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ResearchUpdate

Research and Statistics Group www.newyorkfed.org/research

Mark Gertler Becomes Newest Resident Scholar

The Research Group welcomes Mark Gertler to its Program for Resident Scholars for 2006-07.

Professor Gertler, the Henry and Lucy Moses Professor of Economics at NYU and Chair of the Economics Department, is known for his research on macroeconomic theory, monetary economics, and finance. He has published extensively, coauthoring with Ben Bernanke, Glenn Hubbard, and Mark Watson, and his work has appeared in the *American Economic Review*, the *Journal of Political Economy*, the *Quarterly Journal of Economics*, and the *Review of Economic Studies*.

Professor Gertler has a distinguished career in academia. He is also a coeditor of the *American Economic Review* and has been on the editorial boards of the *Journal of Money, Credit, and Banking; Economics Letters;* the *NBER Macroeconomics Annual;* and the *Journal of Financial Intermediation*. In addition, he is a Fellow of the Econometric Society and has been a visiting scholar at the Federal Reserve Bank of New York on and off since 1994.

Professor Gertler joins current resident scholars Nobuhiro Kiyotaki of the London School of Economics and Suresh M. Sundaresan of Columbia Business School.

The Research Group established its Program for Resident Scholars in 2004 to attract to the New York Fed, for a stay of at least six months, outstanding researchers with an international reputation. The scholars are selected from the top academic and policy institutions in areas related to the Bank's broad policy interests. Resident scholars pursue their own research agendas while participating fully in the Group's activities. They work closely with the director of research, contribute to policymaking discussions, and provide intellectual leadership by advising and collaborating with the Group's economists. ■

Economic Policy Review Sheds Light on Bank Market Size, Repo Contracting Conventions

Studies of the banking and repo markets highlight the new issue of the ***Economic Policy Review*** (vol. 12, no. 1).

In "Local or State? Evidence on Bank Market Size Using Branch Prices," Don Morgan and Paul Edelstein argue that bank branch prices—the amount one bank pays to buy another bank's branches—may be a better indicator of market size than bank deposit rates and other measures.

Morgan and Edelstein explain that since the 1960s, each Federal Reserve Bank has defined the markets in its District as local, that is, metropolitan statistical areas or small groups of rural counties. However, because banks are now free to branch all over a state, the local concept of banking markets may be outdated—perhaps banking markets are more statewide than local? Getting the definition right matters a lot in terms of how the government enforces antitrust policy; bank mergers that might appear anticompetitive under the local market concept might seem less worrisome if markets are viewed as statewide.

Using prices on 110 branch sales over the 1990s, the authors run a "horse race" to determine which measure of bank concentration—state or local—explains more of the variation in branch prices. They find that prices in the ten northeast states analyzed are more closely correlated with state-level concentration, suggesting that banking markets, at least in the northeast, are not necessarily local.

Still, Morgan and Edelstein caution that their finding may be based on an arguably small sample of banks as well as

Publications and Papers

The Research and Statistics Group produces a wide range of publications:

- ***The Economic Policy Review***—a policy-oriented journal focusing on economic and financial market issues.
- ***EPR Executive Summaries***—online versions of selected ***Economic Policy Review*** articles, in abridged form.
- ***Current Issues in Economics and Finance***—concise studies of topical economic and financial issues.
- ***Second District Highlights***—a regional supplement to ***Current Issues***.
- ***Staff Reports***—technical papers intended for publication in leading economic and finance journals, available only online.
- ***Publications and Other Research***—an annual catalogue of our research output.

on how the data are parsed. "Branch price data certainly advance the local-versus-state debate," they note. "With enough such data, that question might be settled once and for all."

In his study of the repo market, Ken Garbade considers how contracting conventions for repurchase agreements changed in one key decade ("The Evolution of Repo Contracting Conventions in the 1980s").

The author describes how the growth of the market, new uses for repos, and the appearance of previously unappreciated risks fueled dramatic changes in the conventions. In the 1950s and 1960s, dealers used repos to borrow money; in the 1970s, they engaged in more complex repo operations, also borrowing securities to cover short selling and thus adding risk to the market. Moreover, rising interest rates and growing Treasury indebtedness attracted many new, smaller, and less sophisticated creditors to the market.

