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Research UPDATE

from the Federal Reserve Bank of New York

RESEARCH AND MARKET ANALYSIS GROUP

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Should the Direction of Public Infrastructure Investment Shift?

Current state spending on public infrastructure development appears to encourage households and firms to move from dense urban centers to the surrounding suburbs. Yet some studies have found that the clustering of producers and consumers in certain areas, such as central cities, is economically and socially beneficial. In an article forthcoming in the ***Economic Policy Review***, Andrew Haughwout examines the findings of these studies in the context of current government practice ("Infrastructure and Social Welfare in Metropolitan America").

Haughwout describes how infrastructure policies may indirectly affect productivity and social welfare through the policies' effects on the location of economic activity. Recent studies on public capital's impact on intrametropolitan patterns of economic activity, he observes, indicate that the place-specific effects of new public investments are substantial. Furthermore, because location patterns indeed affect productivity and household welfare, infrastructure's effects on these patterns may represent the most important way in which infrastructure influences social well-being.

Given these observations, the author suggests that institutional reforms that would change the management and direction of public infrastructure investment may be in order. Specifically, Haughwout recommends the creation of "infrastructure investment authorities"—regional government agencies empowered to choose and finance investments that promote an area's overall well-being. These agencies would most likely target more investment to the central cities.

Haughwout acknowledges that it may be difficult to establish such a system of planning agencies, yet "a good first step would be to create forums in which the regional implications of infrastructure investments could be discussed by all interested parties, equally represented."

The article is available at **www.newyorkfed.org/rmaghome/econ_pol/2001/801ahau.html**.

Also in This Issue …

New Research: July–September 2001

New Study Examines the Sharp Rise and Fall in Business Investment in the 1995–2001 Period

The rapid growth of business expenditures on equipment and software in the second half of the 1990s was followed by a period of sharp retrenchment after the middle of 2000. These swings in business capital spending have encouraged the view that a robust stock market and declining prices in computers and other information-processing equipment led firms to overinvest in high-tech goods during the last decade. In this view, excess investment in the late 1990s made conditions ripe for a pullback in spending on high-tech equipment when the economy slowed in the new century.

In "Equipment Expenditures since 1995: The Boom and the Bust" (***Current Issues in Economics and Finance***, vol. 7, no. 9), Jonathan McCarthy takes issue with this interpretation on two grounds. First, he suggests that an exclusive focus on high-tech goods is misplaced. By tracking the growth of the components of equipment expenditure, he shows that the decline in equipment expenditures has been broad-based, affecting investment in transportation equipment and other conventional machinery as well as purchases of high-tech goods.

Second, McCarthy finds little statistical evidence that a soaring stock market or falling equipment prices prompted firms to overinvest. Using an empirical forecasting model, he demonstrates that investment probably would have been strong in the late 1990s even if stock prices and relative equipment prices had moved in line with their recent historical averages.

The author's statistical analysis does suggest that the stock market decline played some role in the investment "bust" after mid-2000. Nevertheless, the market's contribution appears to have been quite small relative to the steep fall in investment.

Publications and Papers

The Research and Market Analysis Group produces a wide range of publications:

- ***The Economic Policy Review***—a policy-oriented journal focusing on economic and financial market issues.
- ***Current Issues in Economics and Finance***—a newsletter-style publication offering concise and timely analyses of economic and financial topics.
- ***Second District Highlights***—a regional supplement to ***Current Issues*** covering financial and economic developments in the Federal Reserve System's Second District.
- ***Staff Reports***—technical papers intended for publication in leading economic and finance journals. This series is available only on-line.
- ***Publications & Other Research***—an annual catalogue of the Group's research output.

New Editor Named to *Economic Policy Review*

Erica Groshen, an assistant vice president in the Bank's domestic research area, recently succeeded Paul Bennett as editor of the ***Economic Policy Review***.

