Publications and Other Research

2013

Contents

Federal Reserve Bank of New York
Research and Statistics Group
www.newyorkfed.org/research

February 2014

Follow us on Twitter: @NYFedResearch

Introduction

The Federal Reserve Bank of New York's Research and Statistics Group produces a wide variety of publications, blog posts, and discussion papers of interest to business and banking professionals, policymakers, academics, and the general public.

This catalogue lists 2013 issues and blog posts in our research series:

- *Economic Policy Review*
  a policy-oriented journal focusing on economic and financial market issues
- *Current Issues in Economics and Finance*
  concise studies of topical economic and financial issues
- *Second District Highlights*
  a regional supplement to *Current Issues*
- *Liberty Street Economics*
  a blog that enables our economists to engage with the public on diverse issues quickly and frequently
- *Staff Reports*
  technical papers intended for publication in leading economic and finance journals.

We also offer other series of interest to readers:

- *EPR Executive Summaries*
  abridged versions of selected *Economic Policy Review* articles
- *Research Update*
  a quarterly newsletter providing summaries of studies and listings of recent publications in our research series
- *The Research Group of the Federal Reserve Bank of New York*
  A guide for economists interested in joining the Group, as well as an overview of our staff, structure, and functions.

Members of the Group also publish in many economic and finance journals, conference volumes, and scholarly books. A list of these publications begins on page 39.

Economic Policy Review

The *Economic Policy Review* is a policy-oriented research journal that focuses on macroeconomic, banking, and financial market topics.

EPR articles are available at **www.newyorkfed.org/research/epr**.

Volume 19

No. 1, May 2013

TBA Trading and Liquidity in the Agency MBS Market*

James Vickery and Joshua Wright

Mortgage-backed securities in the United States are generally traded on a "to-be-announced," or TBA, basis. The key feature of a TBA trade is that the identity of the securities to be delivered to the buyer is not specified exactly at the time of the trade, facilitating a liquid forward market. This article describes the main features of the TBA market. It also presents evidence on the liquidity of this market during the financial crisis period. Using variation in TBA eligibility rules, the authors' estimates suggest that the liquidity benefits associated with the TBA market are of the order of 10 to 25 basis points during 2009 and 2010, and magnified during periods of market stress. The estimates further suggest that the presence of a government credit guarantee alone does not appear to be sufficient explanation for the liquidity of agency MBS.
EPR Executive Summary available

Unintended Consequences of School Accountability Policies: Evidence from Florida and Implications for New York

Rajashri Chakrabarti and Noah Schwartz

Over the past two decades, state and federal education policies have tried to hold schools more accountable for educating students by tying rewards and sanctions to test scores and other measurable outcomes. A common criticism of these policies is that they may induce schools to "game the system" along with—or instead of—making genuine educational improvements. One such strategic response may be to classify low-performing students into categories that are excluded from grade computation in an effort to artificially inflate scores. This article analyzes school responses to an influential accountability-tied voucher program in Florida. The authors find evidence of increased classification into "excluded" categories in failing schools following the program's inception. Their findings have important implications for New York City's Progress Reports program and New York's implementation of the federal No Child Left Behind Act. While these policies were modeled after the Florida program, they contain important design differences that are likely to discourage this type of gaming, although they may encourage other strategic classifications.
EPR Executive Summary available

Trading Activity and Price Transparency in the Inflation Swap Market

Michael J. Fleming and John R. Sporn

The issues of liquidity and price transparency in derivatives markets have taken on greater import given regulatory efforts under way to improve their transparency. To date, the lack of transaction data has impeded the understanding of how the inflation swap and other derivatives markets operate. This article broadens that understanding by using a novel transaction data set to examine trading activity

*A top download in 2013.

and price transparency in the quickly growing U.S. inflation swap market. The authors find that the market appears reasonably liquid and transparent, despite its over-the-counter nature and modest level of trading activity. Specifically, they find that transaction prices are typically quite close to widely available end-of-day quoted prices and that realized bid-ask spreads are modest, even though the reasonably comprehensive data set from 2010 contains just over two trades per day on average. The authors also identify concentrations of activity in certain tenors (ten years) and trade sizes ($25 million) and among certain market participants, as well as various attributes that help explain trade sizes and price deviations. Their study can serve as a resource for policymakers considering public reporting and other regulatory initiatives and for market participants and observers more generally interested in the workings of the inflation swap market.
EPR Executive Summary available

No. 2, December 2013

Shadow Banking

Zoltan Pozsar, Tobias Adrian, Adam Ashcraft, and Hayley Boesky

The rapid growth of the market-based financial system since the mid-1980s has changed the nature of financial intermediation. Within the system, "shadow banks" have served a critical role, especially in the run-up to the recent financial crisis. Shadow banks are financial intermediaries that conduct maturity, credit, and liquidity transformation without explicit access to central bank liquidity or public sector credit guarantees. This article documents the institutional features of shadow banks, discusses the banks' economic roles, and analyzes their relation to the traditional banking system. The authors argue that an understanding of the "plumbing" of the shadow banking system is an important underpinning for any study of financial system interlinkages. They observe that while many current and future reform efforts are focused on remediating the excesses of the recent credit bubble, increased capital and liquidity standards for depository institutions and insurance companies are likely to heighten the returns to shadow banking activity. Thus, shadow banking is expected to be a significant part of the financial system, although very likely in a different form, for the foreseeable future.
EPR Executive Summary available

The Rising Gap between Primary and Secondary Mortgage Rates

Andreas Fuster, Laurie Goodman, David Lucca, Laurel Madar, Linsey Molloy, and Paul Willen

While mortgage rates reached historic lows during 2012, the spread between primary and secondary rates rose to very high levels. This trend reflected a number of factors that potentially affected mortgage originator costs and profits and restrained the pass-through from lower secondary rates to borrowers' funding costs. This article describes the mortgage origination and securitization process and the way in which originator profits are determined. The authors calculate a series of originator profits and unmeasured costs (OPUCs) for the period 1994 to 2012, and show that these OPUCs increased significantly between 2008 and 2012. They also evaluate the extent to which some commonly cited factors, such as changes in loan putback risk, mortgage servicing rights values, and pipeline hedging costs contributed to the rise in OPUCs. Although some costs of mortgage origination may have risen in recent years, a large component of the rise in OPUCs remains unexplained, pointing to increased profitability of originations. The authors conclude by discussing possible drivers of the rise in profitability, such as capacity constraints and originators' pricing power resulting from borrowers' switching costs.

Precarious Slopes? The Great Recession, Federal Stimulus, and New Jersey Schools

Rajashri Chakrabarti and Sarah Sutherland

While only a sparse literature investigates the impact of the Great Recession on various sectors of the economy, there is virtually no research on the effect on schools. This article starts to fill the void. The authors make use of rich panel data and a trend-shift analysis to study how New Jersey school finances were affected by the onset of the recession and the federal stimulus that followed. Their results show strong evidence of downward shifts in total school funding and expenditures, relative to trend, following the recession. Support of more than $2 billion in American Recovery and Reinvestment Act funding seems to provide a cushion in 2010: While funding and expenditures still fall relative to pre-recession levels, they decline less than in 2009. The infusion of federal funding coincides with significant cuts in state and local support, and the authors mark sharp changes in New Jersey's relative reliance on the three sources of aid. An examination of the compositional shift in expenditures suggests that the stimulus may have prevented declines in categories linked most closely to instruction. Still, budgetary stress seems to have led to sizable layoffs of nontenured teachers, resulting in an increase in median teacher salary and median experience level. Furthermore, high-poverty and urban school districts were found to sustain larger resource declines than more affluent and less populated districts did in the post-recession era. The study's findings offer valuable insight into school finances during recessions and can serve as a guide to aid future policy decisions.
EPR Executive Summary available

The Financial Market Effect of FOMC Minutes

Carlo Rosa

The influence of the Federal Reserve's unanticipated target rate decisions on U.S. asset prices has been the subject of numerous studies. More recently, researchers have looked at the asset price response to statements issued by the Federal Open Market Committee (FOMC). Yet despite a vast and growing body of evidence on the financial market effect of monetary news released on FOMC meeting days, little is known about the real-time response of U.S. asset prices to the information contained in central bank minutes. This article fills the gap by using a novel, high-frequency data set to examine the effect of the FOMC minutes release on U.S. asset prices—Treasury rates, stock prices, and U.S. dollar exchange rates. The author shows that the release significantly affects the volatility of U.S. asset prices and their trading volume. The magnitude of the effects is economically and statistically significant, and it is similar in magnitude to the Institute for Supply Management manufacturing index release, although smaller than that of the FOMC statement and nonfarm payrolls releases. The asset price response to the minutes, however, has declined in recent years, suggesting that the FOMC has become more transparent by releasing information in a timelier manner.

EPR Executive Summaries

Visit our website for concise summaries of *Economic Policy Review* articles.

Our series *EPR Executive Summaries* condenses many of the articles published in the *Review*. Readers will find timely, policy-oriented write-ups that are easy to absorb.

The summaries make the technical research of New York Fed economists more accessible to policy-makers, educators, business leaders, and others. The series is designed to foster a fuller understanding of our research among those who are in a position to put our ideas and findings to work.

Summaries are available for many articles published since 2002.

www.newyorkfed.org/research/epr/executive_summary.html

Current Issues in Economics and Finance

Current Issues in Economics and Finance offers concise studies of topical economic and financial issues.

Second District Highlights—a regional supplement to *Current Issues*—covers important financial and economic developments in the Federal Reserve System's Second District.

Both series are available at **www.newyorkfed.org/research/current_issues**.

Volume 19

No. 1, 2013

Do Industrialized Countries Hold the Right Foreign Exchange Reserves?

Linda Goldberg, Cindy E. Hull, and Sarah Stein

That central banks should hold foreign currency reserves is a key tenet of the post–Bretton Woods international financial order. But recent growth in the reserve balances of industrialized countries raises questions about what level and composition of reserves are "right" for these countries. A look at the rationale for reserves and the reserve practices of select countries suggests that large balances may not be needed to maintain an effective exchange rate policy over the medium and long term. Moreover, countries may incur an opportunity cost by holding funds in currency and asset portfolios that, while highly liquid, produce relatively low rates of return.

No. 2, 2013

The Financial Crisis at the Kitchen Table: Trends in Household Debt and Credit*

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

Since the onset of the financial crisis, households have reduced their outstanding debt by about $1.3 trillion. While part of this reduction stemmed from a historic increase in consumer defaults and lender charge-offs, particularly on mortgage debt, other factors were also at play. An analysis of the New York Fed's Consumer Credit Panel—a rich new data set on individual credit accounts—reveals that households actively reduced their obligations during this period by paying down their current debts and reducing new borrowing. These household choices, along with banks' stricter lending standards, helped drive this deleveraging process.

No. 3, 2013

Securities Loans Collateralized by Cash: Reinvestment Risk, Run Risk, and Incentive Issues*

Frank Keane

Securities loans collateralized by cash are by far the most popular form of securities-lending transaction. But when the cash collateral associated with these transactions is actively reinvested by a lender's agent, potential risks emerge. This study argues that the standard compensation scheme for securities-lending agents, which typically provides for agents to share in gains but not losses, creates incentives for them to take excessive risk. It also highlights the need for greater scrutiny and understanding of cash reinvestment practices—especially in light of the AIG experience, which showed that risks related to cash reinvestment, by even a single participant, could have destabilizing effects.

*A top download in 2013.

No. 4, 2013

New Jersey's Abbott Districts: Education Finances during the Great Recession

Rajashri Chakrabarti and Sarah Sutherland

Funding for New Jersey's low-income school districts tumbled in the most recent recession, and the Abbott districts—a group of poor urban districts that for almost two decades received special appropriations from the state—were hit especially hard. A comparison with the state's other low-income districts reveals that the Abbott districts faced markedly sharper declines in aid, relative to trend. Consequently, while all of the low-income districts responded to the drop in state aid by scaling back spending on support services and utilities, only the Abbott group also made significant cuts in instructional spending. Moreover, the fiscal strains of recession appear to have led to layoffs of untenured teachers in the Abbott districts, but not in the state's other low-income districts.

Second District Highlights

No. 5, 2013

Paying Paul and Robbing No One: An Eminent Domain Solution for Underwater Mortgage Debt

Robert Hockett

In the view of many analysts, the best way to assist "underwater" homeowners—those who owe more on their mortgages than their houses are worth—is to reduce the principal on their home loans. Yet in the case of privately securitized mortgages, such write-downs are almost impossible to carry out, since loan modifications on the scale necessitated by the housing market crash would require collective action by a multitude of geographically dispersed security holders. The solution, this study suggests, is for state and municipal governments to use their eminent domain powers to buy up and restructure underwater mortgages, thereby sidestepping the need to coordinate action across large numbers of security holders.

No. 6, 2013

Understanding the New York Fed's Survey of Primary Dealers

Ellen Correia Golay, Steven Friedman, and Michael McMorrow

The New York Fed's Survey of Primary Dealers plays a key role in the Federal Reserve's understanding of market expectations for monetary policy and the economy, providing timely and comprehensive dealer insight into a range of topics. In recent years, the survey has evolved to reflect the changing macroeconomic environment brought about by the financial crisis and by the Fed's move into new policy tools aimed at adjusting the size and composition of its balance sheet and giving more explicit forward guidance on the path of short-term interest rates. This study offers an in-depth look at the survey and discusses its structure and evolution.

No. 7, 2013

The Parts Are More Than the Whole: Separating Goods and Services to Predict Core Inflation

Richard Peach, Robert Rich, and M. Henry Linder

Economists have not been altogether successful in their efforts to forecast "core" inflation—an inflation measure that typically excludes volatile food and energy prices. One possible explanation is that the models used to make these forecasts fail to distinguish the forces influencing price changes in core services from those affecting price changes in core goods. While core services inflation depends on long-run inflation expectations and the degree of slack in the labor market, core goods inflation depends on short-run inflation expectations and import prices. By using a composite model that combines these different sets of explanatory variables, the authors of this study are able to improve upon the inflation forecasts produced by a standard model.

