ResearchUPDATE

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Research and Statistics Group www.newyorkfed.org/research

Research Group Provides New Platforms for Economists' Work

In 2011, we expanded our efforts to reach audiences through new media offerings—including video interviews and a podcast.

Video Interviews

The video interviews are designed to spotlight research that addresses issues of broad public concern as well as recent work on topics of particular interest to the academic and policy communities. They present the insights of economists and colleagues and complement articles in our chief research publications—the *Economic Policy Review, Current Issues in Economics and Finance,* and the *Staff Reports* working paper series.

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During the year, we added three new videos to our author interview series.

In a video released in February 2011, Michael Fleming and Nicholas Klagge discuss some findings from their *Current Issues* article "Income Effects of Federal Reserve Liquidity Facilities" (vol. 17, no. 1). The authors explain how the special lending programs (liquidity facilities) introduced by the Fed work and how they generate income, and evaluate the program's success in terms of cost savings to both the Federal Reserve and taxpayers.

In another video, released in November, Kathryn Chen and Asani Sarkar, coauthors with Michael Fleming, John Jackson, and Ada Li of the September 2011 staff report "An Analysis of CDS Transactions: Implications for Public Reporting," talk about their study of credit derivatives, focusing on credit default swaps (CDS). The authors describe how they were able to study CDS in such an opaque market; consider the implications of increased transparency for CDS market makers, given that hedging by dealers is quite slow; and clarify the trade-off between the benefits of increased availability of information and the potential risk to market makers. Their study aims to provide a framework for policymakers to consider when designing public reporting rules.

In a third video, released in December, Jaison Abel and Richard Deitz discuss their *Current Issues* article "The Role of Colleges and Universities in

Also in this issue…

Building Local Human Capital" (vol. 17, no. 6). The authors explain what human capital is and how colleges and universities deepen the human capital in their respective regions—by producing college graduates who increase the supply of educated individuals entering the local workforce and by conducting research activities that will raise the demand for educated workers by attracting new firms and helping existing firms to grow. Their research concludes that policymakers should focus on both supply- and demand-side objectives.

Podcast

We also released a podcast in which economists James Orr, John Sporn, Joseph Tracy, and Junfeng Huang share the key findings of their *Current Issues* article "Help for Unemployed Borrowers: Lessons from the Pennsylvania Homeowners' Emergency Mortgage Assistance Program" (vol. 17, no. 2). The team explains how the approach taken by the Pennsylvania program differs from federal mortgage assistance programs, the advantages and cost savings of the Pennsylvania program, and key lessons for policymakers to consider when making refinements to mortgage relief programs.

Visit www.newyorkfed.org/research/video_interviews.html. And keep an eye open in 2012 for more author interviews and other videos. ■

Follow Us on Twitter!

The Research Group recently launched a Twitter feed, designed to offer the first word on news going on in the Group, such as:

- new publications and blog posts,
- updates on economists' work and speaking engagements,
- postings of key indexes and data,
- media coverage of our work.

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EPR Article Sheds Light on Liquidity of TIPS

The liquidity of Treasury inflation-protected securities, or TIPS, differs from that of nominal Treasuries in some important ways, according to new evidence presented in "The Microstructure of the TIPS Market."

In this forthcoming study in the *Economic Policy Review*, Michael J. Fleming and Neel Krishnan observe that the expected benefits from the Treasury's introduction of TIPS in 1997 have not been fully realized, mainly because the securities are less liquid than nominal Treasury securities. The relative lack of liquidity is thought to result in a liquidity premium on TIPS yields compared with yields on nominal Treasuries, a factor that offsets the advantages of TIPS having no inflation risk.

Despite the importance of TIPS liquidity and the market's large size—$728 billion in November 2011—hardly any quantitative evidence exists on the securities' liquidity. The authors note that Fed data show trading activity in TIPS to be much lower than activity in nominal securities. But the data are aggregated over the week and across all TIPS and cover only trading volume, so they do not provide information on activity in particular TIPS, activity over the day or week, or other measures of liquidity, like bid-ask spreads.

