



PUBLICATIONS  
AND  
OTHER RESEARCH  
2014

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## 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 2014 releases in our principal 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 another series of interest to readers:

- *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 26.



## 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](http://www.newyorkfed.org/research/epr).

### Volume 20

No. 1, February 2014

*Special Issue: The Stability of Funding Models*

Literature Review on the Stability of Funding Models

*Tanju Yorulmazer*

Financial intermediaries have an important role as liquidity providers—they perform maturity and liquidity transformation by issuing liquid, short-term liabilities while holding illiquid, long-term assets. But there is an inherent fragility associated with this role. This article provides a review of the economics literature on the stability of banks and other financial intermediaries, with a policy-oriented focus on their funding models. Yorulmazer employs the standard framework used in the literature to examine the fragility of intermediaries that conduct maturity and liquidity transformation. He then considers potential factors that make them more or less stable. Developments in the financial sector that may have affected the stability of funding models are also discussed.

Case Studies on Disruptions during the Crisis

*Tanju Yorulmazer*

The 2007-09 financial crisis saw many funding mechanisms challenged by a drastic reduction in market liquidity, a sharp increase in the cost of transactions, and, in some cases, a drying-up in financing. This article presents case studies of

several key financial markets and intermediaries under significant distress at this time. For each case, the author discusses the size and evolution of the funding mechanism, the sources of the disruptions, and the policy responses aimed at mitigating distress and making markets more liquid. The review serves as a reference on the vulnerabilities of funding structures and is useful for those considering the scope and design of reform efforts.

Stability of Funding Models: An Analytical Framework

*Thomas Eisenbach, Todd Keister, James McAndrews, and Tanju Yorulmazer*

With the recent financial crisis, many financial intermediaries experienced strains created by declining asset values and a loss of funding sources. In reviewing these stress events, one notices that some arrangements appear to have been more stable—that is, better able to withstand shocks to their asset values and/or funding sources—than others. Because the precise determinants of this stability are not well understood, gaining a better grasp of them is a critical task for market participants and policymakers as they try to design more resilient arrangements and improve financial regulation. This article uses a simple analytical framework to illustrate the determinants of a financial intermediary's ability to survive stress events. An intermediary in the framework faces two types of risk: the value of its assets may decline and/or its short-term creditors may decide not to roll over their debt. The authors measure stability by looking at the combinations of shocks the intermediary can experience while remaining solvent. They study how stability depends on the intermediary's balance-sheet characteristics, such as its leverage, the maturity structure of its debt, and the liquidity and riskiness of its asset portfolio. They also show how the framework can be applied to examine current policy issues, including liquidity requirements, discount window policy,

and different approaches to reforming money market mutual funds.

No. 2, December 2014

*Special Issue: Large and Complex Banks*

Do Big Banks Have Lower Operating Costs?

*Anna Kovner, James Vickery, and Lily Zhou*

This study examines the relationship between bank holding company (BHC) size and components of noninterest expense (NIE) in order to shed light on the sources of scale economies in banking. Drawing on detailed expense information provided by U.S. banking firms in the memoranda of their regulatory filings, the authors find a robust negative relationship between size and normalized measures of NIE. The relationship is strongest for employee compensation expenses and components of “other” noninterest expense such as information technology and corporate overhead expenses. In addition, the authors find no evidence that the inverse relationship between banking firm size and NIE ratios disappears above a given size threshold. In dollar terms, their estimates imply that for a BHC of mean size, an additional \$1 billion in assets reduces noninterest expense by \$1 million to \$2 million per year, relative to a base case in which operating cost ratios are unrelated to size.

Evidence from the Bond Market on Banks' “Too-Big-to-Fail” Subsidy

*João A. C. Santos*

Using information on bonds issued over the 1985-2009 period, this study finds that the largest banks have a funding advantage over their smaller peers. This advantage may not be entirely attributable to investors' belief that the largest banks are “too big to fail,” because the study also finds that the largest nonbanks, as well as the largest nonfinancial corporations, have a cost advantage relative to their smaller peers. However, a comparison across the three groups reveals that the funding advantage

enjoyed by the largest banks is significantly larger than that available to the largest nonbanks and nonfinancial corporations. This difference is consistent with the hypothesis that investors believe the largest banks to be too big to fail.

Do “Too-Big-to-Fail” Banks Take On More Risk?

*Gara Afonso, João A. C. Santos, and James Traina*

The notion that some banks are “too big to fail” builds on the premise that governments will offer support to avoid the adverse consequences of disorderly bank failures. However, this promise of support comes at a cost: Large, complex, or interconnected banks might take on more risk if they expect future rescues. This article studies the effect of potential government support on banks' appetite for risk. Using balance-sheet data for 224 banks in forty-five countries starting in March 2007, the authors find higher levels of impaired loans after an increase in government support. To measure support, they rely on Fitch Ratings' support rating floors (SRFs), a new rating that isolates potential sovereign support from other sources of external support. A one-notch rise in the SRF is found to increase the impaired loan ratio by roughly 0.2—an 8 percent increase for the average bank. The authors obtain similar results when they assess the effect of increased support on net charge-offs and when they narrow their sample to U.S. banks only.

Components of U.S. Financial-Sector Growth, 1950-2013

*Samuel Antill, David Hou, and Asani Sarkar*

The U.S. financial sector grew steadily as a share of the total business sector from 1959 until the recent financial crisis, when the trend reversed. In this article, the authors develop measures based on firm-level data to estimate the size of the financial sector and its subsectors relative to the total business (financial and nonfinancial) sector over time. The analysis

further sheds light on how these size measures are affected by a firm's choice of financing (whether public or private), firm size, industry type, use of leverage, and regulation. The authors find that the relative size of finance is smaller when only publicly listed firms are included. Financial firms are more prevalent among large firms than among small firms, with the relative size of finance being two to three times bigger in the large firm sample than in the small firm sample within any period and for any measure. While large financial firms on average grew only at moderately higher rates than smaller financial firms, large traditional banks grew substantially faster than their smaller counterparts. Shadow banks increased rapidly in size at the expense of traditional banks, becoming a significant portion of the financial sector in the mid-1990s and peaking just before the crisis. Overall, the results show that both the pre-crisis growth and the crisis-era decline mainly occurred in opaque, complex, and less-regulated subsectors of finance.

#### Evolution in Bank Complexity

*Nicola Cetorelli, James McAndrews, and James Traina*

This study documents the changing organizational complexity of bank holding companies as gauged by the number and types of subsidiaries. Using comprehensive data on U.S. financial acquisitions over the past thirty years, the authors track the process of consolidation and diversification, finding that banks not only grew in size, but also incorporated subsidiaries that span the entire spectrum of business activities within the financial sector. Their analysis shows that bank holding companies added banks to their firms in the early 1990s, but gradually expanded into nonbank intermediation through acquisitions of already-formed subsidiaries in the years following. They view this emergence as consistent with a move toward a model of finance oriented to securitization, and consider the implications of this new complexity for supervision and resolution.

