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Research

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RESEARCH AND MARKET ANALYSIS GROUP

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Articles Consider the Economic Consequences of 9/11

In a special issue of the ***Economic Policy Review***, "The Economic Effects of September 11" (vol. 8, no. 2), Research and Market Analysis Group economists examine some of the main consequences of the attacks from their vantage point in the Federal Reserve Bank of New York.

The volume's first two articles offer detailed accountings of the economic costs of September 11—one focusing on the expenses incurred by New York City as a result of the attacks, the other examining the costs associated with the country's efforts to prevent future attacks.

In *"Measuring the Effects of the September 11 Attack on New York City,"* Jason Bram, James Orr, and Carol Rapaport estimate that earnings losses, property destruction, and cleanup costs will total between $33 billion and $36 billion. They add that productivity losses from psychological stress, although more difficult to quantify, will also have a significant impact. Looking to fiscal year 2003, Bart Hobijn—in *"What Will Homeland Security Cost?"*—estimates that direct expenses for national security measures will total approximately $72 billion. Public-sector spending will encompass roughly $38 billion in federal expenditures on border security, protection against biological threats, emergency preparedness, and other initiatives, and $1.3 billion in state and local government expenditures. Spending by the private sector will be harder to gauge, notes Hobijn, but should equal about $33 billion.

Inside . . .

Next, the attacks' disruptive effects on the securities settlement and payment systems are studied, respectively, by Michael Fleming and Kenneth Garbade and by James McAndrews and Simon Potter.

In *"When the Back Office Moved to the Front Burner: Settlement Fails in the Treasury Market after 9/11,"* Fleming and Garbade examine the prolonged failure of brokers, dealers, and investors to deliver on Treasury security trades. They explain that fails rose initially because of the destruction of trade records and communication facilities. Fails remained high because the method typically used to remedy or avert a fail—borrowing a security through a special collateral repurchase agreement—proved as costly as failing to deliver the security. However, efforts by the Federal Reserve and the U.S. Treasury ultimately corrected the fails problem by increasing investors' incentives to settle trades. In their analysis of the payment system—*"Liquidity Effects of the Events of September 11, 2001"*—McAndrews and Potter consider the disruption to Fedwire, the electronic network that processes large payments among financial institutions. They note that Fedwire payment flows fell off sharply after the attacks, mainly because the destruction prevented some banks from sending payments, in turn contributing to a breakdown in payment coordination and thus bank liquidity shortfalls. The authors show how the Federal Reserve helped reestablish payment coordination by supplying extraordinary amounts of liquidity to the banking system.

The volume concludes with two distinct but complementary analyses of New York City's prospects after September 11.

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Jason Bram, Andrew Haughwout, and James Orr pose the question: *"Has September 11 Affected New York City's Growth Potential?"* The answer, according to the authors, is that despite the World Trade Center attack's short-term disruption to the local economy, New York City's favorable industry mix, production efficiencies, and quality-of-life advantages should provide the foundation for continued positive trends over the medium term. Providing a more abstract analysis, in *"Terrorism and the Resilience of Cities,"* James Harrigan and Philippe Martin assess the viability of major cities in the face of catastrophes such as terrorist attacks by considering why cities exist in the first place. They conclude that the same forces thought to lead to the formation of cities help to preserve cities at risk of terrorism and other catastrophic events. New York City in particular is likely to continue to thrive despite any ongoing terrorist threat.

Articles are available at **www.newyorkfed.org/rmaghome/econ_pol/2002/**. Executive summaries of most articles are available at **www.newyorkfed.org/rmaghome/econ_pol/eprsumm/summlist.html**.

New York Fed President Offers Views on Corporate Governance

Financial system stability can be achieved only through the interaction of sound leadership at the firm level, strong prudential regulation and supervision, and effective market discipline. This was a central theme conveyed by Federal Reserve Bank of New York President William J. McDonough in the William Taylor Memorial Lecture, delivered in Washington, D.C. The remarks are reprinted in ***Current Issues in Economics and Finance*** ("Issues in Corporate Governance," vol. 8, no. 8).

