Two Research Series Examine Recent Changes in Banking

In July, the Research Group published a special volume of the Economic Policy Review (EPR) and a companion series of Liberty Street Economics blog posts on the evolution of banking since the advent of asset securitization.

The project came out of discussions within the Group about “shadow banks” and their role in the 2007-09 financial crisis. The consensus was that it is no longer obvious what banks really do and to what extent they are still central to the process of financial intermediation. Getting a better understanding of these issues is important from an academic perspective, but the insights gained from the exercise could also prove useful in a practical sense for policymakers.

The main finding of the studies is that financial intermediation is in fact less “shadowy” than originally thought. Financial intermediation has changed and grown more complex, making it more difficult to monitor and regulate. Yet when looked at closely, regulated banks and bank holding companies (BHCs) have been able to adapt and continue to provide essential intermediation services.

After an introduction outlining the issues, the EPR volume offers a survey of the regulatory and policy decisions that have affected the institutions and instruments of credit intermediation and helped transform the role of banks in the process. “Regulation’s Role in Bank Changes,” by Peter Olson, suggests that government action—sometimes unintentionally—has spurred the evolution of financial intermediation.

The five articles that follow explore the idea of bank adaptation in more depth, presenting arguments and findings associated with the volume’s emphasis on intermediation roles and changes in bank structure.

In “The Rise of the Originate-to-Distribute Model and the Role of Banks in Financial Intermediation,” Vitaly Bord and João Santos show that banks indeed play a much more important part in lending than what the balance sheet suggests. Moreover, bank actions have actually spurred the growth of shadow banks involved in the subsequent steps of the credit intermediation chain.

Benjamin Mandel, Donald Morgan, and Chenguang Wei next analyze the importance of banks in providing credit enhancements. Their study, “The Role of Bank Credit Enhancements in Securitization,” asks why credit enhancement is provided and what functions it performs. The study suggests that the act of buffering investors to reduce their credit risk

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exposure is the main motivation behind the provision of credit enhancement in asset securitization. The authors corroborate the underlying view that banks have played a fundamental role in supporting the modern intermediation process.

Nicola Cetorelli and Stavros Peristiani, in “The Role of Banks in Asset Securitization,” examine four key roles in the credit intermediation chain: issuer, underwriter, trustee, and servicer. They then take a “bean-counting” approach to establish the extent to which financial intermediation is now occurring “in the shadow”—that is, outside the realm of banks and the scrutiny of regulators. Their evidence suggests that very little securitization-based intermediation is actually in the shadow—much of it remains within the scope of regulated bank entities.

The last two articles focus on the idea of bank adaptation by looking at the organizational transformation of banks and the expanding role of BHCs. In “A Structural View of U.S. Bank Holding Companies,” Dafna Avraham, Patricia Selvaggi, and James Vickery describe the organizational structure and history of U.S. bank holding companies. Using a detailed data set compiled from relatively obscure regulatory sources, the study shows that while the number of nonbank subsidiaries has increased significantly since the 1990s, most of the structural expansion beyond the traditional boundaries of commercial banking has been limited to the largest organizations. This development signifies the presence of important economies of scale associated with this form of adaptation.

Adam Copeland concludes the volume with his analysis of “Evolution and Heterogeneity among Larger Bank Holding Companies: 1994 to 2010.” Copeland tracks the changing activities of bank holding companies by analyzing data on BHC income streams. He shows that fee-based income has grown in importance across the largest BHCs, and that nonbank subsidiaries have become a more prominent source of income for the larger organization.

You can find the articles at www.newyorkfed.org/research/epr/2012.html; the blog posts are available at libertystreeteconomics.newyorkfed.org/2012/07/index.html.
New Report Recommends Ways to Strengthen Puerto Rico’s Competitiveness

While Puerto Rico—part of the Federal Reserve’s Second District—has shown signs of economic expansion, growth is not occurring broadly enough. Many families, communities, and businesses there continue to face difficult conditions. As part of its commitment to promote community development in its District, the New York Fed is working to help put the Island on a path of robust, sustainable, and inclusive growth. A recent publication, “Report on the Competitiveness of Puerto Rico’s Economy,” reflects that commitment. The report was prepared at the request of business and community leaders in Puerto Rico to investigate impediments to economic growth and evaluate ways to promote competitiveness and productivity. It identifies important challenges facing Puerto Rico, such as how to improve labor market opportunities, develop human capital, and reduce the costs of doing business. The report also makes policy recommendations on ways to capitalize on the Island’s considerable strengths to restore growth—for example, by reducing barriers to job creation and labor force participation as well as fostering partnerships between industry and higher education.

