FRBSF Economic Letter

Number 2007-04, February 9, 2007

2006 Annual Pacific Basin Conference: Summary

This Economic Letter summarizes the papers presented at the annual Pacific Basin Conference held at the Federal Reserve Bank of San Francisco on June 16–17, 2006, under the sponsorship of the Bank's Center for Pacific Basin Studies. The papers are listed at the end and are available at http://www.frbsf.org/economics/conferences/0606/agenda.pdf.

This year's Pacific Basin conference brought together ten papers on a variety of international topics, including the determinants of the U.S. current account deficit, the interest rate parity puzzle, monetary integration in East Asia, and other developments in Asia.

U.S. current account deficit

The rising current account deficit in the U.S., now running at about 7% of GDP, has attracted considerable attention in recent years. Two papers at the conference analyzed the determinants of the U.S. current account position.

Charles Engel of the University of Wisconsin and John H. Rogers at the Board of Governors of the Federal Reserve System investigate the possibility that the U.S. current account deficit, large as it is, may nonetheless be the outcome of optimizing behavior. They develop a simple model in which a country's current account is determined by the expected discounted present value of its future share of world GDP relative to its current share of world GDP. They show that higher expected output growth in the U.S. relative to that abroad can generate large deficits, as the high U.S. output path supports increased lending from foreigners with which to finance these deficits. Moreover, under reasonable assumptions about future U.S. GDP growth relative to other countries, a high U.S. current account deficit may be sustainable for some time to come. Correspondingly, they foresee little depreciation of the real value

of the dollar in the near term, though this conclusion is sensitive to assumptions about tastes and technology.

Michael Devereux, Amartya Lahiri, and Ke Pang at the University of British Columbia try to throw light on the value of different explanations for the U.S. current account deficit. For instance, it may reflect higher underlying productivity growth in the U.S., as Engel and Rogers argue, or it may simply reflect a trend increase in U.S. consumption and fall in saving, independent of the path of productivity. To identify the determinants of the deficit, Devereux et al. use a standard twocountry general equilibrium model and obtain quantitative estimates of various "wedges," that is, the extent to which various relationships associated with the model, such as the conditions for optimal consumption, employment, investment, and production, deviate from actual data. They then feed each of these measured wedges into the model and simulate the counterfactual path of the current account in order to determine the contributions of each to the overall external imbalance of the U.S. They find that a combination of higher U.S. productivity and consumption than abroad does the best job in accounting for most of the measured movement of the U.S. current account.

Interest rate parity

The uncovered interest rate parity equation relationship is a cornerstone of most models in international macroeconomics. This relation predicts that a country with an interest rate higher than abroad should be associated with expected depreciation of its currency in order to equalize the returns to investing in foreign versus domestic assets. In fact, it has long been a puzzle why this relation does not hold empirically, in that relatively higher domestic interest rates have been found to be followed by ongoing currency appreciations.



PACIFIC BASIN NOTES Pacific Basin Notes appears on an occasional basis. It is prepared under the auspices of the Center for Pacific Basin Studies within the FRBSF's Economic Research Department.

Philippe Bacchetta of the University of Lausanne and Eric van Wincoop at the University of Virginia investigate the extent to which incomplete information processing by financial investors can explain this puzzle. Most models assume that all investors instantaneously incorporate all new information into their portfolio decisions. The authors consider two forms of incomplete information processing: (i) infrequent portfolio adjustment by investors, where investors make changes in their portfolios slowly over time, and (ii) partial information processing, where investors use only a subset of all available information. They argue that evidence on the costs of portfolio management can justify such incomplete processing behavior and that it explains the interest parity puzzle. In their framework, an increase in the domestic interest rate leads to an increase in demand for the domestic currency and therefore an initial appreciation of the currency as well. But when investors make infrequent portfolio decisions based on limited information, they will continue to buy the currency as time goes on. This can cause a continuing appreciation of the currency.

China growth and trade balance

Since 1978 China's GDP has grown almost 10% per year, while its GDP per capita has grown almost 6% annually. At the same time, there has been a noticeable transformation of the economy, with the share of workers in agriculture decreasing from over 70% to less than 50%.

