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International Financial Integration and the Current Account Balance

For several years, the U.S. has had a large and growing deficit in its current account, the broadest measure of the country's trade with the rest of the world. While in 1991 the current account was roughly in balance, at the end of 2005 it reached a deficit of 7% of GDP. This deficit essentially means that the U.S. is buying more goods (and services) from abroad than it is selling. What mainly finances the difference in the balance of imports and exports is the flow of foreign funds into the U.S. In other words, foreigners are purchasing such things as U.S. Treasuries, shares in companies, and even firms or property. Thus, the level of U.S. net foreign liabilities relative to GDP has risen substantially.

One concern is whether foreign investors will continue to be willing to purchase U.S.-issued liabilities. For example, it is conceivable that foreigners could suddenly decide to restructure their portfolios and switch their purchases to, say, Europeanissued liabilities. A shrinking supply of funds from abroad implies that U.S. demand for those funds also must shrink. Some studies have calculated that this might entail a substantial depreciation of the U.S. dollar, which would work to bring the current account more into balance, thereby stabilizing U.S. net foreign liabilities.

Indeed, between 2002 and 2004, the dollar declined by about 15% against a broad basket of currencies. And, while the current account deficit did not narrow, the ratio of U.S. net foreign liabilities to GDP did stabilize. This Economic Letter focuses on a channel through which dollar depreciation contributed to this stabilization, namely, valuation effects, which have become increasingly important as the world's financial markets have grown more integrated. In particular, dollar depreciation has raised the value of foreign currencies, which, in turn, has increased the dollar value of U.S. assets denominated in foreign currencies. Official statistics indicate that these positive valuation effects accounted for about 2.8% of GDP on average between 2002 and 2004. A crucial question concerns the role that these effects may have in smoothing the adjustment process to a more balanced U.S. current account.

This *Economic Letter* first reviews some predictions about the exchange rate implications of a return of the U.S. current account into balance. It then presents a recent study that considers the role of greater financial integration and the resulting importance of valuation effects. Finally, it evaluates the impact of valuation effects for those countries that have purchased the bulk of liabilities issued by the U.S. in recent years.

"Global rebalancing" and dollar depreciation

By far the largest component of the current account is trade in goods and services; therefore, bringing the current account to a more balanced position necessarily involves reducing the trade deficit. A reduction in the trade deficit might occur if the economies of our trading partners strengthened relative to the U.S. economy, leading to relatively greater foreign demand for U.S. exports and relatively less U.S. demand for imports. It also might occur through a decrease in the relative price of U.S. exports or an increase in the relative price of foreign imports, thus stimulating sales of U.S. exports and depressing sales of foreign imports. Ultimately, these price changes would imply a depreciation of the U.S. dollar against the currencies of its main trading partners.

The question is: how large is the dollar depreciation implied by a return to balance of the U.S. current account? To answer this question, Obstfeld and Rogoff (2005) used a simple model economy including three regions with trade and financial linkages. One region is calibrated to represent the U.S. economy; another, labeled Europe, represents an aggregate of the euro area, Canada, Switzerland, and the U.K; the third region, labeled Asia, represents the economies of Japan, China, Korea, India, and other Asian emerging market countries. Their baseline scenario is called "global rebalancing," in which the current accounts in all three regions move into balance-the U.S. moves from a deficit (equivalent to 5% of GDP), and Europe and Asia move from corresponding surpluses. Obstfeld and Rogoff, for simplicity, hold constant the pattern of production in each of the three regions. Therefore,

their rebalancing process occurs only through the effects of relative price changes on consumption through two different channels. First, U.S. exports become cheaper relative to European and Asian imports, which generates more U.S. exports and fewer U.S. imports. Second, U.S. nontradable goods become cheaper relative to tradable goods, resulting in more U.S. total consumption of nontradables and less of tradables, while the reverse occurs in Europe and Asia—in those regions, nontradables become more expensive relative to tradables, resulting in more total consumption there of tradables and less of nontradables. The total effect of all these relative price changes is to lower the overall U.S. price level relative to the other regions, thereby leading to a real depreciation of the dollar.

Two factors amplify the effects of these relative price changes on the fall in the dollar. First, in each region, domestic tradables constitute a larger share of the overall price level than foreign tradables due to "home bias"—the tendency to prefer domestically produced goods and services. Therefore, a decrease in the relative price of U.S. tradables results in a significant decrease in the overall U.S. price level relative to the foreign price level, which implies a significant real depreciation of the dollar. Second, and more important, in the U.S., nontradables constitute about 75% of GDP; therefore a fall in the price of nontradables relative to tradables also results in a significant decrease in the U.S. price level relative to the foreign price level.

Obstfeld and Rogoff find that the fall in the dollar can be quite substantial: by 30% against European currencies, by 37% against Asian currencies, and by 34% on a trade-weighted basis. The reason the dollar depreciates more against the Asian currencies than the European currencies reflects the fact that the U.S. current account deficit is larger visà-vis the Asian region. In fact, the authors find that Asia's current account surplus absorbs 75% of the U.S. current account deficit.