The report is available at www.newyorkfed.org/regional/puertorico/index.html.
Study Proposes a Novel Capital Framework for Banks

Regulators could strengthen bank capital structures by implementing a two-part capital requirement designed to counter banks’ incentives to take on excessive risk and leverage, according to a recent article in Current Issues in Economics and Finance (volume 18, no. 4, “Robust Capital Regulation”).

As authors Viral Acharya, Hamid Mehran, Til Schuermann, and Anjan Thakor explain, the new capital framework would consist of a core capital requirement (much like existing requirements) and a special capital account that banks would create from earnings retained by limiting dividend payouts to shareholders. The earnings, invested in Treasury securities or their equivalents, would belong to the bank’s shareholders as long as the bank was solvent, but would pass to regulators—rather than the bank’s creditors—if the bank failed. In the latter event, regulators could use the securities to assist components of the financial sector hurt by the failing institution, or even to support affected parts of the household and real sectors. Regulators could also save the capital as a buffer against a future crisis.

The framework would discourage risk taking in two ways. First, it would require banks to increase the equity in their capital structure. Second, it would motivate creditors to monitor bank management more closely, since they would be uninsured against losses in the event of a bank collapse.

The authors suggest that their proposal would yield a number of benefits. It could bring more capital into banking and thus contribute to the safety and soundness of the financial sector without requiring banks to issue new equity. It could also boost bank incentives to reduce the probability of a crisis and creditors’ incentives to impose discipline on banks. Finally, the proposal relies on well-known instruments, such as equity and retained earnings, rather than new instruments whose pricing characteristics and market impact might be hard to gauge.
Spotlighting Our Work on the Web

In June, we introduced a web series, Research Topics in Focus, to brief readers on work of academic and public-policy interest. The first article pulled together publications by our economists on “The Dynamics of Housing Prices,” including staff reports and Liberty Street Economics blog posts by Andrew Haughwout, Donghoon Lee, Joseph Tracy, Wilbert van der Klaauw, Marco Cipriani, Andrea Ferrero, and Richard Peach.

The Research Topics series grew out of an interview with Haughwout, in which he reviewed the scope of New York Fed research on housing and asset-price bubbles and highlighted insights that were made possible with a relatively new data source, the FRBNY Consumer Credit Panel (CCP). The interview featured a key graphic from a recent study in our Staff Reports series, “Real Estate Investors, the Leverage Cycle, and the Housing Market Crisis,” revealing that estimates of the share of speculative investors active in the housing bubble made using CCP data were sharply higher than the recognized share (see chart). Haughwout commented on the significance of this finding as well as on ways to advance the research.

The Research Topics series will continue to offer insights into topics of interest to academics and policy professionals. Visit www.newyorkfed.org/research/research_topics_archive.html.

Investor Share of Nonprime Mortgage Borrowing

Our research indicates that the share of speculative buyers active in the run-up in housing prices is much larger than previously understood.

Source: FRBNY Consumer Credit Panel, 1 percent sample.

The Research Topics series will continue to offer insights into topics of interest to academics and policy professionals. Visit www.newyorkfed.org/research/research_topics_archive.html.

Publications and Other Media

- EPR Executive Summaries—online versions of selected Economic Policy Review articles, in abridged form.
- 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.
- Liberty Street Economics—a blog that enables our economists to engage with the public on important economic issues quickly and frequently.
Top Blog Posts of Q2

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

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

- “Grading Student Loans,” by Meta Brown, Andrew Haughwout, Donghoon Lee, Maricar Mabutas, and Wilbert van der Klaauw, March 5 – 11,211 downloads
  
  The authors examine the overall student loan debt market as of third-quarter 2011, giving particular attention to changes from the second to the third quarter and highlighting new findings by age group.

- “Historical Echoes: We Are the 99 Percent, 1765 Edition,” by Kara Masciangelo and Jamie McAndrews, April 13 – 6,705 downloads
  
  Masciangelo and McAndrews look back to the 1760s, when an economic downturn caused a great deal of hardship for most of the residents of New York, and conspicuous shows of extreme wealth by the few were met with disapproval.

