FRBSF WEEKLY LETTER

December 2, 1988

The Baffling Dollar

The dollar's behavior in 1988 has mystified most observers. Despite an external deficit of 3.4 percent of Gross National Product (GNP) in 1987, the dollar was largely stable from January to May 1988, and then started appreciating sharply in the middle of June. By late September, the dollar had appreciated more than 10 percent over its levels in May, and close to levels last reached during the period of dollar appreciation in the summer of 1987. Since then, the dollar has depreciated sharply, particularly following the release of U.S. trade data in the middle of October.

The relative strength of the dollar earlier this year is particularly perplexing because, contrary to the belief of many observers, it does not appear to be explained by a rise in nominal or real U.S. interest rates relative to those abroad. In fact, the differential between nominal dollar- and deutschemark-denominated eurocurrency interest rates *fell* from 3.9 percentage points in May to about 3.3 percentage points in August and September even as the value of the dollar relative to the deutschemark appreciated sharply. Also, research by the Federal Reserve Bank of San Francisco indicates that the real appreciation of the dollar in 1988 cannot be explained by differentials in long-term real interest rates.

This *Letter* discusses two alternative explanations for the dollar's strength that have been offered by a number of observers: (1) a vigorous expansion led by an investment boom increased confidence in the outlook for the U.S. economy and shifted demand towards U.S. dollar assets; and (2) news of improvements in the merchandise trade balance led markets to conclude that the dollar had fallen enough to guarantee a sustainable external position for the U.S.

A vigorous expansion

One possible reason for the dollar's recent strength is optimism about the outlook for the U.S. economy, due to a robust and unusually long expansion. In particular, a number of influential commentators have argued that a more favorable investment environment in the 1980s has produced an "investment boom" that has stimulated foreign demand for U.S. dollar assets, thus contributing to the strong dollar *and* external deficits in the 1980s.

In this view, an investment boom was produced by an improvement in the investment environment in the U.S. in the 1980s associated with a rise in the after-tax return on capital. A Federal Reserve Bank of San Francisco study estimates that as a result of the 1981 Tax Act, the effective tax rate on equity-financed equipment investment fell from 13 percent in 1980 to a low of one percent in 1985. (As a result of further legislative changes it has since risen to 14 percent in the first half of 1988.) The tax rate on investment in structures declined from 62 percent in 1980, to 39 percent in 1985, and to 29 percent in the first half of 1988.

Thus, according to this argument, lower tax rates have probably increased the profitability of investment in the U.S. and spurred economic growth, contributing to the demand for U.S. dollar assets and to the tendency for the dollar to strengthen in the 1980s.

Recent indicators of U.S. economic performance provide some support for this argument, as investment has expanded strongly during this expansion. The real share of gross (including depreciation) investment in GNP averaged 17.4 percent between 1983 and 1987, about the same as in the two expansions in the 1970s, even though real interest rates have been much higher in the 1980s compared to the 1970s. In addition, unlike in the two earlier expansions, the investment ratio has not fallen off sharply after reaching a peak in 1984. This suggests that the gross accumulation of capital stock associated with the present expansion is larger than at any period since the 1960s.

Moreover, the pace of investment spending picked up in 1987 and 1988. Nonresidential investment spending grew nearly nine percent in

1987, and close to 11 percent in the first half of 1988. The increase in investment spending contributed to growth in U.S. GNP in 1987 and 1988 that is well above the two to three percent long-run potential rate. With the exception of Japan, this growth has also exceeded that of its major industrial trading partners.

However, there are two difficulties with the explanation that an investment boom may have contributed to a strong dollar. First, some question whether the current growth in investment really qualifies as a boom. Presumably, a boom implies that domestic and foreign investors would not only replace existing capital stock but increase the rate at which they *add* capital stock in order to take advantage of improved investment opportunities in the U.S. This, in turn, would imply an increase in the share of *net* (of depreciation) investment in national product. Instead, the ratio of net investment to Net National Product (NNP), averaged 6.3 percent in 1983–87, below the average of 8.4 percent for the two expansions in the 1970s.

A second difficulty is that the relationship between U.S. investment spending and fluctuations in the value of the dollar is not very strong. For example, it is not clear how an investment boom can explain the steep dollar depreciation from 1985 to 1987, or the sudden drop in the dollar after October 1988.

Improvements in the trade balance

If an investment boom cannot fully explain the dollar's recent behavior, perhaps the delayed reduction in the U.S. trade deficit can. Until this year, a number of observers questioned whether the dollar depreciation since 1985 would help to correct the external imbalance in the U.S. economy. Even after the dollar began depreciating in 1985, the nominal merchandise trade deficit continued to rise—from $100 billion (annual rate) in the first quarter of 1985 to nearly $172 billion in the third quarter of 1987. Thus, until recently, there was little evidence of a significant turnaround in the nominal merchandise trade deficit.

