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Federal Reserve Bank of New York

Research Update

Research and Statistics Group www.newyorkfed.org/research

Joseph S. Tracy Is Named New Director of Research

The Research and Statistics Group is pleased to announce that the Bank's Board of Directors has named Joseph S. Tracy director of research and executive vice president. During his tenure at the Bank, Joe has headed the Group's Domestic Research and Research Support areas and has served as the Group's senior administrative officer.

Joe joined the Bank in 1996 as a research officer in Domestic Research. Previously, he was an associate professor of economics at Columbia University and Yale University as well as the Olin Fellow at the National Bureau of Economic Research. Joe holds a bachelor's degree in political economy from the University of Missouri as well as a doctorate in economics from the University of Chicago.

Joe's research has focused on housing, labor economics, unions and collective bargaining, and real estate finance. He has published in a range of economics and business journals, including the *American Economic Review* ("Strikes and Holdouts in Wage Bargaining: Theory and Data," with Peter Cramton, 1992) and the *Journal of Political Economy* ("The Structure of Local Public Finance and the Quality of Life," with Joseph Gyourko, 1991). His work in scholarly volumes includes "Unions, Bargaining, and Strikes" (in *International Handbook of Trade Unions*, 2003) and "Quality of Life and Environmental Comparisons" (with Joseph Gyourko and Matthew Kahn, in *Handbook of Regional and Urban Economics*, 1999).

For Joe's bio, visit **www.newyorkfed.org/research/economists/tracy/index.html**.

New Research: October-December 2004

Study Finds No Signs of a Bubble in U.S. Home Prices

The fast rise in home prices in the past decade is not indicative of a bubble in the national housing market, according to a new study in the *Economic Policy Review* (vol. 10, no. 3). Moreover, a potential decline in regional housing prices does not expose the aggregate U.S. economy to weakness.

In "Are Home Prices the Next 'Bubble'?" Jonathan McCarthy and Richard Peach examine recent trends in the U.S. housing market. They explain that the sharp rise in home prices since the mid-1990s has raised concerns over a possible bubble in this market and the vulnerability of home prices to a collapse that could harm the U.S. economy.

McCarthy and Peach conclude that such concerns are unwarranted. Instead, they argue that strong market fundamentals are responsible for the run-up in housing prices nationwide. Although home prices have risen sharply, the study explains, increases in family income and declines in nominal mortgage rates have helped keep prices affordable. Even in periods of weak economic growth and high nominal interest rates, aggregate real home prices have decreased only modestly.

At the regional level, McCarthy and Peach conclude that housing prices could potentially soften in states along the east and west coasts, where home price appreciation has been strongest recently. Prices in these areas are subject to a possible fall because housing is relatively inelastic and home prices historically have been volatile. However, the authors note that regional price declines in the past have not had significant negative effects on the broader economy.

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.

U.S. Productivity Growth Should Remain Strong over the Next Decade

U.S. labor productivity growth has accelerated in recent years, despite a series of negative economic shocks that began with the bursting of the NASDAQ bubble in 2000 and extended through the current spike in energy prices. From 1995 to the second quarter of 2004, productivity grew at a rate of 3.1 percent per year, more than twice the average rate of the previous two decades.

In a new study in ***Current Issues in Economics and Finance*** (vol. 10, no. 13, “Will the U.S. Productivity Resurgence Continue?”), Dale Jorgenson, Mun Ho, and Kevin Stiroh update their analysis of the sources of the productivity revival and offer new projections of productivity’s likely growth rate over the next ten years. Specifically, the authors predict that private sector productivity will grow at a rate of 2.6 percent per year in the next decade—a significantly faster pace than the 2.2 percent annual rate they predicted in 2002.

According to the study, information technology (IT) continues to play a key role in the productivity revival. The recent gains reflect not only technological progress in the industries that produce IT equipment and software but also an ongoing shift by firms toward investment in highly productive and relatively inexpensive IT equipment.

On the negative side, the authors project that the aging of the workforce and a tapering off of advances in workers’ educational attainment will temper productivity growth in the years ahead. In addition, they caution that the future of productivity growth will depend critically on hard-to-predict factors such as the evolution of semiconductor technology. Nevertheless, they conclude that the underlying strength of information technology makes it highly unlikely that the U.S. economy will revert to the slower pace of productivity growth observed in the 1970s and 1980s.

