FRBSF Economic Letter

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2007 Annual Pacific Basin Conference: Summary

This Economic Letter summarizes the papers presented at the 2007 Annual Pacific Basin conference held at the Federal Reserve Bank of San Francisco on June 8–9, 2007, 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/0706/agenda.pdf

This year's Pacific Basin conference brought together papers on a variety of international topics, including international pricing behavior and exchange rates, foreign reserve management, the efficacy of capital controls, Asian financial market integration, and developments in China.

International prices and exchange rates

Atkeson and Burstein address a puzzle in international macroeconomics: why are changes in a country's terms of trade—that is, the relative price of its exports to its imports—generally much smaller than changes in the relative prices of goods produced in the United States and goods produced abroad? For example, between 1985 and 1988, the price of manufactured goods produced abroad rose by roughly 40% relative to the average price of manufactured goods produced in the U.S.; movements of similar magnitudes occurred again in the late 1990s and more recently after 2002. In contrast, the terms of trade between exports and imports of U.S.-manufactured goods have been much less volatile. This is consistent with the stylized fact that, even though manufactured goods are heavily traded across countries, the prices that U.S. consumers pay for imports of manufactures move much less than one-for-one with the prices that foreign producers charge in their own markets.

The authors formulate a quantitative model of international trade to explain this behavior. In their model, producers engage in "pricing-to-market" behavior; that is, they raise the price at

which they sell in foreign markets much less than any increase in their costs. The reason firms do not fully pass through changes in their marginal costs to their prices is because their desired markup depends on their share of the foreign sales market. By lowering markups, firms can avoid losing too much market share as they adjust prices in response to greater costs.

Corsetti, Dedola, and Leduc examine whether U.S. economic growth causes the dollar to depreciate or appreciate. Several traditional international macro models predict that the domestic currency should depreciate as a country grows. For example, models in which domestic demand is stimulated by monetary policy often predict higher inflation and depreciation of the currency. Other models in which productivity shocks expand domestic output also imply an increase in the supply of exportable goods, causing the relative price of exports to decline in world markets. This decline in the country's terms of trade also depreciates the currency. However, these predictions are at odds with the recent experience of the U.S., in which the high productivity and domestic output boom of the second half of the 1990s was accompanied by a strong real appreciation of the dollar.

The authors seek to reconcile the empirical evidence with theory by investigating the role of U.S. productivity in a real business cycle model. They find that U.S. productivity shocks do, indeed, increase investment and output. At the same time, however, these shocks also generate strong domestic wealth effects that boost demand for domestic goods as well that (under certain conditions) also leads to an appreciation of the dollar.

Foreign reserves

There is a renewed interest in policy and academic circles about whether some countries are now



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holding too much foreign reserves. International reserves holdings by developing countries, for example, have risen rapidly in recent years, amounting to 20% of GDP in 2005, quadruple the level in high-income countries. A common explanation advanced for foreign reserve accumulation is that it provides an insurance mechanism against the risk of shocks, such as sudden spikes in foreign interest rates or "stops" of capital inflows.

Alfaro and Kanczuk argue that foreign borrowing also provides some of the same functions as holding reserves. They study optimal reserve policy in a stochastic dynamic general equilibrium model that recognizes the potential benefits of holding reserves or borrowing abroad as needed. Calibrating the parameters of the model to accord with a typical developing economy, they conclude that the optimal policy is not to hold reserves at all; contingent borrowing provides sufficient insurance. This contrasts with actual behavior, of course. The authors suggest explanations for the contrast between this theoretical prediction and actual behavior: developing countries often face limits to the extent of their foreign borrowing, and they may be motivated to hold reserves, not just for insurance reasons, but also for political economy considerations, such as desired spending on public works.

Capital controls

The effectiveness of capital controls is the subject of ongoing debate. Magud, Reinhart, and Rogoff argue that it is hard to compare results from existing studies on capital controls, since there are significant differences across countries and time in the control measures implemented, there is no common empirical methodology, nor is there any clear definition of what constitutes "success." The authors seek to fill this void and measure the effectiveness of controls on short-term capital flows by whether they reduce the volume of capital flows, decrease the proportion of short-term capital flows, reduce real exchange rate pressures, and/or allow for more monetary policy independence. They find that capital controls on inflows seem to reduce the share of short-term capital flows, reduce real exchange rate pressures, and make monetary policy more independent, but capital controls on outflows do not have any systematic effect, with the exception of Malaysia. Hence imposing capital controls on outflows need not always be effective.