Liberty Street Economics

Our *Liberty Street Economics* blog, launched in 2011, provides a way for our economists to engage with the public on diverse issues quickly and frequently. The blog typically publishes new economic posts on Mondays and Wednesdays. It publishes reader comments and author responses in the hope of generating dialogue with the public.

Visit the blog at **libertystreeteconomics.newyorkfed.org/**.

Economic Posts in 2013

January 2
A "Reference Price Auction" to Buy or Sell Different Assets Simultaneously
Olivier Armantier

January 7
Making a Statement: How Did Professional Forecasters React to the August 2011 FOMC Statement?
Richard Crump, Stefano Eusepi, and Emanuel Moench

January 9
Ring-Fencing and "Financial Protectionism" in International Banking
Linda Goldberg and Arun Gupta

January 14
China's Impact on U.S. Inflation
Mary Amiti and Mark Choi

January 16
How Severe Was the Credit Cycle in the New York–Northern New Jersey Region?
Jaison R. Abel and Richard Deitz

January 30
Just Released: NY Fed's Erica Groshen Becomes Commissioner of Labor Statistics
Jamie McAndrews

February 4
Did Securitization Lead to Riskier Corporate Lending?
João Santos

February 6
How Did Education Financing in New Jersey's Abbott Districts Fare during the Great Recession?
Rajashri Chakrabarti and Sarah Sutherland

February 11
The Exchange Rate Disconnect
Mary Amiti, Oleg Itskhoki, and Jozef Konings

February 13
Underwater and Drowning? Some Facts about Mortgages that Could Be Targeted by Eminent Domain
Andreas Fuster, Caitlin Gorback, and Paul Willen

February 20
Primary Dealers' Waning Role in Treasury Auctions
Michael Fleming and Sean Myers

February 25
The Macroeconomic Effects of Forward Guidance
Marco Del Negro, Marc Giannoni, and Christina Patterson

February 27
State Unemployment and the Allocation of Federal Stimulus Spending
James Orr and John Sporn

February 28
Just Released: Press Briefing on Household Debt and Credit
Meta Brown, Andrew Haughwout, Donghoon Lee, Joelle Scally, and Wilbert van der Klaauw

March 4
How the Nation Resolved Its First Debt Ceiling Crisis
Kenneth Garbade

March 6
Pick Your Poison: How Money Market Funds Reacted to Financial Stress in 2011
Neel Krishnan, Antoine Martin, and Asani Sarkar

March 11
The Region's Job Rebound from Superstorm Sandy
Jaison R. Abel, Jason Bram, Richard Deitz, and James Orr

March 25
A New Approach for Identifying Demand and Supply Shocks in the Oil Market
Jan Groen, Kevin McNeil, and Menno Middeldorp

March 26
First Impressions Can Be Misleading: Revisions to House Price Changes
Joseph Tracy, Richard Peach, and Joshua Abel

March 27
Is Job Polarization Holding Back the Labor Market?
Stefania Albanesi, Victoria Gregory, Christina Patterson, and Ayşegül Şahin

April 1
How Liquid Is the Inflation Swap Market?
Michael Fleming and John Sporn

April 3
I Want My Money Now: The Highs and Lows of Payments in Real Time
Parinitha Sastry and David Skeie

Just Released: February Report Points to Moderate Regional Economic Growth
Jason Bram and James Orr

April 8
Does Import Competition Improve the Quality of Domestic Goods?
Mary Amiti and Amit Khandelwal

April 10
Foreclosures Loom Large in the Region
Jaison R. Abel and Richard Deitz

April 15
Do Treasury Term Premia Rise around Monetary Tightenings?
Tobias Adrian, Richard Crump, and Emanuel Moench

Just Released: April Empire State Manufacturing Survey
Jason Bram and Richard Deitz

April 17
Young Student Loan Borrowers Retreat from Housing and Auto Markets
Meta Brown and Sydnee Caldwell

April 22
The Effect of Superstorm Sandy on the Macroeconomy
M. Henry Linder, Richard W. Peach, and Sarah K. Stein

Japanese Inflation Expectations, Revisited
Benjamin R. Mandel and Geoffrey Barnes

May 6
Uncertainty, Liquidity Hoarding, and Financial Crises
Tanju Yorulmazer

May 8
Are Stocks Cheap? A Review of the Evidence
Fernando Duarte and Carlo Rosa

May 13
Capital Controls, Currency Wars, and International Cooperation
Bianca De Paoli and Anna Lipińska

May 14
Just Released: The Geography of Student Debt
Andrew Haughwout, Donghoon Lee, Wilbert van der Klaauw, and Joelle Scally

May 15
My Two (Per)cents: How Are American Workers Dealing with the Payroll Tax Hike?
Basit Zafar, Max Livingston, and Wilbert van der Klaauw

May 20
Do Big Cities Help College Graduates Find Better Jobs?
Jaison R. Abel and Richard Deitz

May 22
Foreign Borrowing in the Euro Area Periphery: The End Is Near
Matthew Higgins and Thomas Klitgaard

May 23
Just Released: The New York Fed Staff Forecast—May 2013
Jonathan McCarthy and Richard Peach

May 29
Piggy Banks
Donald P. Morgan and Katherine Samolyk

June 3
Data Link Helps Shed Light on Banks and Public Equity
Anna Kovner, Phoebe White, and Lily Zhou

June 5
Drilling Down into Core Inflation: Goods versus Services
M. Henry Linder, Richard Peach, and Robert Rich

Just Released: New York's Latest Beige Book Report Points to Sustained Growth
Jaison R. Abel and Jason Bram

June 24
Crisis Chronicles: 300 Years of Financial Crises (1620–1920)
James Narron and David Skeie

June 26
States Are Recovering Lost Jobs at Surprisingly Similar Rates
Jason Bram and James Orr

June 27
Just Released: Are Recent College Graduates Finding Good Jobs?
Jaison R. Abel and Richard Deitz

July 8
Do Bank Shocks Affect Aggregate Investment?
Mary Amiti and David Weinstein

July 10
Common Stock Repurchases during the Financial Crisis
Beverly Hirtle

July 15

Improving Access to Refinancing Opportunities for Underwater Mortgages

Joshua Abel and Joseph Tracy

July 17

Magnifying the Risk of Fire Sales in the Tri-Party Repo Market

Leyla Alkan, Vic Chakrian, Adam Copeland, Isaac Davis, and Antoine Martin

July 22

Distressed Residential Real Estate: Dimensions, Impacts, and Remedies

Diego Aragon, Richard Peach, and Joseph Tracy

Just Released: Mapping Changes in School Finances

Rajashri Chakrabarti and Max Livingston

August 5

The Recent Bond Market Selloff in Historical Perspective

Tobias Adrian and Michael Fleming

August 7

Could Superstorm Sandy Stimulate the Region's Economy?

Jaison R. Abel, Jason Bram, Richard Deitz, James Orr, Kaivan K. Sattar, and Eric Stern

---

A Special Series on the System Open Market Account

August 12

The SOMA Portfolio through Time

Meryam Bukhari, Alyssa Cambron, Michael Fleming, Jonathan McCarthy, and Julie Remache

August 13

A History of SOMA Income

Meryam Bukhari, Alyssa Cambron, Marco Del Negro, and Julie Remache

August 14

What If? A Counterfactual SOMA Portfolio

Michael Fleming, Deborah Leonard, Grant Long, and Julie Remache

August 15

More Than Meets the Eye: Some Fiscal Implications of Monetary Policy

Marco Del Negro, Jamie McAndrews, and Julie Remache

August 16

Transparency and Sources of Information on the Federal Reserve's Operations, Income, and Balance Sheet

Michael Fleming and Deborah Leonard

August 14

Just Released: Who Is Driving the Auto Lending Recovery?

Andrew Haughwout, Donghoon Lee, Joelle Scally, and Wilbert van der Klaauw

August 19

Are Higher Haircuts Better? A Paradox

Brian Begalle, Adam Copeland, Antoine Martin, Jamie McAndrews, and Susan McLaughlin

August 21

Creating a History of U.S. Inflation Expectations

Jan Groen and Menno Middeldorp

August 26

Information on Dealer Activity in Specific Treasury Issues Now Available

Michael Fleming

August 28

U.S. Leveraged Buyouts: The Importance of Financial Visibility

Hamid Mehran and Stavros Peristiani

Introduction
Economic Policy Review
Current Issues
Liberty Street Economics
Staff Reports
Outside Journals

September 4

Consumer Confidence: A Useful Indicator of . . . the Labor Market?

Jason Bram, Robert Rich, and Joshua Abel

September 6

Crisis Chronicles: Tulip Mania, 1633-37

James Narron and David Skeie

September 9

Preparing for Takeoff? Professional Forecasters and the June 2013 FOMC Meeting

Richard Crump, Stefano Eusepi, and Emanuel Moench

September 23

Waiting for Recovery: New York Schools and the Aftermath of the Great Recession

Rajashri Chakrabarti and Max Livingston

September 25

Catching Up or Falling Behind? New Jersey Schools in the Aftermath of the Great Recession

Rajashri Chakrabarti and Max Livingston

September 30

Crisis Chronicles: The "Not So Great" Re-Coinage of 1696

James Narron and David Skeie

October 2

Capital Flight inside the Euro Area: Cooling Off a Fire Sale

Matthew Higgins and Thomas Klitgaard

October 7

What's News?

Linda Goldberg

October 9

Twenty-Eight Money Market Funds That Could Have Broken the Buck: New Data on Losses during the 2008 Crisis

Marco Cipriani, Michael Holscher, Antoine Martin, and Patrick McCabe

October 16

A Look at Bank Loan Performance

Tara Sullivan and James Vickery

Dealer Balance Sheet Capacity and Market Liquidity during the 2013 Selloff in Fixed-Income Markets

Tobias Adrian, Michael Fleming, Jonathan Goldberg, Morgan Lewis, Fabio Natalucci, and Jason Wu

October 21

Long Island's Economy Back on Track after Sandy

Jason Bram and Rachel Keller

November 4

Japan's Missing Wall of Money

Thomas Klitgaard

November 6

(Unmet) Credit Demand of American Households

Basit Zafar, Max Livingston, and Wilbert van der Klaauw

November 8

Crisis Chronicles: The South Sea Bubble of 1720—Repackaging Debt and the Current Reach for Yield

James Narron and David Skeie

November 13

On the Design of Monetary and Macroprudential Policies

Bianca De Paoli

November 14

Just Released: Deleveraging Decelerates and Household Balances Increase

Andrew Haughwout, Donghoon Lee, Joelle Scally, and Wilbert van der Klaauw

November 15

A Long Road to Economic Recovery for the U.S. Virgin Islands

Jason Bram and Jonathan Hastings

Just Released: November Empire State Manufacturing Survey Shows a Decline in Activity

Jason Bram and Richard Deitz

November 18

Yen and Yang: The Response of the Nikkei to the Yen

Andrew Howland and Benjamin Mandel

November 20

Intermediary Leverage Cycles and Financial Stability

Tobias Adrian and Nina Boyarchenko

Just Released: Lifting the Veil—For-Profits in the Higher Education Landscape

Rajashri Chakrabarti and John Grigsby

November 22

At the N.Y. Fed: Managing the Risk of Catastrophes—Protecting Critical Infrastructure in Urban Areas

James Orr, Rae Rosen, Max Livingston, Kaivan K. Sattar, and Eric Stern

November 25

A Way with Words: The Economics of the Fed's Press Conference

Fernando Duarte and Carlo Rosa

November 27

Has the Fed Stabilized the Price Level?

Marc P. Giannoni and Hannah Herman

December 2

Who's Lending in the Fed Funds Market?

Gara Afonso, Alex Entz, and Eric LeSueur

A Special Series on the FRBNY Survey of Consumer Expectations

December 4

Introducing the FRBNY Survey of Consumer Expectations: Survey Goals, Design, and Content

Olivier Armantier, Giorgio Topa, Wilbert van der Klaauw, and Basit Zafar

Introducing the FRBNY Survey of Consumer Expectations: Measuring Price Inflation Expectations

Olivier Armantier, Giorgio Topa, Wilbert van der Klaauw, and Basit Zafar

December 5

Introducing the FRBNY Survey of Consumer Expectations: Labor Market Expectations

Olivier Armantier, Giorgio Topa, Wilbert van der Klaauw, and Basit Zafar

December 6

Introducing the FRBNY Survey of Consumer Expectations: Household Finance Expectations

Olivier Armantier, Giorgio Topa, Wilbert van der Klaauw, and Basit Zafar

---

December 9

Who's Borrowing in the Fed Funds Market?

Gara Afonso, Alex Entz, and Eric LeSueur

December 23

The Fragility of an MMF-Intermediated Financial System

Marco Cipriani, Antoine Martin, and Bruno Parigi

December 30

Fairfield County Economy Kicks into Higher Gear

Jason Bram

Introduction
Economic Policy Review
Current Issues
Liberty Street Economics
Staff Reports
Outside Journals

Research Update

Research Update is a quarterly newsletter designed to keep you informed about the Research Group's current work. The newsletter—which complements this catalogue—offers summaries of selected studies and listings of recent articles and papers in our research series.

Research Update also reports on other news within the Group, including:

- staff publication in outside journals,
- information on our most popular papers and blog posts,
- presentations by economists at academic conferences and industry gatherings,
- upcoming conferences at the Federal Reserve Bank of New York, and
- new publications and services.

The publication is available at **www.newyorkfed.org/research/research_update**.

