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Research UPDATE

from the Federal Reserve Bank of New York

RESEARCH AND MARKET ANALYSIS GROUP

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Crises in Emerging Asian Markets Offer Lessons for the Global Economy

The international economy continues to be shaped by many of the issues raised by the recent crises in Asia's emerging markets.

In a special volume of the Bank's ***Economic Policy Review*** (vol. 6, no. 3), international research economists at the New York Fed shed light on the causes and consequences of the 1997-98 currency crises in Indonesia, Malaysia, the Philippines, South Korea, and Thailand. The volume also draws lessons from recent banking crises in Argentina and Mexico.

In "The Economics of Currency Crises and Contagion: An Introduction," Paolo Pesenti and Cédric Tille conclude that the severity of the Asia crisis can be attributed partially to the interaction of structural weaknesses in the crisis countries and volatile international capital markets. Inadequate supervision of the crisis countries' banking and finance sectors was also a contributing factor, the authors note, as was the rapid transmission of the crisis through structural links and spillover effects among the crisis countries.

Turning to Latin America, B. Gerard Dages, Linda Goldberg, and Daniel Kinney examine the value of foreign bank participation in the financial sectors of emerging markets. They determine that the asset quality of bank portfolios—rather than the nationality of bank owners—appears to be the decisive factor behind the growth and volatility of bank credit. Nevertheless, their study, "Foreign and

Also in This Issue . . .

Domestic Bank Participation in Emerging Markets: Lessons from Mexico and Argentina," also finds that foreign banks in these countries exhibited stronger and less volatile loan growth than domestic banks. In addition, it shows that "diversity of ownership has contributed to greater stability of credit in periods of crisis or financial system weakness."

A special volume of the* Economic Policy Review *examines many of the issues relevant to currency and banking crises.

Next, Matthew Higgins and Thomas Klitgaard analyze the export and import performance of four of the crisis countries in "Asia's Trade Performance after the Currency Crisis." According to the authors, these countries needed dramatic improvements in their current account balances in the late 1990s, which they achieved chiefly through lower imports, measured in dollar terms, with export sales largely unchanged. They add that dollar import and export prices fell together in the countries, with both tied to world prices. Finally, "export volumes rose as world demand outside of Asia grew," observe Higgins and Klitgaard, "while import volumes declined sharply with the fall in domestic economic activity in the four countries."

"Asia Crisis Postmortem: Where Did the Money Go and Did the United States Benefit?" reveals that the Asia crisis actually had a positive, albeit small, impact on U.S. economic

Publications and Papers

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

- ***The Economic Policy Review***—a policy-oriented research journal focusing on macroeconomic, banking, and financial market topics.
- ***Current Issues in Economics and Finance***—a newsletter-style publication offering concise and timely analyses of economic and financial topics.
- ***Second District Highlight*****s**—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 in electronic form.
- ***Publications & Other Research***—an annual catalogue of the Group's research output.

growth. Authors Eric van Wincoop and Kei-Mu Yi find that the effects of lower interest rates on consumption and investment more than compensated for the negative contribution of the larger trade deficit, while the depreciated Asian currencies led to lower prices for U.S. imported intermediate goods, boosting output. Their study also finds that almost all of the net capital outflows from the crisis countries originated as banking flows; the majority went first to offshore center banks and then to banks in Europe. A large portion of the funds eventually reached the United States, but in the form of foreign direct investment and portfolio investment rather than banking flows.

In the final study, James Harrigan concludes that, despite concerns to the contrary, U.S. consumers overall benefited from cheaper imports in the wake of the crisis, while the nation's domestic production and employment were largely unhurt. In "The Impact of the Asia Crisis on U.S. Industry: An Almost-Free Lunch?" Harrigan finds that manufactured imports from the four countries he studied rose only slightly, and the decline in U.S. exports was not large enough to affect trend output significantly for most industries. Nevertheless, he points out that "the one exception to this pattern was the steel industry: there, sharply rising imports and falling exports led to a drop in output and prices."

Other *Economic Policy Review* Releases

In June, the Federal Reserve Bank of New York sponsored the conference "Specialization, Diversification, and the Structure of the Financial System: The Impact of Technological Change and Regulatory Reform." A special issue of the ***Economic Policy Review*** (October, vol. 6, no. 4) is dedicated to the proceedings.