Given these changes, "contracting conventions that were not inefficient in the context of the repo markets of the 1950s and 1960s—including neglect of accrued interest, ambiguity about whether repos were loans or transactions, and relatively costly mechanisms for removing repo securities from the control of borrowers—proved inadequate by the early 1980s," observes Garbade. Market participants were thus spurred to revise the conventions dramatically.

The study points to three key developments in the evolution of repo contracting conventions attributable to market participants' actions: the recognition of accrued interest on repo securities, a revision to how federal bankruptcy law applied to repos, and the accelerated growth of tri-party repo—a new form of repo.

According to the author, market participants acted together to bring about the recognition of accrued interest on repo securities and to petition Congress to amend federal bankruptcy law. Collective action was necessary in both cases because uncoordinated, individual solutions would have been too costly. The emergence of tri-party repo reflected the efforts of individual market participants to seek an operationally cheaper, more flexible alternative to conventional repos.

In the volume's lead article, John Kambhu analyzes how the risk associated with convergence trading affects market liquidity and asset price volatility in the interest rate swap market. (This paper was summarized in the previous issue of ***Research Update***.)

The articles are available at **www.newyorkfed.org/research/epr/index.html**.

New Publication Focuses on the Upstate New York Economy

The New York Fed's Buffalo Branch recently published the first issue of ***Upstate New York Regional Review***, a newsletter reporting on topics of importance to the upstate economy.

In "Baby-Boomer Retirements and Emerging Labor Market Pressures," Richard Deitz studies the demand for new workers in upstate New York created by the combination of retirements and the region's economic restructuring. His analysis of projected hiring rates upstate suggests that although there will be demand for workers in all occupations in the coming years, employers may face a particular challenge filling positions in growing services occupations with relatively high retirement rates, such as health care, community and social services, and education.

Upstate New York Regional Review is an expanded and more comprehensive version of its predecessor publication, *The Regional Economy of Upstate New York*. Copies are available at **www.newyorkfed.org/buffalo**.

Recently Published

Adam Ashcraft. 2006. **"New Evidence on the Lending Channel."** *Journal of Money, Credit, and Banking* 38, no. 3 (April): 751-76.

Gauti Eggertsson. 2006. **"The Deflation Bias and Committing to Being Irresponsible."** *Journal of Money, Credit, and Banking* 38, no. 2 (March): 283-322.

James Harrigan. 2006. **"Timeliness and Agglomeration,"** with Anthony J. Venables. *Journal of Urban Economics* 59, no. 2 (March): 300-16.

João Santos. 2006. **"The American Keiretsu and Universal Banks: Investing, Voting, and Sitting on Nonfinancials' Corporate Boards,"** with Adrienne S. Rumble. *Journal of Financial Economics* 80, no. 2 (May): 419-54.

João Santos. 2006. **"Identifying the Effect of Managerial Control on Firm Performance,"** with Renée B. Adams. *Journal of Accounting and Economics* 41, no. 1-2 (April): 55-85.

João Santos. 2006. **"Insuring Banks against Liquidity Shocks: The Role of Deposit Insurance and Lending of Last Resort."** *Journal of Economic Surveys* 20, no. 3 (July): 459-82.

Cédric Tille. 2006. **"Current Account Adjustment with High Financial Integration: A Scenario Analysis,"** with Michele Cavallo. Federal Reserve Bank of San Francisco *Economic Review 2006*: 31-45. ■

New Titles in the *Staff Reports* Series

The following new Staff Reports are available at **www.newyorkfed.org/research/staff_reports**.

MACROECONOMICS AND GROWTH

No. 245, April 2006
Volatility Accounting: A Production Perspective on Increased Economic Stability
Kevin J. Stiroh

Stiroh examines the declining volatility of U.S. output growth from a production perspective. At the aggregate level, increased output stability reflects decreased volatility in both labor productivity growth and hours growth as well as a significant decline in the correlation. The decline in output volatility can also be traced to less volatile labor input and total factor productivity growth and the smaller covariance between them. At the industry level, the decline in volatility appears widespread, with about 80 percent of component industries showing smaller contributions to aggregate output volatility after 1984, although most of the aggregate decline reflects smaller covariances between industries. These results suggest that labor market changes are an important source of increased output stability.