The Research Group of the Federal Reserve Bank of New York

The Research Group of the Federal Reserve Bank of New York is our annual guide for economists interested in joining our team. It offers an overview of our research and policy work and describes the distinctive culture and resources of the Research and Statistics Group.

The guide also describes the responsibilities of our seven research functions, identifies our current staff of economists, and highlights the economists' research interests and recent publications.

The Research Group of the Federal Reserve Bank of New York is available at **www.newyorkfed.org/research/research_group/index.html**.

Staff Reports

The *Staff Reports* series features technical research papers designed to stimulate discussion and elicit comments. The papers are intended for eventual publication in leading economic and finance journals.

The series is available at **www.newyorkfed.org/research/staff_reports**.

Macroeconomics and Growth

No. 592, January 2013

A Boost in the Paycheck: Survey Evidence on Workers' Response to the 2011 Payroll Tax Cuts

Grant Graziani, Wilbert van der Klaauw, and Basit Zafar

This paper presents new survey evidence on workers' response to the 2011 payroll tax cuts. While workers intended to spend 10 to 18 percent of their tax-cut income, they reported actually spending 28 to 43 percent of the funds. This is higher than estimates from studies of recent tax cuts, and arguably a consequence of the design of the 2011 tax cuts. The shift to greater consumption than intended is largely unexplained by present-bias or unanticipated shocks, and is likely a consequence of mental accounting. The authors also use data from a complementary survey to understand the heterogeneous tax-cut response.

No. 595, January 2013

Estimating the Impacts of U.S. LSAPs on Emerging Market Economies' Local Currency Bond Markets

Alexander Tepper, Jeffrey Moore, Myeongguk Suh, and Sunwoo Nam

This paper examines whether large-scale asset purchases (LSAPs) by the Federal Reserve influenced capital flows out of the United States and into emerging market economies (EMEs) and also analyzes the degree of pass-through from long-term U.S. government bond yields to long-term EME bond yields. Using panel data from a broad array of EMEs, the study's empirical estimates suggest that a 10-basis-point reduction in long-term U.S. Treasury yields results in a 0.4-percentage-point increase in the foreign ownership share of emerging market debt. This in turn is estimated to reduce government bond yields in EMEs by approximately 1.7 basis points. Federal Reserve LSAPs, which most previous studies have found reduced ten-year U.S. Treasury yields between 60 and 110 basis points during the authors' sample period, therefore likely contributed to U.S. outflows into EMEs and marginal reductions in longer-term EME government bond yields. These effects are qualitatively similar to conventional U.S. monetary policy easing. To assess the robustness of these estimates, the authors also employ event study and vector autoregression methodologies, finding broadly similar results using these methods. While these results hold in the aggregate, marginal effects vary notably across emerging market countries.

No. 602, March 2013

Household Leveraging and Deleveraging

Alejandro Justiniano, Giorgio Primiceri, and Andrea Tambalotti

U.S. households' debt skyrocketed between 2000 and 2007, but has since been falling. This leveraging and deleveraging cycle cannot be accounted for by the liberalization and subsequent tightening of mortgage credit standards that occurred during the period. The authors base their conclusion on a quantitative dynamic general equilibrium model calibrated using macroeconomic aggregates and microeconomic data from the Survey of Consumer Finances. From the perspective of the model, the credit cycle is more likely due to factors that impacted house prices more directly, thus affecting the availability of credit through a collateral channel. In either case, the macroeconomic consequences of leveraging and deleveraging are relatively minor because the responses of borrowers and lenders roughly wash out in the aggregate.

No. 608, March 2013

The Inflation-Output Trade-Off Revisited

Gauti Eggertsson and Marc P. Giannoni

A rich literature from the 1970s shows that as inflation expectations become more and more ingrained, monetary policy loses its stimulative effect. In the extreme, with perfectly anticipated inflation, there is no trade-off between inflation and output. A recent literature on the interest-rate zero lower bound, however, suggests there may be some benefits from anticipated inflation when he economy is in a liquidity trap. Eggertsson and Giannoni reconcile these two views by showing that while it is true, at positive interest rates, that inflation loses its stimulative effects as it becomes better anticipated, the opposite holds true at the zero bound. Indeed, at the zero bound, the more accurately the public anticipates inflation, the greater is the expansionary effect of inflation on output. This leads them to revisit the trade-off between inflation and output and to show how radically it changes in the face of demand shocks large enough to bring the economy into a liquidity trap. Instead of vanishing once inflation becomes anticipated, the trade-off between inflation and output increases substantially and may become arbitrarily large. In such cases, raising the inflation target in a liquidity trap can be very stimulative.

No. 613, April 2013

The Gender Unemployment Gap

Stefania Albanesi and Ayşegül Şahin

The unemployment gender gap, defined as the difference between female and male unemployment rates, was positive until 1980. This gap virtually disappeared after 1980—except during recessions, when men's unemployment rates always exceed women's. Albanesi and Şahin study the evolution of these gender differences in unemployment from a long-run perspective and over the business cycle. Using a calibrated three-state search model of the labor market, the authors show that the rise in female labor force attachment and the decline in male attachment can mostly account for the closing of the gender unemployment gap. Evidence from nineteen OECD (Organisation for Economic Co-operation and Development) countries also supports the notion that convergence in attachment is associated with a decline in the gender unemployment gap. At the cyclical frequency, the study finds that gender differences in industry composition are important in recessions, especially the most recent, but they do not explain gender differences in employment growth during recoveries.

No. 615, May 2013

Dynamic Effects of Credit Shocks in a Data-Rich Environment

Jean Boivin, Marc P. Giannoni, and Dalibor Stevanovic

The authors examine the dynamic effects of credit shocks using a large data set of U.S. economic and financial indicators in a structural factor model. The identified credit shocks, interpreted as unexpected deteriorations of credit market conditions, immediately increase credit spreads, decrease rates on Treasury securities, and cause large and persistent downturns in the activity of many economic sectors. Such shocks are found to have important effects on real activity measures, aggregate prices, leading indicators, and credit spreads. Boivin, Giannoni, and Stevanovic's identification procedure does not require any timing restrictions between the financial and macroeconomic factors and yields interpretable estimated factors.

No. 618, May 2013

Inflation in the Great Recession and New Keynesian Models*

Marco Del Negro, Marc P. Giannoni, and Frank Schorfheide

It has been argued that existing DSGE models cannot properly account for the evolution of key macroeconomic variables during and following the recent Great Recession, and that models in which inflation depends on economic slack cannot explain the recent muted behavior of inflation, given the sharp drop in output that occurred in 2008-09. The authors use a standard DSGE model available prior to the recent crisis and estimated with data up to the third quarter of 2008 to explain the behavior of key macroeconomic variables since the crisis. They show that as soon as the financial stress jumped in the fourth quarter of 2008, the model successfully predicts a sharp contraction in economic activity along with a modest and more protracted decline in inflation. The model does so even though inflation remains very dependent on the evolution of both economic activity and monetary policy. The study concludes that while the model considered does not capture all short-term fluctuations in key macroeconomic variables, it has proven surprisingly accurate during the recent crisis and the subsequent recovery.

No. 621, May 2013

Inflation Risk and the Cross Section of Stock Returns

Fernando M. Duarte

Duarte establishes that inflation risk is priced in the cross section of stock returns: Stocks that have low returns during inflationary times command a risk premium. He estimates a market price of inflation risk that is comparable in magnitude to the price of risk for the aggregate market. Inflation is therefore a key determinant of risk in the cross section of stocks. The inflation premium cannot be explained by either the Fama-French factors or industry effects. Instead, the author argues the premium arises because high inflation lowers expectations of future real consumption growth. To formalize and test this hypothesis, Duarte develops a consumption-based general equilibrium model. The model generates a price of inflation risk consistent with the authors empirical estimates, while simultaneously matching the joint dynamics of consumption and inflation, the aggregate equity premium, and the level and slope of the yield curve. The model suggests that the costs of inflation are significant: A representative agent would be willing to give up 1.5 percent of lifetime consumption to eliminate all inflation risk.

*A top download in 2013.

No. 628, August 2013

The Macroeconomics of Trend Inflation

Guido Ascari and Argia M. Sbordone

Most macroeconomic models for monetary policy analysis are approximated around a zero-inflation steady state, but most central banks target inflation at a rate of about 2 percent. Many economists have recently proposed even higher inflation targets to reduce the incidence of the zero lower bound (ZLB) constraint on monetary policy. In this survey, Ascari and Sbordone show the importance of appropriately accounting for a low, positive trend inflation rate for the conduct of monetary policy. They first review empirical research on the evolution and dynamics of U.S. trend inflation, as well as some proposed new measures to assess the volatility and persistence of trend-based inflation gaps. Then they construct a generalized New Keynesian model that accounts for a positive trend inflation rate. The authors find that, in this model, higher trend inflation is associated with a more volatile and unstable economy and tends to destabilize inflation expectations. This analysis offers a note of caution in evaluating recent proposals to address the existing ZLB situation by raising the underlying rate of inflation.

No. 639, September 2013

Accounting for Breakout in Britain: The Industrial Revolution through a Malthusian Lens

Alexander Tepper and Karol Jan Borowiecki

This paper develops a simple dynamic model to examine the breakout from a Malthusian economy to a modern growth regime. It identifies several factors that determine the fastest rate at which the population can grow without engendering declining living standards; this is termed maximum sustainable population growth. The authors then apply the framework to Britain and find a dramatic increase in sustainable population growth at the time of the Industrial Revolution, well before the beginning of modern levels of income growth. The main contributions to the British breakout were technological improvements and structural change away from agricultural production, while coal, capital, and trade played a minor role.

No. 642, September 2013

Federal Reserve Tools for Managing Rates and Reserves

Antoine Martin, James McAndrews, Ali Palida, and David Skeie

Monetary policy measures taken by the Federal Reserve as a response to the 2007-09 financial crisis and subsequent economic conditions led to a large increase in the level of outstanding reserves. The Federal Open Market Committee (FOMC) has a range of tools to control short-term market rates in this situation. The authors study several of these tools, namely, interest on excess reserves (IOER), reverse repurchase agreements (RRPs), and the term deposit facility (TDF). They find that overnight RRPs (ON RRPs) may provide a better floor on rates than term RRPs because they are available to absorb daily liquidity shocks. Whether the TDF or RRPs best support equilibrium rates depends on the intensity of interbank monitoring costs versus balance sheet costs, respectively, that banks face. In the authors' model, using the RRP and TDF concurrently may most effectively stabilize short-term rates close to the IOER rate when such costs are rapidly increasing.

No. 644, October 2013

The Capital Structure and Governance of a Mortgage Securitization Utility

Patricia C. Mosser, Joseph Tracy, and Joshua Wright

The authors explore the capital structure and governance of a mortgage-insuring securitization utility operating with government reinsurance for systemic or "tail" risk. The structure they propose for the replacement of the GSEs focuses on aligning incentives for appropriate pricing and transfer of mortgage risks across the private sector and between the private sector and the government. Mosser, Tracy, and Wright present the justification and mechanics of a vintage-based capital structure, and assess the components of the mortgage guarantee fee, whose size they find is most sensitive to the required capital ratio and the expected return on that capital. The authors discuss the implications of selling off some of the utility's mortgage credit risk to the capital markets and how the informational value of such transactions may vary with the level of risk transfer. Finally, they explore how mutualization could address incentive misalignments arising out of securitization and government insurance, as well as how the governance structure for such a financial market utility could be designed.

No. 646, October 2013

Unemployment Benefits and Unemployment in the Great Recession: The Role of Macro Effects

Marcus Hagedorn, Fatih Karahan, Iourii Manovskii, and Kurt Mitman

The authors exploit a policy discontinuity at U.S. state borders to identify the effects of unemployment insurance policies on unemployment. Their estimates imply that most of the persistent increase in unemployment during the Great Recession can be accounted for by the unprecedented extensions of unemployment benefit eligibility. In contrast to the existing recent literature that mainly focused on estimating the effects of benefit duration on job search and acceptance strategies of the unemployed—the micro effect—this paper focuses on measuring the general equilibrium macro effect that operates primarily through the response of job creation to unemployment benefit extensions. The authors find that it is the latter effect that is very important quantitatively.

No. 647, October 2013

The FRBNY DSGE Model

Marco Del Negro, Stefano Eusepi, Marc Giannoni, Argia Sbordone, Andrea Tambalotti, Matthew Cocci, Raiden Hasegawa, and M. Henry Linder

This paper presents the dynamic stochastic general equilibrium (DSGE) model developed by and used at the Federal Reserve Bank of New York. The paper describes how the model works; how it is estimated; how it rationalizes past history, including the Great Recession; and how it is used for forecasting and policy analysis.

No. 649, October 2013

Fiscal Foundations of Inflation: Imperfect Knowledge

Stefano Eusepi and Bruce Preston

This paper proposes a theory of the fiscal foundations of inflation based on imperfect knowledge and learning. The theory is similar in spirit to, but distinct from, unpleasant monetarist arithmetic and the fiscal theory of the price level. Because the assumption of imperfect knowledge breaks Ricardian equivalence, details of fiscal policy, such as the average scale and composition of the public debt, matter for inflation. As a result, fiscal policy constrains the efficacy of monetary policy. Heavily indebted economies with debt maturity structures observed in many countries require aggressive monetary policy to anchor inflation expectations. The model predicts that the Great Moderation period would not have been so moderate had fiscal policy been characterized by a scale and composition of public debt now witnessed in some advanced economies in the aftermath of the 2007-09 global recession.