#### Measures of Global Bank Complexity

*Nicola Cetorelli and Linda S. Goldberg*

Size and complexity are customarily viewed as contributing to the too-big-to-fail status of financial institutions. Yet there is no standard accepted metric for the complexity of a "typical" financial firm, much less for a large firm engaged in global finance. This article provides perspective on the issue of complexity by examining the number, types, and geographical spread of global financial institutions' affiliates. The authors show that standard measures of institution size are strongly related to total counts of affiliates in an organization, but are more weakly aligned with other measures of complexity. Considerable heterogeneity exists across global financial organizations in measures of business and geographic complexity. Some business models and geographic tendencies have strong regional characteristics that are linked to the organization's parentage. Since complexity is distinct from organizational size, the authors argue that its consequences and its policy relevance warrant much broader study.

#### Matching Collateral Supply and Financing Demands in Dealer Banks

*Adam Kirk, James McAndrews, Parinitha Sastry, and Phillip Weed*

The failure and near-collapse of some of the largest dealer banks on Wall Street in 2008 highlighted the marked vulnerability of the industry. Dealer banks are financial intermediaries that make markets for many securities and derivatives. Like standard banks, dealer banks may derive the funding for a loan from their own equity or from external sources, such as depositors or creditors. Unlike standard banks, however, dealer banks rely heavily upon collateralized borrowing and lending, which give rise to "internal" sources of financing. This article provides a descriptive and analytical perspective on dealer banks and their sources of financing, both

internal and external. The authors conclude that internal sources of financing may prove more efficient than external sources of financing in normal times, but may be subject to significant and abrupt reductions in stressful times. The analysis suggests that accounting rules that allow dealer banks to net certain collateralized transactions may obscure the banks' actual economic exposure to their customers, and that a prudent risk management framework should acknowledge the risks inherent in collateralized finance.

#### Bank Resolution Concepts, Trade-offs, and Changes in Practices

*Phoebe White and Tanju Yorulmazer*

Banks and financial intermediaries perform important roles for the smooth functioning of the economy such as channeling resources from savers to productive projects and providing payment services. Because bank failure can result in significant costs for the economy, an efficient resolution mechanism is needed to mitigate such costs. This article provides a simple framework for analyzing the feasibility and cost of different resolution methods. The analysis shows that while private resolution methods, such as sale to a healthy bank, are preferred options in terms of minimizing costs, they may not be feasible when the distressed institution is large or complex or when its failure occurs during a systemic crisis. Instead, firms and regulators may face second-best solutions, entailing trade-offs between disorderly liquidation and the use of public funds.

#### The Failure Resolution of Lehman Brothers

*Michael J. Fleming and Asani Sarkar*

This study examines the resolution of Lehman Brothers Holdings Inc. in the U.S. Bankruptcy Court in order to clarify the sources of complexity in its resolution and to inform the debate on appropriate resolution mechanisms for financial institutions. The authors focus on

the settlement of Lehman's creditor and counterparty claims, especially those relating to over-the-counter (OTC) derivatives, where much of the complexity of Lehman's bankruptcy resolution was rooted. They find that creditors' recovery rate was 28 percent, below historical averages for firms comparable to Lehman. Losses were exacerbated by poor bankruptcy planning and mitigated by timely funding from the Federal Reserve. The settlement of OTC derivatives was a long and complex process, occurring on different tracks for different groups of derivatives creditors. Consequently, the resolution process was less predictable than expected, and it was difficult to obtain an informed view of the process.

#### Why Bail-In? And How!

*Joseph H. Sommer*

All men are created equal, but all liabilities are not. Some liabilities are more equal than others. These "financial liabilities" are products of financial firms. These products shift risk (insurance or derivatives) or provide liquidity (bank deposits or repurchase agreements). Since these liabilities have an independent value as products, they are worth more than their net present value. The value of a financial firm, then, depends on its liability structure. These special liabilities therefore affect insolvency law. Most financial firms are governed by special insolvency law; those that are not receive special treatment in the Bankruptcy Code. These special laws work well for these special firms. However, they do not work for one subset of financial firms: large financial conglomerates. This article draws three major conclusions. First, no established law can succeed with these firms. Second, the "bail-in" process, which is currently under development, should succeed. Finally, policymakers and corporate finance theorists might want to rethink the meaning of capital for financial firms.



### What Makes Large Bank Failures So Messy and What Should Be Done about It?

*James McAndrews, Donald P. Morgan, João A. C. Santos, and Tanju Yorulmazer*

This study argues that the defining feature of large and complex banks that makes their failures messy is their reliance on runnable financial liabilities. These liabilities confer liquidity or money-like services that may be impaired or destroyed in bankruptcy. To make large bank failures more orderly, the authors recommend that systemically important bank holding companies be required to issue “bail-in-able” long-term debt that converts to equity

in resolution. This reassures holders of uninsured liabilities that their claims will be honored in resolution, making them less likely to run. In a novel finding, the authors show that bail-in-able debt and equity are not perfect substitutes in terms of stemming bank runs. Finally, they argue that the long-term debt requirement should increase in line with the amount of uninsured financial liabilities the bank has issued. This approach has the advantage of tying the requirement to the sources of messy failures, and it tends to internalize the externalities associated with the issuance of uninsured financial liabilities.

## 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](http://www.newyorkfed.org/research/current_issues).

### Volume 20

No. 1, 2014

#### Are Recent College Graduates Finding Good Jobs?

*Jaison R. Abel, Richard Deitz, and Yaquin Su*

According to numerous accounts, the Great Recession has left many recent college graduates struggling to find jobs that utilize their education. However, a look at the data on the employment outcomes for recent graduates over the past two decades suggests that such difficulties are not a new phenomenon: individuals just beginning their careers often need time to transition into the labor market. Still, the percentage who are unemployed or “underemployed”—working in a job that typically does not require a bachelor’s degree—has risen, particularly since the 2001 recession. Moreover, the quality of the jobs held by the underemployed has declined, with today’s recent graduates increasingly accepting low-wage jobs or working part-time.

No. 2, 2014

#### The Balance of Payments Crisis in the Euro Area Periphery

*Matthew Higgins and Thomas Klitgaard*

Countries in the euro area periphery borrowed heavily from abroad in the years leading up to the sovereign debt crisis, largely to finance increased consumption and housing investment. When the crisis hit in 2010, capital flight by private investors forced these countries to bring domestic spending back into line with domestic incomes—the same adjustment required of countries facing a typical balance of payments crisis. Nevertheless, adjustment to the pullback of private capital was not as harsh as might have been expected, owing to the workings of the euro area’s system for managing cross-border payment imbalances between regional commercial banks. This system, known as Target2, offset much of the capital flight with credits extended collectively by euro area central banks to central banks in the periphery.

