and fee income during the period, or $13 billion after taking into account the estimated $7 billion cost of funds.

The authors observe that some of the extra income generated should be viewed as compensation for the additional credit risk the Federal Reserve incurred in connection with the facilities. However, the Fed took many facility-specific steps to minimize that risk, such as establishing eligibility criteria for borrowers, providing the loans on a short-term basis, and requiring that loans be backed by adequate collateral. Indeed, the Federal Reserve has not borne any credit losses through its new or expanded liquidity facilities, according to the study.

Fleming and Klagge emphasize that although income generation is not a goal of the Fed's policies, the central bank uses such income to cover its expenses. Furthermore, any excess income produced, such as income derived from the liquidity facilities, is turned over to the Treasury, offsetting the government's need to raise funds from other sources.

"Income Effects of Federal Reserve Liquidity Facilities," *Current Issues in Economics and Finance*, vol. 17, no. 1, is available at www.newyorkfed.org/research/current_issues/ci17-1.html. An interview with the authors can also be viewed there. ■

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.

Study Examines Possible Contributors to Rise in Subprime Foreclosures

The Bankruptcy Abuse Prevention and Consumer Protection Act was enacted in part to curb consumer bankruptcy abuse by introducing requisites for debtors seeking to eliminate certain unsecured debts. After the reform took effect in October 2005, however, foreclosures on subprime mortgages surged nationwide.

In a new study, Donald P. Morgan, Benjamin Iverson, and Matthew Botsch analyze whether the surge was merely coincidental, or whether the reform, which they refer to as "BAR," may have played a role.

They observe that prior to BAR, overly indebted borrowers could file bankruptcy to discharge their unsecured debts, enabling them to retain more income to pay secured debts, such as home mortgages. The reform eliminated that option for better-off filers through a means test and other requirements, and the filers found it more difficult to save their home by filing bankruptcy. Morgan, Iverson, and Botsch consider whether the fact that it was harder for borrowers to default on unsecured debts contributed to higher foreclosures on their home loans.

The study concludes that BAR may have been one of several contributors to the rise in subprime foreclosures, joining declining home prices, expanded mortgage supply, looser lending standards, and agency problems associated with securitization.

The authors find that BAR's impact on filers was greater in states with a high incidence of bankruptcy exemptions. In contrast, filers in low-exemption states were not very protected before BAR, so they were less likely to be affected. For a state with an average home equity exemption, the authors estimate that the subprime foreclosure rate post-BAR rose 11 percent relative to average before the reform; given the number of subprime mortgages in the United States, that figure translates into 29,000 additional subprime foreclosures per quarter nationwide.

Still, BAR still may have served its intended purpose of curbing bankruptcy abuse, according to the study. The strategy that BAR precludes in some cases is defaulting on unsecured debts to make it easier to pay secured debts; if "robbing Peter to pay Paul" constitutes abuse, then the reform may have worked.

"Subprime Foreclosures and the 2005 Bankruptcy Reform," forthcoming in the *Economic Policy Review*, is available at www.newyorkfed.org/research/epr/forthcoming/1102morg.html.

Recently Published

Adam Copeland. 2011. "The Response of Prices, Sales, and Output to Temporary Changes in Demand," with George Hall. *Journal of Applied Econometrics* 26, no. 2 (March): 232-69.

Vasco Cúrdia. 2011. "The Central-Bank Balance Sheet as an Instrument of Monetary Policy," with Michael Woodford. *Journal of Monetary Economics* 58, no. 1 (January): 54-79.

Jan Groen and Paolo Pesenti. 2011. "Commodity Prices, Commodity Currencies, and Global Economic Developments." In Takatoshi Ito and Andrew K. Rose, eds., *Commodity Prices and Markets*. East Asia Seminar on Economics 20: 15-42. NBER conference volume. Chicago: University of Chicago Press.

