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Research Update

Research and Statistics Group www.newyorkfed.org/research

Bank Website Offers Course Readings in Economics and Finance

The Research Group recently launched *Course Readings for University Educators*, a new website that highlights the value of the Bank's research publications as teaching tools. The site's key element is a directory of recommended readings organized by course title and level of mathematical complexity. Finance and economics professors can select a course and then link to articles from our principal research series that might be assigned to students in that course.

The website also provides links to the Research Group's conference and "theme" volumes. By offering multiple perspectives on a topic of current interest—for example, employment growth in the United States and Canada, corporate governance, or the effects of financial innovation on monetary transmission—these collections provide educators with a valuable teaching resource.

The impetus for the creation of the site came from the Research Group's finding that many of its articles are already in common use in college and university courses. Articles in ***Current Issues in Economics and Finance*** and the ***Economic Policy Review*** in particular are favored for their clear exposition and accessibility to a wide range of readers.

Course Readings for University Educators can be accessed from the Bank's home page, under the "Education" category: **www.newyorkfed.org/education/research/**.

An Invitation to AEA Members to Subscribe

Please note that this will be the last issue of ***Research Update*** that we *automatically* send you each quarter. To continue receiving the publication at no cost, please subscribe at:

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New Study Examines the Growth in High-Skill Manufacturing Jobs

The U.S. manufacturing sector has shed 5 million jobs since the early 1980s. At the same time that overall manufacturing employment has declined, however, employment in high-skill manufacturing jobs has risen sharply. In "A Leaner, More Skilled U.S. Manufacturing Workforce" (***Current Issues in Economics and Finance,*** vol. 12, no. 2), authors Richard Deitz and James Orr explore the marked upgrading of skills in the U.S. manufacturing workforce.

Using the median wage of occupational groupings as a proxy for skill level, the authors find that employment in high-skill manufacturing occupations climbed 37 percent between 1983 and 2002—an increase of roughly 1.2 million jobs. By contrast, low-skill jobs declined 25 percent over the period, and mid-skill positions dropped almost 18 percent.

The authors show that skill upgrading has occurred in nearly all manufacturing industries, even in those where employment declined. But while the upgrading has been pervasive, its nature and pace have varied across industries. Thus, the share of workers in high-skill occupations in the professional equipment and electrical machinery industries doubled over the 1983-2002 period, while only modest skill upgrading occurred in industries such as transportation equipment and non-electrical machinery.

Interestingly, the authors find some evidence that the industries that saw the strongest growth in high-skill jobs experienced higher overall manufacturing job growth.

Deitz and Orr also demonstrate that upgrading has occurred in all parts of the country, including those regions where employment losses have been severe. Once again, however, the pattern has varied across regions. The Northeastern states effectively raised their high-skill shares by shedding large numbers of low-skill jobs, with little or no increase in high-skill jobs. By contrast, in the Southwest, a strong expansion in high-skill jobs drove the upgrading. A third pattern is evident in some parts of the "rust belt" surrounding the Great Lakes: these areas experienced modest gains in high-skill jobs at the same time that they shed low-skill jobs.

The authors observe that trade liberalization and productivity growth are thought to have contributed significantly to the changing skill composition of the workforce. The two forces have been linked to both reduced demand for low-skilled workers and increased demand for high-skilled workers.

The article is available at **www.newyorkfed.org/research/current_issues/ci12-2.html**.

Interest Rate Swap Spread Offers Insight into the Destabilizing Role of Trading Risk

Trading activity is typically considered to be a stabilizing force in markets. The risks in trading, however, can sometimes produce the opposite effect, according to a study forthcoming in the ***Economic Policy Review***.

In "Trading Risk, Market Liquidity, and Convergence Trading in the Interest Rate Swap Spread," John Kambhu considers how the risk associated with convergence trading affects market liquidity and asset price volatility in the interest rate swap market. In a convergence trade, speculators trade on the expectation that asset prices will converge to their fundamental, or normal, levels. These trades, explains the author, usually stabilize markets. By countering and smoothing price shocks, the trades can enhance market liquidity. But if convergence traders close out their positions prematurely, asset prices will tend to diverge further from their fundamental levels.

Kambhu examines these effects in terms of the behavior of the interest rate swap spread—the spread between the interest rate swap and Treasury interest rates—and the volume of repurchase contracts. He uncovers stabilizing as well as destabilizing forces at work.