No. 3, 2014

#### Do the Benefits of College Still Outweigh the Costs?

*Jaison R. Abel and Richard Deitz*

In recent years, students have been paying more to attend college and earning less upon graduation—trends that have led many observers to question whether a college education remains a good investment. However, an analysis of the economic returns to college since the 1970s demonstrates that the benefits of both a bachelor’s degree and an associate’s degree still tend to outweigh the costs, with both degrees earning a return of about 15 percent over the past decade. The return has remained high in spite of rising tuition and falling earnings because the wages of those without a college degree have also been falling, keeping the college wage premium near an all-time high while reducing the opportunity cost of going to school.

No. 4, 2014

### The Causes and Consequences of Puerto Rico's Declining Population

*Jaison R. Abel and Richard Deitz*

Puerto Rico's population has been falling for nearly a decade, and the pace of decline has accelerated in recent years. Although a slowdown in the island's birthrate has contributed to this decline, a surge in the out-migration of its citizens has been a more important factor. The exodus—which includes a large share of younger people—has hastened population aging, but it has not necessarily led to a “brain drain.” To counter its population loss, Puerto Rico must not only adopt measures to shore up its economy and expand job opportunities, but also enact fiscal reforms and improve the island's amenities.

#### Second District Highlights

### Las causas y consecuencias del descenso poblacional en Puerto Rico

*Jaison R. Abel y Richard Deitz*

#### Spanish-Language Version

La población de Puerto Rico ha estado decreciendo durante casi una década y el ritmo de contracción se ha acelerado en años recientes. Aunque una disminución en la tasa de natalidad ha contribuido a esta reducción, un factor más importante ha sido el aumento en la migración de salida\* de sus ciudadanos. El éxodo—que incluye una porción grande de jóvenes—ha acelerado el envejecimiento de la población, pero no ha conducido, necesariamente, a una “fuga de cerebros”. Para contrarrestar la pérdida de población, Puerto Rico no sólo debe adoptar medidas que apuntalen su economía y amplíen las oportunidades de empleo, sino que debe poner en vigor, además, reformas fiscales y realzar los atractivos de la Isla.

#### Second District Highlights

\*[N. de la T.] A lo largo del texto en inglés se emplean los términos in-migration y out-migration (y su derivados, in-migrant y out-migrant) para referirse a la migración entre Puerto Rico y EE.UU. Aunque consideramos emplear el equivalente “migración interna”, –que alude a los movimientos migratorios dentro de un mismo territorio–, decidimos usar “migración de entrada” y “migración de salida” para evitar cualquier posible confusión con los movimientos entre una región y otra de Puerto Rico.

## 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/](http://libertystreeteconomics.newyorkfed.org/).

### Economic Posts in 2014

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#### Are Economic Values Transmitted from Parents to Children?

*Marco Cipriani, Paola Giuliano, and Olivier Jeanne*

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#### Comparing Bank and Supervisory Stress Testing Projections

*Beverly Hirtle and Anna Kovner*

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#### Crisis Chronicles: The Mississippi Bubble of 1720 and the European Debt Crisis

*James Narron and David Skeie*

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#### Discount Window Stigma

*Olivier Armantier*

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#### Why Do Banks Feel Discount Window Stigma?

*Olivier Armantier*

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#### Just Released: Introducing the Business Leaders Survey

*Jason Bram and Richard Deitz*

February 3

#### A Mis-Leading Labor Market Indicator

*Samuel Kapon and Joseph Tracy*

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#### Comparing U.S. and Euro Area Unemployment Rates

*Thomas Klitgaard and Richard Peck*

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#### Crisis Chronicles: The Commercial Credit Crisis of 1763 and Today's Tri-Party Repo Market

*James Narron and David Skeie*

February 10

#### The Transformation of Banking: Tying Loan Interest Rates to Borrowers' Credit Default Swap Spreads

*João A. C. Santos*

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#### The Long and Short of It: The Impact of Unemployment Duration on Compensation Growth

*M. Henry Linder, Richard Peach, and Robert Rich*

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#### Puerto Rico Employment Trends—Not Quite as Bleak as They Appear

*Jason Bram*

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#### Just Released: Who's Borrowing Now? The Young and the Riskless!

*Andrew Haughwout, Donghoon Lee, Wilbert van der Klaauw, and David Yun*

*Just Released:* Does Transportation Spending Make Good Stimulus?*Andrew Haughwout, Therese McGuire, and Joseph Morris*

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## Why Is the Job-Finding Rate Still Low?

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*Just Released:* The Inflation Outlook in the Euro Zone . . . Survey Says*Robert Rich, Kaivan K. Sattar, and Joseph Tracy*

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*Carlo Rosa and Andrea Tambalotti*

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*Jan Groen and Richard Peck**Just Released:* Harsh Winter Weather Hampers Economic Activity in the Region*Jaison R. Abel and Jason Bram*

March 7

*Crisis Chronicles:* The Credit and Commercial Crisis of 1772*James Narron and David Skeie*

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*Just Released:* Beyond the Unemployment Rate: Eight Different Faces of the Labor Market*Samuel Kapon and Aysegül Şahin*

## Has Automated Trading Promoted Efficiency in the FX Spot Market?

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## How Liquidity Standards Can Improve Lending of Last Resort Policies

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*Just Released:* April Surveys Find Businesses Face Increasing Difficulty Retaining Skilled Workers*Jason Bram and Richard Deitz*



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*Alyssa Cambron, Michael Fleming, Deborah Leonard, Grant Long, and Julie Remache*

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*Nina Boyarchenko*

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*J. Benson Durham*

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*James Narron and David Skeie*

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Treasury Term Premia: 1961-Present

*Tobias Adrian, Richard Crump, Benjamin Mills, and Emanuel Moench*

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*Just Released:* Young Student Loan Borrowers Remained on the Sidelines of the Housing Market in 2013

*Meta Brown, Sydnee Caldwell, and Sarah Sutherland*

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*Jonathan McCarthy and Richard Peach*

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*Friederike Niepmann and Tim Schmidt-Eisenlohr*

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*Jaison R. Abel and Richard Deitz*

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*A Special Series on the Value of a College Degree*

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*Jaison R. Abel and Richard Deitz*

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College May Not Pay Off for Everyone  
*Jaison R. Abel and Richard Deitz*

Are the Job Prospects of Recent College Graduates Improving?  
*Jaison R. Abel and Richard Deitz*

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September 2  
*From Our Archive*: Reading Labor Market Slack  
*Anna Snider*

September 3  
*Just Released*: N.Y. Fed's Emanuel Moench to Become Head of Research at the Deutsche Bundesbank  
*Jamie McAndrews*

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*Crisis Chronicles*: The British Export Bubble of 1810 and Pegged versus Floating Exchange Rates  
*James Narron, David Skeie, and Don Morgan*

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Introducing the SCE Housing Survey  
*Basit Zafar, Andreas Fuster, Wilbert van der Klaauw, and Matthew Cocci*