- “How Low Will the Unemployment Rate Go?” by Jonathan McCarthy, Simon Potter, and Ayşegül Şahin, April 2 – 2,644 downloads
  
  In the concluding post of the blog’s labor market series, the authors run simulations based on the movements in the outflow and inflow rates of the previous three economic expansions to determine the effect on the unemployment rate if the current expansion lasts as long as any of the previous ones.

- “What’s Driving Up Money Growth?” by Jamie McAndrews, Donald Morgan, and James Vickery, May 23 – 2,618 downloads
  
  The authors show that they can attribute most, but not all, of the recent high money growth rate of monetary aggregate M1 to low current interest rates as well as the growth in bank reserves that has resulted from the Fed’s asset purchase programs.

- “The Great Moderation, Forecast Uncertainty, and the Great Recession,” by Ging Cee Ng and Andrea Tambalotti, May 14 – 2,533 downloads
  
  Ng and Tambalotti attempt to quantify the role the Great Moderation played in making the Great Recession appear nearly impossible in the eyes of macroeconomists.

The blog posts are available at: http://libertystreeteconomics.newyorkfed.org/.

Follow Us on Twitter!

The Research Group has 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 the Group’s work.

Follow us at @NYFedResearch.
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 2012:

- “Shadow Banking,” by Zoltan Pozsar, Tobias Adrian, Adam Ashcraft, and Hayley Boesky (Staff Reports, no. 458, July 2010) – 7,293 downloads
- “Understanding the Securitization of Subprime Mortgage Credit,” by Adam Ashcraft and Til Schuermann (Staff Reports, no. 318, March 2008) – 4,178 downloads
- “Shadow Banking Regulation,” by Tobias Adrian and Adam Ashcraft (Staff Reports, no. 559, April 2012) – 3,731 downloads

SSRN website, second-quarter 2012:

- “Corporate Governance and Banks: What Have We Learned from the Financial Crisis?” by Hamid Mehran, Alan Morrison, and Joel Shapiro (Staff Reports, no. 502, June 2011) – 194 downloads

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

Recently Published


Papers Presented


“Liquidity Management of U.S. Global Banks,” Linda Goldberg. Graduate Center of the City University of New York seminar, New York City, May 1. With Nicola Cetorelli. Also presented at the Workshop on Financial Globalization, Financial Crises, and the (Re-) Regulation of Banking, University of Zurich, Zurich, Switzerland, May 15.


“Fundamentals: Does the Cause of Banking Panics Matter for Prudential Policy?” Todd Keister.
2012 Midwest Macroeconomics Meetings, University of Notre Dame, South Bend, Indiana, May 12. With Vijay Narasiman.


New Titles in the *Staff Reports* Series

**Macroeconomics and Growth**

*No. 560, May 2012*

**How “Unconventional” Are Large-Scale Asset Purchases? The Impact of Monetary Policy on Asset Prices**

Carlo Rosa

This paper examines the impact of large-scale asset purchases (LSAPs) on U.S. asset prices using an event study with intraday data. Estimation results show that the LSAP news has economically large and highly significant effects on asset prices, even after controlling for the surprise component of the Fed’s conventional target rate decision and communication about its future path of policy. The study documents that the cumulative financial market impact of the Fed’s LSAP program is equivalent to an unanticipated cut in the federal funds target rate that ranges between zero (for three-month yields) and 197 basis points (for ten-year yields), with the response of stock prices and foreign exchanges lying within this interval. These point estimates are, however, surrounded by considerable uncertainty. By looking at the cross-asset reactions, Rosa concludes that, for most U.S. asset prices, the effects of asset purchases are not statistically different from an unanticipated cut in the fed funds target rate.

**Microeconomics**

*No. 558, April 2012*

**How Deeply Held Are Anti-American Attitudes among Pakistani Youth? Evidence Using Experimental Variation in Information**

Adeline Delavande and Basit Zafar

This paper investigates how attitudes toward the United States are affected by the provision of information. Delavande and Zafar use an experimentally generated panel of attitudes, obtained by providing urban Pakistanis with fact-based statements describing the United States in either a positive or negative light. Anti-American sentiment is high and heterogeneous in their sample at the baseline. The authors find that revised attitudes are, on average, significantly different from baseline attitudes, indicating that providing information had a meaningful effect on U.S. favorability. Observed revisions are a consequence of both the salience of already known information and information acquisition that leads to a convergence in attitudes across respondents with different priors. This analysis provides evidence that 1) public opinions are not purely a cultural phenomenon and are malleable, and 2) the tendency of respondents to ignore information not aligned with their priors can be overcome. These findings make the case for dissemination of accurate information about various aspects of the Pakistan-U.S. relationship in order to improve opinion about the United States.