In contrast, Fleming and Krishnan analyze more granular, "tick" data from the interdealer market to characterize the liquidity of the TIPS market. They identify several features of that market also present in the nominal securities market, but some unique features too. In both markets, there is a significant difference in trading activity between the most recently issued ("on-the-run") and previously issued ("off-the-run") securities, as trading drops sharply when securities go off the run. In the TIPS market, there is little difference in bid-ask spreads or quoted depth between securities, but large variation in the incidence of posted quotes. These results lead the authors to conclude that "trading activity and the incidence of posted quotes may be better cross-sectional measures of TIPS liquidity than bid-ask spreads or quoted depth."

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The study also examines intraday trading patterns and the effects on TIPS liquidity of public announcements (the CPI release, employment report, FOMC post-meeting announcement, and TIPS auction results). Intraday trading patterns are found to be broadly similar in the TIPS and nominal markets, but TIPS activity peaks somewhat later—likely reflecting differences in the use and ownership of the securities. Announcement effects differ between markets, with TIPS auction results and CPI releases eliciting especially strong increases in trading activity, "likely indicating these announcements' particular importance to TIPS valuation," according to the authors. ■

New Study Examines Differences in How Central Banks Implement Policy

Central banks differ in their approaches to implementing monetary policy, both in good economic times and in bad. In a recent article in *Current Issues in Economics and Finance* (vol. 17, no. 7, "Monetary Policy Implementation: Common Goals but Different Practices"), Marlene Amstad and Antoine Martin consider the strategies followed by four central banks—the Federal Reserve, the European Central Bank, the Bank of England, and the Swiss National Bank—to influence the availability of money and credit when the economy is stable and when a crisis occurs.

The authors look first at how the four banks approach the choice of an interest rate target, or "operational target," a standard feature of conventional monetary policy. While the Federal Reserve, the European Central Bank, and the Bank of England target an overnight rate, the Swiss central bank targets a range for the three-month Libor for the Swiss franc. The authors note that the choice between a short-term and longer-term rate presents trade-offs: the former is easier to target, but the latter is more relevant to economic activity, since it more directly influences firms' investment decisions and households' real estate decisions. Moreover, during periods of financial stress, the use of the three-month rate permits a central bank to stabilize the long-term rate while letting shorter rates fluctuate to absorb changes in risk or liquidity premia.

In the second half of their analysis, Amstad and Martin consider how the four central banks have chosen to manage the expanded balance sheets they acquired during the financial crisis as a result of unconventional monetary policy actions. Specifically, the discussion centers on the choice of particular instruments that allow the banks to adjust interest rates without regard to the quantity of reserves on their balance sheets. As the authors explain, the four central banks have adopted different combinations of three instruments: the payment of interest on excess reserves at the policy rate, the issuance of central bank bills, and the use of reverse repurchase agreements.

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Amstad and Martin observe that the central banks' different approaches to balance sheet management may in part reflect "the unique institutional setting in which each one operates." They caution that it is too early to tell what the outcome of the individual banks' choices will be, but suggest that an "awareness of the . . . instruments and strategies that are possible" can inform policymakers' efforts to guide the economy under both normal and crisis conditions. ■

Top Blog Posts of Q4

Our *Liberty Street Economics* blog posts on economic topics twice a week—more frequently when there's a post on a newly released report or on a pressing topic.

Listed below are the top five posts in the fourth quarter.

- "'Flip This House': Investor Speculation and the Housing Bubble," by Andrew Haughwout, Donghoon Lee, Joseph Tracy, and Wilbert van der Klaauw, December 5 – 9,020 views

  The authors present new findings from their recent New York Fed study that uses unique data to suggest that real estate "investors"—borrowers who use financial leverage in the form of mortgage credit to purchase multiple residential properties—played a previously unrecognized, but very important, role in the housing bubble.

- "The Failure to Forecast the Great Recession," by Simon Potter, November 25 – 8,808 views

  Potter examines the performance of the forecasts produced by Federal Reserve Bank of New York staff over the 2007-10 period and considers reasons why the Fed, like most private sector forecasters, failed to predict the Great Recession.

- "Job Polarization in the United States: A Widening Gap and Shrinking Middle," by Jaison R. Abel and Richard Deitz, November 21 – 4,849 views

  Abel and Deitz show that in the United States, the wage gap between high- and low-paid occupations has widened over the past three decades, and that the share of jobs in both high- and low-paying occupations has grown, leaving a shrinking middle.