Other New Publications

- *The Research Group of the Federal Reserve Bank of New York*. This online guide, updated for 2004-05, offers economists interested in joining the Group a fuller understanding of our activities, our research and policy work, and our staff, structure, and functions.

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

- *The Regional Economy of Upstate New York*. This newsletter, produced by the New York Fed’s Buffalo Branch, focuses on issues of importance to upstate New York. In “The Foundations and Practice of Historic Preservation” (summer/fall 2004), authors Jane Humphreys and Ramon Garcia show why historic preservation serves as an important—yet sometimes controversial—force in the economy.

  www.newyorkfed.org/research/regional_economy/upstatenews.html

New York Fed Conference Explores Benefits and Risks of International Capital Mobility

The many potential benefits of financial globalization include provision of insurance against national shocks, more efficient global allocation of resources, and improvements in international standards of living. Nevertheless, the interconnectedness fostered by globalization increases the exposure of participants to financial and real shocks and to the risk that sudden capital reversals may translate into large-scale economic disruption.

In December, Linda Goldberg and Paolo Pesenti organized the New York Fed conference "Financial Globalization," bringing together a distinguished group of researchers to explore the benefits and vulnerabilities associated with international capital mobility. Stanley Fischer, Vice Chairman of Citigroup, delivered the keynote address. The conference featured papers and discussions by economists from the academic, policy, and financial communities; the papers presented are summarized below.

- *"Financial Globalization and Exchange Rates"*—Philip R. Lane and Gian Maria Milesi-Ferretti observe that the rapid pace of financial globalization in recent years has brought new challenges to the international monetary system. In particular, the large amount of gross cross-holdings of foreign assets and liabilities has made the valuation channel of exchange rate adjustment grow in importance relative to the traditional trade balance channel. The authors explore empirically the interconnections between financial globalization and exchange rate adjustment as well as the policy implications. Discussions by Michael Dooley and Andrew Rose followed.

- *"An International Financial Transmission Model"*—Michael Ehrmann, Marcel Fratzscher, and Roberto Rigobon analyze the degree of financial integration between money markets, bond markets, equity markets, and exchange rates within and between the United States and the euro area. Their findings emphasize the importance of U.S. markets, which on average explain more than 25 percent of movements in euro area markets; by comparison, euro area markets account for only about 8 percent of U.S. asset price changes. The paper featured commentaries by Cédric Tille and Mark Spiegel.

- *"Trade, Production Sharing, and the International Transmission of Business Cycles"*—Ariel Burstein, Christopher Johann Kurz, and Linda Tesar examine the extent to which three observations about the link between international trade and international business cycle synchronization can be reconciled using a multicountry version of a standard model of international business cycles. The observations are: 1) a large increase in manufactures trade has taken place over the past thirty years, 2) a bigger share of trade between core and periphery regions relative to core regions has occurred as production sharing, and 3) cross-country output correlations have risen between core and periphery regions relative to core regions. Qualitatively, the model is found to account for these observations; quantitatively, the direct effects from trade do not generate a large divergence in output correlations across countries. Jon Faust and Kei-Mu Yi provided discussions.

- *"The Euro Area and World Interest Rates"*—Menzie Chinn and Jeffrey Frankel conclude that nominal U.S. interest rates tend to drive European rates at both the short and long horizons. Moreover, while some evidence suggests that U.S. rates are becoming more influenced by European rates, the relationship is far from symmetric, despite European Monetary Union. Real U.S. interest rates also influence European rates, although German rates do not appear to have a similar effect on U.S. rates. Gian Maria Milesi-Ferretti and John Rogers offered their thoughts on the Chinn and Frankel study.

- *"Firm-Specific Information and the Efficiency of Investment"*—Anusha Chari and Peter Blair Henry use a new firm-level data set to examine the efficiency of capital investment in emerging economies. Their main finding is that in the three-year period following capital account liberalization, the growth rate of a typical firm's capital stock exceeds its preliberalization mean by an average of 5.4 percentage points. The return to capital rises in the post-liberalization period, suggesting that the investment boom does not constitute a wasteful binge. Comments by Leonardo Bartolini and Michael Klein complemented the presentation.