The study finds that the swap spread tends to converge to its fundamental level, but it does so more slowly when traders are weakened by losses, while heightened trading risk can cause the spread to diverge from that level. Furthermore, although convergence trading generally absorbs shocks, an unusually large disruption can be amplified when traders close out their positions too soon.

Destabilizing shocks in the swap spread are associated with a fall in repo

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.

volume consistent with the early closing out of convergence trading positions. Repo volume, too, is found to fall in response to convergence trading losses. In particular, "the behavior of repo volume suggests how risk in trading activity can affect market liquidity and asset price volatility," observes Kambhu.

The author adds that taken together, his results are consistent with the argument that trading risk, as reflected in fluctuations in repo volume, can occasionally destabilize the swap spread.

The article is available at **www.newyorkfed.org/research/epr/forthcoming/0507kamb.html**.

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. 241, March 2006
Fiscal Multipliers and Policy Coordination
Gauti B. Eggertsson

This paper addresses the effectiveness of fiscal policy at zero nominal interest rates. Eggertsson analyzes a stochastic general equilibrium model with sticky prices and rational expectations and assumes that the government cannot commit to future policy. The author derives fiscal spending multipliers that calculate how much output increases for each dollar of government spending (real or deficit). Under monetary and fiscal policy coordination, the real spending multiplier is 3.4 and the deficit spending multiplier is 3.8. However, when there is no policy coordination, that is, when the central bank is "goal independent," the real spending multiplier is unchanged but the deficit spending multiplier is zero. Coordination failure may explain why fiscal policy in Japan has been relatively less effective recently than during the Great Depression.

Website News

- The Research Group recently added a web page featuring the most popular research on its site. Visitors to the "Most Downloaded Articles and Papers" page will find the top five ***Economic Policy Review*** articles, ***Current Issues in Economics and Finance*** articles, and Staff Reports. The page, updated quarterly and annually, offers insight into the topics of most interest to readers.

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

INTERNATIONAL

No. 237, January 2006
Could Capital Gains Smooth a Current Account Rebalancing?
Michele Cavallo and Cédric Tille

A narrowing of the U.S. current account deficit through exchange rate movements is likely to entail a substantial depreciation of the dollar, as stressed in research by Obstfeld and Rogoff. Cavallo and Tille assess how the adjustment is affected by the high degree of financial integration in the world economy. They consider an adjustment scenario in which the U.S. net external debt is held constant and find that as the current account moves into balance, the pace of adjustment is smooth. Intuitively, the valuation gains from the depreciation of the dollar allow the United States to finance ongoing, albeit shrinking, current account deficits. The authors find that the smooth pattern of adjustment is robust to alternative scenarios, although the ultimate movements in exchange rates will vary under different conditions.

MICROECONOMICS

No. 238, February 2006
Turbulent Firms, Turbulent Wages?
Diego Comin, Erica L. Groshen, and Bess Rabin

Earlier research by Gottschalk and Moffitt shows that rising earnings instability was responsible for one-third to one-half of the rise in wage inequality during the 1980s. These growing transitory fluctuations remain largely unexplained. To help fill this gap, this paper further documents the recent rise in transitory fluctuations in compensation and investigates its linkage to the concurrent rise in volatility of firm performance documented in research by Comin and Mulani and others. Comin, Groshen, and Rabin investigate the relationship between firm and wage volatility in three complementary panel data sets. They find support for the hypothesis in all three data sets and conclude that the rise in firm turbulence explains about 60 percent of the recent rise in high-frequency (five-year) wage volatility.

BANKING AND FINANCE

No. 239, March 2006
Illiquidity in the Interbank Payment System following Wide-Scale Disruptions
Morten L. Bech and Rod Garratt

Bech and Garratt show how the interbank payment system can become illiquid following wide-scale disruptions. Two forces are at play in such disruptions—operational problems and changes in participants' behavior. The authors model the interbank payment system as an n-player game and utilize the concept of a potential function to describe the process by which one of multiple equilibria emerges after a wide-scale disruption. If the disruption is large enough, hits a key geographic area, or hits a "too-big-to-fail" participant, then the coordination of payment processing can break down, and central bank intervention might be required to reestablish the socially efficient equilibrium. The authors also explore how the network topology of the underlying payment flow among banks affects the resiliency of coordination.