- "How Well Do Financial Markets Separate News from Noise? Evidence from an Internet Blooper," by Carlos Carvalho, Nicholas Klagge, and Emanuel Moench, October 5 – 4,495 views

  This post examines an unusual episode involving a false news report that provides a unique look into how financial markets process news of unexpected events.

- "Why Is There a 'Zero Lower Bound' on Interest Rates?" by Todd Keister, November 16 – 3,571 views

  Economists often talk about nominal interest rates having a "zero lower bound," meaning they should not be expected to fall below zero. Keister explains why negative interest rates are possible in principle, but rare in practice.

http://libertystreeteconomics.newyorkfed.org

New Publications

- *The Research Group of the Federal Reserve Bank of New York, 2011-12*: An online guide for economists interested in joining the Group as well as an overview of our staff, structure, and research departments.

  www.newyorkfed.org/research/research_group/index.html

- *Publications and Other Research, 2011*: An annual catalogue of our publications, papers, and blog posts.

  www.newyorkfed.org/research/publication_annuals/publications_otherresearch.html

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, fourth-quarter 2011:

- "Why Are Banks Holding So Many Excess Reserves?" by Todd Keister and James McAndrews (*Staff Reports*, no. 380, July 2009) – 4,543 downloads
- "Understanding the Securitization of Subprime Mortgage Credit," by Adam B. Ashcraft and Til Schuermann (*Staff Reports*, no. 318, March 2008) – 4,398 downloads
- "Central Bank Dollar Swap Lines and Overseas Dollar Funding Costs," by Linda Goldberg, Craig Kennedy, and Jason Miu (*Economic Policy Review*, vol. 17, no. 1, May 2011) – 3,441 downloads

SSRN website, fourth-quarter 2011:

- "Determinants and Impact of Sovereign Credit Ratings," by Richard Cantor and Frank Packer (*Economic Policy Review*, vol. 2, no. 2, October 1996) – 205 downloads
- "Understanding the Securitization of Subprime Mortgage Credit," by Adam B. Ashcraft and Til Schuermann (*Staff Reports*, no. 318, March 2008) – 203 downloads
- "The Corporate Governance of Banks," by Jonathan R. Macey and Maureen O'Hara (*Economic Policy Review*, vol. 9, no. 1, April 2003) – 169 downloads

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

Recently Published

Tobias Adrian. 2011. "Financial Intermediary Balance Sheet Management," with Hyun Song Shin. *Annual Review of Financial Economics* 3, December: 289-307.

Gara Afonso. 2011. "Precautionary Demand and Liquidity in Payment Systems," with Hyun Song Shin. *Journal of Money, Credit, and Banking* 43, no. s2 (October): 589-619.

Mary Amiti. 2011. "Exports and Financial Shocks," with David E. Weinstein. *Quarterly Journal of Economics* 126, no. 4 (November): 1841-77.

Gauti Eggertsson. 2011. Comment on "Price-Level Targeting and Stabilization Policy," by Aleksander Berentsen and Christopher Waller. *Journal of Money, Credit, and Banking* 43, no. s2 (October): 581-8.

Andreas Fuster. 2011. "Expectations as Endorsements: Evidence on Reference-Dependent Preferences from Exchange and Valuation Experiments," with Keith M. Marzilli Ericson. *Quarterly Journal of Economics* 126, no. 4 (November): 1879-907.

Andreas Fuster. 2011. "Insuring Consumption Using Income-Linked Assets," with Paul Willen. *Review of Finance* 15, no. 4 (October): 835-73.

Todd Keister. 2011. Comment on "Banking in a Matching Model of Money and Capital," by Valerie R. Bencivenga and Gabriele Camera. *Journal of Money, Credit, and Banking* 43, no. s2 (October): 477-85.

James McAndrews and David Skeie. 2011. "Precautionary Reserves and the Interbank Market," with Adam Ashcraft. *Journal of Money, Credit, and Banking* 43, no. s2 (October): 311-48.

Giorgio Topa and Wilbert van der Klaauw. 2011. "Expectations of Inflation: The Biasing Effect of Thoughts about Specific Prices," with Wändi Bruine de Bruin. *Journal of Economic Psychology* 32, no. 5 (October): 834-45. ■

Papers Presented

"Incentives and Responses under *No Child Left Behind*: Credible Threats and the Role of Competition," Rajashri Chakrabarti. Association for Public Policy Analysis and Management conference, Washington, D.C., November 5. Also presented at the Fall NBER Education workshop, Stanford University, Palo Alto, California, November 10.