No. 652, November 2013

The Effects of Policy Guidance on Perceptions of the Fed's Reaction Function

Katherine Femia, Steven Friedman, and Brian Sack

In the past few years, the Federal Open Market Committee (FOMC) has been using forward guidance about the federal funds rate in a more explicit way than ever before. This paper explores the market reaction to the forward guidance, with particular focus on the use of calendar dates and economic thresholds in the FOMC statement. The results show that market participants interpreted the FOMC's policy guidance as conveying important information about the Committee's policy reaction function. In particular, market participants came to expect the FOMC to wait for lower levels of unemployment for a given level of inflation before beginning to raise the target federal funds rate, thereby shifting to a more accommodative policy approach aimed at supporting the economic recovery.

No. 658, November 2013

Another View on U.S. Treasury Term Premiums

J. Benson Durham

The consensus suggests that subdued nominal U.S. Treasury yields on balance since the onset of the global financial crisis primarily reflect exceptionally low, if not occasionally negative, term premiums as opposed to low anticipated short rates. Depressed term premiums plausibly owe to unconventional Federal Reserve policy as well as to net flight-to-quality flows after 2007. However, two strands of evidence raise questions about this story. First, a purely survey-based expected forward term premium measure, as opposed to an approximate spot estimate, has increased rather than decreased in recent years. Second, with respect to the time-series dynamics of factors underlying affine term structure models, simple econometrics of recent data produce not only a more persistent level of the term structure but also a depressed long-run mean, which in turn implies an implausibly low expected short-rate path. Strong caveats aside, an implication for central bankers is that unconventional monetary policy measures may have worked in more conventional ways, and an inference for investors is that longer-dated yields embed meaningful compensation for bearing duration risk.

International

No. 600, February 2013

Capital Controls: A Normative Analysis

Bianca De Paoli and Anna Lipińska

Countries' concerns about the value of their currency have been studied and documented extensively in the literature. Capital controls can be—and often are—used as a tool to manage exchange rate fluctuations. This paper investigates whether countries can benefit from using such a tool. De Paoli and Lipińska develop a welfare-based analysis of whether (or, in fact, how) countries should tax international borrowing. Their results suggest that restricting international capital flows through the use of these taxes can be beneficial for individual countries, although it would limit cross-border pooling of risk. The reason is because, while consumption risk-pooling is important, individual countries also care about domestic output fluctuations. Moreover, the results show that countries decide to restrict the international flow of capital exactly when this flow is crucial to ensure cross-border risk sharing. The authors' findings point to the possibility of costly "capital control wars" and thus to significant gains from international policy coordination.

No. 609, April 2013

Banking across Borders with Heterogeneous Banks

Friederike Niepmann

Individual banks differ substantially in their foreign operations. This paper introduces heterogeneous banks into a general equilibrium framework of banking across borders to explain the documented variation. While the model matches existing micro and macro evidence, novel and unexplored predictions of the theory are also strongly supported by the data: The efficiency of the least efficient bank active in a host country increases the greater the impediments to banking across borders and the efficiency of the banking sector in the host country. There is also evidence of a trade-off between proximity and fixed costs in banking. Banks hold more assets and liabilities in foreign affiliates relative to cross-border positions if the target country is further away and the cost of foreign direct investment is low. These results suggest that fixed costs play a crucial role in the foreign activities of banks.

No. 611, April 2013

A Bargaining Theory of Trade Invoicing and Pricing

Linda Goldberg and Cédric Tille

Goldberg and Tille develop a theoretical model of international trade pricing in which individual exporters and importers bargain over the transaction price and exposure to exchange rate fluctuations. They find that the choice of price and invoicing currency reflects the full market structure, including the extent of fragmentation and the degree of heterogeneity across importers and across exporters. The study shows that a party has a higher effective bargaining weight when it is large or more risk tolerant. A higher effective bargaining weight of importers relative to exporters in turn translates into lower import prices and greater exchange rate pass-through into import prices. The authors show the range of price and invoicing outcomes that arise under alternative market structures. Such structures matter not only for the outcome of specific exporter-importer transactions, but also for aggregate variables such as the average price, the average choice of invoicing currency, and the correlation between invoicing currency and the size of trade transactions.

No. 614, May 2013

Going Global: Markups and Product Quality in the Chinese Art Market

Jennie Bai, Jia Guo, and Benjamin Mandel

The authors analyze two reasons for export prices to be different across markets—namely, quality differentiation and variable markups—and attempt to parse their relative importance and some of their underlying drivers. To overcome the substantial measurement issues in this task, they consider a particular industry as a special case: Chinese fine art. The simplicity of the supply-side of art vis-à-vis marginal cost and the wealth of data on its quality characteristics make it possible to separately identify the markup and quality components of international relative prices for Chinese artwork. Through this lens, Bai, Guo, and Mandel trace the process of growth and internationalization of Chinese art since the year 2000 and uncover a rich set of facts. They find strong support for quality sorting into international markets at both the level of artist and artwork, as well as substantial markup differences across destinations. Using a structural model of endogenous quality choice by Feenstra and Romalis (2012), the authors argue that much of the international quality premium is driven by specific distribution costs (whether physical or informational), rather than destination-specific preferences for quality.

No. 633, September 2013

Banks in International Trade Finance: Evidence from the U.S.

Friederike Niepmann and Tim Schmidt-Eisenlohr

Banks play a critical role in facilitating international trade by guaranteeing international payments and thereby reducing the risk of trade transactions. This paper uses banking data from the United States to document new empirical patterns regarding the use of letters of credit and similar bank guarantees. The analysis shows that the volume of banks' trade finance claims differs substantially across destination countries. Controlling for exports, claims are hump-shaped in country credit risk and increase with the time to import of a destination market. They also vary systematically with global conditions, expanding when aggregate risk is higher and funding is cheaper. The response to changes in these macro factors is not uniform. Trade finance claims adjust the least in countries with intermediate levels of risk, which rely the most on letters of credit to settle payments. The authors show that a modification of the standard model of payment contract choice in international trade is needed to rationalize these empirical findings.

No. 648, October 2013

The Effects of the Saving and Banking Glut on the U.S. Economy

Alejandro Justiniano, Giorgio E. Primiceri, and Andrea Tambalotti

The authors use a quantitative equilibrium model with houses, collateralized debt, and foreign borrowing to study the impact of global imbalances on the U.S. economy in the 2000s. Their results suggest that the dynamics of foreign capital flows account for between one-fourth and one-third of the increase in U.S. house prices and household debt that preceded the financial crisis. The key to these findings is that the model generates the sustained low level of interest rates observed over that period.

Microeconomics

No. 605, March 2013

Geographical Reallocation and Unemployment during the Great Recession: The Role of the Housing Bust

Fatih Karahan and Serena Rhee

This paper quantitatively evaluates the hypothesis that the housing bust in 2007 decreased geographical reallocation and increased the dispersion and level of unemployment during the Great Recession. Karahan and Rhee construct an equilibrium model of multiple locations with frictional housing and labor markets. When house prices fall, the amount of home equity declines, making it harder for homeowners to afford the down payment on a new house after moving. Consequently, the decline in house prices reduces migration and causes unemployment to rise differently in different locations. The model accounts for 90 percent of the increase in geographical dispersion of unemployment and the entire decline in net migration. However, despite large effects on migration and geographical dispersion of unemployment, the effect on aggregate unemployment is moderate: The study's findings suggest that, absent the housing bust, aggregate unemployment would have been 0.5 percentage point lower.

No. 610, April 2013

Up Close It Feels Dangerous: "Anxiety" in the Face of Risk

Thomas M. Eisenbach and Martin C. Schmalz

Motivated by individuals' emotional response to risk at different time horizons, the authors model an "anxious" agent—one who is more risk averse with respect to imminent risks than distant risks. Such preferences describe well-documented features of 1) individual behavior, 2) equilibrium prices, and 3) institutions. In particular, they derive implications for financial markets, such as overtrading and price anomalies around announcement dates, as well as a downward-sloping term structure of risk premia, which are found empirically. Since such preferences can lead to dynamic inconsistencies with respect to risk trade-offs, Eisenbach and Schmalz show that costly delegation of investment decisions is a strategy used to cope with "anxiety."

No. 612, April 2013

Shared Knowledge and the Coagglomeration of Occupations

Todd M. Gabe and Jaison R. Abel

This paper provides an empirical analysis of the extent to which people in different occupations locate near one another, or coagglomerate. The authors construct pairwise Ellison-Glaeser coagglomeration indices for U.S. occupations and use these measures to investigate the factors influencing the geographic concentration of occupations. The analysis is conducted separately at the metropolitan area and state levels of geography. Empirical results reveal that occupations with similar knowledge requirements tend to coagglomerate and that the importance of this shared knowledge is larger in metropolitan areas than in states. These findings are robust to instrumental variables estimation that relies on an instrument set characterizing the means by which people typically acquire knowledge. An extension to the main analysis finds that, when the authors focus on metropolitan areas, the largest effects on coagglomeration are due to shared knowledge about the subjects of engineering and technology, arts and humanities, manufacturing and production, and mathematics and science.

No. 617, May 2013

The Impact of Housing Markets on Consumer Debt: Credit Report Evidence from 1999 to 2012

Meta Brown, Sarah Stein, and Basit Zafar

The authors investigate the impact of large swings in the housing market on nonmortgage borrowing, using CoreLogic geographic house price variation and Equifax-sourced FRBNY Consumer Credit Panel data for 1999 to 2012. First-differenced instrumental variables (FD-IV) estimates indicate that all homeowner types increased both housing and nonhousing debt in response to the housing boom. However, older and prime homeowners responded to house price changes by reallocating obligations between home equity and credit card debt, with little change in total debt, during both the comparatively stable 1999-2001 period and the 2007-12 downturn. Younger and marginally creditworthy homeowners' nonmortgage debts moved with house prices during both expansions and downturns. These results suggest meaningful wealth effects of the housing market on consumption only for the boom period, but collateral effects throughout. A difference-in-differences estimation approach yields similar results. Finally, despite broad speculation, the authors find little substitution out of home equity debt into student loans in response to recent house price declines.

No. 627, August 2013

Preferences and Biases in Educational Choices and Labor Market Expectations: Shrinking the Black Box of Gender

Ernesto Reuben, Matthew Wiswall, and Basit Zafar

Standard observed characteristics explain only part of the differences between men and women in education choices and labor market trajectories. Using an experiment to derive students' levels of overconfidence, and preferences for competitiveness and risk, this paper investigates whether these behavioral biases and preferences explain gender differences in college major choices and expected future earnings. In a sample of high-ability undergraduates, the authors find that competitiveness and overconfidence, but not risk aversion, are systematically related with expectations about future earnings: Individuals who are overconfident and overly competitive have significantly higher earnings expectations. Moreover, gender differences in overconfidence and competitiveness explain about 18 percent of the gender gap in earnings expectations. These experimental measures explain as much of the gender gap in earnings expectations as a rich set of control variables, including test scores and family background, and they are poorly proxied by these same control variables, underscoring that they represent independent variation. While expected earnings are related to college major choices, the experimental measures are not related with college major choice.

No. 631, September 2013

The Long Road to Recovery: New York Schools in the Aftermath of the Great Recession

Rajashri Chakrabarti and Max Livingston

Schools play a crucial role in human capital development, and were one of the many elements of government adversely affected by the Great Recession. Using a rich panel data set of New York State school districts and a trend-shift analysis, Chakrabarti and Livingston examine how the funding and expenditure dynamics of districts have changed in the four years since the recession hit. They find that although the stimulus prevented major cuts to expenditures while it was in place, once the stimulus funding was used up districts faced strong budget constraints and made deep cuts to their expenditures. While state and local funding continue to be below trend, the role of funding schools has shifted more to local governments because of a cutback in state and federal aid. Breaking up expenditure into its primary categories, the authors see that instructional spending was preserved with the help of the stimulus money in 2010, but by 2012 instructional expenditure experienced a statistically and economically significant downward shift. They also examine heterogeneities in the effects by metropolitan area, looking at the major MSAs of New York. The study finds that Nassau sustained the largest cuts, while Buffalo sustained the smallest. These findings are instructive in that they shed light on how recessions and fiscal policy can affect school finance dynamics, and provide important lessons/insight for future policy and experiences of schools in financial distress.

No. 632, September 2013

Still Not Out of the Woods? New Jersey Schools during the Recession and Beyond

Rajashri Chakrabarti and Max Livingston

Schools are essential in forming human capital and in improving the long-term health of the economy. They are also heavily reliant on state and local funds, which were severely depleted during the Great Recession. To alleviate some of the strain on local budgets, the federal government passed and implemented a large stimulus package, which included funds for school districts. However, the stimulus funds were drawn down beginning in 2011, at a time when state and local revenues were still under pressure. This paper uses a detailed panel data set of all school districts in New Jersey for the period 1999 through 2012 and analyzes the impact of this series of events on New Jersey school finances using a trend-shift analysis. Chakrabarti and Livingston find that the recession led to cuts in funding and expenditure. While the stimulus served as an effective stopgap against major cuts, the picture was very different once the stimulus funds were depleted, with significantly deeper cuts in both funding and spending. With cutbacks in state aid and the withdrawal of the stimulus funding, local funding played a larger role, despite the fact that local funding was also decreasing relative to trend. Examining the components of expenditure, the authors find that instructional categories were prioritized over noninstructional, so instructional expenditure only sustained small cuts in the initial years after recession. But when the stimulus dried up and the economy was still stagnating, instructional expenditure received severe cuts. They analyze variations by metropolitan area, and find that Camden experienced the largest cuts while Wayne experienced the smallest (although the declines in funding and expenditure were still significant). Their findings are an important step in understanding how recessions and fiscal policy affect school finances and inform future policy decisions relating to school finances during fiscal crises.