Why Aren't More Renters Becoming Homeowners?  
*Andreas Fuster, Basit Zafar, and Matthew Cocci*

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*At the N.Y. Fed*: Workshop on the Risks of Wholesale Funding  
*Dong Beom Choi, Patrick de Fontnouvelle, Thomas Eisenbach, and Michael Fleming*

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Measuring Settlement Fails  
*Michael Fleming, Frank Keane, Antoine Martin, and Michael McMorrow*

What Explains the June Spike in Treasury Settlement Fails?  
*Michael Fleming, Frank Keane, Antoine Martin, and Michael McMorrow*

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*A Special Series on the FRBNY Dynamic Stochastic General Equilibrium (DSGE) Model*

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Forecasting with the FRBNY DSGE Model  
*Marco Del Negro, Bianca De Paoli, Stefano Eusepi, Marc Giannoni, Argia Sbordone, and Andrea Tambalotti*

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A Bird's Eye View of the FRBNY DSGE Model  
*Bianca De Paoli, Argia Sbordone, and Andrea Tambalotti*

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Developing a Narrative: The Great Recession and Its Aftermath  
*Andrea Tambalotti and Argia Sbordone*

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An Assessment of the FRBNY DSGE Model's Real-Time Forecasts, 2010-13  
*Matthew Cocci, Marco Del Negro, Stefano Eusepi, Marc Giannoni, M. Henry Linder, and Sara Shahanaghi*

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The FRBNY DSGE Model Forecast  
*Matthew Cocci, Marco Del Negro, Stefano Eusepi, Marc Giannoni, and Sara Shahanaghi*

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Connecting "the Dots": Disagreement in the Federal Open Market Committee  
*Richard Crump, Troy Davig, Stefano Eusepi, and Emanuel Moench*

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Direct Purchases of U.S. Treasury Securities by Federal Reserve Banks  
*Kenneth D. Garbade*

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Do Unemployment Benefits Expirations Help Explain the Surge in Job Openings?  
*Fatih Karahan, Samuel Kapon, and Kaivan K. Sattar*

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Cross-Country Evidence on Transmission of Liquidity Risk through Global Banks  
*Claudia M. Buch, James Chapman, and Linda Goldberg*

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*Crisis Chronicles*: The Crisis of 1816, the Year without a Summer, and Sunspot Equilibria  
*Jim Narron and Don Morgan*

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What Can We Learn from Prior Periods of Low Volatility?

*Fernando Duarte, Juan Navarro-Staicos, and Carlo Rosa*

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Demographic Trends and Growth in Japan and the United States

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*Ricardo Correa, Linda Goldberg, and Tara Rice*

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*Adam Copeland and Ira Selig*

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*At the N.Y. Fed:* Macroeconomic Policy Mix in the Transatlantic Economy

*Moreno Bertoldi, Philip R. Lane, Paolo Pesenti, and Valérie Rouxel-Laxton*

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Evolution of S-Corporation Banks

*Rajlakshmi De, Hamid Mehran, and Michael Suher*

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Forecasting Inflation with Fundamentals . . . It's Hard!

*Jan Groen*

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Did School Districts Offset State Education Funding Cuts?

*Ravi Bhalla and Rajashri Chakrabarti*

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Did Local Funding Responses to Post-Recession State Aid Cuts Vary by Property Wealth?

*Ravi Bhalla and Rajashri Chakrabarti*

*A Special Series on Long-Term Unemployment*

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Measuring Labor Market Slack: Are the Long-Term Unemployed Different?

*Rob Dent, Samuel Kapon, Fatih Karahan, Benjamin W. Pugsley, and Ayşegül Sahin*

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How Attached to the Labor Market Are the Long-Term Unemployed?

*Rob Dent, Samuel Kapon, Fatih Karahan, Benjamin W. Pugsley, and Ayşegül Sahin*

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The Long-Term Unemployed and the Wages of New Hires

*Rob Dent, Samuel Kapon, Fatih Karahan, Benjamin W. Pugsley, and Ayşegül Sahin*

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Introducing the SCE Credit Access Survey

*Basit Zafar and Wilbert van der Klaauw*

November 24

Bitcoin: How Likely Is a 51 Percent Attack?

*Rod Garratt and Rosa Hayes*

November 25

*Just Released:* Household Debt Balances Increase as Deleveraging Period Concludes

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

*A Special Series on Banks' Use of Fracking Industry Deposits*

December 1

What Do Banks Do with All That "Fracking" Money?

*Matthew Plosser*

December 3

Why Do Banks Keep All That "Fracking" Money?

*Matthew Plosser*

December 5

*Crisis Chronicles:* The Panic of 1819—America's First Great Economic Crisis

*James Narron, David Skeie, and Don Morgan*

*A Special Series on Interest Rate Derivatives and Monetary Policy*

Interest Rate Derivatives and Monetary Policy Expectations

*Richard Crump, Emanuel Moench, William O'Boyle, Matthew Raskin, Carlo Rosa, and Lisa Stowe*

Survey Measures of Expectations for the Policy Rate

*Richard Crump, Emanuel Moench, William O'Boyle, Matthew Raskin, Carlo Rosa, and Lisa Stowe*

December 8

Global Asset Prices and the Taper Tantrum Revisited

*Jan Groen*

December 19

*Just Released:* New Source for Perspective on Regional Household Debt and Credit

*Michael Gedal, Stephanie Rosoff, and Joelle Scally*

December 22

Is There a Future for Credit Default Swap Futures?

*Or Shachar*

December 29

Data Insight: Which Growth Rate? It's a Weighty Subject

*Richard Crump, Stefano Eusepi, David Lucca, and Emanuel Moench*

## 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](http://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](http://www.newyorkfed.org/research/staff_reports).

### Macroeconomics and Growth

No. 669, April 2014

**Lights, Camera . . . Income! Estimating Poverty Using National Accounts, Survey Means, and Lights**

*Maxim Pinkovskiy and Xavier Sala-i-Martin*

Pinkovskiy and Sala-i-Martin propose a way to assess whether national accounts or survey means perform better in capturing differences in income across countries and over time, creating a new measure of income per capita that is an optimal combination of national accounts and survey means data.

No. 672, April 2014

**The FRBNY Staff Underlying Inflation Gauge: UIG**

*Marlene Amstad, Simon Potter, and Robert Rich*

The authors present a new measure of underlying inflation—the FRBNY Staff Underlying Inflation Gauge (UIG). A less noisy series than CPI inflation or PCE inflation, the UIG is derived from a broad data set that includes asset prices and real variables (such as unemployment data) and that considers the specific and time-varying persistence of individual subcomponents of an inflation series.