According to McDonough, sound leadership at the firm level—the first bulwark against financial system instability—begins with good corporate governance. This attribute takes the form of experienced directors and management, a coherent strategy and business plan, and clear lines of responsibility and accountability.

Official regulation and supervision also defend against instability. To that end, McDonough observes, governments must ensure that markets operate in a fair, transparent, and efficient manner—and that market participants comply with the rules. At the same time, governments must not rely on outdated notions of risk and risk management: Supervision must evolve in line with financial institutions' management of their activities, which is increasingly along business lines.

Effective market discipline is another deterrent to financial system instability. Here, "market participants, when armed with timely, meaningful, and accurate information about a firm's performance, can, by their investment and credit decisions, encourage managers and boards of directors to manage their risks soundly."

Looking ahead, McDonough identifies four areas where cooperative efforts by the public and private sectors can strengthen the financial system: corporate governance, executive compensation, accounting, and disclosure.

An important corporate governance challenge for directors and executive management, in McDonough's view, is to find outside directors who are sufficiently independent but still knowledgeable about and engaged in the firm's business. These qualities are particularly valuable given the increased technical complexity of most business activities and the rapid change in financial markets and practices. Balancing outside directors' general business knowledge with specific industry knowledge and technical expertise in critical areas poses another key challenge.

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Among McDonough's views on executive compensation is the belief that a more neutral tax policy would reduce firms' reliance on stock options and give firms greater freedom to choose other types of contingent-pay mechanisms. Furthermore, regardless of the specific compensation decisions of companies, "public policy should aim to eliminate distorting incentives and to encourage instead the role of market discipline."

The New York Fed President describes the challenge for accounting firms as the ability to develop a business model that allows them to maintain some of their natural economies of scope while avoiding the conflicts of interest proscribed by law. Another central issue concerns the treatment of intangible assets and complex financial transactions. Accounting and disclosure rules, says McDonough, have to reflect accurately not only the value of intangible assets, but also their vulnerabilities to sharp downward revaluations. In addition, accounting and disclosure rules have to keep pace with financial innovation so that complex financial arrangements, such as those funded offshore or through special-purpose entities, can be addressed effectively.

McDonough concludes by emphasizing the public policy need to rethink the entire disclosure framework. He argues that the need for mandatory disclosures will certainly continue, but firms should also be encouraged—and in some cases required—to make otherwise nonmandatory disclosures if accounting statements are misleading or incomplete. Finally, "it is simply not enough for companies to disclose information," McDonough observes, "investors also have to pay attention to the information disclosed."

New Titles in the *Staff Reports* Series

Macroeconomics and Growth

No. 156

Inventory Dynamics and Business Cycles: What Has Changed?

Jonathan McCarthy and Egon Zakrajšek

By historical standards, the U.S. economy has experienced remarkable stability since the mid-1980s. One explanation attributes the diminished variability of economic activity to inventory management improvements led by information technology. This study, however, finds that changes in inventory dynamics have played a reinforcing—rather than a leading—role in the reduced volatility. A decomposition of the reduction in the volatility of manufacturing output shows that the reduction almost entirely reflects a decline in the variance of the growth contribution of shipments. And although the volatility of total inventory investment has fallen, the decline occurred well before the mid-1980s and was driven by the reduced variability of materials and supplies. The analysis also shows that since the mid-1980s, inventory dynamics have helped to stabilize manufacturing production, but this effect appears to be a consequence of changes in how industry-level sales and aggregate economic activity respond to shocks, rather than a cause of changes in macroeconomic behavior.