Papers include:

- "The Determinants of Success in the New Financial Services Environment: Now That Firms Can Do Everything, What Should They Do and Why Should Regulators Care?" by Anthony M. Santomero and David L. Eckles
- "The Economics and Politics of Financial Modernization," by Randall S. Kroszner
- "The Changing Landscape of the Financial Services Industry: What Lies Ahead?" by Cara S. Lown, Carol L. Osler, Philip E. Strahan, and Amir Sufi

Also available on our web site—**www.ny.frb.org/rmaghome/econ_pol/2000.htm**—is "Actual Federal Reserve Policy Behavior and Interest Rate Rules," by Ray C. Fair. This article will appear in a forthcoming volume of the ***Economic Policy Review***.

Study Examines Dominance of Top Bank Holding Companies in the 1990s

How did the nation's largest bank holding companies (BHCs) increase their market share of assets so dramatically during the past decade?

In "Explaining the Rising Concentration of Banking Assets in the 1990s" (***Current Issues in Economics and Finance***, vol. 6, no. 9), Kevin Stiroh and Jennifer Poole report that these institutions achieved their dominance almost entirely through mergers and acquisitions. External growth through these activities, they explain, is consistent with a goal of consolidating overlapping operations and eliminating inefficiencies.

As the industry evolves, large bank holding companies are consolidating operations and removing excess capacity.

According to Stiroh and Poole, the rise in asset concentration could also have been attributable to internal growth of the BHCs—that is, the expansion of existing subsidiaries. However, this possibility was ruled out by the authors' analysis, which identified the fifty largest BHCs in 1999 and tracked their changes in asset size and market share over the decade. Stiroh and Poole found that, on a pro forma basis, the market share of the current fifty largest BHCs was *lower* in 1999 than in 1990. "This finding implies that the increased concentration reflects a transfer of bank assets as ownership changed through consolidation," they observe, "rather than internal growth of existing subsidiaries."

Stiroh and Poole explain that their results are consistent with the "excess capacity hypothesis." They note that as the industry evolves from a fractured national banking system, large BHCs are opting for a different—and likely more efficient—structure by consolidating operations and removing excess capacity.

U.S. Household Finances Are Stronger Than the Reported Saving Rate Suggests

The steep drop in the U.S. personal saving rate has prompted fears that households are overextended and that nationwide saving and investment are inadequate. But a new study published in ***Current Issues in Economics and Finance*** (vol. 6, no. 10, "A Nation of Spendthrifts? An Analysis of Trends in Personal and Gross Saving") indicates that such fears are ill founded.

Assessing the official saving rate reported in the Commerce Department's National Income and Product Accounts (NIPA), authors Richard Peach and Charles Steindel conclude that "the low reported personal saving rate provides a very distorted measure of the state of household finances." According to the authors, the estimate of disposable personal income from which the saving rate is derived significantly understates the true resources of U.S. households—largely because it excludes capital gains. As a result, the saving rate is also likely to underestimate what households are actually putting away.

When the authors track an alternative measure of household saving that includes realized capital gains, they find that the downward trend evident in the NIPA saving measure in the 1990s is reversed. Moreover, when they add both realized and unrealized capital gains to the saving rate, the measure exhibits a marked increase after 1992. Thus, the evidence strongly suggests that the growth of consumer spending is not undermining the accumulation of resources by the household sector.

The authors also show that concerns about the extent of economy-wide saving and investment have little basis in fact. Government saving has risen from -2.8 percent of GNP in the third quarter of 1992 to 5.1 percent in the second quarter of 2000, more than offsetting the decline in the NIPA personal saving measure. This increase, the authors contend, has helped to fund a significant increase in the growth rate of the nation's capital stock since 1995.

Persistent Decline in Import Prices May Explain the Low Rates of Inflation in the 1990s

Many analysts interpret the decrease in price inflation through 1999 as evidence of a permanent change in the dynamics of the inflation process. According to this view, heightened competition among producers and productivity advances stemming from the new technologies have fundamentally altered the relationship between inflation and economic growth.

In "Understanding the Recent Behavior of U.S. Inflation" (***Current Issues in Economics and Finance***, vol. 6, no. 8), authors Robert Rich and Donald Rissmiller take issue with this interpretation, arguing that conventional economic forces can account for the low rates of inflation.

Foremost among these forces, the authors contend, was a large and protracted drop in import prices. Between 1995 and 1999, relative import prices fell at an average annual rate of 6.4 percent. The decline—which resulted from a mix of events, including a reduction in oil prices, the Asian financial crisis, and periodic increases in the value of the dollar—constituted a favorable supply shock that kept inflation in check by lowering producers' costs.