The role of greater financial integration

Although the dollar depreciated between 2002 and 2004, the current account deficit has not narrowed. At the same time, the ratio of U.S. net foreign liabilities to GDP has remained unchanged; at the end of 2001, it amounted to 23% of GDP, while, by the end of 2004, it was 22% of GDP. One explanation for this stable ratio lies in positive valuation effects. For U.S. foreign assets denominated in foreign currencies, the depreciation of the dollar *raised* their dollar value, which, in turn, raised the aggre-

gate value of gross U.S. foreign assets, leaving the value of gross U.S. foreign liabilities unchanged, as these are mostly denominated in dollars. Thus, valuation effects helped stabilize the ratio of U.S. net foreign liabilities to GDP by offsetting the increase in gross foreign liabilities needed to finance the current account deficit.

Greater financial integration between the U.S. and the rest of the world is behind the increased relevance of these valuation effects. Over the last two decades, the volume of both gross foreign assets and gross foreign liabilities increased sharply in the U.S. By the end of 2004, gross U.S. foreign assets and liabilities reached 85% and 107% of GDP, respectively. At the same time, gross U.S. foreign assets denominated in foreign currencies have also substantially increased. As of the end of 2004, they were 55% of GDP (see estimates in Tille 2005). As a result, exchange rate changes generated larger valuation effects. The latest estimate provided by the Bureau of Economic Analysis indicates that in 2002, 2003, and 2004, exchange rate changes generated positive valuation effects equivalent to 2.2%, 3.8% and 2.3% of GDP, respectively.

Cavallo and Tille (2006) analyzed the role of these valuation effects in shaping the process of rebalancing the U.S. current account. Adapting the framework of Obstfeld and Rogoff, they considered a scenario in which positive valuation effects stemming from dollar depreciation keep the ratio of net foreign liabilities to GDP in the U.S. constant. This scenario is broadly similar to the recent behavior of U.S. net foreign liabilities. It is also consistent with the analysis of Gourinchas and Rey (2005), who found that valuation effects generated by exchange rate changes are particularly helpful in explaining the behavior of the U.S. net foreign liabilities in the short to medium run. Cavallo and Tille find that valuation effects can smooth both the process of current account rebalancing and the depreciation of the dollar over time, as suggested also by Helbling, Batini, and Cardarelli (2005).

The impact on foreign investors

A depreciation of the U.S. dollar not only increases the dollar value of U.S. assets denominated in foreign currencies, but it also reduces the foreign currency value of U.S. liabilities, which are, essentially, all denominated in U.S. dollars. Recently, liabilities issued by the U.S. to finance the current account deficit have been purchased mostly by foreign governments to increase their stock of foreign exchange reserves. While the geographic decomposition of these foreign purchases cannot be known with certainty, Higgins and Klitgaard (2004) suggest that Asian governments financed about 71% percent of the U.S. current account deficit in 2003, with the largest purchases likely made by Japan, China, Taiwan Province of China, India, and Korea.

These purchases expose foreign investors to negative valuation effects when the U.S. dollar depreciates against their respective domestic currencies, as dollar-denominated securities lose value in terms of domestic currencies. Higgins and Klitgaard (2004) used data on reserve holdings of Asian governments at the end of 2003 and calculated their exposure to negative valuation effects stemming from a 10% U.S. dollar depreciation against their domestic currencies. In Singapore, for example, it would produce a negative valuation effect in terms of domestic currency of more than 10% of GDP. Similarly, in Taiwan, it would generate a negative valuation effect corresponding to about 8% of GDP. Korea and China could also experience a negative effect of almost 3% of GDP.

Obstfeld and Rogoff (2005) used other estimates indicating that Asian countries have 20% of their foreign assets and 66% of their foreign liabilities denominated in currencies other than the U.S. dollar. They calculated that, under their global rebalancing scenario, the implied depreciation of the U.S dollar would raise the dollar value of those assets by an amount corresponding to 6% of U.S. GDP, while also raising the dollar value of those liabilities by a larger 16% of U.S. GDP; thus, the value of Asia's total foreign assets relative to that of its total foreign liabilities falls by as much as 10% percent of U.S GDP.

Conclusions

The large U.S. current account deficit has raised concerns that foreigners might want to stop purchasing liabilities issued by the U.S. to finance it. Many fear that such a development could prompt a substantial depreciation of the U.S. dollar that would move the current account to a more balanced position, with possible adverse effects on financial markets and on the level of economic activity. The studies discussed here do not provide a definitive answer on how the current account will return to balance nor on the timing or the exact magnitude of any dollar depreciation. One study, Cavallo and Tille (2006), however, does suggest that the adjustment may be relatively benign, as valuation effects serve to smooth both the rebalancing and the associated dollar depreciation.

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