Erica, a Harvard-trained labor economist, has conducted research in the Federal Reserve System for thirteen years, headed the Bank's international and domestic research areas, and served on the editorial boards of the ***Review*** and other economic journals. Erica will be assisted by an active editorial board that includes Linda Goldberg, James Kahn, and Hamid Mehran, as well as new members Donald Morgan and Carol Osler.

Paul Bennett, who recently retired from the New York Fed, is now Senior Vice President and Chief Economist at the New York Stock Exchange.

Recently Published

Leonardo Bartolini. 2001. "Banks' Reserve Management, Transaction Costs, and the Timing of Federal Reserve Intervention," with Giuseppe Bertola and Alessandro Prati. ***Journal of Banking and Finance*** 25, no. 7 (July): 1287-317.

Leonardo Bartolini. 2001. "Excess Volatility of Exchange Rates with Unobservable Fundamentals," with Lorenzo Giorgianni. ***Review of International Economics*** 9, no. 3 (August): 518-30.

Andrew Biehl. 2001. "Durable-Goods Monopoly with Stochastic Values." ***Rand Journal of Economics*** 32, no. 3 (fall): 565-78.

Arturo Estrella. 2001. "Dealing with Financial Crises: The Central Bank's Took Kit." Central Bank of Sweden ***Penning-och valutapolitik*** 5, no. 2: 34-49.

Arturo Estrella. 2001. "Regulatory Capital and the Supervision of Financial Institutions: Some Basic Distinctions and Policy Choices." In Anthony Santomero, Staffan Viotti, and Anders Vredin, eds., ***Challenges for Modern Central Banking***. Proceedings of a conference sponsored by the Central Bank of Sweden. Boston: Kluwer Academic Publishers.

Kenneth Kuttner. 2001. "Inflation, Monetary Transparency, and G3 Exchange Rate Volatility," with Adam Posen. In M. Balling, E. Hennessy, and E. Hochreiter, eds., ***Adapting to Financial Globalisation***. Proceedings of the 22nd Société Universitaire Européenne de Recherches Financières (SUERF) Colloquium. London: Routledge.

Richard Peach and Stavros Peristiani. 2001. "How Much Mortgage Pool Information Do Investors Need?" with Paul Bennett. ***Journal of Fixed Income*** 11, no. 1 (June): 8-15.

Paolo Pesenti. 2001. "Roundtable on the Causes and Consequences of the East Asian Financial Crisis," with Graciana Del Castillo, Albert Fishlow, and Miles Kahler. In Arvid Lukauskas and Francisco Rivera-Batiz, eds., ***The Political Economy of the East Asian Crisis and Its Aftermath: Tigers in Distress***, 249-64. Cheltenham, England, and Northampton, Mass.: Edward Elgar Publishing.

Robert Rich. 2001. "Structural Estimates of the U.S. Sacrifice Ratio," with Stephen Cecchetti. ***Journal of Business and Economic Statistics*** 19, no. 4: 416-27.

Kei-Mu Yi. 2001. Comment on "Revealing Comparative Advantage: Chaotic or Coherent Patterns across Time and Sector and U.S. Trading Partner?" by David Richardson and Chi Zhang. In Magnus Blomstrom and Linda Goldberg, eds., ***Topics in Empirical International Research: A Festschrift in Honor of Robert E. Lipsey***. Chicago: University of Chicago Press.

New Titles in the *Staff Report*s Series

The following new ***Staff Report*s** are available at **www.newyorkfed.org/rmaghome/staff_rp/**.

Macroeconomics and Growth

No. 136

New Evidence on the Lending Channel
Adam B. Ashcraft

This study examines whether banks play a special role in the monetary policy transmission mechanism. The author uses the presence of internal capital markets in bank holding companies to isolate plausibly exogenous variation in the financial constraints faced by banks. In particular, he demonstrates that affiliated bank loan growth is less sensitive to changes in the federal funds rate than that of unaffiliated banks, and that these relatively unconstrained banks are better able to smooth insured deposit outflows by issuing uninsured debt. State loan growth also becomes less sensitive to changes in the federal funds rate as the loan market share of affiliated banks increases, but state output growth is largely unaffected.