No. 687, August 2014

**Shifts in the Beveridge Curve**

*Peter A. Diamond and Ayşegül Şahin*

Diamond and Şahin examine the behavior of the Beveridge curve—the relationship between unemployment and the job vacancy rate—since 1950. They find that the curve's outward shift in the present recovery was consistent with its behavior in past recoveries and that such shifts do not predict the unemployment rate that will obtain at the end of the expansion.

No. 690, September 2014

**Monetary Policy, Financial Conditions, and Financial Stability**

*Tobias Adrian and Nellie Liang*

Adrian and Liang provide a review of the transmission channels of monetary policy, focusing not just on financial conditions, but also on financial stability consequences by way of financial vulnerabilities.

No. 695, October 2014

**Dynamic Prediction Pools: An Investigation of Financial Frictions and Forecasting Performance**

*Marco Del Negro, Raiden B. Hasegawa, and Frank Schorfheide*

The authors provide a novel methodology for estimating time-varying weights in linear prediction pools and use it to investigate the relative forecasting performance of DSGE models with and without financial frictions for output growth and inflation from 1992 to 2011.



No. 701, November 2014

### When Does a Central Bank's Balance Sheet Require Fiscal Support?

*Marco Del Negro and Christopher A. Sims*

Del Negro and Sims argue that a central bank with a large balance sheet composed of long-duration nominal assets should have access to, and be willing to ask for, support for its balance sheet by the fiscal authority. Otherwise, its ability to control inflation may be at risk.

No. 707, December 2014

### Grown-Up Business Cycles

*Benjamin Pugsley and Aysegül Şahin*

Pugsley and Şahin document the steady decline in the firm entry rate over the last thirty years and the gradual shift of employment from younger to older firms over the same period—developments that hold across industries and geography. Despite these trends, firms' lifecycle dynamics and their business cycle properties have remained virtually unchanged.

### International

No. 681, July 2014

### What Determines the Composition of International Bank Flows?

*Cornelia Kerl and Friederike Niepmann*

Several recent studies document that the extent to which shocks are transmitted through banks across borders depends on the type of foreign activities these banks engage in. Kerl and Niepmann propose a model to explain the composition of banks' foreign activities, distinguishing between international interbank lending, intrabank lending, and cross-border lending to foreign firms.

### Microeconomics

No. 682, August 2014

### Educational Assortative Mating and Household Income Inequality

*Lasse Eika, Magne Mogstad, and Basit Zafar*

Educational assortative mating is a pattern in which individuals choose to mate with one another based on similar educational attainment. Using data from the United States and Norway over the period 1980-2007, the authors investigate this pattern, its evolution over time, and its impact on household income inequality.

No. 683, August 2014

### University Choice: The Role of Expected Earnings, Non-pecuniary Outcomes, and Financial Constraints

*Adeline Delavande and Basit Zafar*

Delavande and Zafar investigate the determinants of students' university choice, with a focus on expected monetary returns, non-pecuniary factors enjoyed at school, and financial constraints, in the Pakistani context.

No. 685, August 2014

### Information Heterogeneity and Intended College Enrollment

*Zachary Bleemer and Basit Zafar*

This study finds that if individuals were provided with accurate information about college costs and the returns to a college education, their estimates of the likelihood of their (pre-college age) child attending college would increase significantly.

No. 686, August 2014

### Africa Is on Time

*Maxim Pinkovskiy and Xavier Sala-i-Martin*

Pinkovskiy and Sala-i-Martin present evidence that the recent African growth renaissance has reached Africa's poor.

No. 689, August 2014

### Job Search Behavior over the Business Cycle

*Toshihiko Mukoyama, Christina Patterson, and Aysegül Şahin*

The authors examine how nonemployed workers' job search effort varies over the business cycle and consider its implications for individual and aggregate labor market outcomes. To this end, they construct a measure of search effort by combining information from the American Time Use Survey and the Current Population Survey.

No. 700, November 2014

### Debt, Jobs, or Housing: What's Keeping Millennials at Home?

*Zachary Bleemer, Meta Brown, Donghoon Lee, and Wilbert van der Klaauw*

The authors investigate the residence choices of the young people surveyed in the New York Fed's Consumer Credit Panel, and examine the relationship of these choices to evolving local house prices, local employment conditions, and the student debt reliance of local college students.

### Banking and Finance

No. 663, February 2014

### The Capital and Loss Assessment under Stress Scenarios (CLASS) Model

*Beverly Hirtle, Anna Kovner, James Vickery, and Meru Bhanot*

The CLASS model is a top-down capital stress-testing framework that projects the effects of different macroeconomic scenarios on U.S. banking firms. CLASS model projections suggest that the U.S. banking industry's vulnerability to undercapitalization in stressed economic conditions has decreased significantly since the financial crisis of 2007-09, consistent with increases in regulatory capital ratios.

No. 664, February 2014

### Financial Stability Policies for Shadow Banking

*Tobias Adrian*

Adrian illustrates the role of shadow bank policies using three examples: agency mortgage real estate investment trusts, leveraged lending, and captive reinsurance affiliates. He finds that any policy prescription for the shadow banking system is highly specific relative to the particular activity.

No. 665, February 2014

### Arbitrage-free Affine Models of the Forward Price of Foreign Currency

*J. Benson Durham*

Forward foreign exchange contracts embed not only expected depreciation but also a sizable premium, which complicates inferences about anticipated returns. Durham suggests that the premium is indeed nonzero and variable, but not to the degree implied by previous econometric studies.

No. 666, March 2014

**Bank Holding Company Dividends and Repurchases during the Financial Crisis**  
*Beverly Hirtle*

Many large U.S. bank holding companies (BHCs) continued to pay dividends during the recent financial crisis, even as market conditions deteriorated. In contrast, share repurchases by BHCs dropped sharply in the early part of the crisis. Hirtle documents this divergent behavior and examines the role that repurchases played in large BHCs' decisions to reduce or eliminate dividends.

No. 667, March 2014

**LIBOR: Origins, Economics, Crisis, Scandal, and Reform**  
*David Hou and David Skeie*

Hou and Skeie examine the behavior of the London Interbank Offered Rate during the financial crisis.

No. 668, April 2014

**Measuring Student Debt and Its Performance**  
*Donghoon Lee, Wilbert van der Klaauw, Andrew Haughwout, Meta Brown, and Joelle Scally*

Student loans have come to play an increasingly important role in financing higher education, but they are not well understood. The authors bring a new data set to bear on this important issue and present a brief analysis of historical and current levels of student debt and how that debt is performing.

No. 670, April 2014

**Gates, Fees, and Preemptive Runs**  
*Marco Cipriani, Antoine Martin, Patrick McCabe, and Bruno M. Parigi*

The authors build a model of a financial intermediary, in the tradition of Diamond and Dybvig (1983), and show that allowing the intermediary to impose redemption fees or gates in a crisis—a form of suspension of convertibility—can lead to preemptive runs.

