

# FRBSF ECONOMIC LETTER

Number 2009-10, March 13, 2009

## 2008 Annual Pacific Basin Conference: Summary

*This Economic Letter summarizes the papers presented at the 2008 Annual Pacific Basin conference held September 19–20, 2008, at the Federal Reserve Bank of San Francisco under the sponsorship of the Bank's Center for Pacific Basin Studies. Conference papers are listed at the end and are available at <http://www.frbsf.org/economics/conferences/0809/agenda.pdf>*

This year's Pacific Basin conference brought together papers on a variety of international topics, including trade and growth in Asia, global current account imbalances, and international investment patterns.

### Trade and growth in Asia

Traditional trade theory holds that firms are more likely to engage in international trade when they have advantages of greater productivity and/or lower costs. Newer work suggests that credit availability and contract concerns, such as intellectual property rights, are also important factors in determining patterns of trade. Manova and Zhang make use of newly available data on globally active Chinese firms to assess the role of these factors. They find that most of China's trade is conducted by a few firms, with the top 1% responsible for 50–60% of exports and imports. Foreign-owned firms account for roughly 50% of China's trade and are substantially more likely to export and import than privately held domestic firms. This may be because affiliates of foreign multinationals frequently import intermediate products for further processing, final assembly, and re-exporting.

Manova and Zhang also find evidence that foreign-owned and state-owned firms account for relatively more of Chinese exports and imports in industries in which access to financing is important. This is consistent with a credit-constraints view of international trade, which holds that a firm's ability to obtain financing affects its ability

to export and import. Foreign ownership can offer cheaper financing by providing access to the financial resources of the parent company. State ownership facilitates financing from local state-owned banks. These advantages enhance the ability of foreign- and state-owned firms to trade relative to more credit-constrained firms.

In addition, Manova and Zhang find that the share of Chinese exports and imports held by the affiliates of foreign multinationals is relatively higher in sectors that are more intensive in research and development (R&D). By comparison, both private and state-owned domestic firms are substantially more active in sectors with low R&D intensity. This suggests that firms engaged in developing and producing more technologically sophisticated products prefer to integrate production across borders through foreign branches and subsidiaries, rather than outsourcing to unaffiliated firms.

China's overall trade growth has been accompanied by a dramatic change in the pattern of its bilateral trade with Japan and the United States. In 1992, Japan imported three times as much from the United States as from China. By 2005, China had become Japan's largest trading partner, with Japan importing twice as much from China as it was from the United States. Over the same period, Japanese import prices generally fell, leading some analysts to suggest that Chinese imports contributed to Japan's persistent deflation.

Weinstein and Broda assess the impact of imported Chinese goods on Japanese prices from 1992 to 2005. They first show that the methodology used to compute official Japanese import prices overstates how much overall import prices declined over the period. They find no evidence that China had a strong deflationary impact on reported Japanese import prices, either directly



**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.

through lower rates of inflation for existing imported Chinese products, or through competitive pressure on other exporters to Japan. They detect no difference in the price trend of Chinese goods compared with other imported goods.

However, Weinstein and Broda link Japan's expanded imports from China to significant increases in the quality of goods. They estimate that when prices are adjusted for quality (price per unit quality), the typical price of Chinese exports fell by half between 1992 and 2005. Thus, they attribute the growth in Japanese imports from China to the increasing quality and variety of Chinese goods.

South Korea's real per capita GDP growth averaged almost 7% annually between 1961 and 1995. A key feature of this "miracle" was an enormous increase in Korea's international trade, particularly in manufactured goods. Over this period, Korea's merchandise exports as a share of GDP rose from 2% to more than 30%, while the share of manufactured goods in exports rose from 35% to over 90%.

Connolly and Yi assess the importance of trade-policy reforms in explaining Korea's growth miracle. They point out that in the early 1960s Korea eliminated tariffs on imported inputs and capital equipment used to produce goods for export. In addition, beginning in the 1970s and continuing for the next two decades, Korea engaged in a broad, gradual reduction of tariff rates.

Connolly and Yi formulate a structural model of growth and trade that highlights several channels through which trade liberalization can increase per capita income. First, bilateral tariff reduction may engender specialization and greater productivity growth. Second, tariff exemptions for investment goods increase imports of such goods and spur capital accumulation. They find that tariff reductions can explain up to one-third of South Korea's catch-up to industrial countries in output per worker.

### **International trade**

Fixed transaction costs and delivery lags represent important frictions to international trade. Alessandria, Kaboski, and Midrigan document that these costs lead firms to limit the frequency with which they place import orders and to hold substantially larger inventories of imported goods than domestic goods. They argue that this behavior helps explain the short-run responses of trade

flows and pricing to unanticipated terms-of-trade shocks experienced in recent years by developing economies.

Specifically, Alessandria, Kaboski, and Midrigan formulate a model of importers facing uncertain demand, order lags, and fixed costs of importing. They show that a sudden devaluation that increases the relative price of imported goods at the wholesale level leads to an immediate, though temporary, drop in the quantity of imported goods as well as higher than desired inventory holdings. Consequently, importers find it desirable to limit increases in retail prices of imported goods so they can draw down their inventories. The model provides a novel explanation for the slow adjustment of retail prices observed during devaluation episodes.