No. 240, March 2006

Risks in U.S. Bank International Exposures

Nicola Cetorelli and Linda Goldberg

U.S. banks have substantial exposure to foreign markets. The authors show how the amounts and forms of these exposures have evolved over time and note the changes in embodied risks taken through banks' cross-border activity, local claims, and derivative positions. Their findings vary with the type of U.S. bank. Compared with other banks, money-center banks tend to have a greater share of their assets in foreign exposures. Some of money-center banks' exposure to riskier countries is achieved through the activities of local branches and subsidiaries that take on liabilities as well as assets, a strategy that reduces their bank transfer risk accordingly. As a share of total international exposures, the transfer risk assumed by money-center banks tends to be significantly lower than that of other banks.

No. 242, March 2006

Money and Modern Banking without Bank Runs

David R. Skeie

In the literature, bank runs take the form of withdrawals of real demand deposits that deplete a fixed reserve of goods in the banking system. However, in a modern banking system, large withdrawals take the form of electronic payments that shift balances among banks within a clearinghouse system, with no analog of a depletion of a scarce reserve. In a model of nominal demand deposits repayable in money within a clearinghouse, the author shows that interbank lending and monetary prices imply that traditional bank runs do not occur. This finding suggests that deposit insurance may not be needed to prevent bank runs in a modern economy.

No. 243, March 2006

The Topology of Interbank Payment Flows

Kimmo Soramäki, Morten L. Bech, Jeffrey Arnold, Robert J. Glass, and Walter E. Beyeler

The authors explore the network topology of the interbank payments transferred between commercial banks over the Fedwire Funds Service. They find that the network is compact despite low connectivity. The network includes a tightly connected core of money-center banks to which all other banks connect. The degree distribution is scale-free over a substantial range. The authors find that the properties of the network changed considerably in the immediate aftermath of the attacks of September 11, 2001.

No. 244, March 2006

Does the Market Discipline Banks? New Evidence from the Regulatory Capital Mix

Adam B. Ashcraft

Ashcraft documents that since the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA) reduced the ability of the FDIC to absorb losses of subordinated debt investors, the mix of debt has had a positive effect on the future outcomes of distressed banks, as if the presence of debt investors has worked to limit moral hazard. To mitigate concerns about selection, the author uses the variation across banks in the mix of debt in capital generated by cross-state variation in state corporate income tax rates. Interestingly, instrumental-variables estimates document that selection problems are indeed important, but suggest that the benefits of subordinated debt are even larger. Ashcraft concludes that the market may play a useful direct role in regulating banks. ■

Recently Published

Nicola Cetorelli. 2006. **"Finance as a Barrier to Entry: Bank Competition and Industry Structure in Local U.S. Markets,"** with Philip E. Strahan. *Journal of Finance* 61, no. 1 (February): 437-61.

Rebecca Hellerstein. 2006. **"Identification of Supply Models of Retailer and Manufacturer Oligopoly Pricing,"** with Sofia Villas-Boas. *Economics Letters* 90, no. 1 (January): 132-40.

Todd Keister. 2006. **"Bank Runs and Investment Decisions Revisited,"** with Huberto M. Ennis. *Journal of Monetary Economics* 53, no. 2 (March): 217-32.

Todd Keister. 2006. **"Discount Window Policy, Banking Crises, and Indeterminacy of Equilibrium,"** with Gaetano Antinolfi. *Macroeconomic Dynamics* 10, no. 1 (February): 1-19.

Antoine Martin. 2006. **"Contracts and Money Revisited,"** with Cyril Monnet. *B.E. Journals in Macroeconomics–Topics in Macroeconomics* 6, no. 1.

Antoine Martin. 2006. **"Endogenous Multiple Currencies."** *Journal of Money, Credit, and Banking* 38, no. 1 (February): 245-62.

Antoine Martin. 2006. **"Liquidity Provision versus Deposit Insurance: Preventing Bank Panics without Moral Hazard."** *Economic Theory* 28, no. 1 (May): 197-211.

Andrea Moro. 2006. **"Persistent Distortionary Policies with Asymmetric Information,"** with Matthew F. Mitchell. *American Economic Review* 96, no. 1 (March): 387-93.

Joshua Rosenberg and Til Schuermann. 2006. **"A General Approach to Integrated Risk Management with Skewed, Fat-Tailed Risks."** *Journal of Financial Economics* 79, no. 3 (March): 569-614.

Charles Steindel. 2006. **"Owners' Equivalent Rent and the Cost of Living."** *Business Economics* 41, no. 1 (January): 66-8.