- *"Capital Flows in a Globalized World: The Role of Policies and Institutions"*—Laura Alfaro, Sebnem Kalemli-Ozcan, and Vadym Volosovych examine the determinants of international capital flows and capital flow volatility in the 1970-2000 period. They find that institutional quality is important in determining capital flows and that historical determinants of institutional quality have a direct effect on flows. Good fiscal and monetary policies and capital controls also explain the changes in capital flows and volatility. Franklin Allen and Nouriel Roubini followed with their observations.

- *"Emerging Markets, Sovereign Debt, and International Financial Integration: 1870-1913 and Today"*—Paolo Mauro, Nathan Sussman, and Yishay Yafeh add to the literature on micro- and macro-economics by analyzing international capital flows over the 1870-1913 period and the institutions operating at the time. Their analysis also considers the determinants of borrowing costs for emerging markets before World War I and today as well as the mechanisms by which the consequences of past debt crises were mitigated. Richard Portes and Alan Taylor offered their insight on the work.

- ***"Currency Crises, Capital Account Liberalization, and Selection Bias"***—Reuven Glick, Xueyan Guo, and Michael Hutchison consider whether countries with unregulated capital flows are more vulnerable to currency crises. After controlling for sample-selection bias, the authors conclude that countries with liberalized capital accounts experience a lower likelihood of crises. Their findings, which contradict the conventional wisdom, suggest that the benefits of capital market liberalization for external stability are substantial. Frederic Mishkin discussed the paper as well as summarized many of the issues touched upon at the conference.

Links to the papers can be found at **www.newyorkfed.org/research/conference/2004/financial_globalization.html**.

Recently Published

Arturo Estrella. 2004. "Bank Capital and Risk: Is Voluntary Disclosure Enough?" ***Journal of Financial Services Research*** 26, no. 2 (October): 145-60.

Linda Goldberg. 2004. Comment on "The Role of Multinational Corporations in International Business Cycle Transmission: Skew Lines or Arbitrage Opportunities?" by Gordon Hansen and Matthew Slaughter. In Horst Siebert, ed., ***Macroeconomic Policies in the World Economy***, 156-62. Berlin-Heidelberg: Springer-Verlag.

Bart Hobijn. 2004. "Generalizations of the KPSS Test for Stationarity," with Philip Hans Franses and Marius Ooms. ***Statistica Neerlandica*** 58, no. 4 (November): 1-20.

Simon Potter. 2004. "Forecasting in Dynamic Factor Models Using Bayesian Model Averaging," with Gary Koop. ***Econometrics Journal*** 7, no. 2 (December): 550-65.

Til Schuermann. 2004. "Measurement, Estimation, and Comparison of Credit Migration Matrices," with Yusuf Jafry. ***Journal of Banking and Finance*** 28, no. 11 (November): 2603-39.

Kevin Stiroh. 2004. "Discussion of Productivity Trends and Measurement Issues in Services Industries." In Jack E. Triplett and Barry P. Bosworth, eds., ***Productivity in the U.S. Services Sector: New Sources of Economic Growth***, 41-5. Washington, D.C.: Brookings Institution Press.

Kevin Stiroh. 2004. "Diversification in Banking: Is Noninterest Income the Answer?" ***Journal of Money, Credit, and Banking*** 36, no. 5 (October): 853-82.

Giorgio Topa. 2004. "Cooperation as a Transmitted Cultural Trait," with Alberto Bisin and Thierry Verdier. ***Rationality and Society*** 16, no. 4 (November): 477-507.

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. 195, October 2004
Menu Costs at Work: Restaurant Prices and the Introduction of the Euro
Bart Hobijn, Federico Ravenna, and Andrea Tambalotti

Restaurant prices in the euro area saw an unprecedented increase after the introduction of the euro. The authors use an extension of commonly used models of sticky prices and argue that the increase in restaurant prices can be explained by menu costs. The extension they use involves the state-dependent decision of firms about when to adopt the euro. Two main mechanisms drive the result. First, the authors' model concentrates otherwise staggered price increases around the introduction of the euro. Second, before the adoption of the euro, prices do not reflect marginal cost increases expected to occur after the changeover. This horizon effect disappears as soon as the new currency is adopted, contributing to a jump in prices at that time. For realistic parameter values, the model generates a blip in inflation of the same magnitude observed in the data.

