FRBSF ECONOMIC LETTER

Number 2006-04, March 10, 2006

External Imbalances and Adjustment in the Pacific Basin: Conference Summary

This Economic Letter *summarizes the papers presented at the conference on "External Imbalances and Adjustment in the Pacific Basin" held at the Federal Reserve Bank of San Francisco on September 22–23, 2005, 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/0509/agenda.pdf*

The U.S. current account balance on international transactions in goods and services has deteriorated significantly over the last fifteen years. Since recording a small surplus in 1991, it has swelled to a deficit in 2005 of more than 6% of GDP, the highest such ratio in over 40 years. In the past, other countries with a current account deficit above 5% of GDP have typically faced worsening borrowing terms, either in the form of reduced borrowing opportunities or increased interest charges. By that standard, some would argue that the U.S. is overdue for such adjustments, including a significant fall in the value of the dollar.

This year's Pacific Basin Conference brought together seven papers examining the U.S. current account deficit and its implications, with special emphasis on the prominent role of Asian countries, which accounted for over 40% of the overall U.S. trade deficit in 2004.

The U.S. current account and net international investment position

Maurice Obstfeld of U.C. Berkeley and Kenneth Rogoff of Harvard University use a small general equilibrium model of the U.S. and the rest of the world to estimate the magnitude of dollar depreciation necessary to eliminate the U.S. current account deficit. Focusing only on the relative price effects of currency change, they calculate that a devaluation of as much as 30% is necessary to achieve this goal. These estimates are sensitive to assumptions about key parameters, particularly the degree of substitutability of traded and nontraded goods. For example, a lower substitutability implies that a greater depreciation is required to induce a shift of resources out of nontradables and into tradables production. Obstfeld and Rogoff note that currency and price changes are only part of the adjustment mechanism through which the U.S. trade imbalance will be reduced; other factors, such as the relative growth of foreign output, matter as well. They also point out that it is difficult to determine when the adjustment to the U.S. current account will begin and whether it will be rapid or slow.

The ongoing U.S. trade deficits have contributed to the buildup of U.S. net international liabilities. Since the early 1980s, the U.S.'s net international investment position has swung from a creditor position of more than 5% of GDP to a debtor position amounting to 22% of GDP. This situation has raised concerns about the extent to which the U.S. can continue to accumulate foreign liabilities. Pierre-Olivier Gourinchas of U.C. Berkeley and Hélène Rey of Princeton University analyze how a depreciation of the dollar affects the U.S. net international investment position through two channels, trade and finance. Through the "trade channel," a depreciation makes U.S. goods more competitive than foreign goods, encouraging a switch of world consumption towards U.S. goods, improvement of the trade balance, and lessening of the accumulation of foreign liabilities. Second, through the "financial channel" dollar depreciation affects the dollar value of U.S. financial assets and liabilities denominated in foreign currencies.

Gourinchas and Rey argue that recent dollar depreciations have generated sizable capital gains and

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.

reduced the U.S. net debt position. In particular, because approximately 70% of U.S. foreign assets are in foreign currencies, while almost all of U.S. foreign liabilities are in dollars, a dollar depreciation on balance reduces the net U.S. international debt position in dollars. In fact, because of substantial valuation effects associated with the dollar depreciations since the end of 2001, the net U.S. debt position has remained roughly constant, despite current account deficits in excess of 5% of GDP.

Imbalances in the Pacific Basin region are not limited to international trade. For example, Japan has been running large fiscal deficits during its recent era of sluggish growth. Given the demographic complications associated with the aging of the Japanese population, Japan is expected to address these fiscal imbalances once its economic growth has proven to be sustainable. This raises the question of what a change in Japan's fiscal policy is likely to mean for the Japanese economy and the pattern of world trade.

Nicoletta Batini, Papa N'Diaye, and Alessandro Rebucci from the International Monetary Fund (IMF) address this question using the IMF's global economy model. This model divides the world into five blocks—the U.S., Japan, emerging Asia, Europe, and the rest of the world. Batini et al. explore the implications of bringing Japan's fiscal policy back into balance, both with and without accompanying structural reforms to the Japanese economy. The authors compare the results of three scenarios. In the first scenario, Japan slowly brings its government into fiscal balance but makes no other changes. In the second, Japan achieves modest productivity growth to accompany its fiscal adjustment. In the third, Japan achieves more rapid productivity growth but makes no explicit policy effort to reduce its fiscal budget deficits. The results for the first scenario show that the U.S. current account falls further into deficit; specifically, the demand for U.S. goods declines as Japan reduces its degree of fiscal stimulus. The other two scenarios, however, demonstrate that enhanced productivity growth can accelerate the pace of fiscal adjustment without exacerbating Japan's current account imbalance. The policy conclusion, therefore, is that Japan can regain fiscal balance without disrupting the world economy, provided it simultaneously pursues reforms that achieve productivity growth.

China's trade

The U.S. bilateral trade deficit with China reached over $200 billion in 2005. Some have attributed this development to an undervalued currency that makes Chinese goods unduly cheap in world markets, such as the United States. Indeed, since 1994, China has maintained a fixed exchange rate with respect to the U.S. dollar (although a small degree of flexibility was introduced in July 2005).