No. 634, September 2013

Financial Education and the Debt Behavior of the Young

Meta Brown, Wilbert van der Klaauw, Jaya Wen, and Basit Zafar

More than three-quarters of U.S. households bear consumer debt, yet the public has little understanding of the relationship between financial education and the debt behavior of U.S. consumers. Brown, van der Klaauw, Wen, and Zafar study the effects of exposure to financial training on debt outcomes in early adulthood. Identification comes from variation in financial literacy, economics, and mathematics course offerings and graduation requirements mandated over the 1990s and 2000s by state-level high-school curricula. The FRBNY Consumer Credit Panel provides debt outcomes based on quarterly Equifax credit reports from 1999 to 2012. The analysis, based on a flexible event-study approach, reveals significant effects of financial education on debt-related outcomes of youth. On the extensive margin, financial literacy education has a sizable impact on the propensity of youth having a credit report. Conditional on having a credit report, on the intensive margin, math and financial literacy education exposure reduces the incidence of adverse outcomes—such as accounts in collections and delinquent accounts—and reduces both the likelihood of youth carrying debt and their average debt balances. The net effect of both math and financial literacy education is an increase in youths' average creditworthiness, as measured by the Equifax risk score. On the other hand, economic education increases the likelihood of individuals carrying balances, leads to significant increases in debt balances—in particular, debt used to support consumption—and, at the same time, increases the likelihood of adverse credit outcomes, leading to a decline in youths' average risk scores. The effects of these financial education policies accumulate over the course of early adulthood. The authors results suggest that financial education programs, increasingly promoted by policymakers, are likely to have significant impacts on the financial decision-making of youth, but the effects depend on the content of these programs.

No. 635, September 2013

Auctions Implemented by the Federal Reserve Bank of New York during the Great Recession

Olivier Armantier and John Sporn

During the Great Recession, the Federal Reserve implemented several novel programs to address adverse conditions in financial markets. Three of these temporary programs relied on an auction mechanism: the Term Auction Facility, the Term Securities Lending Facility, and the disposition of the Maiden Lane II portfolio. These auctions differed from one another in several dimensions: their objectives, rules, and the financial asset being traded. The object of this paper is to document, compare, and provide a rationale for the mechanics of the different auctions implemented by the Federal Reserve during the Great Recession.

Introduction
Economic Policy Review
Current Issues
Liberty Street Economics
Staff Reports
Outside Journals

No. 636, September 2013

Negative Equity and Housing Investment

Andrew Haughwout, Sarah Sutherland, and Joseph Tracy

Housing is a depreciating asset. The rate of depreciation depends on the degree to which households engage in housing investments. Housing investment expenditures economy-wide are sizable, averaging 45 percent of the value of new home construction over the past twenty years. The housing bust and recession coincided with a significant decline in housing investment. Using Consumer Expenditure Survey data from 2007 to 2012, the authors find that negative equity households reduce their housing investments by roughly 75 percent. The large increase in negative equity due to declining housing prices during the housing bust resulted in a cumulative decline of housing investment expenditures from 2006 to 2010 of $51.2 billion.

No. 641, September 2013

Merit Aid, Student Mobility, and the Role of College Selectivity

Rajashri Chakrabarti and Joydeep Roy

Chakrabarti and Roy investigate the role of college selectivity in mobility decisions (both in-state and out-of-state) of freshmen students following Georgia's HOPE scholarship program. How did HOPE affect the selectivity of colleges attended by Georgia's freshmen students? Did it induce Georgia's freshmen students who would have otherwise attended more selective out-of-state colleges to instead attend less selective in-state ones? Or was there movement to more selective ones, both in-state and out-of-state? Using student residency and enrollment data from IPEDS and selectivity data from Barron's and Peterson's, the authors find that in the aftermath of HOPE, Georgia freshmen attended relatively more selective colleges overall. Disaggregating further, they find that Georgia freshmen attending in-state colleges attended more selective ones. Georgia freshmen attending out-of-state colleges were also more likely to attend more selective colleges, most likely due to an increase in the reservation price to go to out-of-state colleges following HOPE. The authors' results are robust to a variety of sensitivity checks and have important policy implications. In particular, Peltzman had observed in his classic 1973 paper that in-kind subsidies can induce individuals to invest in less quality-adjusted human capital than they might otherwise. The fact that Georgia freshmen attended relatively more selective colleges in the post-HOPE period allays, to some extent, the concern that state merit aid programs can adversely affect long-term outcomes and human capital formation.

No. 643, October 2013

Did Cuts in State Aid during the Great Recession Lead to Changes in Local Property Taxes?

Rajashri Chakrabarti, Max Livingston, and Joydeep Roy

During the Great Recession and its aftermath, state and local governments' revenue streams dried up due to diminished taxes. Budget cuts affected many aspects of government. In this paper, the authors investigate whether (and how) local school districts modified their funding and taxing decisions in response to changes in state aid in the post-recession period. Using detailed district-level panel data from New York and a fixed effects as well as an instrumental variables strategy, they find strong evidence that school districts did indeed respond to state aid cuts in the post-recession period by countering the cuts. In comparison with the pre-recession period, a unit decrease in state aid was associated with a relative increase in local funding per pupil. To further probe the school district role, Chakrabarti, Livingston, and Roy explore whether the property tax rate, which districts set each year in response to budgetary needs, also responded to state aid cuts. Indeed, they find that relative to the pre-recession period, the post-recession period was characterized by a strong negative relationship between the property tax rate and state aid per pupil. In other words, after the recession a unit decrease in state aid was associated with a relative increase in the property tax rate in the post-recession period (in comparison with the pre-recession period).

No. 662, December 2013

World Welfare Is Rising: Estimation Using Nonparametric Bounds on Welfare Measures

Maxim L. Pinkovskiy

Pinkovskiy takes a new approach to measuring world inequality and welfare over time by constructing robust bounds for these series instead of imposing parametric assumptions to compute point estimates. He derives sharp bounds on the Atkinson inequality index that are valid for any underlying distribution of income conditional on given fractile shares and the Gini coefficient. While the bounds are too wide to reject the hypothesis that world inequality may have risen, the study shows that world welfare rose unambiguously between 1970 and 2006. This conclusion is valid for alternative methods of dealing with countries and years with missing surveys, alternative survey harmonization procedures, and alternative GDP series, or if the inequality surveys used systematically underreport the income of the very rich or suffer from nonresponse bias.

Banking and Finance

No. 594, January 2013

Securitization and the Fixed-Rate Mortgage

Andreas Fuster and James Vickery

Fixed-rate mortgages (FRMs) dominate the U.S. mortgage market, with important consequences for household risk management, monetary policy, and systemic risk. The authors show that securitization is a key driver of FRM supply. Their analysis compares the agency and nonagency mortgage-backed-securities (MBS) markets, exploiting the freeze in nonagency MBS liquidity in the third quarter of 2007. Using exogenous variation in access to the agency MBS market, Fuster and Vickery find that when both market segments are liquid they perform similarly in terms of supporting FRM supply. However, after the nonagency market freezes, the share of FRMs is sharply higher among mortgages eligible to be securitized through the still-liquid agency MBS market. Their interpretation is that securitization is particularly important for FRMs because of the prepayment and interest rate risk embedded in these loans. The authors highlight policy implications for ongoing reform of the U.S. mortgage finance system.

No. 596, February 2013

A Sampling-Window Approach to Transactions-Based Libor Fixing

David Skeie, Darrell Duffie, and James Vickery

The authors examine the properties of a method for fixing Libor rates that is based on transactions data and multi-day sampling windows. The use of a sampling window may mitigate problems caused by thin transaction volumes in unsecured wholesale term funding markets. Using two partial data sets of loan transactions, Skeie, Duffie, and Vickery estimate how the use of different sampling windows could affect the statistical properties of Libor fixings at various maturities. Their methodology, which is based on a multiplicative estimate of sampling noise that avoids the need for interest rate data, uses only the timing and sizes of transactions. Limitations of this sampling-window approach are also discussed.

No. 597, February 2013

Rollover Risk as Market Discipline: A Two-Sided Inefficiency

Thomas M. Eisenbach

Why does the market discipline that banks face seem too weak during good times and too strong during bad times? This paper shows that using rollover risk as a disciplining device is effective only if all banks face purely idiosyncratic risk. However, if banks' assets are correlated, a two-sided inefficiency arises: Good aggregate states have banks taking excessive risks, while bad aggregate states suffer from fire sales. The driving force behind this inefficiency is an amplifying feedback loop between asset liquidation values and market discipline. This feedback loop operates in both good and bad aggregate states, but with opposite effects.

No. 599, February 2013

Money Market Funds Intermediation and Bank Instability

Marco Cipriani, Antoine Martin, and Bruno M. Parigi

In recent years, U.S. banks have increasingly relied on deposits from financial intermediaries, especially money market funds (MMFs), which collect funds from large institutional investors and lend them to banks. Intermediation through MMFs allows investors to limit their exposure to a given bank. However, since MMFs are themselves subject to runs from their own investors, a banking system intermediated through MMFs is more unstable than one in which investors interact directly with banks. The mechanism through which instability arises in an MMF intermediated financial system is the release of private information on bank assets, which is aggregated by MMFs and can lead them to withdraw en masse from a bank.

No. 601, February 2013

Financial Stability Monitoring*

Tobias Adrian, Daniel Covitz, and Nellie J. Liang

Adrian, Covitz, and Liang present a forward-looking monitoring program to identify sources of systemic risk and to develop preemptive policies to promote financial stability. The program reflects that private incentives can lead market participants to react to changes in financial regulations and economic conditions in ways that would increase systemic risk, and that the Dodd-Frank Act raised the standards for ex-post government intervention in a crisis. To guide such a program, the authors develop a framework that distinguishes between shocks, which are difficult to prevent, and vulnerabilities that amplify shocks, but can be reduced by preemptive actions. Building on substantial research, they focus on leverage, maturity transformation, interconnectedness, complexity, and the pricing of risk as the primary vulnerabilities in the financial system. These vulnerabilities are tracked in four areas: systemically important financial institutions (SIFIs), shadow banking, asset markets, and the nonfinancial sector. The framework also highlights the policy trade-off between reducing systemic risk and raising the cost of financial intermediation by taking preemptive actions.

No. 603, March 2013

Identifying Term Interbank Loans from Fedwire Payments Data

Dennis Kuo, David Skeie, James Vickery, and Thomas Youle

Interbank markets for term maturities experienced great stress during the 2007-09 financial crisis, as illustrated by the behavior of one- and three-month Libor. Despite widespread interest in these markets, little data are available on dollar interbank lending for maturities beyond overnight. The authors develop a methodology to infer individual term dollar interbank loans (for maturities between two days and one year)

*A top download in 2013.

by applying a set of filters to payments settled on the Fedwire Funds Service, the large-value bank payment system operated by the Federal Reserve Banks. Their approach introduces several innovations and refinements relative to previous research by Furfine (1999) and others that measures overnight interbank lending. Diagnostic tests to date suggest Kuo et al.'s approach provides a novel and useful source of information about the term interbank market, allowing for a number of research applications. Limitations of the algorithm and caveats on its use are discussed in detail. They also present stylized facts based on the algorithm's results, focusing on the 2007-09 period. At the crisis peak following the failure of Lehman Brothers in September 2008, the authors observe a sharp increase in the dispersion of inferred term interbank interest rates, a shortening of loan maturities, and a decline in term lending volume.

No. 604, March 2013

How Much Do Bank Shocks Affect Investment? Evidence from Matched Bank-Firm Loan Data

Mary Amiti and David E. Weinstein

The authors show that supply-side financial shocks have a large impact on firms' investment. They do this by developing a new methodology to separate firm-borrowing shocks from bank supply shocks using a vast sample of matched bank-firm lending data. Amiti and Weinstein decompose loan movements in Japan for the period 1990 to 2010 into bank, firm, industry, and common shocks. The high degree of financial institution concentration means that individual banks are large relative to the size of the economy, which creates a role for granular shocks as in Gabaix (2011). As a result, bank supply shocks—that is, movements in the supply of bank loans net of borrower characteristics and general credit conditions—can have large impacts on aggregate loan supply and investment. The authors show that these bank supply shocks explain 40 percent of aggregate loan and investment fluctuations.

No. 606, March 2013

Buyout Activity: The Impact of Aggregate Discount Rates

Valentin Haddad, Erik Loualiche, and Matthew Plosser

Haddad, Loualiche, and Plosser argue that buyout waves form in response to fluctuations in aggregate discount rates. In their model, discount rates alter the present value of cash flow improvements and the illiquidity premium demanded by buyout investors. The authors confirm their predictions empirically. Overall deal activity varies positively with the risk premium and negatively with the risk-free rate, exhibiting heterogeneous effects across firms. Cross-sectionally, firms with high levels of systematic risk or idiosyncratic risk are less likely targets. They decompose variation in activity structurally between changes in the value of cash flow and the illiquidity premium. The positive correlation of the two explains the wave behavior of activity.

No. 607, March 2013

Risk-Neutral Systemic Risk Indicators

Allan M. Malz

This paper describes a set of indicators of systemic risk computed from current market prices of equity and equity index options. It displays results from a prototype version, computed daily from January 2006 to January 2013. The indicators represent a systemic risk event as the realization of an extreme loss on a portfolio of large-intermediary equities. The technique for computing them combines risk-neutral return distributions with implied return correlations drawn from option prices, tying together the single-firm return distributions via a copula to simulate the joint distribution and thus the financial-sector portfolio return distribution. The indicators can be computed daily using only current market prices; no historical data are involved. They are therefore forward-looking and can exploit all the information impounded in current prices. However, the indicators blend both market expectations and the market's desire to protect itself against volatility and tail risk, so they cannot be readily decomposed into these two elements. The paper presents evidence that the indicators have some predictive power for systemic risk events and that they can serve as a meaningful market-adjusted point of comparison for fundamentals-based systemic risk indicators.