International

No. 155

The Trade Comovement Problem in International Macroeconomics

M. Ayhan Kose and Kei-Mu Yi

Recent empirical research has found that pairs of countries with stronger trade linkages tend to have more highly correlated business cycles. This study assesses whether the standard international business cycle framework can replicate this intuitive result. Employing a three-country model with transportation costs, the authors simulate the effects of increased goods-market integration under two asset market structures: complete markets and international financial autarky. They find that under international financial autarky, the model generates stronger correlations for pairs of countries that trade more, but the increased correlation explains only about 6 percent of the empirical findings. This result is broadly robust to many combinations of shock specifications, import shares, and elasticities of substitution. Because the difference between business cycle theory and the empirical results cannot be resolved by changes in parameter values and the structure of the standard models, the authors term this discrepancy the "trade comovement problem."

Quantitative Methods

No. 157

On Both Sides of the Quality Bias in Price Indexes

Bart Hobijn

It is often argued that price indexes do not fully capture the quality improvements of new goods in the market. Because of this shortcoming, the indexes are perceived to overestimate the actual price increases that occur. This paper argues that the quality bias in price indexes is just as likely to be upward as downward. The author shows how both the sign and magnitude of the quality bias in the most commonly applied price index methods are determined by the cross-sectional variation of prices per quality unit across the product models sold in the market. He does so by simulating a model of a market that includes monopolistically competing suppliers of the various product models and a representative consumer with CES (constant elasticity of substitution) preferences. The bias in the commonly applied price index methods is illustrated by comparing the methods' estimates of inflation with the theoretical inflation rate implied by the data-generating process.

Recently Published

Morten Bech. 2002. "Liquidity, Gridlocks, and Bank Failures in Large Value Payment Systems," with Kimmo Soramäki. In ***E-money and Payment Systems Review***, 111-25. London: Central Banking Publications.

Arturo Estrella and Stavros Peristiani. 2002. "Capital Ratios and Credit Ratings as Predictors of Bank Failures," with Sangkyun Park. In Michael Ong, ed., ***Credit Ratings: Methodologies, Rationale, and Default***, 233-56. London: Risk Books.

Linda Goldberg. 2002. "When Is U.S. Bank Lending to Emerging Markets Volatile?" In Sebastian Edwards and Jeffrey A. Frankel, eds., ***Preventing Currency Crises in Emerging Markets***, 171-95. NBER conference volume. Chicago: University of Chicago Press.

Andrew Haughwout. 2002. "Should Suburbs Help Their Central City?" with Robert P. Inman. In William G. Gale and Janet Rothenberg Pack, eds., ***Brookings-Wharton Papers on Urban Affairs***, 45-88.

Kenneth Kuttner. 2002. "Are There Bank Effects in Borrowers' Costs of Funds? Evidence from a Matched Sample of Borrowers and Banks," with R. Glenn Hubbard and Darius N. Palia. ***Journal of Business*** 75, no. 4 (October): 559-81.

James McAndrews. 2002. "Deregulation and Correspondent Banking and the Role of the Federal Reserve," with Philip Strahan. ***Journal of Financial Intermediation*** 11, no. 3: 320-43.

James McAndrews. 2002. "E-Finance: An Introduction," with Franklin Allen and Philip Strahan. ***Journal of Financial Services Research*** 22, no. 1-2 (August-October): 5-27.

Paolo Pesenti. 2002. "The Role of Large Players in Currency Crises," with Giancarlo Corsetti and Nouriel Roubini. In Sebastian Edwards and Jeffrey A. Frankel, eds., ***Preventing Currency Crises in Emerging Markets,*** 197-258. NBER conference volume. Chicago: University of Chicago Press.

Simon Potter. 2002. "Predicting a Recession: Evidence from the Yield Curve in the Presence of Structural Breaks," with Marcelle Chauvet. ***Economics Letters*** 77, no. 2 (October): 245-53.

Kevin Stiroh. 2002. "Information Technology and the U.S. Productivity Revival: What Do the Industry Data Say?" ***American Economic Review*** 92, no. 5 (December): 1559-76.

Kevin Stiroh. 2002. "New and Old Economics in the 'New Economy.'" In Horst Siebert, ed., ***Economic Policy in the New Economy***, 3-28. Berlin: Springer-Verlag.

