

Foreign Economic Growth and the Dollar

by Owen F. Humpage

The pace of foreign economic activity is accelerating and may actually catch up to the U.S. growth rate this year. As welcome as this news may be, many economic analysts caution that faster growth abroad could prompt a marked depreciation of the dollar in foreign exchange markets. A higher return on capital abroad, they contend, affords international investors a long-awaited opportunity to diversify dollar-laden portfolios. In some people's minds, the question is not if—but how quickly—investors will ditch dollar-denominated assets and how sharply the dollar will fall.

This *Economic Commentary* illustrates that rapid foreign economic growth exerts both positive and negative influences on the dollar. A simple systematic relationship (suitable as a basis for forecasting) does not exist, but other factors, notably the recent buildup of foreign claims against the United States, may very well bias the dollar toward depreciation as growth abroad accelerates. All told, however, forecasts of exchange-rate movements, particularly those based on macroeconomic variables, have proven notoriously inaccurate.

■ Foreign Economic Growth

In 1998, as the aftershocks of the Asian and Russian financial crises reverberated around the globe, foreign economic activity slowed, especially in emerging-market economies. The average rate of economic growth abroad fell from 4.2 percent in 1997 to 1.4 percent in 1998 (see figure 1).¹ Although foreign economic growth accelerated in 1999, it continued to lag the vigorous rates in the United States. During these three

years (1997, 1998, and 1999), international investors fled emerging markets for more promising returns in the United States. Sizable capital inflows contributed to a 20 percent appreciation of the dollar and to a sharp expansion of the U.S. current account deficit.

Recently, forecasters have upgraded their outlook for foreign economic growth; they now expect it to be on par with U.S. growth this year, approximately 4 percent. In 2001, they expect foreign growth, at 3.8 percent, to edge past U.S. growth. If a relatively strong U.S. economy attracted capital and precipitated a dollar appreciation, wouldn't slower U.S. growth have the opposite effect?

■ Economic Growth and Capital Flows

Analysts who expect the dollar to depreciate as foreign economic activity accelerates regard relative GDP growth rates as a reliable proxy for the comparative return on investing in different countries. Accordingly, they believe that as foreign economic growth quickens, the real risk-adjusted return to capital there will rise relative to that afforded by American investments.

As the relative return on U.S. investment slips, capital inflows into the country will slow. This could occur even if foreign economic growth does not actually exceed domestic growth; the impact could be all the greater if, as many anticipate, U.S. economic growth slows. The argument, therefore, predicts a positive relationship between relative rates of economic growth and net foreign investment.

Figure 2 demonstrates this correspondence. The figure plots economic

Analysts caution that rapid foreign economic growth could induce a depreciation of the dollar, as international investors diversify their portfolios for higher returns abroad. Although we cannot establish a simple relationship between foreign growth and the dollar, we can conclude that if a desire to diversify out of dollars lies dormant among investors, faster growth abroad *may* stir it.

growth differentials (foreign minus U.S. growth rates) against private net foreign investment flows, with positive net foreign investment values indicating capital outflows from the United States to foreign countries, and negative amounts indicating capital inflows. (These data do not include official capital movements, which need not be responsive to relative rates of return on investments.)

Since 1983, the United States has experienced a continuous inflow of foreign capital. In 1983 and 1984, when domestic economic growth surpassed foreign growth by approximately one percentage point, private capital, which had departed the United States in the previous three years, reversed direction. From 1987 through 1991, foreign economic growth again exceeded U.S. growth by a substantial margin, and private capital flows into the United States slowed. In 1997, 1998, and 1999, when U.S. economic growth clearly outpaced growth abroad, capital inflows to the United States again rose sharply. During the intervening years, the positive relationship between growth differentials and net foreign investment was lacking or

weak. Other important influences may have interfered with the relationship. In any event, over the 19-year period, the correlation was positive, as many now predict, and statistically significant. (The simple correlation coefficient between private capital flows and growth differentials is 0.62 percent.)