International

No. 137

Does Foreign Ownership Contribute to Sounder Banks in Emerging Markets? The Latin American Experience
Jennifer S. Crystal, B. Gerard Dages, and Linda S. Goldberg

Foreign banks entering emerging markets are usually thought to improve the condition and performance of acquired institutions, and more generally to enhance local financial stability. The authors use bank-specific data for several Latin American countries since the mid-1990s to investigate this theory. Across the seven largest countries, they find that the financial strength ratings of local banks acquired by foreign entities generally show a slight improvement relative to their domestic counterparts. The authors' more in-depth studies of Chile, Colombia, and Argentina do not indicate striking differences in health between foreign and domestic banks. However, foreign banks often have higher average loan growth, average provisioning expense, and loss-absorption capacity. These results suggest that foreign ownership can provide important positive influences on the stability and development of emerging market banking systems.

Banking and Finance

No. 133

Measuring Treasury Market Liquidity
Michael J. Fleming

The author examines a comprehensive set of liquidity measures for the U.S. Treasury market. He finds highly significant price impact coefficients, which are strongly correlated with bid-ask spreads and episodes of reported poor liquidity such as the fall 1998 financial market turmoil. Quote and trade sizes are found to correlate modestly with these episodes and with the other liquidity measures, as are yield spreads between on-the-run and off-the-run securities. In contrast, trading volume and trading frequency are only weakly correlated with these other measures, suggesting that they are poor liquidity proxies. The various measures, almost without exception, are positively correlated across securities, especially Treasury notes.

No. 135

The Overnight Interbank Market: Evidence from the G-7 and the Euro Zone
Alessandro Prati, Leonardo Bartolini, and Giuseppe Bertola

This analysis of the major industrial countries' interbank markets for overnight loans links the behavior of very short-term interest rates to the operating procedures of the countries' central banks. Previous studies on this topic have focused on key features of the U.S. federal funds rate's behavior. Yet this study finds that many of these features are not robust to changes in institutional details and changes in the style of central bank intervention, along both cross-sectional and time-series dimensions of data. The study suggests that the empirical features of the day-to-day behavior of short-term interest rates are more strongly influenced by institutional arrangements than by extensively researched market frictions.

No. 138

Are Bank Shareholders Enemies of Regulators or a Potential Source of Market Discipline?
Sangkyun Park and Stavros Peristiani

In moral hazard models, bank shareholders have incentives to transfer wealth from the deposit insurer—that is, maximize put option value—by pursuing riskier strategies. For safe banks with large charter value, however, the risk-taking incentive is outweighed by the possibility of losing charter value. By focusing on the relationship between book value, market value, and a risk measure, this study develops a semiparametric model for estimating the critical level of bank risk at which put option value starts to dominate charter value. From these estimates, the authors infer the extent to which the risk-taking incentive prevailed during 1986-92, a period of serious banking and financial turmoil. They find that despite the environment, shareholders' risk-taking incentive was confined primarily to a small fraction of highly risky banks.

Quantitative Methods

No. 134

Forecasting Recessions Using the Yield Curve
Marcelle Chauvet and Simon Potter

The authors compare forecasts of recessions using four specifications of the probit model: a time-invariant conditionally independent version, a business cycle specific conditionally independent model, a time-invariant probit with autocorrelated errors, and a business cycle specific probit with autocorrelated errors. The more sophisticated versions of the model take into account some of the potential underlying causes of the documented predictive instability of the yield curve. The authors find strong evidence in favor of the more sophisticated specification, which allows for multiple breakpoints across business cycles and autocorrelations. They also develop a new approach to the construction of real-time forecasts of recession probabilities.

Research Update Now Available in Html Format

As part of our ongoing enhancements to our web site, we are now offering an html version of ***Research Update***. The html format enables Internet users to navigate quickly through the content of an issue. Links built into the text take you directly to the publication being summarized or the author's FRBNY web page.