David Weinstein. 2002. "Bones, Bombs, and Break Points: The Geography of Economic Activity," with Donald R. Davis. ***American Economic Review*** 92, no. 5 (December): 1269-89.

David Weinstein. 2002. "Do Endowments Determine the Location of Production? Evidence from National and International Data," with Jeffrey Bernstein. ***Journal of International Economics*** 56, no. 1: 55-76.

David Weinstein. 2002. "The Mystery of the Excess Trade (Balances)," with Donald R. Davis. ***American Economic Review*** 92, no. 2: 170-4.

David Weinstein. 2002. "What Role for Empirics in International Trade?" with Donald R. Davis. In Ronald Findlay, Lars Jonung, and Mats Lundahl, eds., ***Bertil Ohlin: A Centennial Celebration (1899-1999)***, 363-87. Cambridge: MIT Press.

Papers Presented by Economists in the Research and Market Analysis Group

"How Volatile Is New York's Economy?" *Richard Deitz*. New York State Network for Economic Research and Rockefeller Institute of Government conference, Albany, New York, December 4.

"Is Japan's Trade (Still) Different?" *James Harrigan*. National Bureau of Economic Research, Centre for Economic Policy Research, and Tokyo Center for Economic Research Conference on Empirical International Trade, Tokyo, Japan, December 10. With Rohit Vanjani.

"Do Stock Price Bubbles Influence Corporate Investment?" *Charles Himmelberg*. *Journal of Monetary Economics* and Swiss National Bank Conference on Behavioral Macroeconomics, Gerzensee, Switzerland, October 11. With Simon Gilchrist and Gur Huberman.

"Distinguishing Trends from Cycles in Productivity," *James Kahn and Robert Rich*. Bank for International Settlements Central Bank Economists' meeting, Basel, Switzerland, October 14. Also presented at a Carnegie-Mellon University seminar, Pittsburgh, Pennsylvania, November 13.

"The Monetary-Fiscal Policy Mix: Perspectives from the United States," *Kenneth Kuttner*. National Bank of Poland conference, Warsaw, Poland, October 25.

"Self-Validating Optimum Currency Areas," *Paolo Pesenti*. Santa Cruz Center for International Economics conference, Santa Cruz, California, October 11. With Giancarlo Corsetti. Also presented at a Cornell University seminar, Ithaca, New York, October 30.

"Monetary Rules for Small, Open, Emerging Economies," *Paolo Pesenti*. Carnegie-Rochester Conference on Public Policy, Pittsburgh, Pennsylvania, November 23. With Douglas Laxton. Also presented at a Georgetown University seminar, Washington, D.C., December 13.

"Nonparametric Pricing of Multivariate Contingent Claims," *Joshua Rosenberg*. Risk Waters Group conference, New York City, November 4.

"Risk Measurement, Risk Management, and Capital Adequacy in Financial Conglomerates," *Til Schuermann*. Brookings Institution and Wharton Financial Institutions Center, Netherlands-U.S. Roundtable on Financial Conglomerates, Washington, D.C., October 24.

"The New Basel Accord and Questions for Research," *Til Schuermann*. Southern Finance Association 2002 Annual Meeting, Key West, Florida, November 22.

"How Valuable Is Exchange Rate Flexibility? Optimal Monetary Policy under Sectoral Shocks," *Cédric Tille*. Latin American and Caribbean Economic Association conference, Madrid, Spain, October 13.

"Technological Superiority and the Costs of Migration," *David Weinstein*. University of Chicago Seminar, Chicago, Illinois, October 28.

"Why Countries Trade: Insights from Firm-Level Data," *David Weinstein*. National Bureau of Economic Research, Centre for Economic Policy Research, and Tokyo Center for Economic Research Conference on Empirical International Trade, Tokyo, Japan, December 10. With Donald R. Davis.

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A special volume devoted to the economic effects of September 11.

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