"Merit Aid, Student Mobility, and the Role of College Selectivity," Rajashri Chakrabarti. Association for Public Policy Analysis and Management conference, Washington, D.C., November 4. With Joydeep Roy.

"Macro Effects of Large Asset Purchases," Vasco Cúrdia. University of California at Santa Cruz, Santa Cruz, California, November 10. With Han Chen and Andrea Ferrero. Also presented at a Bank of England seminar, London, England, November 18.

"Rare Shocks, Great Recessions," Marco Del Negro. European Seminar on Bayesian Econometrics, National Bank of Belgium, Brussels, Belgium, November 4. With Vasco Cúrdia and Daniel Greenwald.

"Anxiety in the Face of Risk," Thomas Eisenbach. Miami Behavioral Finance conference, University of Miami School of Business Administration, Coral Gables, Florida, December 16. With Martin Schmalz.

"In Defense of Global Banking," Linda Goldberg. Keynote address at the Deutsche Bundesbank Conference on the Costs and Benefits of Global Banking, Frankfurt, Germany, October 18.

"The International Role of the Dollar and the Transmission of Shocks through Global Banks," Linda Goldberg. Bank of England Monetary Policy Event on Exchange Rates and Capital Flows, London, England, October 25.

"Liquidity Management of U.S. Global Banks: Internal Capital Markets in the Great Recession," Linda Goldberg. Deutsche Bundesbank Conference on "Basel III and Beyond: Regulating and Supervising Banks in the Post-Crisis Era," Frankfurt, Germany, October 19. With Nicola Cetorelli.

"Micro, Macro, and Strategic Forces in International Trade Invoicing," Linda Goldberg. Brandeis University International Business School seminar, Waltham, Massachusetts, November 18. With Cédric Tille.

"Real-Time Inflation Forecasting in a Changing World," Jan Groen. Marcel-Dagenais Seminar on Econometrics and Macroeconomics, University of Montreal, Montreal, Quebec, Canada, November 3. With Richard Paap and Francesco Ravazzolo.

"The Pre-FOMC Announcement Drift," Emanuel Moench. New York University Stern School of Business seminar, New York City, November 30. With David Lucca.

"Macro Forecasts, Uncertainty, and Tail Risk Assessments: Evidence from the ECB Survey of Professional Forecasters," Robert Rich. CESifo (Center for Economic Studies, Ifo Institute, and Munich Society for the Promotion of Economic Research) Conference on Macroeconomics and Survey Data, Munich, Germany, November 11. With Joseph Song and Joseph Tracy. Also presented at a Fordham University Department of Economics seminar, New York City, November 29.

"Repo Runs," David Skeie. Baruch College seminar, New York City, October 12. With Antoine Martin, David Skeie, and Ernst-Ludwig von Thadden.

"Anatomy of Welfare Reform: Announcement and Implementation Effects," Wilbert van der Klaauw. IZA Conference on Labor Market Policy Evaluation, Harvard University, Cambridge, Massachusetts, October 8. With Richard Blundell and Marco Francesconi. Also presented at a New York University Wagner Graduate School of Public Service seminar, New York City, October 20.

"Is Libor Accurate? Evidence from Term Funding Markets," James Vickery. University of California at Berkeley Haas School of Business, Fisher Center for Real Estate and Urban Economics seminar, Berkeley, California, November 30. With Dennis Kuo and David Skeie.

"Stereotypes and Madrassas: Experimental Evidence from Pakistan," Basit Zafar. NBER Workshop on Economics of Culture and Institutions, Boston, Massachusetts, November 12. With Adeline Delavande. ■

New Titles in the *Staff Reports* Series

Macroeconomics and Growth

No. 519, October 2011

Expectations versus Fundamentals: Does the Cause of Banking Panics Matter for Prudential Policy?