To analyze the factors underlying inflation behavior in the 1990s, the authors make use of a triangle model of the Phillips curve. In the model specification, inflation has three determinants—past inflation rates (the "inertia" component), the unemployment rate for prime-age males (the demand component), and the change in the price of imports relative to the change in domestic prices (the supply component).

Rich and Rissmiller estimate the model over a sample period extending from 1971 to 1991, then use the estimated relationship to generate inflation forecasts for the 1992-99 period. Adding the three components to the model sequentially, they find that the incorporation of import prices brings the model predictions closely into line with actual inflation. The forecasting exercise leads the authors to conclude that import prices were a key force in curbing inflation, particularly after 1995.

Call for Papers on Productivity Growth

On November 2, 2001, the New York Fed will sponsor a conference on productivity growth. The goal of the conference is to put into perspective the past decade of technological progress and to offer a forum for discussing future issues and developments.

Interested individuals may now submit papers for review by a selection committee. Selected papers will be published in a planned special issue of the ***Review of Economic Dynamics***.

For complete information on the submission procedures, visit **www.ny.frb.org/rmaghome**.

Upcoming Conferences at the New York Fed

"Welfare Reform Four Years Later: Progress and Prospects," November 17

Four years after President Clinton signed the Personal Responsibility and Work Opportunity Reconciliation Act into law, important questions remain: How are families who have left welfare doing? Does the decline in participation result from welfare reform or from a robust economy? Have states been too aggressive in cutting welfare rolls, exposing some families to unnecessary economic hardship?

This conference brings together a nationally recognized group of government administrators, practitioners, and welfare policy researchers to address these questions, examine their implications for New York and the nation, and discuss future directions for welfare policy. The proceedings will be published in a special issue of the Bank's ***Economic Policy Review***.

For more information, please visit **www.ny.frb.org/rmaghome**.

"Financial Innovation and Monetary Transmission," April 5-6, 2001

The past few years have been marked by extraordinary financial innovation and change. Recently, new forms of payments have emerged, bank reserves have shrunk, Treasury securities have begun to be replaced by other instruments, loan securitizations have accelerated, and derivative products have proliferated. Furthermore, the consolidation of the financial industry has created an increasingly integrated financial system.

The goal of this conference is to offer insight into how these myriad changes will affect the transmission of monetary policy. The sessions will draw on the expertise of economists, academics, foreign central bankers, policy analysts, and members of private sector firms. A special issue of the Bank's ***Economic Policy Review*** will be devoted to the proceedings.

For more information, please contact either **kenneth.kuttner@ny.frb.org** or **patricia.mosser@ny.frb.org**.

New Titles in the *Staff Report*s Series

The following new ***Staff Report*****s** are available at the Research and Market Analysis Group's web site: **www.ny.frb.org/rmaghome.**

Macroeconomics and Growth

No. 111

Pass-Through of Exchange Rates and Import Prices to Domestic Inflation in Some Industrialized Economies

Jonathan McCarthy

This study examines the impact of exchange rates and import prices on the domestic producer price index and consumer price index in selected industrialized economies. When the empirical model is estimated over the post–Bretton Woods era, exchange rates are found to have a modest effect on domestic price inflation while import prices have a stronger effect. Pass-through is greater in countries with a larger import share and more persistent exchange rates and import prices.

No. 113

How Stable Is the Predictive Power of the Yield Curve? Evidence from Germany and the United States

Arturo Estrella, Anthony P. Rodrigues, and Sebastian Schich

Earlier studies have shown that the slope of the yield curve can have significant predictive power for real activity and inflation. The theoretical motivations of the models used in past studies, however, suggest that those relationships may not be stable over time. Using recent econometric techniques for break testing, the authors examine whether these relationships are in fact stable. They find that models that predict real activity are more stable than those that predict inflation, and binary models are more stable than continuous ones. The model that predicts recessions is stable over the full sample period in both Germany and the United States.

International

No. 107

Factor Supplies and Specialization in the World Economy

James Harrigan and Egon Zakrajšek

A core prediction of the Heckscher-Ohlin theory is that countries specialize in goods in which they have a comparative advantage, and that the source of the advantage is differences in relative factor supplies. To examine this theory, the authors document the pattern of industrial specialization and factor endowment differences in a broad sample of countries over the 1970-92 period. Their results show the importance of factor endowments on specialization: relative endowments do matter.