Robert Dekle and Guillaume Vandenbroucke at the University of Southern California formulate a quantitative, general equilibrium growth model to try to capture China's recent growth and structural transformation. Their model distinguishes three sectors: the agricultural sector, the nonagricultural private sector, and the nonagricultural public (government) sector. They use this model to measure the relative contributions of productivity improvements and the transfer of labor out of agriculture into high-productivity activities. They find that between 1978 and 1995 the reallocation of labor from agriculture to nonagriculture accounted for over one-third of China's average annual increase in output per capita (that is, 2.0 percentage points of total labor productivity growth of 5.2%), while productivity growth in the public sector and private nonagricultural sector contributed 1.6 and 0.6 percentage points, respectively. Over the more recent period 1996-2003, however, the reallocation of labor from the public to the private nonagricultural sector accounted for a significant part of

growth, contributing 1 percentage point of total labor productivity growth of 5.8% per year, while public and private nonagricultural sector productivity growth contributed 1.0 and 2.7 percentage points, respectively.

China's current account surplus as a percent of GDP rose from 2.4% in 2002 to 7.2% in 2005 and is on pace to rise even higher in 2006. Some have attributed this development to an undervalued currency that makes Chinese goods unduly cheap in world markets, such as the United States. However, it is unclear how much even a substantial appreciation of the renminbi would work to reduce China's trade imbalance.

Jaime Marquez and John Schindler at the Board of Governors analyze the response of China's trade to a change in the renminbi's value. They first point out that such an exercise is hampered by two factors: first, the data available on the prices of China's traded goods are limited, and, second, the estimation sample includes the period of China's transformation from a centrally planned economy to a market-oriented system. To address these limitations, they use a more sensible sample period (1997–2004), and assess the impact of changes in the real effective value of the renminbi on the shares of China's exports and imports in world trade, thereby avoiding the need for trade price proxies to compute quantity measures of trade. Marquez and Schindler develop an empirical model explaining the shares of China's exports and imports in world trade in terms of the real effective value of the renminbi. The estimation results suggest that a 10% real appreciation of the renminbi lowers the share of aggregate Chinese exports by a half of a percentage point. The same appreciation lowers the share of aggregate imports by about a tenth of a percentage point.

Monetary integration in Asia

Three panelists discussed monetary integration in East Asia. Many countries in East Asia are planning or negotiating regional trade agreements, and there is increasing interest in financial integration and a common currency. Peter Kenen at the Council on Foreign Relations and Princeton University and Ellen Meade at American University describe the history of increasing monetary integration within the region since the Asia financial crisis, as well as policy options ahead, ranging from independently floating currencies to a monetary union. They argue that an Asian monetary union is unlikely to span the whole region, primarily because

of the continued lack of willingness to promote formal delegation of national authority to common institutions. They foresee that China and Japan, as the largest countries in the region, are likely to keep their national currencies, while the ASEAN countries or a subset of its members might be able to form a monetary union of their own. Peter Petri of Brandeis University shows that East Asia interdependence, defined as the preference for trade among regional partners, actually fell in the 1980s, but has been growing in the last decade. He points out that most of this increasing interdependence is attributable to trade relationships fostered by greater specialization in production.

Philip Lane of Trinity College in Dublin and Sergio Schmukler at the World Bank highlight several features that characterize the international financial integration of China and India. First, these countries are large holders of official reserves, while having only a small global share of privately held external assets and liabilities (with the exception of China's foreign direct investment liabilities). Second, their international balance sheets are highly asymmetric: both countries primarily hold lowreturn foreign reserves on the asset side, together with higher-yielding equity and debt liabilities. Third, China and India have improved their net external positions over the last decade, although, based on their level of economic development, neoclassical models would predict them to be large net borrowers. Lane and Schmukler project that domestic financial reforms and capital account liberalization in both countries will lead them to restructure their international balance sheets and become major international investors, with important consequences for global private financial markets.

Other developments in Asia

R. Anton Braun at the University of Tokyo, Daisuke Ikeda at the Bank of Japan, and Douglas Joines at the University of Southern California investigate the explanation for recent declines in Japanese saving rates and interest rates. They consider several explanations, including changes in fertility rates, changes in survival rates, and changes in technology. They explore the empirical relevance of these factors using a computable dynamic overlapping generations model. They find that the combined effects of an aging population and slower total factor productivity growth successfully explain the declines in Japan's saving rate and after-tax real interest rate during the 1990s.