Research Update is the second publication to be converted to this format, following our ***Introduction to Research*** booklet. Other publications are also being considered for conversion. ***Research Update*** will continue to be available in printable form via the pdf version.

www.newyorkfed.org/rmaghome/update/2001.html

Proceedings of Welfare Reform Conference Available

In November 2000, the Federal Reserve Bank of New York sponsored the conference "Welfare Reform Four Years Later: Progress and Prospects." The proceedings of the conference, which examines the consequences of the 1996 legislative changes to public assistance, have recently been published in the Bank's ***Economic Policy Review***.

www.newyorkfed.org/rmaghome/econ_pol/2001/801indx.html

Papers Presented by Economists in the Research and Market Analysis Group

"The Dual Role of Corporate Boards as Advisors and Monitors of Management: Theory and Evidence," *Renée Adams*. Center for Economic and Policy Research European Summer Symposium in Financial Markets, Gerzensee, Switzerland, July 31.

Adams analyzes the consequences of having corporate boards that both advise and monitor management. She finds that when a board has such a dual role, situations may arise in which a management-friendly board is optimal. In other situations, a separation of the roles, such as in the dual-board system in Europe, may be optimal.

"The Overnight Interbank Market: Evidence from the G-7 and the Euro Zone," *Leonardo Bartolini*. Sixteenth Annual Congress of the European Economic Association, University of Lausanne, Switzerland, September 7. With Alessandro Prati and Giuseppe Bertola.

The authors find evidence suggesting that many empirical features of the day-to-day behavior of short-term interest rates are more strongly influenced by institutional arrangements than by extensively researched market frictions.

"Measuring Treasury Market Liquidity," *Michael Fleming*. Conference on Market Microstructure and High-Frequency Data in Finance, Centre for Analytical Finance, University of Aarhus, Sonderborg, Denmark, August 10.

Fleming examines a comprehensive set of U.S. Treasury market liquidity measures, analyzing them relative to one another, across securities, and over time.

"Optimal Interest Rate Rules," *Marc Giannoni*. Swiss National Bank, Zurich, Switzerland, August 31. With Michael Woodford.

This paper characterizes interest rate rules that are optimal regardless of the statistical properties of disturbance processes.

"Robust Optimal Monetary Policy in a Forward-Looking Model with Parameter and Shock Uncertainty," *Marc Giannoni*. Sixteenth Annual Congress of the European Economic Association, University of Lausanne, Switzerland, September 1.

This study argues that the robust optimal rule is likely to involve a stronger response in the interest rate when changes in inflation, the output gap, and the lagged interest rate occur amid—rather than in the absence of—parameter uncertainty.

"Does Ownership Contribute to Sounder Banks in Emerging Markets? The Latin American Experience," *Linda Goldberg*. InterAmerican Seminar on Economics, Cambridge, Massachusetts, July 20. With B. Gerard Dages and Jennifer Crystal.

This paper looks at the performance of established foreign banks in Latin America and suggests that foreign ownership may provide important stabilizing influences in emerging financial systems.

"Exchange Rate Pass-Through into Import Prices: A Macro or Micro Phenomenon?" *Linda Goldberg*. National Bureau of Economic Research Summer Institute in International Finance and Macroeconomics, Cambridge, Massachusetts, July 24. With José Campa.

The authors look at the responsiveness of import prices (in OECD countries) to exchange rates. Although some price variation is attributable to local macroeconomic conditions, changes in the composition of a country's import bundle are the main drivers of differences in pass-through elasticities.

"The Great Recession: Lessons for Macroeconomic Policy from Japan," *Kenneth Kuttner*. Brookings Panel on Economic Activity conference, Washington, D.C., September 7. With Adam Posen.

Kuttner and Posen find that Japan's policies to combat the nation's ten-year recession have worked largely as expected, and some scope remains for their more aggressive use. However, weak financial conditions have undermined the policies' effectiveness.

"The Credit Cycle and the Business Cycle: New Findings Using the Survey of Senior Loan Officers," *Cara Lown and Don Morgan*. Conference on Capital Markets in the Economy, National Bureau of Economic Research, Cambridge, Massachusetts, July 18.