No. 112

"Beggar-Thy-Neighbor" or "Beggar-Thyself"? The Income Effect of Exchange Rate Fluctuations

Cédric Tille

This paper analyzes the impact of exchange rate fluctuations when they are only partially passed through to consumer prices. It shows that an exchange rate depreciation does not necessarily have a beggar-thy-neighbor effect and may in fact have an opposite, or beggar-thyself, effect. The direction of the welfare effect depends on who owns the firms importing goods from producers and selling them to consumers—an issue that has not been explored in the previous literature.

Banking and Finance

No. 108

Bank Commitment Relationships, Cash Flow Constraints, and Liquidity Management

Donald P. Morgan

This study suggests that a close banking relationship—a loan commitment in particular—relaxes firms' cash flow and cash management constraints. The investment–cash flow correlation is found to be substantially lower when firms have a bank loan commitment. The difference in cash flow sensitivity reflects differences in firms' cash management practices in the face of cash flow shocks. Firms with a commitment run down their cash when their cash flow falls but investment prospects remain strong.

No. 109

Banks' Reserve Management, Transaction Costs, and the Timing of Federal Reserve Intervention

Leonardo Bartolini, Giuseppe Bertola, and Alessandro Prati

The authors use bank reserve and interest rate data to document a pattern in the federal funds market: banks tend to hold more reserves during the last few days of each reserve maintenance period, when the opportunity cost of holding reserves typically is highest. The authors then present a model in which transaction costs and the central bank's policy of smoothing interest rates cause a large amount of liquid funds to be associated with high interest rates around reserve settlement days.

No. 110

Day-to-Day Monetary Policy and the Volatility of the Federal Funds Interest Rate

Leonardo Bartolini, Giuseppe Bertola, and Alessandro Prati

The authors propose a model of the interbank money market with an explicit role for central bank intervention and periodic reserve requirements, and study the interaction of profit-maximizing banks with a central bank targeting interest rates at high frequency. The model predicts biweekly patterns of the federal funds rate's volatility and its response to changes in target rates and intervention procedures. The results are consistent with interest rate volatility patterns in the federal funds market.

Papers Presented by Economists in the Research and Market Analysis Group

"The Dual Role of Corporate Boards as Advisors and Monitors of Management," *Renee Adams*. European Finance Association Conference, London, England, August 25.

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 Challenges of Risk Management in Diversified Financial Companies," *Christine Cumming and Beverly Hirtle*. Western Economic Association International Annual Conference, Vancouver, Canada, July 1.

The authors analyze the benefits of consolidated risk management and address some of the problems that have hindered firms from fully implementing such systems.

"The Economic Significance of National Border Effects," *Carolyn Evans*. National Bureau of Economic Research Conference, Cambridge, Massachusetts, August 8.

Evans examines the economic significance of the negative effect that national borders have on trade flows. She finds that the effects may indicate distortionary barriers to trade, as well as welfare costs and a role for policy.

"Understanding Macroeconomic Interdependence: Do We Really Need to Shut off the Current Account?" *Fabio Ghironi*. Western Economic Association International Annual Conference, Vancouver, Canada, July 1.

Ghironi demonstrates the setup and the functioning of a stationary model of macroeconomic interdependence in which the current account plays a role in the transmission of shocks.

"Alternative Monetary Rules for a Small Open Economy: The Case of Canada," *Fabio Ghironi*. European Economic Association Annual Conference, Bozen-Bolzano, Italy, August 31.

The paper evaluates the performance of alternative monetary regimes—including inflation targeting and a fixed exchange rate with the United States—for the Canadian economy using a dynamic, small open economy model.

"Toward New Open Economy Macroeconometrics," *Fabio Ghironi*. European Economic Association Annual Conference, Bozen-Bolzano, Italy, September 1.

Ghironi illustrates a plausible approach to the estimation of the structural parameters of a stationary, small open economy model with incomplete markets.

"When Is Foreign Bank Lending to Emerging Markets Volatile?" *Linda Goldberg*. National Bureau of Economic Research Preconference on Currency Crises, Cambridge, Massachusetts, July 21.

The author brings new evidence to the debate over the participation of foreign banks in the financial systems of emerging market countries. Key issues identified include the patterns of credit provision in crisis and noncrisis periods and the relationship between these patterns and the characteristics of the parent banks.