No. 671, April 2014

**A Primer on the GCF Repo<sup>®</sup> Service**  
*Paul Agueci, Leyla Alkan, Adam Copeland, Isaac Davis, Antoine Martin, Kate Pingitore, Caroline Prugar, and Tyisha Rivas*

This primer provides a detailed description of the GCF Repo Service, a financial service provided by the Fixed Income Clearing Corporation. Chapter 1 focuses on how GCF Repo trades are cleared and settled, and describes how current reforms to the settlement of repos relate to this service; Chapter 2 focuses on how dealers use this financial service.

No. 673, May 2014

**Dealer Financial Conditions and Lender-of-Last-Resort Facilities**  
*Viral V. Acharya, Michael J. Fleming, Warren B. Hrungrung, and Asani Sarkar*

The authors examine the financial conditions of dealers that participated in two of the Federal Reserve's lender-of-last-resort facilities—the Term Securities Lending Facility (TSLF) and the Primary Dealer Credit Facility (PDCF)—that provided liquidity against a range of assets during 2008-09.

No. 674, May 2014

**Understanding Mortgage Spreads**  
*Nina Boyarchenko, Andreas Fuster, and David O. Lucca*

The authors propose prepayment model risk as a potential driver of agency mortgage-backed securities (MBS) spreads and present a new pricing model that uses “stripped” MBS prices to identify the contribution of this risk to option-adjusted spreads.

No. 675, May 2014

**International Banking and Liquidity Risk Transmission: Lessons from across Countries**  
*Claudia M. Buch and Linda S. Goldberg*

This study summarizes the common methodology and results of empirical studies conducted in eleven countries to explore liquidity risk transmission. Buch and Goldberg find that bank balance sheet characteristics matter for differentiating lending responses across banks, mainly in the realm of cross-border lending.

No. 676, June 2014

**Liquidity Risk and U.S. Bank Lending at Home and Abroad**  
*Ricardo Correa, Linda Goldberg, and Tara Rice*

The recent financial crisis underscored the importance of clarifying how liquidity conditions influence credit extension to domestic and foreign customers. The authors investigate the distinctions between responses to liquidity risks across two types of large U.S. banks—those that are domestically oriented and those that are more global, that is, have affiliates in foreign countries.

No. 677, June 2014

**A Simple and Reliable Way to Compute Option-Based Risk-Neutral Distributions**  
*Allan M. Malz*

Malz describes a method for computing risk-neutral density functions based on the option-implied volatility smile; he includes examples for equities, foreign exchange, and long-term interest rates.

No. 678, June 2014

**The Revolving Door and Worker Flows in Banking Regulation**  
*David Lucca, Amit Seru, and Francesco Trebbi*

The authors trace the career transitions of federal and state U.S. banking regulators from a large sample of publicly available curricula vitae.

No. 679, June 2014

**The Effect of State Pension Cut Legislation on Bank Values**  
*Lee Cohen, Marcia Millon Cornette, Hamid Mehran, and Hassan Tebranian*

This study suggests that states' budget cuts affect bank values and credit supply through their municipal bond holdings.

No. 684, August 2014

**Direct Purchases of U.S. Treasury Securities by Federal Reserve Banks**  
*Kenneth D. Garbade*

Garbade addresses three questions: Why did Congress 1) prohibit direct purchases in 1935 (after they had been utilized without incident for eighteen years), 2) provide a limited exemption in 1942 (instead of simply removing the prohibition), and 3) allow the exemption to expire in 1981?

No. 688, August 2014

### A Leverage-Based Measure of Financial Instability

*Alexander Tepper and Karol Jan Borowiecki*

Tepper and Borowiecki develop a measure of financial instability designed to give regulators and policymakers advance warning of financial crises and apply it to an investigation of the 1998 collapse of Long-Term Capital Management.

No. 692, September 2014

### How Does Risk Management Influence Production Decisions? Evidence from a Field Experiment

*Shawn Cole, Xavier Giné, and James Vickery*

The authors use a randomized controlled trial involving a sample of Indian farmers to study how an innovative rainfall insurance product affects production decisions.

No. 693, October 2014

### Bank Heterogeneity and Capital Allocation: Evidence from “Fracking” Shocks

*Matthew C. Plosser*

Plosser empirically investigates how positive funding shocks—arising from innovations in drilling technology that have resulted in the development of several new oil and gas fields throughout the United States—translate into investments by banks.

No. 694, October 2014

### Counterparty Risk in Material Supply Contracts

*Nina Boyarchenko and Anna M. Costello*

The authors test whether three sources of counterparty risk—financial exposure, product quality risk, and redeployability risk—are priced in the equity returns of linked firms.

No. 696, November 2014

### Supervisory Stress Tests

*Beverly Hirtle and Andreas Lehnert*

Hirtle and Lehnert describe the background, design choices, and particular details of stress tests used as part of an overall supervisory regime.

No. 697, November 2014

### CDS and Equity Market Reactions to Stock Issuances in the U.S. Financial Industry: Evidence from the 2002-13 Period

*Marcia Millon Cornette, Hamid Mehran, Kevin Pan, Minh Phan, and Chenyang Wei*

The authors study credit default swap (CDS) and equity market reactions to seasoned equity issuances that were announced by financial companies between 2002 and 2013.

No. 698, November 2014

### Costly Information, Planning Complementarities and the Phillips Curve

*Sushant Acharya*

Unlike the models in the sticky information literature, the one presented in this paper is capable of explaining the differential adjustment of prices in response to monetary and idiosyncratic shocks.

No. 702, November 2014

### The Sensitivity of Housing Demand to Financing Conditions: Evidence from a Survey

*Andreas Fuster and Basit Zafar*

Fuster and Zafar employ an alternative survey-based approach to gauge the sensitivity of housing demand to mortgage rates, down payment constraints, and an exogenous shock in nonhousing wealth.

No. 703, December 2014

### Asset Pricing with Horizon-Dependent Risk Aversion

*Marianne Andries, Thomas M. Eisenbach, and Martin C. Schmalz*

The authors investigate the implications of horizon-dependent risk aversion for both the level and the term structure of risk premia.

No. 704, December 2014

### Banks’ Incentives and the Quality of Internal Risk Models

*Matthew C. Plosser and João A. C. Santos*

Plosser and Santos investigate the incentives for banks to bias internally generated risk estimates.

No. 705, December 2014

### Hybrid Intermediaries

*Nicola Cetorelli*

Today’s complex bank holding companies are the best example of hybrid intermediaries, but Cetorelli argues that financial firms from the “nonbank” space can just as easily evolve into conglomerates with a similar organizational structure, thus acquiring the capability to engage in financial intermediation.

No. 706, December 2014

### Option-Implied Term Structures

*Erik Vogt*

The illiquidity of long-maturity options has made it difficult to study the term structures of option-spanning portfolios. Vogt proposes a new estimation and inference framework for these option-implied term structures that addresses long-maturity illiquidity.