No. 616, May 2013

The Risk of Fire Sales in the Tri-Party Repo Market

Brian Begalle, Antoine Martin, James McAndrews, and Susan McLaughlin

This paper studies the risk of "fire sales" in the tri-party repo market, a large and important market where securities dealers find short-term funding for a substantial portion of their own and their clients' assets. The authors distinguish between fire sales of assets by a dealer who, facing a run that could lead to default, sells securities to generate liquidity, and fire sales of assets by repo investors after a dealer's default has occurred. While fire sales do cause damage no matter how they arise, the tools available to lessen the harm from the two types of fire sales are different. The study finds that limited tools are available to mitigate the risk of pre-default fire sales and that no established tools currently exist to mitigate the risk of post-default sales.

No. 620, May 2013

Trading Partners in the Interbank Lending Market

Gara Afonso, Anna Kovner, and Antoinette Schoar

There is substantial heterogeneity in the structure of trading relationships in the U.S. overnight interbank lending market: Some banks rely on spot transactions, while most form stable, concentrated borrowing relationships to hedge liquidity needs. As a result, borrowers pay lower prices and borrow more from their concentrated lenders. Exogenous shocks to liquidity supply (days with low GSE lending) lead to marketwide drops in liquidity and a rise in interest rates. However, borrowers with concentrated lenders are almost completely insulated from the shocks, while liquidity transmission affects the rest of the market via higher interest rates and reduced borrowing volumes.

No. 622, May 2013

The Microstructure of China's Government Bond Market

Jennie Bai, Michael Fleming, and Casidhe Horan

Although China now has one of the largest government bond markets in the world, the market has received relatively little attention and analysis. The authors describe the history and structure of the market and assess its functioning. They find that trading in individual bonds was historically sparse but has increased markedly in recent years. Bai, Fleming, and Horan find also that certain announcements of macroeconomic news, such as China's producer price index (PPI) and manufacturing purchasing managers' index (PMI), have significant effects on yields, even when such yields are measured at a daily level. Despite the increased activity in the market, the authors are able to reject the null hypothesis of market efficiency under two different tests for four of the most actively traded bonds.

No. 623, August 2013

How Do Global Banks Scramble for Liquidity? Evidence from the Asset-Backed Commercial Paper Freeze of 2007

Viral V. Acharya, Gara Afonso, and Anna Kovner

In August of 2007, banks faced a freeze in funding liquidity from the asset-backed commercial paper (ABCP) market. The authors investigate how banks scrambled for liquidity in response to this freeze and its implications for corporate borrowing. Commercial banks in the United States raised deposits and took advances from Federal Home Loan Banks (FHLBs). In contrast, foreign banks—with limited access to the deposit market and FHLB advances—lent less in the overnight interbank market and borrowed more from the Federal Reserve's Term Auction Facility (TAF) auctions. Relative to before the ABCP freeze and relative to their non-U.S. dollar lending, foreign banks with ABCP exposure charged higher interest rates to corporations for syndicated loan packages denominated in dollars. The results point to a funding risk in global banking, manifesting as currency shortages for banks engaged in maturity transformation in foreign countries.

No. 624, August 2013

Order Flow Segmentation and the Role of Dark Trading in the Price Discovery of U.S. Treasury Securities

Michael Fleming and Giang Nguyen

This paper studies the workup protocol, a unique trading feature in the U.S. Treasury securities market that resembles a mechanism for discovering dark liquidity. Fleming and Nguyen quantify its role in the price formation process in a model of the dynamics of price and segmented order flow induced by the protocol. They find that the dark liquidity pool generally contains less information than its transparent counterpart, but that its role is not trivial. They also show that workups are used more often around volatile times, but that their information role becomes relatively less important at those times compared to that of pre-workup trades. Higher usage of workups is also associated with higher market depth, lower bid-ask spreads, and higher trading intensity. Collectively, the evidence suggests that workups tend to be used more as a channel for liquidity providers to guard against adverse price movements than as a channel to hide private information.

No. 625, August 2013

Leverage Asset Pricing

Tobias Adrian, Emanuel Moench, and Hyun Song Shin

Adrian, Moench, and Shin investigate intermediary asset pricing theories empirically and find strong support for intermediary book leverage as the relevant state variable. A parsimonious dynamic pricing model that uses detrended broker-dealer leverage as a price of risk variable, and innovations to broker-dealer leverage as pricing factor is shown to perform well in time series and cross sectional tests of a wide variety of equity and bond portfolios. The model outperforms alternative intermediary pricing specifications that use intermediary net worth as state variables, and performs well in comparison to benchmark asset pricing models. The authors draw implications for macroeconomic theories.

No. 626, August 2013

Time Variation in Asset Price Responses to Macro Announcements

Linda S. Goldberg and Christian Grisse

Although the effects of economic news announcements on asset prices are well established, these relationships are unlikely to be stable. This paper documents the time variation in the responses of yield curves and exchange rates using high-frequency data from January 2000 through August 2011. Significant time variation in news effects is present for those announcements that have the largest effects on asset prices. The time variation in effects is explained by economic conditions, including the level of policy rates at the time of the news release, and risk conditions: Government bond yields increase in response to "good news," but less so when risk is elevated. Risk conditions matter since they can capture the effects of uncertainty on the information content of news announcements, the interaction of monetary policy and financial stability objectives of central banks, and the effect of news announcements on the risk premium.

No. 630, September 2013

The Fragility of Short-Term Secured Funding Markets

Antoine Martin, David Skeie, and Ernst-Ludwig von Thadden

This paper develops a model of financial institutions that borrow short term and invest in long-term assets that can be traded in frictionless markets. Because these financial intermediaries perform maturity transformation, they are subject to potential runs. The authors derive distinct liquidity, collateral, and asset liquidation constraints, which determine whether a run can occur as a result of changing market expectations. They show that the extent to which borrowers can ward off an individual run depends on whether it has sufficient liquidity, collateral, and asset liquidation capacity. These determinants are endogenous and depend on the borrower's balance sheet, in terms of asset market exposure and leverage, and on fundamentals, such as productivity and size. Moreover, systemic runs are possible if shocks to the valuation of collateral held by outside investors are sufficiently strong and uniform, and if the system as a whole is exposed to high short-term funding risk.

No. 637, September 2013

Heterogeneity and Stability: Bolster the Strong, Not the Weak

Dong Beom Choi

Choi provides a model of systemic panic among financial institutions with heterogeneous fragilities. Concerns about potential spillovers from each other generate strategic interaction among institutions, triggering a preemption game in which one tries to exit the market before the others to avoid spillovers. Although financial contagion originates in weaker institutions, systemic risk depends critically on the financial health of stronger institutions in the contagion chain. This analysis suggests that when concerns about spillovers prevail, then 1) increasing heterogeneity of institutions promotes systemic stability and 2) bolstering the strong institutions in the contagion chain, rather than the weak, more effectively enhances systemic stability.

No. 638, September 2013

Shadow Bank Monitoring

Tobias Adrian, Adam B. Ashcraft, and Nicola Cetorelli

The authors provide a framework for monitoring the shadow banking system. The shadow banking system consists of a web of specialized financial institutions that conduct credit, maturity, and liquidity transformation without direct, explicit access to public backstops. The lack of such access to sources of government liquidity and credit backstops makes shadow banks inherently fragile. Shadow banking activities are often intertwined with core regulated institutions such as bank holding companies, security brokers and dealers, and insurance companies. These interconnections of shadow banks with other financial institutions create sources of systemic risk for the broader financial system. The authors describe elements of monitoring risks in the shadow banking system, including recent efforts by the Financial Stability Board.

No. 640, September 2013

Banking Globalization, Transmission, and Monetary Policy Autonomy

Linda S. Goldberg

International financial linkages, particularly through global bank flows, generate important questions about the consequences for economic and financial stability, including the ability of countries to conduct autonomous monetary policy. Goldberg addresses the monetary autonomy issue in the context of the international policy trilemma: Countries seek three typically desirable but jointly unattainable objectives—stable exchange rates, free international capital mobility, and monetary policy autonomy oriented toward, and effective at, achieving domestic goals. The author argues that global banking entails some features that are distinct from the broad issues of capital market openness captured in existing studies. In principle, if global banks with affiliates in foreign markets can reduce frictions in international capital flows, then the macroeconomic policy trilemma could bind tighter and interest rates will exhibit more co-movement across countries. However, if the information content and stickiness of the claims and services provided are enhanced relative to a benchmark alternative, then global banks can weaken the trilemma rather than enhance it. The result is a prediction of heterogeneous effects on monetary autonomy, tied to the business models of the global banks and whether countries are investment or funding locations for those banks. Empirical tests of the trilemma support this view that global bank effects are heterogeneous and that the primary drivers of monetary autonomy are exchange rate regimes.

No. 645, October 2013

Fire-Sale Spillovers and Systemic Risk

Fernando Duarte and Thomas Eisenbach

Duarte and Eisenbach construct a new systemic risk measure that quantifies vulnerability to fire-sale spillovers using detailed regulatory balance sheet data for U.S. commercial banks and repo market data for broker-dealers. Even for moderate shocks in normal times, fire-sale externalities can be substantial. For commercial banks, a 1 percent exogenous shock to assets in 2013:Q1 produces fire-sale externalities equal to 21 percent of system capital. For broker-dealers, a 0.1 percent shock to assets in August 2013 generates spillover losses equivalent to almost 6 percent of system capital. Externalities during the last financial crisis are between two and three times larger. The authors' systemic risk measure reaches a peak in the fall of 2007 but shows a notable increase starting in 2004, ahead of many other systemic risk indicators. Although the largest banks and broker dealers produce—and are victims of—most of the externalities, leverage and linkages of financial institutions also play important roles.

No. 650, October 2013

Did Liquidity Providers Become Liquidity Seekers?

Jaewon Choi and Or Shachar

The misalignment between corporate bond and credit default swap (CDS) spreads (that is, CDS-bond basis) during the 2007-09 financial crisis is often attributed to corporate bond dealers shedding off their inventory, right when liquidity was scarce. This study documents evidence against this widespread perception. In the months following Lehman's collapse, dealers, including proprietary trading desks in investment banks, provided liquidity in response to the large selling by clients. Corporate bond inventory of dealers rose sharply as a result. Although providing liquidity, limits to arbitrage, possibly in the form of limited capital, obstructed the convergence of the basis. The authors further show that the unwinding of precrisis "basis trades" by hedge funds is the main driver of the large negative basis. Price drops following Lehman's collapse were concentrated among bonds with available CDS contracts and high activity in basis trades. Overall, their results indicate that hedge funds that serve as alternative liquidity providers at times, not dealers, caused the disruption in the credit market.

No. 651, November 2013

Intermediary Balance Sheets

Tobias Adrian and Nina Boyarchenko

The authors document the cyclical properties of the balance sheets of different types of intermediaries. While the leverage of the bank sector is highly procyclical, the leverage of the nonbank financial sector is acyclical. They propose a theory of a two-agent financial intermediary sector within a dynamic model of the macroeconomy. Banks are financed by issuing risky debt to households and face risk-based capital constraints, which leads to procyclical leverage. Households can also participate in financial markets by investing in a nonbank "fund" sector where fund managers face skin-in-the-game constraints, leading to acyclical leverage in equilibrium. The model also reproduces the empirical feature that the banking sector's leverage growth leads the financial sector's asset growth, while leverage in the fund sector does not precede growth in financial-sector assets. The procyclicality of the banking sector is due to its risk-based funding constraints, which give a central role to the time variation of endogenous uncertainty.

No. 653, November 2013

Coordinating Monetary and Macroprudential Policies

Bianca De Paoli and Matthias Paustian

The financial crisis has prompted macroeconomists to think of new policy instruments that could help ensure financial stability. Policymakers are interested in understanding how these should be set in conjunction with monetary policy. The authors contribute to this debate by analyzing how monetary and macroprudential policy should be conducted to reduce the costs of macroeconomic fluctuations. They do so in a model in which such costs are driven by nominal rigidities and credit constraints. De Paoli and Paustian find that, if faced with cost-push shocks, policy authorities should cooperate and commit to a given course of action. In a world in which monetary and macroprudential tools are set independently and under discretion, the authors' findings suggest that assigning conservative mandates (à la Rogoff [1985]) and having one of the authorities act as a leader can mitigate coordination problems. At the same time, choosing monetary and macroprudential tools that work in a similar fashion can increase such problems.

No. 654, November 2013

ECB Monetary Operations and the Interbank Repo Market

Peter G. Dunne, Michael J. Fleming, and Andrey Zholos

The authors examine the relationship between monetary policy operations and interbank borrowing and lending of funds using sovereign bonds as collateral. They first establish that, in the precrisis period, there are important but rather weak relations between these funding sources and that this relationship varies within maintenance periods and at the end of the year. Official funding conditions did not meaningfully constrain repo market activity in the 2003-05 period but, in the immediate precrisis period, rate increases led to a sharp contraction in repo activity. Focusing on the crisis period, the authors identify potentially benign substitution effects between official auctions and repo market activity but their empirical analysis shows that positive innovations in the cost of official funding, due to aggressive bidding, and a limited allotment response, encouraged increased use of the interbank repo market. The analysis informs a discussion of the merits of returning to variable rate operations.

No. 656, November 2013

Arbitrage-Free Models of Stocks and Bonds

J. Benson Durham

A small but ambitious literature uses affine arbitrage-free models to estimate jointly U.S. Treasury term premiums and the term structure of equity risk premiums. Within this approach, this paper identifies the parameter restrictions that are consistent with a simple dividend discount model, extends the cross-section to Germany and France, averages across multiple observable-factor and market prices of risk specifications, and considers alternative samples for parameter estimation. The results produce intuitive trajectories for both sets of premiums given standard samples starting from July 1993. However, the decomposition of nominal U.S. Treasury yields, but not long-run equity risk premiums, is sensitive to data beyond 2008, which raises some questions about the net effects of unconventional monetary policy measures. Nonetheless, the rotation from sharp inversion during the financial crisis to an upward-sloping term structure of equity risk premiums more recently, with modest readings at the front end, is not inconsistent with some net moderation in required compensation for equity risk in the United States.