Starting in the first quarter of 1988, however, it became apparent that the nominal trade deficit was no longer increasing; by June there were six months of data indicating that a sharp reduction in the nominal trade deficit was taking place. Although delayed, the improvement in the U.S. external position has been dramatic. The merchandise trade deficit fell from an annual rate of $172 billion in the last quarter of 1987 to $120 billion in the second quarter of 1988, a 30 percent drop in two quarters. The second quarter improvement in the merchandise trade balance also produced an improvement in the U.S. current account balance, a broader measure that includes trade in services and interest payments on outstanding debt as well as merchandise trade. The current account deficit was $133.3 billion (annual rate) in the second quarter of 1988, about $1 billion below its fourth quarter 1987 levels, and $14 billion below its value in the first quarter of 1988.

News of the turnaround and the subsequent dramatic improvements in merchandise trade in the first half of 1988 may have caused markets to revise their expectations of the size of the U.S. external deficit in the future. This, in turn, would have diminished concern that the dollar would have to fall to maintain the U.S. external deficit at a sustainable level. Consequently, the new information on the dollar's impact may have caused financial markets to revise upward their expectations of the future value of the dollar, producing the appreciation observed from June to September 1988. In line with this explanation, the news received in mid-October that the August trade deficit had increased significantly may have caused another reassessment of the trade deficit and the long-run value of the dollar, producing a significant downward adjustment in the value of the dollar.

The coincidence in the timing of exchange rate movements and the announcement of news on the U.S. trade balance supports the view that changes in the market's assessment of the long-run U.S. external position have recently influenced the value of the dollar. If this relationship persists, continued reductions in the external deficit will tend to strengthen the dollar, while increases in the U.S. external deficit will tend to weaken the dollar.

However, there is a great deal of disagreement on the likely path of the U.S. external deficit in coming months. Many argue that the deficit will rise simply because of the U.S.' status as a debtor na-

tion. The interest payments on the large external debts the U.S. has already incurred will add to deficits in the external account.

Moreover, some observers argue that such "automatic" increases in U.S. external deficits will be reinforced by a secular tendency toward deficits in merchandise trade. Specifically, in the absence of exchange rate changes, the U.S. demand for imports tends to exceed that of its major trading partners. Staff of the Federal Reserve Bank of San Francisco estimate that a one percent increase in U.S. GNP produces a nearly three percent increase in U.S. imports. In contrast, a one percent increase in the GNP of major U.S. trading partners produces a 1.8 percent increase in U.S. exports. Thus, in the absence of exchange rate changes, U.S. trading partners have to grow fifty percent faster than the U.S. to balance U.S. trade. Since the long run (potential) growth rates in the U.S. and its major industrial country trading-partners are about the same, U.S. imports will tend to be larger than U.S. exports unless the dollar depreciates.

On the other hand, structural changes may be taking place that ultimately may reverse the secular tendency toward growing U.S. external deficits. For example, some argue that the strong dependence of the U.S. on imports is partly the result of a decline in manufacturing capacity in the U.S. tradable goods sector, caused by the sharp appreciation of the dollar from 1980 to 1985. Conversely, the steepness of the dollar depreciation from 1985 to 1987 has probably restored some U.S. manufacturing capacity in tradable goods which may permanently reduce U.S. dependence on imports and increase foreign demand for U.S. goods without further changes in the exchange rate. The demand for U.S. exports may also be increased by recent efforts to lower trade barriers among U.S. trading partners.

If these offsetting forces are sufficiently strong to reverse the secular tendency towards growing U.S. external deficits, there may be no further downward pressure on the dollar from this channel. So far, however, there is no conclusive evidence to this effect.

Conclusions

While investment spending in the present expansion has certain remarkable characteristics, the data examined suggest that the investment outlook cannot fully explain the recent behavior of the U.S. dollar. On the other hand, the timing of changes in the exchange rate suggests that news of improvements and deterioration in the merchandise trade balance may have contributed to the observed behavior of the dollar in 1988.

Although the course of the trade deficit and of the dollar cannot be known with certainty, the preceding analysis suggests that the U.S. trade deficit may increase, thus producing further downward pressure on the dollar. These developments, however, could be muted to the extent that significant changes in the U.S. trade structure have occurred that would permanently reduce U.S. demand for imported goods and increase foreign demand for U.S. exports.

Even in the absence of such changes in U.S. trade structure, however, the long run impact of the U.S. external deficit on the U.S. dollar is unclear. As pointed out in a recent *Letter* (October 7, 1988), there is a large world demand for U.S. dollar assets that is growing apace with growing financial integration and rising world wealth. This demand may grow rapidly enough to support the U.S. dollar even if U.S. trade deficits persist.

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