If this correlation represents a desire to move investment funds to the economy with the highest return on capital, then we might also expect to see a negative relationship between economic growth differentials and dollar exchange rates. To transfer investment capital from dollar-denominated assets to foreign-currency-denominated assets, investors must sell dollars on the foreign exchange market and buy the relevant foreign currency. All other things being equal, these transactions will depreciate the dollar because they increase the supply of dollars in foreign exchange markets and boost the demand for foreign currencies. This mechanism, therefore, connects faster foreign economic growth with dollar depreciation.

■ Economic Growth and the Current Account

If cross-border differences in economic performance can influence investment flows between countries, then surely they can also affect cross-border trade in goods and services. As foreign economic growth accelerates relative to U.S. economic growth, foreign demand for our exported goods and services should begin to outpace our desire for imports. The current account deficit should narrow.² This equally common argument predicts a positive relationship between faster relative economic growth abroad and the current account balance.

Figure 3, which compares the same economic growth differential to the U.S. current account balance, reveals the expected relationship. The U.S. current account deficit began to widen in 1983 and 1984 as our economic growth surpassed foreign economic growth. The deficit narrowed between 1988 and 1991, as foreign economic growth once again outpaced the United States.³ The current account deficit widened sharply in 1998 and 1999 as U.S. growth again grew faster, on average, than growth abroad. Although the relationship por-

trayed in figure 3 is not always clear and strong, the overall correlation is positive and statistically significant. (The correlation coefficient is 0.64 percent.)

While the connection between economic growth differentials and capital flows suggests that the dollar should depreciate when foreign economic activity expands, the relationship between those differentials and the current account implies exactly the opposite connection—the dollar should appreciate. As foreign incomes expand, U.S. exports rise—but to acquire U.S. goods and services, foreigners must first acquire dollars. Similarly, as U.S. growth slows, so do our purchases of foreign goods and services and our need for foreign currencies. Increased foreign demand for dollars and decreased U.S. demand for foreign currencies will trigger the dollar to appreciate.

■ Business Cycles and the Dollar

The foregoing discussion suggests that as foreign economic activity abroad accelerates relative to economic activity in the United States, the current account deficit is likely to narrow and capital inflows are likely to slow. But the dollar could depreciate or appreciate, depending on whether diversification or consumption motivates changes in the U.S. international accounts. Figure 4 shows that the relationship between international growth differentials and the real effective U.S. dollar exchange rate is not as predictable as the relationships depicted in figures 2 and 3.⁴ The dollar appreciated in 1981 and 1982, when foreign economic growth exceeded U.S. economic growth, but continued to appreciate through 1985, even though the pace of U.S. economic activity had surpassed growth abroad. The dollar generally depreciated between 1986 and 1995, despite relatively fast foreign economic growth, and appreciated thereafter, seemingly independent of the growth differential.

Statistical analysis of these data finds no evidence of a systematic relationship between the two. The simple correlation coefficient (0.11) is not statistically different than zero. Moreover, tests for more complicated correspondents, such as a nonlinear or lagged relationship, produce similarly unimpressive results.

History provides no basis on which to forecast that a dollar depreciation must inevitably accompany a growing differential between foreign and U.S. economic growth.

■ Is the Present Situation Different?

Although history is inconclusive, there are other reasons to believe that capital might flee and the dollar might depreciate as foreign economic growth accelerates. Chief among these is the huge and growing volume of dollar-denominated claims that foreigners now hold against the United States.

Over the past 15 years, the United States has experienced a continuous string of current account deficits. A country that runs persistent current account deficits is not exporting enough goods and services to pay for its imports. To settle its account balance, the deficit country must provide foreigners with financial claims—bank accounts, bonds, stocks, etc.—against its future output and/or must reduce its existing financial claims to their future output. As a consequence of financing our persistent and large current account deficits, the net stock of foreign claims on the United States now amounts to \$1.5 trillion, approximately 20 percent of GDP. Most economists expect this ratio to rise somewhat further over the next couple of years.