No. 657, November 2013

Momentum and the Term Structure of Interest Rates

J. Benson Durham

A vast literature reports excess returns to momentum strategies across many financial asset classes. However, no study examines trading rules based on price history along individual government-bond term structures—that is, with respect to duration buckets across the curve—as opposed to across sovereign markets or individual term structures as a whole over time. Under duration-neutral and long-only constraints as well as low trading costs, this paper reports excess annualized returns of up to 120 basis points and information ratios as high as 0.79 using U.S. Treasury total return data from December 1996 through July 2013. Given a corresponding long-short strategy with no absolute duration risk, excess returns and information ratios are up to 207 basis points and 1.01, respectively. Unlike momentum strategies in some other asset classes, the excess return distributions are positively skewed, and momentum loads, if in any way, favorably on broad risk factors. Returns correlate to a degree with portfolios based on instantaneous forward term premium estimates, in turn derived from a set of Gaussian arbitrage-free affine term structure models. However, substantial variance remains unexplained, the betas are less than one, and the alphas are meaningfully positive. A caveat is that underlying behavioral explanations for momentum are lacking in the context of the U.S. Treasury market.

No. 659, November 2013

No Guarantees, No Trade: How Banks Affect Export Patterns

Friederike Niepmann and Tim Schmidt-Eisenlohr

This study provides evidence that shocks to the supply of trade finance have a causal effect on U.S. exports. The identification strategy exploits variation in the importance of banks as providers of letters of credit across countries. The larger a U.S. bank's share of the trade finance market in a country is, the larger should be the effect on exports to that country if the bank reduces its supply of letters of credit. The authors find that supply shocks have quantitatively significant effects on export growth. A shock of one standard deviation to a country's supply of trade finance decreases exports, on average, by 2 percentage points. The effect is much larger for exports to small and risky destinations and in times when aggregate uncertainty is high. Their results imply that global banks affect export patterns and suggest that trade finance played a role in the Great Trade Collapse.

No. 660, December 2013

The Over-the-Counter Theory of the Fed Funds Market: A Primer

Gara Afonso and Ricardo Lagos

Afonso and Lagos present a dynamic over-the-counter model of the fed funds market, and use it to study the determination of the fed funds rate, the volume of loans traded, and the intraday evolution of the distribution of reserve balances across banks. They also investigate the implications of changes in the market structure, as well as the effects of central bank policy instruments such as open market operations, the Discount Window lending rate, and the interest rate on bank reserves.

No. 661, December 2013

Liquidity Policies and Systemic Risk

Tobias Adrian and Nina Boyarchenko

The growth of wholesale-funded credit intermediation has motivated liquidity regulations. The authors analyze a dynamic stochastic general equilibrium model in which liquidity and capital regulations interact with the supply of risk-free assets. In the model, the endogenously time-varying tightness of liquidity and capital constraints generates intermediaries' leverage cycle, influencing the pricing of risk and the level of risk in the economy. Their analysis focuses on liquidity policies' implications for household welfare. Within the context of the authors' model, liquidity requirements are preferable to capital requirements, as tightening liquidity requirements lowers the likelihood of systemic distress without impairing consumption growth. In addition, Adrian and Boyarchenko find that intermediate ranges of risk-free asset supply achieve higher welfare.

Quantitative Methods

No. 591, January 2013

Chinese Exports and U.S. Import Prices*

Benjamin R. Mandel

Mandel develops a technique to decompose price distributions into contributions from markups and marginal cost. The estimators are then used as a laboratory to measure the relationship between increasing Chinese competition and the components of U.S. import prices. The estimates suggest that the intensification of Chinese exports in the 2000s corresponded to substantial changes in the distributions of both the markups and marginal cost of U.S. imports. The entry of a Chinese exporter in an industry corresponded to rest-of-world exporters shrinking their markup (lowering prices by up to 30 percent) and increasing their marginal cost (raising prices by up to 50 percent). The fact that marginal cost

*A top download in 2011.

increased as competition stiffened strongly suggests that the composition of non-Chinese exports shifted toward higher-quality varieties. The estimates also imply a pattern in the acquisition of market share by Chinese exporters: They enter at relatively low cost/quality and then subsequently undertake quality improvements and markup reductions. These results provide some of the first measures of the dual nature of trade's procompetitive effects; exporters respond to tougher competition by simultaneously adjusting both markups and quality.

No. 593, January 2013

Gender Discrimination and Social Identity: Experimental Evidence from Urban Pakistan

Adeline Delavande and Basit Zafar

Gender discrimination in South Asia is a well-documented fact. However, gender is only one of an individual's many identities. This paper investigates how gender discrimination depends on the social identities of interacting parties. The authors use an experimental approach to identify gender discrimination by randomly matching 2,836 male and female students pursuing bachelor's-equivalent degrees in three different types of institutions—Madrassas (religious seminaries), Islamic universities, and liberal universities—that represent distinct identities within the Pakistani society. Delavande and Zafar's main finding is that gender discrimination is not uniform in intensity and nature across the educated Pakistani society and varies as a function of the social identity of both individuals who interact. While they find no evidence of higher-socioeconomic-status men discriminating against women, men of lower socioeconomic status and higher religiosity tend to discriminate against women—but only women of lower socioeconomic status who are closest to them in social distance. Moreover, this discrimination is largely taste-based. Their findings suggest that social policies aimed at empowering women need to account for the intersectionality of gender with social identity.

No. 598, February 2013

The High-Frequency Response of Energy Prices to Monetary Policy: Understanding the Empirical Evidence

Carlo Rosa

Rosa examines the impact of conventional and unconventional monetary policy on energy prices, using an event study with intraday data. Three measures for monetary policy surprises are used: 1) the surprise change to the current federal funds target rate, 2) the surprise component to the future path of policy, and 3) the unanticipated announcements of future large-scale asset purchases (LSAPs). Estimation results show that monetary policy news has economically important and highly significant effects on the level and volatility of energy futures prices and their trading volumes. The author finds that, on average, a hypothetical unanticipated 100 basis point hike in the federal funds target rate is associated with roughly a 3 percent decrease in West Texas Intermediate oil prices. He also documents that, in a narrow window around the Federal Open Market Committee meeting, the Federal Reserve's LSAP1 and LSAP2 programs have a cumulative financial market impact on crude oil equivalent to an unanticipated cut in the federal funds target rate of 155 basis points. Monetary policy affects oil prices mostly by affecting the value of the U.S. dollar exchange rate. Intraday energy prices also respond to news announcements about the U.S. macroeconomy and inventories. The daily responses are never significant, except in the case of inventory news.

No. 619, May 2013

Time-Varying Structural Vector Autoregressions and Monetary Policy: A Corrigendum

Marco Del Negro and Giorgio Primiceri

This note corrects a mistake in the estimation algorithm of the time-varying structural vector autoregression model of Primiceri (2005) and proposes a new algorithm that correctly applies the procedure proposed by Kim, Shephard, and Chib (1998) to the estimation of VAR or DSGE models with stochastic volatility. Relative to Primiceri (2005), the correct algorithm involves a different ordering of the various Markov Chain Monte Carlo steps.

No. 629, September 2013

Evaluating the Quality of Fed Funds Lending Estimates Produced from Fedwire Payments Data

Anna Kovner and David Skeie

A number of empirical analyses of interbank lending rely on indirect inferences from individual interbank transactions extracted from payments data using algorithms. Kovner and Skeie conduct an evaluation to assess the ability of identifying overnight U.S. fed funds activity from Fedwire payments data. They find evidence that the estimates extracted from the data are statistically significantly correlated with banks' fed funds borrowing as reported on the FRY-9C. The authors find similar associations for fed funds lending, although the correlations are lower. To be conservative, they believe that the estimates are best interpreted as measures of overnight interbank activity rather than fed funds activity specifically. They also compare the estimates provided by Armantier and Copeland (2012) to the Y-9C fed funds amounts.

No. 655, November 2013

Noisy Information and Fundamental Disagreement

Philippe Andrade, Richard K. Crump, Stefano Eusepi, and Emanuel Moench

The authors study the term structure of disagreement of professional forecasters for key macroeconomic variables. They document a novel set of facts: 1) forecasters disagree at all horizons, including the very long run; 2) the shape of the term structure of disagreement differs markedly across variables: the term structure is downward-sloping for real output growth, relatively flat for CPI inflation, and upward-sloping for the federal funds rate; 3) disagreement is time varying at all horizons, including the very long run. The authors suggest a model with noisy information and shifting long-run beliefs that is consistent with these stylized facts. Notably, their model does not rely on the heterogeneity of prior beliefs, bounded rationality, or differences in the precision of signals across agents.

Outside Journals

Members of the Research and Statistics Group publish in a wide range of economic and finance journals, conference volumes, and scholarly books.

Published in 2013

Macroeconomics and Growth

Bianca De Paoli
"Cyclical Risk Aversion, Precautionary Savings, and Monetary Policy," with Pawel Zabczyk. *Journal of Money, Credit, and Banking* 45, no. 1 (February): 1-36.

"Policy Design in a Model with Swings in Risk Appetite," with Pawel Zabczy. *Oxford Economic Papers* 65, suppl. 1 (April): 146-69.

Thomas Eisenbach
"Macroeconomics with Financial Frictions: A Survey," with Markus Brunnermeier and Yuliy Sannikov. In Daron Acemoglu, Manuel Arellano, and Eddie Dekel, eds., *Advances in Economics and Econometrics*. Tenth World Congress of the Econometric Society. Vol. 2. Cambridge, U.K.: Cambridge University Press.

Marc Giannoni
"Some Unpleasant General Equilibrium Implications of Executive Incentive Compensation Contracts." *Journal of Economic Theory* 148, no. 1 (January): 31-63.

Fatih Karahan
"On the Persistence of Income Shocks over the Life-Cycle: Evidence, Theory, and Implications", Serdar Ozkan. *Review of Economic Dynamics* 16, no. 3 (July): 452-76.

Robert Rich and Joseph Tracy
"Early Contract Renegotiation: An Analysis of U.S. Labor Contracts from 1970 to 1995." *Journal of Labor Economics* 34, no. 4 (October): 825-42.

Ayşegül Şahin
"Firms and Flexibility," with Bart Hobijn. *Economic Inquiry* 51, no. 1 (January): 922-40.

"Unemployment Dynamics in the OECD," with Michael Elsby and Bart Hobijn. *Review of Economics and Statistics* 95, no. 2 (May): 530-48.

Andrea Tambalotti
"Is There a Trade-Off between Inflation and Output Stabilization?" with Alejandro Justiniano and Giorgio Primiceri. *American Economic Journal: Macroeconomics* 5, no. 2 (April): 1-31.

International

Mary Amiti
"Import Competition and Quality Upgrading," with Amit Khandelwal. *Review of Economics and Statistics* 95, no. 2 (May): 476-90.

Benjamin Mandel
"Effects of Terms of Trade Gains and Tariff Changes on the Measurement of U.S. Productivity Growth," with Robert Feenstra, Marshall Reinsdorf, and Matthew Slaughter. *American Economic Journal: Economic Policy* 5, no. 1 (February): 59-93.

Paolo Pesenti
"Theoretical Notes on Commodity Prices and Monetary Policy." Proceedings of *Globalization and Inflation Dynamics in Asia and the Pacific*, a research workshop organized by the Bank for International Settlements. *BIS Papers,* no. 70, February: 79-90.

"Varieties and the Transfer Problem," with Giancarlo Corsetti and Philippe Martin. *Journal of International Economics* 89, no. 1 (January): 1-12.

Ernst Schaumburg
"Causes of the Great Recession of 2007-2009: The Financial Crisis Was the Symptom Not the Disease!" with Ravi Jagannathan and Mudit Kapoor. *Journal of Financial Intermediation* 22, no. 1 (January): 4-29.

Introduction
Economic Policy Review
Current Issues
Liberty Street Economics
Staff Reports
Outside Journals

Microeconomics

Olivier Armantier, Giorgio Topa,
Wilbert van der Klaauw, and Basit Zafar
"Measuring Inflation Expectations," with Wändi Bruine de Bruin and Simon Potter. *Annual Review of Economics* 5, January: 273-301.

Rajashri Chakrabarti
"Accountability with Voucher Threats, Responses, and the Test-Taking Population: Regression Discontinuity Evidence from Florida." *Education Finance and Policy* 8, no. 2 (Spring): 121-67.

"Do Vouchers Lead to Sorting under Random Private School Selection? Evidence from the Milwaukee Voucher Program." *Economics of Education Review* 34, June: 191-218.

"Impact of Voucher Design on Public School Performance: Evidence from Florida and Milwaukee Voucher Programs." *B.E. Journal of Economic Analysis and Policy* 13, no. 2 (October): 349-94.

"Vouchers, Public School Response, and the Role of Incentives: Evidence from Florida." *Economic Inquiry* 51, no. 1 (January): 500-26.

Marco Cipriani
"Like Mother Like Son? Experimental Evidence on the Transmission of Values from Parents to Children," with Paola Giuliano and Olivier Jeanne. *Journal of Economic Behavior and Organization* 90, June: 100-11.

Andreas Fuster
"What Goes Up Must Come Down? Experimental Evidence on Intuitive Forecasting," with John Beshears, James Choi, David Laibson, and Brigitte Madrian. *American Economic Review* 103, no. 3 (May): 570-4. Papers and Proceedings of the 125th Annual Meeting of the American Economic Association.

Maxim Pinkovskiy
"World Welfare Is Rising: Estimation Using Nonparametric Bounds on Welfare Measures." *Journal of Public Economics* 97, no. 1 (January): 176-95.