Todd Keister and Vijay Narasiman

There is a longstanding debate about whether banking panics and other financial crises always have fundamental causes or are sometimes the result of self-fulfilling beliefs. Disagreement on this point would seem to present a serious obstacle to designing policies that promote financial stability. However, Keister and Narasiman show that the appropriate choice of policy is invariant to the underlying cause of banking panics in some situations. In their model, the anticipation of being bailed out in the event of a crisis distorts the incentives of financial institutions and their investors. Two policies that aim to correct this distortion are compared: restricting policymakers from engaging in bailouts, and allowing bailouts but taxing the short-term liabilities of financial institutions. The authors find that the latter policy yields higher equilibrium welfare regardless of whether panics are sometimes caused by self-fulfilling beliefs.

No. 520, October 2011

The Great Escape? A Quantitative Evaluation of the Fed's Liquidity Facilities

Marco Del Negro, Gauti Eggertsson, Andrea Ferrero, and Nobuhiro Kiyotaki

The authors introduce liquidity frictions into an otherwise standard DSGE model with nominal and real rigidities, explicitly incorporating the zero bound on the short-term nominal interest rate. Within this framework, they ask: Can a shock to the liquidity of private paper lead to a collapse in short-term nominal interest rates and a recession like the one associated with the 2008 U.S. financial crisis? Once the nominal interest rate reaches the zero bound, what are the effects of interventions in which the government exchanges liquid government assets for illiquid private paper? The authors find that the effects of the liquidity shock can be large, and they provide numerical examples showing that the liquidity facilities prevented a repeat of the Great Depression in 2008-09.

No. 521, October 2011

Early Contract Renegotiation: An Analysis of U.S. Labor Contracts from 1970 to 1995

Robert Rich and Joseph Tracy

This paper examines the ex post flexibility of U.S. labor contracts during the 1970-95 period by investigating whether unanticipated changes in inflation increase the likelihood of a contract being renegotiated prior to its expiration. Rich and Tracy find strong empirical support for this hypothesis. Specifically, their results indicate that renegotiations are triggered principally by large and infrequent price shocks of either sign. When combined with evidence that ex ante contract durations are shorter during episodes of increased inflation uncertainty, their results suggest that these contracts are flexible both ex ante and ex post to changes in the evolution of inflation.

No. 524, November 2011

Optimal Disinflation under Learning

Timothy Cogley, Christian Matthes, and Argia M. Sbordone

Cogley, Matthes, and Sbordone model transitional dynamics that emerge after the adoption of a new monetary policy rule. They assume that private agents learn about the new policy via Bayesian updating, and they study how learning affects the nature of the transition and the choice of a new rule. Temporarily explosive dynamics can emerge when there is substantial disagreement between actual and perceived policies. These dynamics make the transition highly volatile and dominate expected loss. The emergence of temporarily explosive paths depends more on uncertainty about policy-feedback parameters than about the long-run inflation target. For that reason, the central bank can at least achieve low average inflation. Its ability to move feedback parameters away from initial beliefs, however, is more constrained.

No. 527, December 2011

The Macroeconomic Effects of Large-Scale Asset Purchase Programs

Han Chen, Vasco Cúrdia, and Andrea Ferrero

The effects of asset purchase programs on macroeconomic variables are likely to be moderate. The authors embed a preferred habitat framework in a standard DSGE model estimated on U.S. data and evaluate the effects of the Federal Reserve's second large-scale asset purchase program (LSAP II). The simulations suggest that such a program increases GDP growth by less than half a percentage point, although the effect on the level of GDP is very persistent. The program's marginal contribution to inflation is minimal. The small estimated degree of financial market segmentation is crucial for the results. Augmenting the set of observables with a measure of long-term debt leads to even smaller macroeconomic effects of LSAP programs, as the authors find an elasticity of the risk premium to the quantity of debt substantially smaller than the recent empirical estimates suggest. Throughout the analysis, a commitment to an extended period at the zero lower bound for nominal interest rates increases the effects of asset purchase programs on GDP growth and inflation.

No. 531, December 2011

Some Unpleasant General Equilibrium Implications of Executive Incentive Compensation Contracts

John B. Donaldson, Natalia Gershun, and Marc P. Giannoni

The authors consider a simple variant of the standard real business cycle model in which shareholders hire a self-interested executive to manage the firm on their behalf. A generic family of compensation contracts similar to those employed in practice is studied. When compensation is convex in the firm's *own* dividend (or share price), a given increase in the firm's output generated by an additional unit of physical investment results in a more than proportional increase in the manager's income. Incentive contracts of sufficient yet modest convexity are shown to result in an indeterminate general equilibrium, one in which business cycles are driven by self-fulfilling fluctuations in the manager's expectations that are unrelated to the economy's fundamentals. Arbitrarily large fluctuations in macroeconomic variables may result. The authors also provide a theoretical justification for the proposed family of contracts by demonstrating that they yield first-best outcomes for specific parameter choices.