Henry surveys the literature on capital flows and finds little evidence that capital account openness is associated with higher economic growth. However, he argues that traditional theory implies that capital account liberalization should have only a temporary, not a permanent, effect on growth. He shows that opening the capital account leads countries to temporarily invest more and grow faster than they did when their capital accounts were closed. Allowing foreign investors into emerging market equity markets lowers the cost of capital, raises the optimal level of the capital stock, and increases steady-state per capita income. During the transition to the new steady-state (higher) level of capital stock, growth rates will increase above normal before eventually returning to trend.

Asian financial markets

Fujiki and Terada-Hagiwara examine the degree of integration of East Asian economies with world financial markets. They find that, while East Asia has become more integrated with world financial markets since the Asia crisis of 1997–1998, domestic saving and investment still are much more highly correlated within East Asia compared to the euro area. They also find that the cross-holding of financial assets is lower within Asia than it is within the euro area. In addition, they find no evidence of any decline in consumption volatility in Asia as one might expect if greater financial integration were enabling greater risk-sharing with the rest of the world. These results suggest that there is room for welfare gains in Asia via further asset flows and risk-sharing within the region as well as with the rest of the world. The results also imply that increased integration into world financial markets alone is unlikely to provide a firm basis for a currency union in East Asia at this stage.

Two panelists offered presentations on Asian capital markets. Robert McCauley of the Bank for International Settlements observed that Asian financial markets have become more integrated with the rest of the world. Equity investors from the U.S. and Europe invest heavily in the region. In addition, dollar-denominated bonds and syndicated loan markets show significant regional integration, with 40% of dollar bonds sold by Asian issuers bought by Asian residents, and similar fractions of syndicated loans for Asian borrowers taken up by banks from Asia. However, the role of foreign investors in local currency bond markets is very limited, because of either explicit inflow restrictions or withholding tax requirements. McCauley argued that foreign investors in domestic bond markets could provide a more diverse investor base to support

domestic growth (though at the risk of greater exposure of local markets to global bond market strains and possibly large inflows and outflows).

Barry Eichengreen of the University of California at Berkeley also emphasized the importance of developing national bond markets in local currency. He noted that Asia has progressed slowly in developing local markets for corporate debt, particularly in terms of market liquidity. He provided evidence that bond market growth in developing countries depends on the extent of banking sector development, macroeconomic stability, creditor rights, and corporate governance. He attributed the limited development of corporate bond markets in Asia to slow progress in several of these areas.

China saving

China's overall saving rate is now nearly 50%, by far the highest in the world. China's domestic investment rate has also been high, but not as high as saving, resulting in net current account surpluses which rose from 4% of GDP in 2004 to 7% in 2007. The corresponding trade deficits with its trading partners, particularly the United States, imply that China's high saving rate has important ramifications for its economic relations with other countries.

Horioka and Wan analyze the determinants of the household saving rate in China using panel data on Chinese provinces for the period 1995–2004. They find China's saving rate is very persistent and strongly related to income growth and the interest rate (in the case of rural, but not urban, households). However, they do not find that the variables relating to the age structure of the population have any significant impact on the household saving rate (in part because the shortness of their sample limits the time series variation in demographic variables).

Thus it is not clear how much saving will fall once the aging of the population is completed. Further research is warranted on the effects of China's aging population, its one-child policy, and its currently high corporate saving levels.

Nicholas Lardy of the Peterson Institute of Economics delivered the keynote address and discussed China's recent efforts to alter fundamentally the country's growth strategy by expanding domestic consumption in place of investment and exports. In his view the success of this new policy requires policies to reduce China's currently high saving rate. He argued, however, that initiatives to implement these policies have thus far been modest in scope.

Reuven Glick Group Vice President

Conference papers

Alfaro, Laura, and Fabio Kanczuk. "Optimal Reserve Management and Sovereign Debt."

Atkeson, Andrew, and Ariel Burstein. "Pricing-to-Market, Trade Costs, and International Relative Prices."

Corsetti, Giancarlo, Luca Dedola, and Sylvain Leduc. "Productivity and the Dollar."

Fujiki, Hiroshi, and Akiko Terada-Hagiwara. "Financial Integration in East Asia."

Henry, Peter Blair. "Capital Account Liberalization: Theory, Evidence, and Speculation."

Horioka, Charles Yuji, and Junmin Wan. "The Determinants of Household Saving in China: A Dynamic Panel Analysis of Provincial Data."

Lardy, Nicholas. "China: Rebalancing Economic Growth." Magud, Nicolas, Carmen Reinhart, and Kenneth Rogoff. "Capital Controls: Myth and Reality, A Portfolio Balance Approach to Capital Controls."

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