Paolo Pesenti. 2011. Comment on "The International Transmission of the Financial Crisis," by Jean Pisani-Ferry and Adam Posen. In Jean Pisani-Ferry, Adam Posen, and Fabrizio Saccomanni, eds., *An Ocean Apart? Comparing Transatlantic Responses to the Financial Crisis*. Brussels: Bruegel. ■

Papers Presented

"Broker-Dealer Leverage and the Cross-Section of Stock-Returns," Tobias Adrian. Conference cosponsored by the Center for Central Banking Studies and the Financial Markets Group, held at the Bank of England, London, England, January 25. With Erkko Etula and Tyler Muir. Also presented at the New York Stock Exchange Third Annual Conference on Hedge Funds, New York City, January 27.

"Risk Appetite and Exchange Rates," Tobias Adrian. International Banking Economics and Finance Association Annual Meeting, Denver, Colorado, January 8. With Erkko Etula and Hyun Song Shin.

"Shadow Banking," Tobias Adrian. International Banking Economics and Finance Society Annual Meeting, Denver, Colorado, January 7. With Zoltan Pozsar, Adam Ashcraft, and Hayley Boesky. Also presented at the Association of Financial Economists–American Economic Association Annual Meeting, Denver, Colorado, January 8, and at a Boston University Center for Finance, Law, and Policy conference, Boston, Massachusetts, February 27.

"Stigma in Financial Markets: Evidence from Liquidity Auctions and Discount Window Borrowing during the Crisis," Olivier Armantier. Federal Reserve Day-Ahead Conference on Financial Markets and Institutions, held at the Federal Reserve Bank of Kansas City, Kansas City, Missouri, January 6. With Eric Ghysels, Asani Sarkar, and Jeffrey Shrader.

"State-Dependent Pricing under Infrequent Information: A Unified Framework," Carlos Carvalho. Econometric Society 2011 North American Winter Meeting, Denver, Colorado, January 9.

"Intended and Unintended Effects of *No Child Left Behind*," Rajashri Chakrabarti. American Economic Association Annual Meeting, Denver, Colorado, January 8. Also presented at the Association for Education Finance and Policy Annual Conference, Seattle, Washington, March 25.

"Merit Aid Programs, Incentives, and Student Mobility," Rajashri Chakrabarti. Association for Education Finance and Policy Annual Conference, Seattle, Washington, March 24.

"Vouchers, Responses, and the Test-Taking Population: Evidence from a Regression Discontinuity Analysis," Rajashri Chakrabarti. American Economic Association Annual Meeting, Denver, Colorado, January 8.

"House Price Booms and Current Account Deficits," Andrea Ferrero. INSEAD conference, Fontainebleau, France, March 15. Also presented at the Paris School of Economics and Sciences Po, Paris, France, March 16.

"What Drives the Oil-Dollar Correlation?" Christian Grisse. American Economic Association Annual Meeting, Denver, Colorado, January 9.

"Fundamentals-Based Exchange Rate Prediction Revisited," Jan Groen. Baruch College Zicklin School of Business seminar, New York City, March 23.

"Financial Fragility and Regulation: A Diamond-Dybvig View," Todd Keister. Conference hosted by the Center for Advanced Study in Economic Efficiency, held at Arizona State University, Tempe, Arizona, February 12.

"Stressed, Not Frozen: The Federal Funds Market in the Financial Crisis," Anna Kovner. American Finance Association Annual Meeting, Denver, Colorado, January 7. With Gara Afonso and Antoinette Schoar.

"Potential and Optimal Output," Andrea Tambalotti. Cornell University Department of Economics seminar, Ithaca, New York, February 24. With Alejandro Justiniano and Giorgio Primiceri.

"Credit Ratings and Security Prices in the Subprime MBS Market," James Vickery. American Economic Association Annual Meeting, Denver, Colorado, January 9. With Adam Ashcraft, Paul Goldsmith-Pinkham, and Peter Hull.