Quantitative Methods

No. 196, December 2004
Forecasting and Estimating Multiple Change-Point Models with an Unknown Number of Change Points
Gary M. Koop and Simon M. Potter

The authors develop a new approach to change-point modeling that allows for an unknown number of change points in the observed sample. Their model assumes that regime durations have a Poisson distribution. The model approximately nests the two most common approaches: the time-varying parameter model with a change point every period and the change-point model with a small number of regimes. The authors focus on the construction of reasonable hierarchical priors both for regime durations and for the parameters that characterize each regime. A Markov Chain Monte Carlo posterior sampler is constructed to estimate a change-point model for conditional means and variances. Koop and Potter find that their techniques work well in an empirical exercise involving U.S. inflation and GDP growth. Empirical results suggest that the number of change points is larger than previously estimated in these series and the implied model is similar to a time-varying parameter model with stochastic volatility.

No. 197, December 2004
Prior Elicitation in Multiple Change-Point Models
Gary M. Koop and Simon M. Potter

This paper discusses Bayesian inference in change-point models. Current approaches place a possibly hierarchical prior over a known number of change points. Koop and Potter show how two popular priors have some potentially undesirable properties, such as allocating excessive prior weight to change points near the end of the sample. They discuss how these properties relate to imposing a fixed number of change points in the sample. Their study develops a hierarchical approach that allows some change points to occur out of the sample. The authors show that this prior has desirable properties and handles cases with unknown change points. Their hierarchical approach can be shown to nest a wide variety of change-point models, from time-varying parameter models to those with few or no breaks. Data-based learning about the parameter that controls this variety occurs because the authors' prior is hierarchical.

Papers Presented by Economists in the Research and Statistics Group

"Lender-of-Last-Resort Breakdowns," *Leonardo Bartolini*. European Central Bank, Frankfurt, Germany, October 26.

"The Currency Invoicing of International Trade," *Linda Goldberg*. Columbia University Department of Economics seminar, New York City, November 10. Also presented at a Princeton University Department of Economics seminar, November 15. With Cédric Tille.

"Is There a Quantity Puzzle within Countries?" *Linda Goldberg*. Bank of Canada Annual Research Conference, Ottawa, Canada, November 18.

"Has Structural Change Contributed to a Jobless Recovery?" *Erica Groshen*. Conference cosponsored by the Cato Institute and *The Economist*, Washington, D.C., October 7. With Simon Potter.

"Corporate Cash Holding: Theory and Evidence on a Cash-in-Advance Model," *Charles Himmelberg*. Arizona State University Department of Finance, October 15.

"The Stock Market Impact of CEO Certification of Bank Holding Company Financial Statements," *Beverly Hirtle*. Financial Management Association Annual Meeting, New Orleans, Louisiana, October 7.

"A Tale of Two States," *Amartya Lahiri*. Iowa State University Department of Economics seminar, October 8. With Kei-Mu Yi. Also presented at the University of Iowa Conference on Development Economics, October 9, and an Indian Statistical Institute seminar, New Delhi, India, November 25.

"Segmented Asset Markets and Optimal Exchange Rate Regimes," *Amartya Lahiri*. Reserve Bank of India seminar, Mumbai, India, November 23. With Rajesh Singh and Carlos Vegh.

"Demand for Fedwire Funds Transfers," *James McAndrews*. Bank Administration Institute Money Transfer Conference, New York City, October 28.

"Board Committee Structure, Ownership, and Firm Performance," *Hamid Mehran*. Conference cosponsored by the *Journal of Financial Intermediation* and Washington University in St. Louis, Olin School of Business, Center for Research in Economics and Strategy, St. Louis, Missouri, November 12. With Rachel Hayes and Scott Schaefer.

"Conflicts of Interest in Commercial Banking," *Hamid Mehran*. Ohio State University, Fisher College of Business, Charles A. Dice Center for Research in Financial Economics seminar, Columbus, Ohio, December 2.

"Old and New Open-Economy Macroeconomic Models," *Paolo Pesenti*. Norges Bank Annual Meeting of Economists, Oslo, Norway, October 19.

"The Simple Geometry of Transmission and Stabilization in Closed and Open Economies," *Paolo Pesenti*. Columbia University Department of Economics lecture, New York City, December 8. With Giancarlo Corsetti.