INTERNATIONAL

No. 247, April 2006
Distribution Margins, Imported Inputs, and the Sensitivity of the CPI to Exchange Rates
José Manuel Campa and Linda S. Goldberg

This paper decomposes the sources of consumer price index stability for twenty-one countries, focusing on the important role that the distribution sector and imported inputs play in determining the degree to which exchange rate fluctuations are transmitted to consumption prices. While the distribution sector dampens the sensitivity of consumption prices of tradable goods to exchange rates by reducing the import content of the final consumption good, it also enhances sensitivity because the prices of imported inputs used in the production of distribution services are also sensitive to exchange rates. Calibration exercises show that the United States has the lowest expected CPI sensitivity to exchange rates—less than 5 percent—while the cross-country exchange rate pass-through to CPI averages closer to 15 percent.

No. 249, April 2006
Expectations and Contagion in Self-Fulfilling Currency Attacks
Todd Keister

Keister presents a model in which currency crises can spread across countries as a result of the self-fulfilling beliefs of market participants. An incomplete-information approach is used to overcome many undesirable features of existing multiple-equilibrium explanations of contagion. If speculators expect contagion across markets to occur, they have an incentive to trade in both currency markets to take advantage of this correlation. These actions, in turn, link the two markets in such a way that a sharp devaluation of one currency will be propagated to the other market, fulfilling the original expectations. Even though this contagion is driven solely by expectations, the model places restrictions on observable variables that are broadly consistent with existing empirical evidence.

No. 250, April 2006
A Decomposition of the Sources of Incomplete Cross-Border Transmission
Rebecca Hellerstein

According to conventional wisdom, relative price changes are the primary mechanism by which shocks are transmitted across borders. Yet traded goods prices exhibit significant inertia in response to shocks such as exchange rate changes. The author uses a structural model to quantify the relative importance of manufacturers' and retailers' local-cost components and markup adjustments as sources of this incomplete transmission. The model is applied to a panel data set of one industry with retail and wholesale prices for Universal Product Code–level products. Markup adjustments by manufacturers and retailers explain two-thirds of the incomplete transmission, and local-cost components account for the remaining third. Foreign manufacturers generally bear more of the cost (or reap more of the benefit) of an exchange-rate-induced marginal cost shock than do domestic consumers, domestic manufacturers, or the domestic retailer.

No. 251, April 2006
Arm's-Length Transactions as a Source of Incomplete Cross-Border Transmission: The Case of Autos
Rebecca Hellerstein
and Sofia Berto Villas-Boas

Hellerstein and Villas-Boas present new evidence of a positive relationship between an industry's share of multinational trade and its rate of exchange rate pass-through to prices. They develop a structural econometric model with both manufacturers and retailers to quantify how firms' organization of their activities across borders affects their pass-through of a foreign cost shock and apply the model to auto market data. Firms' pass-through of foreign cost shocks is on average 29 percentage points lower in arm's-length transactions than in multinational transactions because the higher markups from a double optimization along the distribution chain create more opportunity for markup adjustment following a shock. This difference may explain up to 20 percent of the incomplete transmission of foreign-cost shocks to the United States in the aggregate.

BANKING AND FINANCE

No. 246, April 2006
Two-Sided Markets and Intertemporal Trade Clustering: Insights into Trading Motives
Asani Sarkar and Robert A. Schwartz

Sarkar and Schwartz show that equity markets are typically two-sided and that trades cluster in certain trading intervals for both NYSE and Nasdaq stocks under a broad range of conditions—news and non-news days, different times of the day, and a spectrum of trade sizes. By "two-sided," the authors mean that the arrivals of buyer-initiated and seller-initiated trades are positively correlated; by "trade clustering," they mean that trades tend to bunch together in time with greater frequency than would be expected if their arrival were a random process. Controlling for order imbalance, number of trades, news, and other microstructure effects, Sarkar and Schwartz find that two-sided clustering is associated with higher volatility but lower trading costs.

No. 248, April 2006

Three Decades of Financial Sector Risk

Joel F. Houston and Kevin J. Stiroh

This study examines the evolution of risk in the U.S. financial sector using firm-level equity market data from 1975 to 2005. Over this period, financial sector volatility has increased steadily, reaching extraordinary levels from 1998 to 2002. Much of this recent turbulence can be attributed to a series of major financial shocks, and there is evidence of an upward trend in volatility only for the common sector component. While idiosyncratic volatility remains dominant, a combination of common shocks, deregulation, and diversification has reduced its relative importance since the early 1990s. Within the financial sector, commercial banks show the largest rise in volatility, which also reflects industry shocks and not the idiosyncratic component. Despite these changes, the authors find that the links between the financial sector and economic activity have declined in recent years.