David Cook at the Hong Kong University of Science and Technology and Hiromi Nosaka at Kansai University analyze the behavior of labor markets in Indonesia at the time of the 1997-1998 Asia crisis. They try to explain why output in Indonesia (and other affected countries as well) fell, even as employment remained relatively constant during the crisis. They do so with a dynamic general equilibrium model of a small open developing economy in which labor markets include both urban employment and rural employment. They show how an external financial shock can lead to migration of labor from the productive urban sector of the economy to the less productive rural sector, leaving overall employment unchanged even as aggregate output declines.

Reuven Glick Group Vice President

Conference papers

Bacchetta, Philippe, and Eric van Wincoop. "Incomplete Information Processing: A Solution to the Forward Discount Puzzle."

Braun, R. Anton, Daisuke Ikeda, and Douglas Joines. "Saving and Interest Rates in Japan: Why They Have Fallen and Why They Will Remain Low."

Cook, David, and Hiromi Nosaka. "Dual Labor Markets and Business Cycles."

Dekle, Robert, and Guillaume Vandenbroucke. "A Quantitative Analysis of China's Structural Transformation."

Devereux, Michael, Amartya Lahiri, and Ke Pang. "Global Current Account Adjustment: A Decomposition."

Engel, Charles, and John H. Rogers "The U.S. Current Account Deficit and the Expected Share of World Output."

Kenen, Peter, and Ellen Meade. "Monetary Integration in East Asia: Why East Asia Is Different and Why That Matters."

Lane, Philip, and Sergio Schmukler. "The International Financial Integration of China and India."

Marquez, Jaime, and John Schindler. "Exchange-Rate Effects on China's Trade: An Interim Report."

Petri, Peter. "Is East Asia Becoming More Interdependent?"

ECONOMIC RESEARCH

FEDERAL RESERVE BANK OF SAN FRANCISCO

P.O. Box 7702 San Francisco, CA 94120 Address Service Requested PRESORTED STANDARD MAIL U.S. POSTAGE PAID PERMIT NO. 752 San Francisco, Calif.

Printed on recycled paper with soybean inks



Index to Recent Issues of FRBSF Economic Letter

DATE	NUMBER	TITLE	AUTHOR
8/25	06-21	New Uses for New Macro Derivatives	Wolfers
9/1	06-22	Inflation Targets and Inflation Expectations: Some Evidence	Trehan/Tjosvold
9/15	06-23	The Exchange Rate-Consumer Price Puzzle	Valderrama
9/22	06-24	Oil Prices and the U.S. Trade Deficit	Cavallo
9/29	06-25	Health Insurance Costs and Declining Coverage But	uchmueller/Valletta
10/6	06-26	Safe and Sound Banking, 20 Years Later	Kwan
10/13	06-27	Inflation Persistence in an Era of Well-Anchored Inflation Expectations	Williams
10/20	06-28	Did Quantitative Easing by the Bank of Japan "Work"?	Spiegel
10/27	06-29	What Are the Risks to the United States of a Current Account Reversal?	Valderrama
11/3	06-30	The Rise in Homeownership	Doms/Motika
11/17	06-31	Interest Rates, Carry Trades, and Exchange Rate Movements	Cavallo
11/24	06-32	Is a Recession Imminent?	Fernald/Trehan
12/1	06-33-34	Economic Inequality in the United States	Yellen
12/8	06-35	The Mystery of Falling State Corporate Income Taxes	Wilson
12/15	06-36	The Geographic Scope of Small Business Lending: Evidence	Laderman
12/22	06-37	Will Moderating Growth Reduce Inflation?	Lansing
12/29	06-38	Mortgage Innovation and Consumer Choice	Krainer
1/5	07-01	Concentrations in Commercial Real Estate Lending	Lopez
1/19	07-02	Disentangling the Wealth Effect: Some International Evidence Siermin	iska/Takhtamanova
1/26	07-03	Monetary Policy Inertia and Recent Fed Actions	Rudebusch

Opinions expressed in the *Economic Letter* do not necessarily reflect the views of the management of the Federal Reserve Bank of San Francisco or of the Board of Governors of the Federal Reserve System. This publication is edited by Judith Goff, with the assistance of Anita Todd. Permission to reprint portions of articles or whole articles must be obtained in writing. Permission to photocopy is unrestricted. Please send editorial comments and requests for subscriptions, back copies, address changes, and reprint permission to: Public Information Department, Federal Reserve Bank of San Francisco, P.O. Box 7702, San Francisco, CA 94120, phone (415) 974-2163, fax (415) 974-3341, e-mail sf.pubs@sf.frb.org. The *Economic Letter* and other publications and information are available on our website, http://www.frbsf.org.