### **Global imbalances and investment**

Many economists argue that the large U.S. current account deficit, driven in great part by an enormous excess of imports into the United States over exports, is unsustainable and necessarily must shrink. Correcting the current account imbalance would require a falling dollar to expand U.S. exports and curb imports. Ferrero, Gertler, and Svensson explore what would be the best monetary policy during a period when the current account deficit was contracting.

The authors construct a simple two-country model. They recognize that monetary policy by itself may not be able to do much to facilitate adjustment, since current account imbalances largely reflect real factors such as differences in savings and investment among trading nations. They consider two adjustment scenarios—one in which the home country's current account adjustment is smooth and slow, and the second, in which the home country's current account deficit is rapidly reversed.

Ferrero, Gertler, and Svensson find that, under the slow-adjustment scenario, alternative approaches to monetary policy have only modestly different effects on the domestic economy. In contrast, when adjustment takes place rapidly, domestic output and inflation are very sensitive to monetary policy. They conclude that the best economic outcome occurs when monetary authorities target a specified inflation rate. The authors argue that monetary policy targeting a fixed exchange rate is not desirable because holding the nominal exchange rate steady places all the burden of adjustment on domestic prices. In such a case, while

the nominal exchange rate is fixed, it is necessary to lower domestic prices substantially relative to foreign prices in order to make domestic goods more attractive to foreigners so that exports expand and the current account deficit declines. To make general domestic prices lower, monetary policymakers would be forced to raise interest rates at the cost of lower domestic output.

### Global investment

The last 20 years have witnessed an unprecedented increase in cross-border financial transactions. Theory suggests these capital flows should be motivated in part by investor desire to diversify risks globally. Standard international portfolio models hold that domestic investors should direct a share of their wealth abroad proportionate to the financial size of foreign markets, typically measured by relative stock market capitalization. However, empirical evidence suggests that investors have a bias for equities and bonds from their home markets and a strong reluctance to “go abroad” as much as the standard model indicates they should.

More recent models suggest that a home equity bias may arise when domestic stock investments provide a good hedge against exchange rate risk. Theoretically, the hedge would be effective if domestic stock market returns were to rise when the domestic currency appreciated. In that case, domestic residents holding domestic stocks would receive more income just as domestic goods become more expensive for foreigners, causing external demand for those goods to fall. The extra equity income hedges the lower profits of domestic exporters stemming from the loss of earnings on sales to foreigners. However, the empirical correlation between equity returns and the real exchange rate is too low to explain the observed equity home bias.

Coeurdacier and Gourinchas explain equity home bias by introducing bonds into an international portfolio model. In this model, the hedging of real exchange rate risks primarily occurs through international bond holdings rather than equities, because relative bond returns are strongly correlated with real exchange rate fluctuations. Since bonds can hedge real exchange rates very well, equities are not needed to protect against exchange rate risk. Equilibrium equity positions are determined instead by the correlation of returns on equity with returns from other nonfinancial forms of wealth. Their model explains the significant

levels of home equity bias in the United States, Japan, and Canada.

The ability of the United States to run persistent current account deficits has been in part sustained by U.S. success in attracting foreign capital inflows. Why are foreigners willing to invest so much in the United States, especially given low returns relative to comparable investments in other countries and widespread expectations of continued dollar depreciation?

Forbes finds that standard portfolio allocation models and diversification motives are poor predictors of foreign holdings of U.S. liabilities. Foreigners do not invest more in either U.S. equity or debt markets if returns in their own markets are less correlated with the United States, providing little support for a diversification motive for foreign investment. Instead, foreigners hold greater shares of their investment portfolios in the United States if they have less-developed financial markets. This supports the view that U.S. financial markets provide services to countries lacking deep or efficient markets. In addition, countries with fewer capital controls and greater trade with the United States also invest more in U.S. equity and bond markets, suggesting that trade relationships foster international investment flows.

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### Conference papers

- Alessandria, George, Joseph Kaboski, and Virgiliu Midrigan. “Inventories, Lumpy Trade, and Large Devaluations.”
- Coeurdacier, Nicolas, and Pierre-Olivier Gourinchas. “When Bonds Matter: Home Bias in Goods and Assets.”
- Connolly, Michelle, and Kei-Mu Yi. “How Much of South Korea’s Growth Miracle Can Be Explained by Trade Policy?”
- Ferrero, Andrea, Mark Gertler, and Lars Svensson. “Current Account Dynamics and Monetary Policy.”
- Forbes, Kristin. “Why Do Foreigners Invest in the United States?”
- Manova, Kalina, and Zhiwei Zhang. “China’s Exporters and Importers: Firms, Products, and Trade Partners.”
- Weinstein, David, and Christian Broda. “Exporting Deflation? Chinese Exports and Japanese Prices.”

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