Economists usually evaluate net foreign claims on the United States relative to GDP, since our national income represents our ability to service and, ultimately, retire these claims. Although we have no basis upon which to judge the current ratio of net foreign claims (at 20 percent) as unsustainably high, or upon which to argue that it cannot rise higher, the ratio surely cannot grow indefinitely. Sooner or later, international investors will doubt the United States' ability (or willingness) to continue servicing these claims. They will then begin to diversify out of dollar assets, and as they do so, the dollar will depreciate and real interest rates in the United States will rise. The process will stop when interest rates and exchange rates have adjusted sufficiently to provide a premium against the perceived risks of holding dollar-denominated assets. These risks may reflect greater uncertainty about the expected future exchange value of the dollar, or about U.S. policies that may affect asset returns.

FIGURE 1: FOREIGN GDP GROWTH, TOP 15 U.S. TRADE PARTNERS

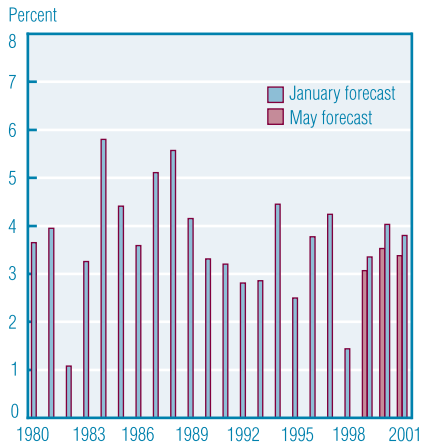


FIGURE 3: GROWTH DIFFERENTIALS AND THE CURRENT ACCOUNT

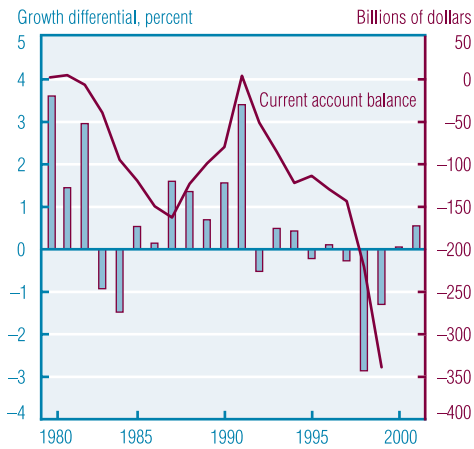
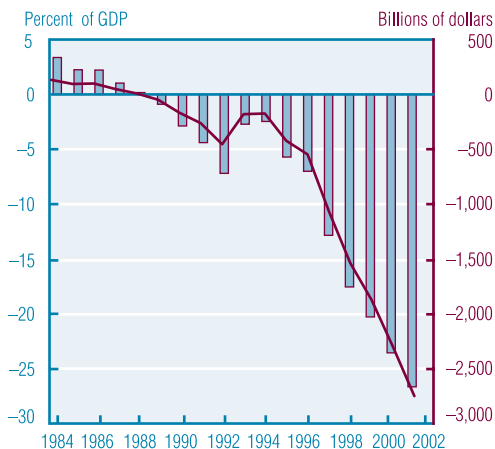


FIGURE 5: INTERNATIONAL INVESTMENT POSITION



SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; Board of Governors of the Federal Reserve System; International Monetary Fund, *International Financial Statistics*; *Blue Chip Economic Indicators*, May 10; Organisation for Economic Co-operation and Development, *Economic Outlook*, December 1999; and *The Economist*, June 17–23.