Yin-Wong Cheung from U.C. Santa Cruz, Menzie Chinn from the University of Wisconsin at Madison, and Eiji Fujii of the University of Tsukuba evaluate the extent to which the renminbi might be undervalued using a variety of criteria, such as purchasing power parity calculations. Because of the vast structural changes in China over time, the calculations depend on the base period used. Cheung et al. find that some approaches imply substantial undervaluation of the renminbi, while others imply little or no undervaluation. China's undervaluation appears to be driven not by competitive reductions in the nominal value of its currency, but rather by greater inflation in the mid-1990s that was not accompanied by an appreciation of the renminbi. Since the late 1990s inflation in China has been comparable to that in the U.S.

China's accession to the World Trade Organization (WTO) in 2001 entailed several liberalization requirements, including reductions in its tariffs and capital inflow restrictions as well as harmonization of its corporate tax policy on foreign and domestic firms. A year later, China took major steps toward liberalization by agreeing to form a free trade area with the ASEAN nations by 2012.

Mesut Saygili and Kar-yiu Wong of the University of Washington evaluate the impact of China's accession to the WTO and its formation of a free trade area with the ASEAN nations. They develop a model of trade among China, ASEAN, and the rest of the world. They then consider the impact of China's accession to the WTO, both in isolation and accompanied by the formation of a free trade area with the ASEAN nations. They find that accession to the WTO alone would greatly increase China's openness, as its imports increase and resources previously employed in import-competing industries are transferred to the production of exports. They then examine the combination of China's accession to the WTO and its formation of a free trade area with the ASEAN nations. They again find that China's trade increases overall, but the pattern of trade is quite different. China's trade with the rest of the world declines, in favor of increased trade with ASEAN. Overall, both China and the rest of the world are shown to experience modest declines in welfare as a result of the pursuit of both policies, while the ASEAN nations emerge as large winners.

Foreign reserve accumulation

The recent increase in the U.S. trade deficit has been accompanied by large buildups of holdings of U.S. securities by Asian governments. Some have suggested that these buildups are motivated by mercantilist desires to maintain export competitiveness by keeping exchange rates low; others have argued that they represent a precautionary response to the 1997 Asian financial crisis experience. Joshua Aizenman from U.C. Santa Cruz and Jaewoo Lee from the IMF use a theoretical model to identify testable differences between these two explanations. They find that the empirical patterns followed by foreign reserve buildups have been more consistent with the precautionary motive hypothesis. In particular, countries with more liberal capital regimes, which would expose them to greater risk of capital outflows, holding all else equal, are shown to hold greater stocks of international reserves.

Maturity mismatches

"Maturity mismatch," whereby a country borrows abroad short-term, but invests the borrowed capital in long-term assets, exposes borrowing countries to significant risk. In the event of a "sudden stop," where foreign creditors refuse to roll over these short-term obligations, a borrowing country could find itself illiquid, compelling it to curtail investment plans and perhaps even liquidate assets prematurely. The contention that the potential for disruptive sudden stops exists has largely been based on the observation that countries that issue short-term debt obligations often experience poorer economic performance. However, this observed correlation may simply reflect the fact that poorly performing economies are limited to short-term borrowing by creditors because they are expected to exhibit inferior performance.

To assess the role of maturity mismatches in sudden stop crises, Hoyt Bleakley of U.C. San Diego and Kevin Cowan of the Inter-American Development Bank use micro data for 3,000 publicly traded firms from a cross-section of 16 emerging market nations, including five in East Asia. Their sample includes firms in countries that experienced high capital account volatility as well as countries that issued large volumes of short-term debt liabilities. Surprisingly, they find no statistically significant difference in the investment response of firms with high and low short-term debt obligations to changes in aggregate short-term capital flows. They do determine that firms with more short-term debt find capital outflows more costly and are sometimes forced to liquidate in the wake of capital outflows, but these outflows do not disproportionately affect their investment behavior relative to firms with fewer short-term debt obligations.

Reuven Glick
Group Vice President

Mark Spiegel
Vice President

Conference Papers

Aizenman, Joshua, and Jaewoo Lee. "International Reserves: Precautionary versus Mercantilist Views, Theory and Evidence."

Batini, Nicoletta, Papa N'Diaye, and Alessandro Rebucci. "The Domestic and Global Impact of Japan's Policies for Growth."

Bleakley, Hoyt, and Kevin Cowan. "Maturity Mismatch and Financial Crises: Evidence from Emerging Market Corporations."

Cheung, Yin-Wong, Menzie D. Chinn, and Eiji Fujii. "Why the Renminbi Might Be Overvalued (But Probably Isn't)."

Gourinchas, Pierre-Olivier, and Hélène Rey. "International Financial Adjustment."

Obstfeld, Maurice, and Kenneth Rogoff. "The Unsustainable U.S. Current Account Position Revisited."

Saygili, Mesut, and Kar-yiu Wong. "Unilateral and Regional Trade Liberalization: China's WTO Accession and FTA with ASEAN."

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*