No. 252, May 2006

Visible and Hidden Risk Factors for Banks

Til Schuermann and Kevin J. Stiroh

Schuermann and Stiroh examine the common factors that drive the returns of U.S. bank holding companies from 1997 to 2005. They compare a range of market models and show that the market factor clearly dominates in explaining bank returns. Even in the authors' broadest model, however, considerable residual variation remains. A principal component analysis shows that this residual variance is relatively diffuse, although the largest banks do tend to load in the same direction on the first component. Compared with the returns of large firms in other sectors, bank returns are relatively well explained with standard risk factors. This finding assuages some concerns about systemic risk, but it does leave open the possibility of systemic concerns through the "broad channel" if many banks respond to unexpected shocks in similar ways. ■

Other New Publications

- The Federal Reserve Bank of New York's 2005 *Annual Report* is available.
  www.newyorkfed.org/aboutthefed/annualreports.html

Papers Presented by Economists in the Research and Statistics Group

"On the Market Discipline of Informationally Opaque Firms: Evidence from Bank Borrowers in the Federal Funds Market," Adam Ashcraft. Financial Intermediation Research Society conference, Shanghai, China, June 3. With Hoyt Bleakley.

"Money Market Integration," Leonardo Bartolini. Bank of France conference, Paris, France, June 6.

"Entry into Banking Markets and the Early-Mover Advantage," Astrid Dick. Journal of Financial Intermediation conference, Shanghai, China, June 4. With Allen Berger. Also presented at a Journal of Banking and Finance conference, Beijing, China, June 6.

"Personal Bankruptcy and Credit Market Competition," Astrid Dick. International Industrial Organization Society conference, Boston, Massachusetts, April 8. With Andreas Lehnert.

"Monetary Policy Tick-by-Tick," Michael Fleming. Bank of Canada conference, Ottawa, Ontario, Canada, May 3. With Monika Piazzesi. Also presented at an NBER conference, Cambridge, Massachusetts, May 12.

"Distribution Margins, Imported Inputs, and the Sensitivity of the CPI to Exchange Rates," Linda Goldberg. Drexel University seminar, Philadelphia, Pennsylvania, May 17.

"Dollar Depreciation: Implications for Exporters, Importers, and the U.S. Trade Balance," Linda Goldberg. Seminar cosponsored by the Buffalo branch of the Federal Reserve Bank of New York and the World Trade Center Buffalo Niagara, Buffalo, New York, June 14.

"The International Role of the Dollar and Trade Balance Adjustment," Linda Goldberg. Conference cosponsored by the Santa Cruz Center for International Economics, the Federal Reserve Bank of San Francisco, and the Center for European Integration Studies at the University of Bonn (ZEI), Santa Cruz, California, May 26. With Cédric Tille.

"The Benefits and Challenges of Labor Mobility," Erica Groshen. Joint European Union–United States conference, Brussels, Belgium, April 10.

"The Interaction of Labor Markets and Inflation: Analysis of Micro Data from the International Wage Flexibility Project," Erica Groshen. Institute for the Study of Labor (IZA) seminar, Bonn, Germany, April 3. With William Dickens, Lorenz Goette, Steinar Holden, Julian Messina, Mark Schweitzer, Jarkko Turunen, and Melanie Ward. Also presented at a National Bank of Belgium seminar, Brussels, Belgium, April 5.

"Turbulent Firms, Turbulent Wages?" Erica Groshen. Society of Labor Economists conference, Cambridge, Massachusetts, May 5. With Diego Comin and Bess Rabin.

"Arm's-Length Transactions as a Source of Incomplete Cross-Border Transmission," Rebecca Hellerstein. NBER Universities' Research Conference, Cambridge, Massachusetts, May 19.

"A Framework for Identifying the Sources of Local-Currency Price Stability with an Empirical Application: Some Evidence on the Relative Importance of Menu Costs, Non-Traded Local Costs, and Markup Adjustment by Manufacturers and Retailers," Rebecca Hellerstein. New York University International and Development Economics seminar, New York City, April 4. With Pinelopi Goldberg.