Kevin Stiroh. 2006. **"Potential Growth of the U.S. Economy: Will the Productivity Resurgence Continue?"** with Dale W. Jorgenson and Mun S. Ho. *Business Economics* 41, no. 1 (January): 7-16.

Giorgio Topa. 2006. **"Dynamic Properties of Local Interaction Models,"** with Timothy G. Conley. In Lawrence E. Blume and Steven N. Durlauf, eds., *The Economy as an Evolving Complex System III: Current Perspectives and Future Directions*, 283-308. Santa Fe Institute Studies on the Sciences of Complexity series. New York: Oxford University Press. ■

Papers Presented by Economists in the Research and Statistics Group

"Stock Returns and Volatility: Pricing the Short-Run and Long-Run Components of Market Risk," Tobias Adrian. University of North Carolina at Chapel Hill seminar, Chapel Hill, North Carolina, January 20. Also presented at a Princeton University seminar, Princeton, New Jersey, March 8.

"Multiple Equilibria and Optimal Time-Consistent Policy," Gauti Eggertsson. Allied Social Sciences Association and Econometrics Society meeting, Boston, Massachusetts, January 6. With Eric Swanson.

"Monetary Policy Tick-by-Tick," Michael Fleming. Dauphine Workshop on Financial Market Quality, sponsored by DRM-CEREG (Paris-Dauphine University) and Euronext Paris, Paris, France, March 9. With Monika Piazzesi.

"Distribution Margins, Imported Inputs, and the Sensitivity of the CPI to Exchange Rates," Linda Goldberg. The New School for Social Research, Department of Economics seminar, New York, New York, March 1.

"The Interaction of Labor Markets and Inflation: Analysis of Micro Data from the International Wage Flexibility Project," Erica Groshen. Allied Social Sciences Association and Econometrics Society meeting, Boston, Massachusetts, January 8. With William Dickens, Lorenz Goette, Steinar Holden, Julian Messina, Mark Schweitzer, Jarkko Turunen, and Melanie Ward.

"Turbulent Firms, Turbulent Wages?" Erica Groshen. Cornell University seminar, Ithaca, New York, February 20. With Diego Comin and Bess Rabin.

"Is There a Bubble in the U.S. Housing Market Now?" Jonathan McCarthy and Richard Peach. EFG Eurobank Ergasias conference, Athens, Greece, January 20.

"Is There a Bubble in the U.S. Housing Market Now?" Richard Peach. U.S. Treasury Department, Washington, D.C., March 15. With Jonathan McCarthy. Also presented at the Washington Association of Money Managers, Washington, D.C., March 15.

"Intra-Day Trade Clustering and Two-Sided Markets," Asani Sarkar. American Finance Association annual meeting, Boston, Massachusetts, January 8. With Robert A. Schwartz.

"Macroeconomic Dynamics and Credit Risk: A Global Perspective," Til Schuermann. International Monetary Fund seminar, Washington D.C., February 14. With M. Hashem Pesaran, Björn-Jakob Treutler, and Scott M. Weiner.

"Current Account Adjustment with High Financial Integration: A Scenario Analysis," Cédric Tille. Graduate Institute of International Economics, University of Geneva, Geneva, Switzerland, December 20, 2005. With Michele Cavallo. Also presented at the University of Geneva, Geneva, Switzerland, January 30; the University of Tübingen, Tübingen, Germany, February 3; the Swiss National Bank, Zurich, Switzerland, February 13; the Bank for International Settlements, Basel, Switzerland, February 14; and the Centre for Economic Policy Research, Study Center Gerzensee, Gerzensee, Switzerland, March 3.

"Fannie and Freddie's Excellent Adventure: GSEs, Consumer Choice, and Pricing in the Residential Mortgage Market," James Vickery. Bendheim Center for Finance, Princeton University, Princeton, New Jersey, March 15.

"Catastrophe Bonds, Reinsurance, and the Optimal Collateralization of Risk Transfer," George Zanjani. NBER conference, Boston, Massachusetts, February 10. With Darius Lakdawalla. ■

Other New Publications

- ***Publications and Other Research***. The 2005 edition of our catalogue lists all of the papers published in our research series as well as many papers published by our economists in economic and finance journals, conference volumes, and scholarly books.

www.newyorkfed.org/research/publication_annuals/por2005.pdf

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Research and Statistics Group Publications and Papers: January-March 2006

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

ECONOMIC POLICY REVIEW

Forthcoming
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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Challenges Facing the New York Metropolitan Area Economy
James Orr and Giorgio Topa
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Richard Deitz and James Orr

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