International

No. 522, October 2011

The International Role of the Dollar: Does It Matter if This Changes?

Linda Goldberg

There is often speculation that the international roles of currencies may be changing. This paper presents the current status of these roles. The U.S. dollar continues to be the dominant currency across various uses. Yet, such a role may change over time. If this occurs, there could be consequences for seignorage returns, U.S. funding costs, the dollar's value, U.S. insulation from foreign shocks, and U.S. global influence. The paper concludes with a discussion of recent research on related themes and questions for future study.

No. 530, December 2011

What Do Drug Monopolies Cost Consumers in Developing Countries?

Rebecca Hellerstein

Hellerstein quantifies the effects of drug monopolies and low per-capita income on pharmaceutical prices in developing economies using the example of the antiretroviral drugs used to treat HIV.

Microeconomics

No. 523, October 2011

Do We Know What We Owe? A Comparison of Borrower- and Lender-Reported Consumer Debt

Meta Brown, Andrew Haughwout, Donghoon Lee, and Wilbert van der Klaauw

Brown et al. compare household debt as reported by borrowers to the Survey of Consumer Finances (SCF) with household debt as reported by lenders to Equifax using the new FRBNY Consumer Credit Panel (CCP). Moments of the borrower and lender debt distributions are compared by year, age of household head, household size, and region of the country, in total and across five standard debt categories. The debt reports are strikingly similar, with one noteworthy exception: the aggregate credit card debt implied by SCF borrowers' reports is less than 50 percent of the aggregate credit card debt implied by CCP lenders' reports. Adjustments for sample representativeness and for small business and convenience uses of credit cards raise SCF credit card debt to somewhere between 52 and 66 percent of the CCP figure. Despite the credit card debt mismatch, bankruptcy history is reported comparably in the borrower and lender sources, indicating that not all stigmatized consumer behaviors are underreported.

No. 525, October 2011

Incentives and Responses under *No Child Left Behind*: Credible Threats and the Role of Competition

Rajashri Chakrabarti

The *No Child Left Behind* law mandated the institution of adequate yearly progress (AYP) objectives, on which schools are assigned a pass or fail. Chakrabarti studies the incentives and responses of schools that failed AYP once. Using regression discontinuity designs, she finds evidence in these schools of improvements in high-stakes reading and spillover effects to low-stakes language arts. The patterns are consistent with a focus on marginal students around the high-stakes cutoff, but this improvement did not come at the expense of the ends. Meanwhile, there is little evidence of improvement in high-stakes math or in low-stakes science and social studies. Performance in low-stakes grades suffered, as did performance in weaker subgroups despite their inclusion in AYP computations. Finally, there is strong evidence in favor of response to incentives: Schools that failed AYP only in reading and/or math subsequently did substantially better in those subject areas. Credibility of threat mattered. AYP-failed schools that faced more competition responded both more strongly and more broadly.

No. 526, November 2011

Housing Busts and Household Mobility: An Update

Fernando Ferreira, Joseph Gyourko, and Joseph Tracy

This paper provides updated estimates of the impact of three financial frictions—negative equity, mortgage lock-in, and property tax lock-in—on household mobility. The authors add the 2009 wave of the American Housing Survey (AHS) to their sample and also create an improved measure of permanent moves in response to Schulhofer-Wohl's (2011) critique of their earlier work (2010). The updated estimates corroborate their previous results: Negative equity reduces household mobility by 30 percent, and $1,000 of additional mortgage or property tax costs reduces household mobility by 10 to 16 percent. Schulhofer-Wohl's finding of a slight positive correlation between mobility and negative equity appears to be due to a large fraction of false positives, as his coding methodology has the propensity to misclassify almost half of the additional moves it identifies relative to the authors' measure of permanent moves. This also makes his mobility measure dynamically inconsistent, as many transitions originally classified as a move are reclassified as a nonmove when additional AHS panels become available. The authors conclude with directions for future research, including potential improvements to measures of household mobility.