"Banking Policy without Commitment: Suspension of Convertibility Taken Seriously," Todd Keister. Rutgers University Department of Economics seminar, New Brunswick, New Jersey, March 7. With Huberto Ennis. Also presented at the Midwest Macroeconomics Meetings, Washington University, St. Louis, Missouri, May 6.

"Expectations and Contagion in Self-Fulfilling Currency Attacks," Todd Keister. Econometric Society and Allied Social Sciences Association annual meeting, Boston, Massachusetts, January 7. Also presented at the Cornell–Penn State University Macro Workshop, University Park, Pennsylvania, April 14.

"Housing Activity and Values and Consumer Spending," Jonathan McCarthy and Charles Steindel. Federal Reserve Bank of Chicago Bank Structure Conference, Chicago, Illinois, May 18.

"Modeling Global Imbalances and Current Account Adjustment," Paolo Pesenti. European Central Bank seminar, Frankfurt, Germany, May 3. Also presented at a European University Institute seminar, Florence, Italy, May 11.

"The Relationship between Expected Inflation, Disagreement, and Uncertainty: Evidence from Matched Point and Density Forecasts," Robert Rich. Midwest Macroeconomics Meetings, Washington University, St. Louis, Missouri, May 5. With Joseph Tracy.

"Liquidity Spillovers and Cross-Autocorrelations," Asani Sarkar. Vrije Universiteit Amsterdam, Amsterdam, the Netherlands, April 5. With Tarun Chordia and Avanidhar Subrahmanyam.

"Money and Modern Banking without Bank Runs," David Skeie. Financial Intermediation Research Society conference, Shanghai, China, June 3. Also presented at a Journal of Banking and Finance conference, Beijing, China, June 6.

"The Industry Origins of the Second Surge of U.S. Productivity Growth," Kevin Stiroh. Conference cosponsored by the International Telecommunication Union and the London Business School, Geneva, Switzerland, June 5.

"The Sources of the Second Surge of U.S. Productivity Growth and Implications for the Future," Kevin Stiroh. Conference cosponsored by the Bank of France and the Bank of Canada, Paris, France, April 24. With Dale W. Jorgenson and Mun S. Ho.

"Three Decades of Financial Sector Risk," Kevin Stiroh. Conference cosponsored by the Federal Reserve Bank of Atlanta and the International Association of Financial Engineers, Atlanta, Georgia, April 18. With Joel Houston. Also presented at a Swiss National Bank conference, Zurich, Switzerland, May 31, and the International Monetary Fund, Washington, D.C., June 13.

"Intertemporal Disturbances," Andrea Tambalotti. Conference cosponsored by the University of Quebec at Montreal and the Interuniversity Center on Risk, Economic Policy, and Employment (CIRPEE), Montreal, Quebec, Canada, June 5. With Giorgio Primiceri and Ernst Schaumburg.

"Could Capital Gains Smooth a Current Account Rebalancing?" Cédric Tille. University of Wisconsin seminar, Madison, Wisconsin, April 28. With Michele Cavallo.

"Financial Integration and the Wealth Effect of Exchange Rate Fluctuations," Cédric Tille. Conference cosponsored by the Santa Cruz Center for International Economics, the Federal Reserve Bank of San Francisco, and the Center for European Integration Studies at the University of Bonn (ZEI), Santa Cruz, California, May 27.

"Catastrophe Bonds, Reinsurance, and the Optimal Collateralization of Risk Transfer," George Zanjani. Risk Theory Society Annual Seminar, Richmond, Virginia, April 22. With Darius Lakdawalla. ■

Research and Statistics Group Publications and Papers: April-June 2006

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

ECONOMIC POLICY REVIEW, VOL. 12

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Trading Risk, Market Liquidity, and Convergence Trading in the Interest Rate Swap Spread
John Kambhu

Local or State? Evidence on Bank Market Size Using Branch Prices
Paul Edelstein and Donald P. Morgan

The Evolution of Repo Contracting Conventions in the 1980s
Kenneth D. Garbade

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Alternative Arrangements for the Distribution of Intraday Liquidity
James J. McAndrews

No. 4, May/June 2006
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