"Design of Contingent Capital with a Stock Price Trigger for Mandatory Conversion," Zhenyu Wang. Columbia University Law School seminar, New York City, January 27. With Suresh Sundaresan. ■

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, first-quarter 2011:

- "Shadow Banking," by Zoltan Pozsar, Tobias Adrian, Adam Ashcraft, and Hayley Boesky (*Staff Reports*, no. 458, July 2010) – 3,685 downloads
- "Understanding the Securitization of Subprime Mortgage Credit," by Adam B. Ashcraft and Til Schuermann (*Staff Reports*, no. 318, March 2008) – 2,107 downloads
- "The Yield Curve as a Predictor of U.S. Recessions," by Arturo Estrella and Frederic S. Mishkin (*Current Issues in Economics and Finance*, vol. 2, no. 7, June 1996) – 1,845 downloads

SSRN website, first-quarter 2011:

- "Traders' Broker Choice, Market Liquidity, and Market Structure," by Sugato Chakravarty and Asani Sarkar (*Staff Reports*, no. 28, August 1997) – 569 downloads
- "Understanding the Securitization of Subprime Mortgage Credit," by Adam B. Ashcraft and Til Schuermann (*Staff Reports*, no. 318, March 2008) – 553 downloads
- "An Empirical Analysis of Stock and Bond Market Liquidity," by Tarun Chordia, Asani Sarkar, and Aranidhar Subrahmanyam (*Staff Reports,* no. 164, March 2003) – 545 downloads

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

New Titles in the *Staff Reports* Series

Macroeconomics and Growth

No. 481, January 2011

Responses to the Financial Crisis, Treasury Debt, and the Impact on Short-Term Money Markets

Warren B. Hrung and Jason S. Seligman

Several programs have been introduced by U.S. fiscal and monetary authorities in response to the financial crisis. Hrung and Seligman examine the responses involving Treasury debt—the Term Securities Lending Facility (TSLF), the Supplemental Financing Program, increases in Treasury issuance, and open market operations—and their impacts on the overnight Treasury general collateral repo rate, a key money market rate. Their contribution is to consider each policy in light of the others, both to help guide policy responses to future crises and to emphasize policy interactions. Only the TSLF was designed to directly address stresses in short-term money markets by temporarily changing the supply of Treasury collateral in the marketplace. The authors find that the TSLF is uniquely effective relative to other policies and that, while changes in Treasury collateral do affect repo rates, the impacts are not equivalent across sources of Treasury collateral.

No. 485, February 2011

BASEL III: Long-Term Impact on Economic Performance and Fluctuations

Paolo Angelini, Laurent Clerc, Vasco Cúrdia, Leonardo Gambacorta, Andrea Gerali, Alberto Locarno, Roberto Motto, Werner Roeger, Skander Van den Heuvel, and Jan Vlček

The authors assess the long-term economic impact of the new regulatory standards (the Basel III reform), answering the following questions: 1) What is the impact of the reform on long-term economic performance? 2) What is the impact of the reform on economic fluctuations? 3) What is the impact of the adoption of countercyclical capital buffers on economic fluctuations? The main results are the following: 1) Each percentage point increase in the capital ratio causes a median 0.09 percent decline in the level of steady-state output, relative to the baseline. The impact of the new liquidity regulation is of a similar order of magnitude, at 0.08 percent. 2) The reform should dampen output volatility; the magnitude of the effect is heterogeneous across models; the median effect is modest. 3) The adoption of countercyclical capital buffers could have a more sizable dampening effect on output volatility.

Microeconomics

No. 482, January 2011

Household Debt and Saving during the 2007 Recession

Rajashri Chakrabarti, Donghoon Lee, Wilbert van der Klaauw, and Basit Zafar

Using credit report records and data collected from several household surveys, the authors analyze changes in household debt and saving during the 2007 recession. They find that the crisis' impact appears to have been widespread, affecting large shares of households across all age, income, and education groups. In response to their deteriorated financial situations, households reduced their average spending and increased their saving. This increase in saving—at least in 2009—did not materialize through an increase in contributions to retirement and savings accounts. Instead, the higher saving rate appears to reflect a considerable decline in household debt, as households paid down mortgage debt in particular. At the end of 2009, individuals expected to continue increasing their saving and paying down debt—expectations that are consistent with what the authors have observed so far in 2010. In contrast, consumers were pessimistic about the availability of credit, expecting it to become harder to obtain during 2010.