"The Reduced Volatility of the U.S. Economy: Policy or Progress?" *James Kahn*. Western Economic Association International Annual Conference, Vancouver, Canada, July 1.

The paper considers the role of improved inventory management in reducing the volatility of demand shocks and thereby facilitating policymakers' efforts to bring down inflation.

"The Role of Large Players in Currency Crises," *Paolo Pesenti*. National Bureau of Economic Research Preconference on Currency Crises, Cambridge, Massachusetts, July 21. With Giancarlo Corsetti and Nouriel Roubini.

Assessing currency crises and episodes of financial market turbulence, the authors analyze both theory and evidence on the potential role played by hedge funds and other highly leveraged institutions in determining and propagating financial volatility.

"'Beggar-Thy-Neighbor' or 'Beggar-Thyself'? The Income Effect of Exchange Rate Fluctuations," *Cédric Tille*. Western Economic Association International Annual Conference, Vancouver, Canada, July 3.

Tille analyzes the welfare effects of exchange rate fluctuations. He shows that intermediaries who purchase goods from foreign firms to sell in the domestic market play a key role in determining whether a country benefits from a depreciation of its currency.

Recently Published

Paul Bennett. 2000. "A Teoria das Carteiras e os Empréstimos Bancários" (Portfolio theory and bank lending). ***Tecnologia de Crédito*** 3, no. 19 (July): 63-72.

Paul Bennett, Richard Peach, and Stavros Peristiani. 2000. "Implied Mortgage Refinancing Thresholds." ***Real Estate Economics*** 28, no. 3: 405-34.

Arturo Estrella. 2000. "Credit Ratings and Complementary Sources of Credit Quality Information." Basel Committee on Banking Supervision Working Paper no. 3, August. Basel: Bank for International Settlements.

Michael Fleming. 2000. "U.S. Treasury and Agency Securities," with Frank J. Fabozzi. In Frank J. Fabozzi, ed., ***The Handbook of Fixed Income Securities***, 175-96. 8th ed. New York: McGraw-Hill.

Linda Goldberg and Joseph Tracy. 2000. "Exchange Rates and Local Labor Markets." In Robert C. Feenstra, ed., ***The Impact of International Trade on Wages***. Chicago: University of Chicago Press.

James Harrigan. 2000. "International Trade and American Wages in General Equilibrium, 1967-1995." In Robert C. Feenstra, ed., ***The Impact of International Trade on Wages***. Chicago: University of Chicago Press.

James McAndrews. 2000. "Opening the 'Black Box' of Network Externalities in Network Adoption," with Robert Kauffman and Yu-Ming Wang. ***Information Systems Research*** 11, no. 1 (March): 61-82.

James Orr. 2000. "The Financial Services Sector in London and New York," with Sarah Dilnot, Wendy Hyde, and Rae D. Rosen. ***The London-New York Study***, 1-34. London: Corporation of London.

Simon Potter. 2000. "Coincident and Leading Indicators of the Stock Market," with Marcelle Chauvet. ***Journal of Empirical Finance*** 7, no. 1 (May): 87-111.

Kevin J. Stiroh. 2000. "Raising the Speed Limit: U.S. Economic Growth in the Information Age," with Dale W. Jorgenson. ***Brookings Papers on Economic Activity***, no. 1: 125-211.

Eric van Wincoop. 2000. "Capital Flows to Emerging Markets: Liberalization, Overshooting, and Volatility," with Philippe Bacchetta. In Sebastian Edwards, ed., ***Capital Flows and the Emerging Economies***, 61-98. Cambridge, Mass.: National Bureau of Economic Research.

Eric van Wincoop, ed. 2000. ***Intranational Macroeconomics***, with Gregory Hess. Cambridge: Cambridge University Press.

RESEARCH AND MARKET ANALYSIS GROUP PUBLICATIONS AND PAPERS: July-September 2000

Economic Policy Review
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Special Issue: Lessons from Recent Crises in Asian and Other Emerging Markets

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Vol. 6, No. 4

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Anthony M. Santomero and David L. Eckles

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The Changing Landscape of the Financial Services Industry: What Lies Ahead?
Cara S. Lown, Carol L. Osler, Philip E. Strahan, and Amir Sufi

Forthcoming

Actual Federal Reserve Policy Behavior and Interest Rate Rules
Ray C. Fair

Current Issues in Economics and Finance, Vol. 6

No. 8
Understanding the Recent Behavior of U.S. Inflation
Robert W. Rich and Donald Rissmiller

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