"Endogenous Pass-Through and Optimal Monetary Policy: A Model of Self-Validating Exchange Rate Regimes," *Paolo Pesenti*. Bank of Canada International Department seminar, Ottawa, Canada, December 13. With Giancarlo Corsetti. Also presented at a Vanderbilt University Department of Economics seminar, Nashville, Tennessee, December 6.

"The Use of Copulas in Financial Econometrics," *Joshua Rosenberg*. New York University Stern School of Business conference, New York City, October 1.

"Intra-Day Trade Clustering and Two-Sided Markets," *Asani Sarkar*. Baruch College, New York City, November 23. With Robert Schwartz and Avner Wolf.

"The Role of Industry, Geography, and Firm Heterogeneity in Credit Risk," *Til Schuermann*. NBER conference, Woodstock, Vermont, October 23. With M. Hashem Pesaran and Bjoern-Jakob Treutler.

"The Relationship between Manufacturing Production and Goods Output," *Charles Steindel*. Bureau of Economic Analysis, Washington, D.C., December 2.

"Bank Risk and Revenue Diversification: An Assessment Using Equity Market Returns," *Kevin Stiroh*. Bank of Spain, Madrid, Spain, December 2.

"Will the U.S. Productivity Resurgence Continue?" *Kevin Stiroh*. Universidad Complutense de Madrid, Madrid, Spain, December 3. With Dale W. Jorgenson and Mun S. Ho.

"Bank Risk and Revenue Diversification: An Assessment Using Equity Returns," *Kevin Stiroh*. Federal Deposit Insurance Corporation, Washington, D.C., December 20.

"Menu Costs at Work: Restaurant Prices and the Introduction of the Euro," *Andrea Tambalotti*. Wesleyan University Department of Economics, Middletown, Connecticut, November 17. With Bart Hobijn and Federico Ravenna.

"Financial Integration and the Wealth Effect of Exchange Rate Fluctuations," *Cédric Tille*. Institute of International Economics conference, Geneva, Switzerland, November 2. Also presented at the University of Paris I, Paris, France, November 3; Queens University, Belfast, United Kingdom, November 5; the Bank of England, London, England, November 10; the London School of Economics, London, England, November 10; the Swiss National Bank, Zurich, Switzerland, November 25; and the European University Institute, Florence, Italy, November 29.

"Place of Work and Place of Residence: Informal Hiring Networks and Labor Market Outcomes," *Giorgio Topa*. New York University Department of Economics, New York City, December 6. With Patrick Bayer and Stephen L. Ross.

"Regulation, Capital, and the Evolution of Organizational Form in U.S. Life Insurance," *George Zanjani*. Georgia State University seminar, Atlanta, Georgia, November 2.

Quarterly Review Articles Are Now Online

All back issues of the Bank's *Quarterly Review* are now available at our website.

The *Quarterly Review* was the New York Fed's chief research publication from 1976 to 1994 and is the predecessor to the *Economic Policy Review*. The new archive was created in response to continuing demand for many of the articles in the series.

Articles are available at **www.newyorkfed.org/research/quarterly_review/1976.html**.

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Research and Statistics Group Publications and Papers: October-December 2004

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

Economic Policy Review, vol. 10, no. 3

Are Home Prices the Next "Bubble"?
Jonathan McCarthy and Richard W. Peach

The Historical and Recent Behavior of Goods and Services Inflation
Richard W. Peach, Robert Rich, and Alexis Antoniades

Origins of the Federal Reserve Book-Entry System
Kenneth D. Garbade

Economizing on Liquidity with Deferred Settlement Mechanisms
Kurt Johnson, James J. McAndrews, and Kimmo Soramäki

Current Issues in Economics and Finance, vol. 10

No. 11, November 2004
Recent Innovations in Treasury Cash Management
Kenneth D. Garbade, John C. Partlan, and Paul J. Santoro

No. 12, December 2004
New York and New Jersey Poised for Modest Job Growth in 2005
James Orr and Rae Rosen
Second District Highlights

No. 13, December 2004
Will the U.S. Productivity Resurgence Continue?
Dale W. Jorgenson, Mun S. Ho, and Kevin J. Stiroh

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