## Quantitative Methods

No. 680, July 2014

### Central Bank Macroeconomic Forecasting during the Global Financial Crisis: The European Central Bank and Federal Reserve Bank of New York Experiences

*Lucia Alessi, Eric Ghysels, Luca Onorante, Richard Peach, and Simon Potter*

The authors document macroeconomic forecasting during the global financial crisis by the European Central Bank and the Federal Reserve Bank of New York. This paper is the result of a collaborative effort between the two institutions that allowed the authors to study the time-stamped forecasts as they were made throughout the crisis.

No. 691, September 2014

### What Predicts U.S. Recessions?

*Weiling Liu and Emanuel Moench*

Liu and Moench reassess the predictability of U.S. recessions at horizons from three months to two years ahead for a large number of previously proposed leading indicator variables.

No. 699, November 2014

### Population Aging, Migration Spillovers, and the Decline in Interstate Migration

*Fatih Karahan and Serena Rhee*

Interstate migration in the United States has declined by 50 percent since the mid-1980s. The authors study the effect of the aging population on this long-run decline.



## 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 2014

#### Macroeconomics and Growth

##### Stefania Albanesi

“Maternal Health and the Baby Boom,” with Claudia Olivetti. *Quantitative Economics* 5, no. 2 (July): 225-69.

##### Domenico Giannone

“Short-Term Inflation Projections: A Bayesian Vector Autoregressive Approach,” with Michele Lenza, Daphne Momferatou, and Luca Onorante. *International Journal of Forecasting* 30, no. 3 (July-September): 635-44.

##### Marc Giannoni

“Optimal Interest Rate Rules and Inflation Stabilization versus Price-Level Stabilization.” *Journal of Economic Dynamics and Control* 41, April: 110-29.

##### Argia Sbordone

“The Macroeconomics of Trend Inflation,” with Guido Ascari. *Journal of Economic Literature* 52, no. 3 (September): 679-739.

#### International

##### Mary Amiti

“Importers, Exporters, and Exchange Rate Disconnect,” with Oleg Itshoki and Josef Konings. *American Economic Review* 104, no. 7 (July): 1942-78.

##### Jan Groen

“Discussion on Forecasting Commodity Price Indexes Using Macroeconomic and Financial Predictors.” *International Journal of Forecasting* 30, no. 3 (July-September): 844-6.

##### 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* 92, suppl. 1 (April): S52-S67. Papers presented at the Thirty-Sixth Annual NBER International Seminar on Macroeconomics.

#### Microeconomics

##### Jaison Abel

“Skills across the Urban-Rural Hierarchy,” with Todd M. Gabe and Kevin Stolarick. *Growth and Change* 45, no. 4 (December): 499-517.

##### Rajashri Chakrabarti

“Incentives and Responses under *No Child Left Behind*: Credible Threats and the Role of Competition.” *Journal of Public Economics* 110, February: 124-46.

##### Adam Copeland

“Intertemporal Substitution and New Car Purchases.” *RAND Journal of Economics* 45, no. 3 (Fall): 624-44.

##### Giacomo De Giorgi

“Understanding Social Interactions: Evidence from the Classroom,” with Michele Pellizzari. *Economic Journal* 124, no. 579 (September): 917-53.

##### Andreas Fuster

“The Endowment Effect,” with Keith M. Marzilli Ericson. *Annual Review of Economics* 6, August: 555-79.

##### Andrew Haughwout and Wilbert van der Klaauw

“Land Use Regulation and Welfare,” with Matthew A. Turner. *Econometrica* 82, no. 4 (July): 1341-1403.

##### Maxim Pinkovskiy

“Africa Is on Time,” with Xavier Sala-i-Martin. *Journal of Economic Growth* 19, no. 3 (September): 311-38.

##### Benjamin Pugsley

“Are Household Surveys Like Tax Forms? Evidence from Income Underreporting of the Self-Employed,” with Erik Hurst and Geng Li. *Review of Economics and Statistics* 96, no. 1 (March): 19-33.

##### Ayşegül Şahin and Giorgio Topa

“Mismatch Unemployment,” with Joseph Song and Giovanni L. Violante. *American Economic Review* 104, no. 11 (November): 3529-64.

##### Basit Zafar

“Do We Follow Others When We Should outside the Lab? Evidence from the AP Top 25,” with Daniel F. Stone. *Journal of Risk and Uncertainty* 49, no. 1 (August): 73-102.

#### Banking and Finance

##### Tobias Adrian

“Financial Intermediaries and the Cross-Section of Asset Returns,” with Erkko Etula and Tyler Muir. *Journal of Finance* 69, no. 6 (December): 2557-96.

“Procyclical Leverage and Value-at-Risk,” with Hyun Song Shin. *Review of Financial Studies* 27, no. 2 (February): 373-403.

##### Tobias Adrian, Adam Copeland, and Antoine Martin

“Repo and Securities Lending,” with Brian Begalle. In Markus K. Brunnermeier and Arvind Krishnamurthy, eds., *Risk Topography: Systemic Risk and Macro Modeling*: 131-48. NBER conference volume. Chicago: University of Chicago Press.

##### Dong Beom Choi

“Heterogeneity and Stability: Bolster the Strong, Not the Weak.” *Review of Financial Studies* 27, no. 6 (April): 1830-67.

##### Nicola Cetorelli

“Surviving Credit Market Competition.” *Economic Inquiry* 52, no. 1 (January): 320-40.

##### Marco Cipriani

“Estimating a Structural Model of Herd Behavior in Financial Markets,” with Antonio Guarino. *American Economic Review* 104, no. 1 (January): 224-51.

##### Adam Copeland and Antoine Martin

“Repo Runs: Evidence from the Tri-Party Repo Market,” with Michael Walker. *Journal of Finance* 69, no. 6 (December): 2343-80.

##### Stefano Eusepi

“When Does Determinacy Imply E-Stability?” with James Bullard. *International Economic Review* 55, no. 1 (February): 1-22.

##### Rodney Garratt

“The Role of Counterparty Risk in CHAPS Following the Collapse of Lehman Brothers,” with Evangelos Benos and Peter Zimmerman. *International Journal of Central Banking*, December: 143-71.

“The Great Entanglement: The Contagious Capacity of the International Banking Network Just before the 2008 Crisis,” with Lavan Mahadeva and Katsiaryna Svirydenska. *Journal of Banking and Finance* 49, December: 367-85.

David Lucca

“Inconsistent Regulators: Evidence from Banking,” with Sumit Agarwal, Amit Seru, and Francesco Trebbi. *Quarterly Journal of Economics* 129, no. 2 (May): 889-938.

“The Revolving Door and Worker Flows in Banking Regulation,” with Amit Seru and Francesco Trebbi. *Journal of Monetary Economics* 65, July: 17-32. Proceedings of *A Century of Money, Banking, and Financial Instability*, Carnegie–Rochester–NYU Conference Series on Public Policy.