FIGURE 2: GROWTH DIFFERENTIALS AND PRIVATE CAPITAL FLOWS

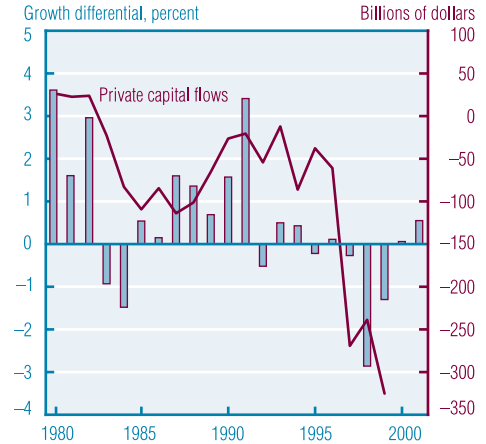
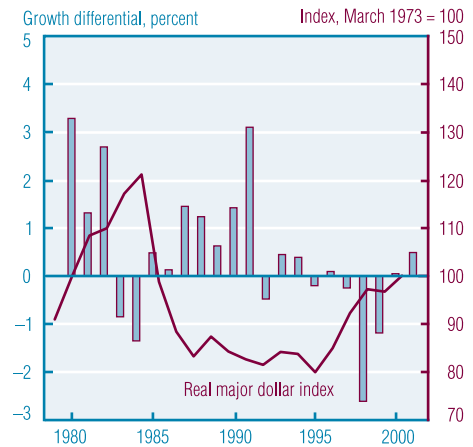


FIGURE 4: GROWTH DIFFERENTIALS AND THE REAL MAJOR DOLLAR INDEX



Fast Growth and Big Claims

As reasonable as the foregoing chain of arguments may seem, they unfortunately lack the key connection to a prediction: We simply cannot forecast the critical value of net foreign claims to GDP at which foreign investors will diversify, en masse, away from dollar assets. Other countries have maintained large net foreign claims to GDP with no apparent economic collapse.⁵ Similarly, we have no way of knowing how far and how fast the dollar might depreciate in response to such a diversification. In the end, all that we can conclude is this: If a desire to diversify out of dollars lies dormant

among international investors, faster growth abroad *may* stir it.

■ Footnotes

1. Foreign economic growth refers to a weighted average of economic growth among our top 15 trading partners: Canada, Japan, Mexico, Germany, the United Kingdom, China, Taiwan, Korea, France, Singapore, Italy, Hong Kong, Malaysia, the Netherlands, and Brazil. The weights pertain to the sum of each country's imports and exports with the United States between 1992 and 1997, expressed as a percentage of total U.S. trade with these 15 countries. Forecasts of economic growth for individual countries come from *The Economist*, May 6–12, 2000; *Blue Chip Economic Indicators*; International Monetary Fund, *International Financial Indicators*; and the Organisation for Economic Co-operation and Development, *Economic Outlook*.

2. The U.S. current account includes trade in goods and services, net unilateral transfers to foreigners, and income earned from U.S.-owned assets abroad less income payments on foreign-owned assets in the United States. Because changes in the trade account, the largest component, dominate movements in

the current account, I have ignored possible business-cycle influences on the other components.

3. Studies of import and export income elasticities suggest that, holding all other variables constant, foreign economic growth must exceed U.S. economic growth by nearly 2 percentage points before the U.S. trade deficit narrows. See Peter Hooper, Karen Johnson, and Jaime Marquez, "Trade Elasticities for G-7 Countries," Board of Governors of the Federal Reserve System, *International Finance Discussion Papers*, no. 609, April 1998.

4. The exchange rate is the Board of Governors' real Major Currency Index. See Michael P. Leahy, "New Summary Measures of the Foreign Exchange Value of the Dollar," *Federal Reserve Bulletin*, October 1998, pp. 811–18.

5. Catherine Mann contends that current-account reversals have typically taken place in industrialized countries when their current-account deficits reach approximately

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The views stated here are those of the author and not necessarily those of the Federal Reserve Bank of Cleveland or of the Board of Governors of the Federal Reserve System.

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