Wilbert van der Klaauw
"What Determines Family Structure?" with David Blau. *Economic Inquiry* 51, no. 1 (January): 579-604.

James Vickery
"Barriers to Household Risk Management: Evidence from India," with Shawn Cole, Xavier Giné, Jeremy Tobacman, Petia Topalova, and Robert Townsend. *American Economic Journal: Applied Economics* 5, no. 1 (January): 104-35.

Basit Zafar
"College Major Choice and the Gender Gap." *Journal of Human Resources* 48, no. 6 (Summer): 545-95.

Banking and Finance

Tobias Adrian, Richard Crump, and Emanuel Moench
"Pricing the Term Structure with Linear Regressions." *Journal of Financial Economics* 110, no. 1 (October): 110-38.

Nicola Cetorelli and Stavros Peristiani
"Prestigious Stock Exchanges: A Network Analysis of International Financial Centers." *Journal of Banking and Finance* 37, no. 5 (May): 1543-51.

Marco Cipriani
"Financial Contagion in the Laboratory: The Cross-Market Rebalancing Channel," with Gloria Gardinal and Antonio Guarino. *Journal of Banking and Finance* 37 no. 11 (November): 4310-26.

Marco Cipriani and Antoine Martin
"The Minimum Balance at Risk: A Proposal to Mitigate the Systemic Risks Posed by Money Market Funds," with Michael Holscher and Patrick McCabe. *Brookings Papers on Economic Activity*, spring: 211-78.

Antoine Martin
"Bank Capital Regulation and Structured Finance," with Bruno Parigi. *Journal of Money, Credit, and Banking* 45, no. 1 (February): 87-119.

"Liquidity-Saving Mechanisms in Collateral-Based RTGS Payment Systems," with Marius Jurgilas. *Annals of Finance* 9, no. 1 (February): 29-60.

"Rediscounting under Aggregate Risk with Moral Hazard," with James Chapman. *Journal of Money, Credit, and Banking* 45, no. 4 (June): 651-74.

Friederike Niepmann
"Bank Bailouts, International Linkages, and Cooperation," with Tim Schmidt-Eisenlohr. *American Economic Journal: Economic Policy* 5, no. 4 (November): 270-305.

Or Shachar
"Why Do Closed-End Bond Funds Exist? An Additional Explanation for the Growth in Domestic Closed-End Bond Funds," with Christopher R. Blake, Edwin J. Elton, and Martin J. Gruber. *Journal of Financial and Quantitative Analysis* 48, no. 2 (April): 405-25.

Tanju Yorulmazer
"Liquidity Hoarding," with Douglas Gale. *Theoretical Economics* 8, no. 2 (May): 291-324.

"A Theory of Arbitrage Capital," with Viral Acharya and Hyun Song Shin. *Review of Corporate Finance Studies* 2, no. 1 (January): 62-97.

Quantitative Methods

Jennie Bai
"State Space Models and MIDAS Regressions," with Eric Ghysels and Jonathan Wright. *Econometric Reviews* 32, no. 7 (June): 779-813.

Adam Copeland
"The Production Impact of 'Cash-for-Clunkers': Implications for Stabilization Policy," with James Kahn. *Economic Inquiry* 51, no. 1 (January): 288-303.

Jan Groen
"Model Selection Criteria for Factor-Augmented Regressions," with George Kapetanios. *Oxford Bulletin of Economics and Statistics* 75, no. 1 (February): 37-63.

"Multivariate Methods for Monitoring Structural Change," with George Kapetanios and Simon Price. *Journal of Applied Econometrics* 28, no. 2 (March): 250-74.

"Real-Time Inflation Forecasting in a Changing World," with Richard Paap and Francesco Ravazzolo. *Journal of Business and Economic Statistics* 31, no. 1 (January): 29-44.

Forthcoming

Macroeconomics and Growth

Tobias Adrian
"Financial Intermediaries and the Cross-Section of Asset Returns," with Erkko Etula and Muir Tyler. *Journal of Finance*.

"Which Financial Frictions? Parsing the Evidence from the Financial Crisis of 2007-09," with Paolo Colla and Hyun Song Shin. *NBER International Seminar on Macroeconomics*.

Discussion of "An Integrated Framework for Multiple Financial Regulations," by Charles Goodhart, Anil Kashyap, Dimitrios Tsomocos, and Alex Vardoulakis. *International Journal of Central Banking*.

Stefania Albanesi
"Maternal Health and the Baby Boom," with Claudia Olivetti. *Quantitative Economics*.

Rajashri Chakrabarti, Donghoon Lee, Wilbert van der Klaauw, and Basit Zafar
"Household Debt and Saving during the 2007 Recession." In Michael Palumbo Hulten and Marshall Reinsdorf, eds., *Measuring Wealth and Financial Intermediation and Their Links to the Real Economy*. NBER conference volume.

Gauti Eggertsson
"Deficits, Public Debt Dynamics, and Tax and Spending Multipliers," with Matthew Denes and Sophia Gilbukh. *Economic Journal*.

"Fiscal Multipliers and Policy Coordination." In Jordi Galí, ed., *Fiscal Policy and Macroeconomic Performance*. Proceedings of the Fourteenth Annual Conference of the Central Bank of Chile.

Discussion of "How Flexible Can Inflation Targeting Be and Still Work?" by Kenneth N. Kuttner and Adam S. Posen. *International Journal of Central Banking*.

Stefano Eusepi
"Stabilizing Expectations under Monetary and Fiscal Policy Coordination," with Bruce Preston. *Journal of the European Economic Association*.

Marc Giannoni
"Optimal Interest Rate Rules and Inflation Stabilization versus Price-Level Stabilization." *Journal of Economic Dynamics and Control*.

Benjamin Mandel
"Missing Import Price Changes and Low Exchange Rate Pass-Through," with Etienne Gagnon and Robert Vigfusson. *American Economic Journal*.

Jonathan McCarthy
"Has the Response of Investment to Financial Market Signals Changed?" In Per Gunnar Berglund and Leanne J. Ussher, eds., *Recent Developments in Macroeconomics*. Eastern Economic Association conference volume. Oxford, U.K.: Routledge.

Ayşegül Şahin
"The Decline of the U.S. Labor Share," with Michael Elsby and Bart Hobijn. *Brookings Papers on Economic Activity*.

"The Labor Market in the Great Recession: An Update," with Michael Elsby, Bart Hobijn, and Rob Valletta. *Brookings Papers on Economic Activity.*

"A Rising Natural Rate of Unemployment: Transitory or Permanent?" with Mary Daly, Bart Hobijn, and Rob Valletta. *Journal of Economic Perspectives*.

"Subsidizing Job Creation in the Great Recession," with Sagiri Kitao and Joseph Song. *Economics Letters*.

International

Mary Amiti
"Importers, Exporters, and Exchange Rate Disconnect," with Oleg Itshoki and Josef Konings. *American Economic Review*.

Jan Groen
"Forecasting Commodity Price Indexes Using Macroeconomic and Financial Predictors: Discussion." *International Journal of Forecasting*.

Andrea Tambalotti
"The Effects of the Saving and Banking Glut on the U.S. Economy," with Giorgio Primiceri and Alejandro Justiniano. *Journal of International Economics*.

Microeconomics

Jaison Abel
"Skills across the Urban-Rural Hierarchy," with Todd M. Gabe and Kevin Stolarick. *Growth and Change*.

Tobias Adrian
"Procyclical Leverage and Value-at-Risk," with Hyun Song Shin. *Review of Financial Studies*.

Tobias Adrian, Adam Copeland, and Antoine Martin
"Repo and Securities Lending," with Brian Begalle. In Markus K. Brunnermeier and Arvind Krishnamurthy, eds., *Systemic Risk Measurement.* NBER conference volume.

Olivier Armantier
"Eliciting Beliefs: Proper Scoring Rule, Incentives, Stakes, and Hedging," with Nicolas Treich. *European Economic Review*.

"On the Effects of Incentive Framing on Bribery: Evidence from an Experiment in Burkina Faso," with Amadou Boly. In Danila Serra and Leonard Wantchekon, eds., *Econometrics of Governance*.

"On the External Validity of Laboratory Experiments on Corruption," with Amadou Boly. In Danila Serra and Leonard Wantchekon, eds., *New Advances in Experimental Research on Corruption*. *Research in Experimental Economics,* vol. 15. Bingley, U.K.: Emerald Group Publishing.

"Relative Performance of Liability Rules: Experimental Evidence," with Vera Angelova, Giuseppe Attanasi, and Yolande Hiriart. *International Economic Review*.

Rajashri Chakrabarti
"Incentives and Responses under No-Child-Left-Behind: Credible Threats and the Role of Competition." *Journal of Public Economics*.

Adam Copeland
"Intertemporal Substitution and New Car Purchases." *RAND Journal of Economics*.

Adam Copeland and Antoine Martin
"Repo Runs: Evidence from the Tri-Party Repo Market," with Michael Walker. *Journal of Finance*.

Andrew Haughwout, Richard Peach, and Joseph Tracy
"The Supply Side of the Housing Boom and Bust of the 2000s," with John Sporn. In Edward Glaeser and Todd Sinai, eds., *Housing and the Financial Crisis.* Chicago: University of Chicago Press.

Andrew Haughwout and Joseph Tracy
"Second Chances: Subprime Mortgage Modification and Re-Default," with Ebiere Okah. *Journal of Money, Credit, and Banking*.

Andrew Haughwout and Wilbert van der Klaauw
"Land Use Regulation and Welfare," with Matthew A. Turner. *Econometrica*.

Anna Kovner
"Doing Well by Doing Good? Community Development Venture Capital," with Josh Lerner. *Journal of Economics and Management Strategy*.

Benjamin Pugsley
"Are Household Surveys Like Tax Forms? Evidence from Income Underreporting of the Self-Employed." *Review of Economics and Statistics*.

Ayşegül Şahin
"Beveridge Curve Shifts across Countries since the Great Recession," with Bart Hobijn. *IMF Economic Review*.

Wilbert van der Klaauw
"Unintended Consequences of Welfare Reform: The Case of Divorced Parents," with Marco Francesconi and Helmut Rainer. *Review of Economics of the Household*.

Basit Zafar
"Bayesian Social Learning, Conformity, and Stubbornness: Evidence from the AP Top 25," with Daniel Stone. *Journal of Risk and Uncertainty*.

Banking and Finance

Tobias Adrian
"Shadow Banking: A Review of the Literature," with Adam B. Ashcraft. *Palgrave Dictionary of Economics*.

Nicola Cetorelli
"Surviving Credit Market Competition." *Economic Inquiry*.

Comment on "Inflation and Financial Market Performance: What Have We Learned in the Last Ten Years?" by John Boyd and Bruce Champ. *Journal of Money, Credit, and Banking*.

Dong Beom Choi
"Heterogeneity and Stability: Bolster the Strong, Not the Weak." *Review of Financial Studies*.

Marco Cipriani
"Estimating a Structural Model of Herd Behavior in Financial Markets," with Antonio Garino. *American Economic Review*.

Stefano Eusepi
"When Does Determinacy Imply E-Stability?" with James Bullard. *International Economic Review*.

David Lucca
"Inconsistent Regulators: Evidence from Banking," with Francesco Trebbi, Amit Seru, and Sumit Agarwal. *Quarterly Journal of Economics*.

David Lucca and Emanuel Moench
"The Pre-FOMC Announcement Drift." *Journal of Finance*.

Antoine Martin and David Skeie
"The Fragility of Short-Term Secured Funding Markets," with Ludwig Von Thadden. *Journal of Economic Theory*.

"Repo Runs," with Ernst-Ludwig Von Thadden. *Review of Financial Studies*.

Donald Morgan
"Payday Holiday: How Households Fare after Payday Credit Bans." *Journal of Money, Credit, and Banking*.

Donald Morgan and Stavros Peristiani
"The Information Value of the Stress Test and Bank Opacity," with Vanessa Savino. *Journal of Money, Credit, and Banking*.

João Santos
"Banks' Liquidity and the Cost of Liquidity to Corporations," with Vitaly Bord. *Journal of Money, Credit, and Banking*.

Ernst Schaumburg
"Decomposing Short-Term Return Reversal," with Zhi Da and Qianqiu Liu. *Management Science*.

Quantitative Methods

Richard Crump
"Bootstrapping Density-Weighted Average Derivatives," with Matias Cattaneo and Michael Jansson. *Econometric Theory*.

"Generalized Jackknife Estimators of Weighted Average Derivatives," with Matias Cattaneo and Michael Jansson. *Journal of the American Statistical Association*.

"Small Bandwidth Asymptotics for Density-Weighted Average Derivatives," with Matias Cattaneo and Michael Jansson. *Econometric Theory*.

Marco Del Negro
"Rare Shocks, Great Recessions," with Vasco Cúrdia and Daniel Greenwald. *Journal of Applied Econometrics*.

Emanuel Moench
"Dynamic Hierarchical Factor Models," with Serena Ng and Simon Potter. *Review of Economics and Statistics*.

Ernst Schaumburg
"Integrated Quarticity Estimation: Theory and Practical Implementation," with Torben Andersen and Dobrev Dobrislav. *Econometric Theory*.

Join Our Free E-Alert Service

Readers interested in learning of our new research quickly and conveniently are encouraged to join our free E-Alert notification service.

As a subscriber to E-Alert, you receive an e-mail as soon as new research publications are posted on our website—enabling you to download research immediately.

The e-mails also offer you:

- full abstracts of the new publications,
- links to the publications, their press releases, author home pages, and research on similar topics,
- access to a range of data and charts on economic and financial conditions,
- information on upcoming conferences and calls for papers.

Subscribe to E-Alert by visiting
www.newyorkfed.org/research/index.html