Donald Morgan and Stavros Peristiani

“The Information Value of the Stress Test and Bank Opacity,” with Vanessa Savino. *Journal of Money, Credit, and Banking* 46, no. 7 (October): 1479-1500.

João A. C. Santos

“Banks’ Liquidity and the Cost of Liquidity to Corporations,” with Vitaly Bord. *Journal of Money, Credit, and Banking* 46, suppl. 1 (February): 13-45.

“Do Banks Propagate Debt Market Shocks?” with Galina Hale. *Journal of Financial and Economic Policy* 6, no. 3 (April): 270-310.

“The Introduction of Market-Based Pricing in Corporate Lending,” with Ivan Ivanov and Thu Vo. *Journal of Financial Perspectives* 2, no. 1 (March): 155-9.

Ernst Schaumburg

“A Closer Look at the Short-Term Return Reversal,” with Zhi Da and Qianqiu Liu. *Management Science* 60, no. 3 (March): 658-74.

“A Robust Neighborhood Truncation Approach to Estimation of Integrated Quarticity,” with Torben Andersen and Dobrislav Dobrev. *Econometric Theory* 30, no. 1 (February): 3-59.

## Quantitative Methods

Richard Crump

“Bootstrapping Density-Weighted Average Derivatives,” with Matias Cattaneo and Michael Jansson. *Econometric Theory* 30, no. 6 (December): 1135-64.

“Small Bandwidth Asymptotics for Density-Weighted Average Derivatives,” with Matias Cattaneo and Michael Jansson. *Econometric Theory* 30, no. 1 (February): 176-200.

Marco Del Negro

“Rare Shocks, Great Recessions,” with Vasco Cúrdia and Daniel Greenwald. *Journal of Applied Econometrics* 29, no. 7 (November-December): 1031-52.

## Forthcoming

### Macroeconomics and Growth

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.

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, United Kingdom: Routledge.

Ayşegül Şahin

“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*.

Andrea Tambalotti

“Has U.S. Monetary Policy Tracked the Efficient Interest Rate?” with Vasco Cúrdia, Andrea Ferrero, and Ging Cee Ng. *Journal of Monetary Economics*.

“Household Leveraging and Deleveraging,” with Alejandro Justiniano and Giorgio Primiceri. *Review of Economic Dynamics*.

### Microeconomics

Jaison Abel and Richard Deitz

“Agglomeration and Job Matching among College Graduates.” *Regional Science and Urban Economics*.

Olivier Armantier

“Eliciting Beliefs: Proper Scoring Rules, 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*.

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

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

“Inflation Expectations and Behavior: Do Survey Respondents Act on their Beliefs?” with Wändi Bruine de Bruin. *International Economic Review*.

“The Price Is Right: Updating of Inflation Expectations in a Randomized Price Information Experiment,” with Scott Nelson. *Review of Economics and Statistics*.

Meta Brown and Giorgio Topa

“Do Informal Referrals Lead to Better Matches? Evidence from a Firm’s Employee Referral System,” with Elizabeth Setren. *Journal of Labor Economics*.

Meta Brown and Basit Zafar

“The Impact of Housing Markets on Consumer Debt: Credit Report Evidence from 1999 to 2012,” with Sarah Stein. *Journal of Money, Credit, and Banking*.

Rajashri Chakrabarti

“Did Cuts in State Aid during the Great Recession Lead to Changes in Local Property Taxes?” with Joydeep Roy. *Education Finance and Policy*.

“Housing Markets and Residential Segregation: Impacts of the Michigan School Finance Reform on Inter- and Intra-District Sorting.” *Journal of Public Economics*.

Giacomo De Giorgi

“Gender Complementarities in the Labor Market.” *Research in Labor Economics*.

Andrew Haughwout and Joseph Tracy

“Second Chances: Subprime Mortgage Modification and Re-Default,” with Ebiere Okah. *Journal of Money, Credit, and Banking*.

“How Mortgage Finance Affects the Urban Landscape,” with Sewin Chan. In Giles Duranton, J. Vernon Henderson, and William C. Strange, eds., *Handbook of Regional and Urban Economics*.



Maxim Pinkovskiy

“Voter Learning in State Primary Elections,” with Shigeo Hirano, Gabriel Lenz, and James Snyder. *American Journal of Political Science*.

Joseph Tracy

“Is the FHA Creating Sustainable Homeownership?” with Andrew Caplin and Anna Cororaton. *Real Estate Economics*.

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

“Determinants of College Major Choice: Identification using an Information Experiment,” with Matthew Wiswall. *Review of Economic Studies*.

“Heterogeneous Inflation Expectations, Learning, and Market Outcomes,” with Carlos Madeira. *Journal of Money, Credit, and Banking*.

## Banking and Finance

Tobias Adrian

“Shadow Banking: A Review of the Literature,” with Adam B. Ashcraft. *The New Palgrave Dictionary of Economics*.

“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*.

Tobias Adrian and Richard Crump

“Regression-Based Estimation of Dynamic Asset Pricing Models,” with Emanuel Moench. *Journal of Financial Economics*.

Nicola Cetorelli

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*.

Andreas Fuster and James Vickery

“Securitization and the Fixed-Rate Mortgage.” *Review of Financial Studies*.

Rodney Garratt

“Mapping Change in the Overnight Money Market,” with Morten L. Bech, Carl T. Bergstrom, and Martin Rosvall. *Physica A: Statistical Mechanics and Its Applications*.

David Lucca

“The Pre-FOMC Announcement Drift,” with Emanuel Moench. *Journal of Finance*.

Antoine Martin

“The Fragility of Short-Term Secured Funding Markets,” with David Skeie and Ernst-Ludwig Von Thadden. *Journal of Economic Theory*.

“Repos, Fire Sales, and Bankruptcy Policy,” with Gaetano Antinolfi, Francesca Carapella, Charles Kahn, David Mills, and Ed Nosal. *Review of Economic Dynamics*.

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

Hamid Mehran

“Executive Compensation and Risk Taking,” with Patrick Bolton and Joel Shapiro. *Review of Finance*.

Donald Morgan

“Payday Holiday: How Households Fare after Payday Credit Bans.” *Journal of Money, Credit, and Banking*.

João A. C. Santos

“Does Securitization of Corporate Loans Lead to Riskier Lending?” with Vitaly Bord. *Journal of Money, Banking, and Finance*.

## Quantitative Methods

Domenico Giannone

“Conditional Forecasts and Scenario Analysis with Vector Autoregressions for Large Cross-Sections,” with Marta Banbura and Michele Lenza. *International Journal of Forecasting*.

“Prior Selection for Vector Autoregressions,” with Michele Lenza and Giorgio Primiceri. *Review of Economics and Statistics*.

Robert Rich and Joseph Tracy

“The Measurement and Behavior of Uncertainty: Evidence from the ECB Survey of Professional Forecasters,” with Joshua Abel and Joseph Song. *Journal of Applied Econometrics*.



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