No. 534, December 2011

The Impact of the Great Recession on School District Finances: Evidence from New York

Rajashri Chakrabarti and Elizabeth Setren

Despite education's fundamental role in human capital formation and growth, there is no research that examines the effect of the Great Recession (or any other recession) on schools. This study begins to fill this gap. Exploiting detailed data on school finance indicators and an analysis of trend shifts, the authors examine how the Great Recession affected school funding in New York State. While they find no evidence of effects on either total revenue or expenditure, they identify important compositional changes to both. There is strong evidence of substitution of funds on the revenue side—the infusion of funds from the federal stimulus occurred simultaneously with statistically and economically significant cuts in state and local financing, especially the former. On the expenditure side, instructional expenditure was maintained, while other categories, such as transportation, student activities, and utilities, suffered. Important heterogeneities in experiences are also observed by poverty level, metropolitan area, school district size, and urban status. These findings promise to facilitate an understanding of how recessions affect schools and of the role policy can play in mitigating the consequences.

Banking and Finance

No. 528, December 2011

Which Financial Frictions? Parsing the Evidence from the Financial Crisis of 2007-09

Tobias Adrian, Paolo Colla, and Hyun Song Shin

The financial crisis of 2007-09 has sparked keen interest in models of financial frictions and their impact on macro activity. Most models share the feature that borrowers suffer a contraction in the quantity of credit. However, the evidence suggests that although bank lending contracted during the crisis, bond financing actually increased to make up much of the gap. This paper reviews both aggregate and micro-level data and highlights the shift in the composition of credit between loans and bonds. Motivated by the evidence, the authors formulate a model of direct and intermediated credit that captures the key stylized facts. In their model, the impact on real activity comes from the spike in risk premiums rather than the contraction in the total quantity of credit.

No. 529, December 2011

Repo and Securities Lending

Tobias Adrian, Brian Begalle, Adam Copeland, and Antoine Martin,

The authors provide an overview of the data requirements necessary to monitor repurchase agreements (repos) and securities lending markets for the purposes of informing policymakers and researchers about firm-level and systemic risk. They start by explaining the functioning of these markets, then argue that it is crucial to understand the institutional arrangements. Data collection is currently incomplete. A comprehensive collection should include six characteristics of repo and securities lending trades at the firm level: principal amount, interest rate, collateral type, haircut, tenor, and counterparty.

No. 532, December 2011

Financial Intermediary Balance Sheet Management

Tobias Adrian and Hyun Song Shin

Conventional discussions of balance sheet management by nonfinancial firms take the set of positive net present value (NPV) projects as given, which in turn determines the size of the firm's assets. The focus is on the composition of equity and debt in funding such assets. In contrast, the balance sheet management of financial intermediaries reveals that it is equity that behaves like the predetermined variable, and the asset size of the bank or financial intermediary is determined by the degree of leverage that is permitted by market conditions. The relative stickiness of equity reveals possible nonpecuniary benefits to bank owners so that they are reluctant to raise new equity, even during boom periods when raising equity is associated with less stigma and, hence, smaller discounts. The authors explore the empirical evidence for both market-based financial intermediaries such as the Wall Street investment banks, as well as the commercial bank subsidiaries of the large U.S. bank holding companies. They further explore the aggregate consequences of such behavior by the banking sector for the propagation of the financial cycle and securitization.

No. 533, December 2011

Dodd-Frank One Year On: Implications for Shadow Banking

Tobias Adrian

One year after passage of the Dodd-Frank Act (DFA), regulators proposed several of the rules required for its implementation. In this paper, Adrian discusses some aspects of proposed DFA rules in light of shadow banking. The topics are risk-retention rules for securitized products and the impact of capital reforms on asset-backed commercial paper (ABCP) conduits. While the reform of securitization is resulting primarily from DFA, changes in accounting standards, together with the Basel capital reforms, have had important impacts on the economics of ABCP conduits. ■

Research and Statistics Group Publications and Papers: October–December 2011

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

ECONOMIC POLICY REVIEW, FORTHCOMING

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

The Microstructure of the TIPS Market
Michael J. Fleming and Neel Krishnan

CURRENT ISSUES IN ECONOMICS AND FINANCE, VOL. 17

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Jaison R. Abel and Richard Deitz

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Marlene Amstad and Antoine Martin

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