No. 486, March 2011

Vouchers, Responses, and the Test-Taking Population: Regression Discontinuity Evidence from Florida

Rajashri Chakrabarti

This paper analyzes a Florida program that embedded vouchers in an accountability regime. Specifically, it investigates whether the threat of vouchers and the stigma associated with the Florida program induced schools to strategically manipulate their test-taking population. Under Florida rules, scores of students in several special-education and limited-English-proficient (LEP) categories were not included in the computation of school grades. Did this rule induce the threatened schools to reclassify some of their weaker students into these "excluded" categories so as to remove them from the effective test-taking pool? Using a regression discontinuity strategy, Chakrabarti finds evidence in favor of strategic reclassification into the excluded LEP category in high-stakes grade 4 and entry-grade 3. In contrast, she finds no evidence that the program led to reclassification into excluded special-education categories, which is consistent with the substantial costs of classifying into special-education categories during this period. These findings have important policy implications.

Banking and Finance

No. 483, January 2011

Stigma in Financial Markets: Evidence from Liquidity Auctions and Discount Window Borrowing during the Crisis

Olivier Armantier, Eric Ghysels, Asani Sarkar, and Jeffrey Shrader

The authors provide empirical evidence for the existence, magnitude, and economic impact of stigma associated with banks borrowing from the Federal Reserve's discount window facility. They find that, during the height of the financial crisis, banks were willing to pay an average premium of at least 37 basis points (and 150 basis points after Lehman's bankruptcy) to borrow from the Term Auction Facility rather than from the discount window. The incidence of stigma varied according to bank characteristics and market conditions. Finally, the authors find that discount window stigma is economically relevant since it increased banks' borrowing costs during the crisis. These results have important implications for the provision of liquidity by central banks.

No. 484, February 2011

Comovement Revisited

Maria Kasch and Asani Sarkar

Kasch and Sarkar find, unlike earlier researchers, that there is no rise in the market betas of stocks that enter the S&P 500 index when the estimated factor model is that of Fama and French (1993). They also find that SMB and HML factor betas decline after the stocks are added to the index. This decline is explained by strong increases in earnings and in the market value of the event stocks in the period around—and, in particular, prior to—their inclusion in the index. The authors suggest that inclusions to the S&P 500 index are informative events that trigger a reassessment of the risk of newly added firms by drawing the broad market's attention to their extraordinary growth in size and profitability.

No. 488, March 2011

Liquidity Hoarding

Douglas Gale and Tanju Yorulmazer

Banks hold liquid and illiquid assets. An illiquid bank that receives a liquidity shock sells assets to liquid banks in exchange for cash. Gale and Yorulmazer characterize the constrained efficient allocation as the solution to a planner's problem and show that the market equilibrium is constrained inefficient, with too little liquidity and inefficient hoarding. Their model features a precautionary as well as a speculative motive for hoarding liquidity, but the inefficiency of liquidity provision can be traced to the incompleteness of markets (due to private information) and the increased price volatility that results from trading assets for cash.

Quantitative Methods

No. 487, March 2011

Central Bank Transparency and the Crowding Out of Private Information in an Experimental Asset Market

Menno Middeldorp and Stephanie Rosenkranz

Central banks have become increasingly communicative. An important reason is that democratic societies expect more transparency from public institutions. Central bankers, drawing on empirical research, also believe that sharing information has economic benefits. Communication is seen as a way to improve the predictability of monetary policy, thereby lowering financial market volatility and contributing to a more stable economy. However, a potential side-effect of providing costless public information is that market participants may be less inclined to invest in private information. Theoretical results suggest that this can hamper the ability of markets to predict future monetary policy. Middeldorp and Rosenkranz test this in a laboratory asset market. Crowding out of information acquisition does indeed take place, but only where it is most pronounced does the predictive ability of the market deteriorate. Notable features of the experiment include a complex setup based directly on the theoretical model and the calibration of experimental parameters using empirical measurements. ■

Research and Statistics Group Publications and Papers: January–March 2011

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

ECONOMIC POLICY REVIEW, FORTHCOMING

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Donald P. Morgan, Benjamin Iverson, and Matthew Botsch

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