This paper presents an empirical analysis showing that lending standards for business loans have a predictive relationship with loan growth and real GDP. Lending standards are also significant in explaining retail and wholesale inventory investment.

"Bank Integration and Business Volatility," *Don Morgan*. European Finance Association Summer Meeting, Barcelona, Spain, August 28. With Philip Strahan and Bertrand Rime.

The authors find that the integration of the U.S. banking system—through the development of cross-state banking—appears to have had a stabilizing effect, as volatility in each state has become more closely correlated with national conditions.

"International Dimensions of Optimal Monetary Policy," Paolo Pesenti. National Bureau of Economic Research Summer Institute in International Finance and Macroeconomics, Cambridge, Massachusetts, July 16. With Giancarlo Corsetti.

This paper shows that optimal monetary rules for interdependent economics trade off a larger domestic output gap against lower import prices. Gains from international monetary cooperation are related in a nonmonotonic way to the degree of exchange rate pass-through.

"Productivity: What Is It, and Why Do We Care about It?" *Charles Steindel and Kevin Stiroh*. National Association for Business Economics 43rd Annual Meeting, New York City, September 9.

Steindel and Stiroh present a broad overview of productivity, both labor and total factor, and discuss why it is such an important topic.

"Are ICT Spillovers Driving the New Economy?" *Kevin Stiroh*. National Bureau of Economic Research Summer Institute, Cambridge, Massachusetts, July 30.

The author finds little evidence to support the view that investment in information and communications technology (ICT) leads to total factor productivity gains in the industries that use ICT equipment most intensively. He suggests that the primary effect of ICT investment occurs through traditional capital-deepening channels.

"On the Distributional Effects of Exchange Rate Fluctuations," *Cédric Tille*. Sixteenth Annual Congress of the European Economic Association, University of Lausanne, Switzerland, August 28. Also presented at the University of Tilburg, Switzerland, September 4; the European Central Bank, Frankfurt, Germany, September 5; and the University of Munich, Germany, September 6.

Tille analyzes how the impact of exchange rate fluctuations differs across sectors and shows that the countrywide effects mask a significant degree of sectoral heterogeneity.

RESEARCH AND MARKET ANALYSIS GROUP PUBLICATIONS AND PAPERS: July-September 2001

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Economic Policy Review, Forthcoming

The Effect of Employee Stock Options on the Evolution of Compensation in the 1990s
Hamid Mehran and Joseph Tracy

Infrastructure and Social Welfare in Metropolitan America
Andrew F. Haughwout

The Corporate Governance of Banks
Jonathan R. Macey and Maureen O'Hara

Vol. 7, No. 2

"Welfare Reform Four Years Later: Progress and Prospects"
Proceedings of a conference sponsored by the Federal Reserve Bank of New York

How Are Families Who Left Welfare Doing over Time? A Comparison of Two Cohorts of Welfare Leavers
Pamela Loprest

Declining Caseloads/Increased Work: What Can We Conclude about the Effects of Welfare Reform?
Rebecca M. Blank

Changing Caseloads: Macro Influences and Micro Composition
Robert A. Moffitt and David W. Stevens

Changing the Culture of the Welfare Office: The Role of Intermediaries in Linking TANF Recipients with Jobs
LaDonna Pavetti, Michelle K. Derr, Jacquelyn Anderson, Carole Trippe, and Sidnee Paschal

Welfare Reform and New York City's Low-Income Population
Howard Chernick and Cordelia Reimers

Using Financial Incentives to Encourage Welfare Recipients to Become Economically Self-Sufficient
Philip K. Robins and Charles Michalopoulos

Current Issues in Economics and Finance, Vol. 7

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Fiscal Policy in New York and New Jersey: 1977-97
Andrew F. Haughwout
Second District Highlights series

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To What Extent Does Productivity Drive the Dollar?
Cédric Tille, Nicolas Stoffels, and Olga Gorbachev

No. 9
Equipment Expenditures since 1995: The Boom and the Bust
Jonathan McCarthy

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