*No. 562, June 2012*

**Payment Changes and Default Risk: The Impact of Refinancing on Expected Credit Losses**

Joseph Tracy and Joshua Wright

This paper analyzes the relationship between changes in borrowers’ monthly mortgage payments and future credit performance. This relationship is important for the design of an internal refinance program such as the Home Affordable Refinance Program (HARP). Tracy and Wright use a competing risk model to estimate the sensitivity of default risk to downward adjustments of borrowers’ monthly mortgage payments for a large sample of prime adjustable-rate mortgages. Applying a 26 percent average monthly payment reduction that they estimate would result from refinancing under HARP, the authors find that the cumulative five-year default rate on prime conforming adjustable-rate mortgages with loan-to-value ratios above 80 percent declines by 3.8 percentage points. If they assume an average loss given a default of 35.2 percent, this lower default risk implies reduced credit losses of 134 basis points per dollar of balance for mortgages that refinance under HARP.
Banking and Finance

No. 559, April 2012

Shadow Banking Regulation
Tobias Adrian and Adam B. Ashcraft

Shadow banks conduct credit intermediation without direct, explicit access to public sources of liquidity and credit guarantees. The banks contributed to the credit boom in the early 2000s and collapsed during the financial crisis of 2007-09. Adrian and Ashcraft review the rapidly growing literature on shadow banking and provide a conceptual framework for its regulation. Since the financial crisis, regulatory reform efforts have aimed at strengthening the stability of the shadow banking system. They review the implications of these reform efforts for shadow funding sources, including asset-backed commercial paper, tri-party repurchase agreements, money market mutual funds, and securitization. Despite significant efforts by lawmakers, regulators, and accountants, the authors find that progress in achieving a more stable shadow banking system has been uneven.

No. 561, May 2012

Estimating a Structural Model of Herd Behavior in Financial Markets
Marco Cipriani and Antonio Guarino

Cipriani and Guarino develop a new methodology for estimating the importance of herd behavior in financial markets. Specifically, they build a structural model of informational herding that can be estimated with financial transaction data. In the model, rational herding arises because of information-event uncertainty. The authors estimate the model using 1995 stock market data for Ashland Inc., a company listed on the New York Stock Exchange. Herding occurs often and is particularly pervasive on certain days. On an information-event day, on average, 2 percent (4 percent) of informed traders herd-buy (-sell). On 7 percent (11 percent) of information-event days, the proportion of informed traders who herd-buy (-sell) is greater than 10 percent. Herding causes important informational inefficiencies, amounting, on average, to 4 percent of an asset's expected value.
Research and Statistics Group Publications and Blog Posts

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

ECONOMIC POLICY REVIEW, FORTHCOMING
The Federal Reserve’s Term Asset-Backed Securities Loan Facility
Adam Ashcraft, Allan Malz, and Zoltan Pozsar

CURRENT ISSUES IN ECONOMICS AND FINANCE, VOL. 18
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The Evolution of Treasury Cash Management during the Financial Crisis
Paul J. Santoro

No. 4
Robust Capital Regulation
Viral Acharya, Hamid Mehran, Til Schuermann, and Anjan Thakor

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LIBERTY STREET ECONOMICS BLOG
The blog posts are available at http://libertystreeteconomics.newyorkfed.org/.

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Joshua Abel, Robert Rich, and Joseph Tracy

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Historical Echoes: we Are the 99 Percent, 1765 Edition
Kara Masciangelo and Jamie McAndrews

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The Federal Reserve in the 21st Century 2012 Symposium
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Forecasting the Great Recession: DSGE vs. Blue Chip
Marco Del Negro, Daniel Herbst, and Frank Schorfheide

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The Impact of Trade Reporting on the Interest Rate Derivatives Market
Michael Fleming, John Jackson, Ada Li, Asani Sarkar, and Patricia Zobel

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Euro Area Spending Imbalances and the Sovereign Debt Crisis
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