Federal Reserve Bank of Cleveland April 1, 1987
ISSN 0428-1276

# ECONOMIC COMMENTARY

## Requirements for Eliminating the Trade Deficit

by Owen F. Humpage

If the United States is to eliminate its external deficit, it must satisfy certain basic economic conditions with respect to its private savings, private investment, and total government budget deficit.[1]

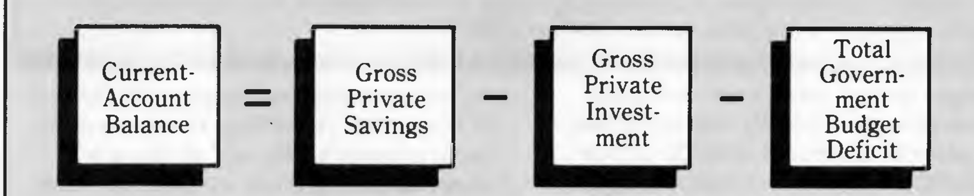
The U.S. current-account deficit reached a record $140.6 billion in 1986 and probably will not improve, on balance, this year. A slight worsening early in 1987 could offset a modest improvement late in the year. Consequently, the United States will continue to amass external debts and will become one of the world's largest debtor countries.

The intense foreign competition evidenced by recent current-account deficits has slowed growth in U.S. traded-goods industries and has heightened protectionist sentiments to levels unparalleled since the 1930s. Moreover, the rapid rise in U.S. international indebtedness challenges our ability to sustain the rate of growth in our standard of living that most of us have come to expect.

The United States thus far has relied primarily on a two-pronged approach to alleviate the trade imbalance. Until quite recently, we have promoted a depreciation of the dollar in foreign-exchange markets, hoping to restore the competitiveness of U.S. goods. In addition, we are encouraging Japan and Germany to stimulate their economies in order to increase demand for U.S. exports.

This *Economic Commentary* examines whether these policies meet the basic criteria required to eliminate our external imbalance. We first develop a framework to illustrate the nature of current-account deficits and to describe conditions for correcting a deficit. Next, we compare U.S. policy against this framework.

**Chart 1 The Current-Account Balance in a National-Income-Account Framework**




### The Nature of a Current-Account Deficit

The national income and product accounts provide an accounting framework for recording our gross national product (GNP). The accounts show that nominal GNP equals the realized nominal values of private consumption, plus private investment, plus government spending, plus exports, less imports. One can adjust the accounts and rearrange them to get an expression for the current-account deficit. The current account records our nation's international trade in goods and services plus net transfers that carry no obligation for repayment.

Rearranged, the accounting framework indicates that a nation's gross private savings, less its gross private investment, less its total government (state, local, and federal) budget deficit equal its current-account balance (see chart 1). According to this expression, a nation running a current-account deficit is not saving sufficiently to finance its private investment and total government budget deficit. Similarly, a nation running a current-account surplus is saving more than is needed to finance its private investment and total government deficit.

In 1986, for example, private savings in the United States totaled $681 billion; private investment equaled $686 billion; and the government budget deficit amounted to $143 billion. With private savings less than private investment and the total government budget deficit last year, the United States experienced a $143 billion current-account deficit.[2] The $5 billion discrepancy in the arithmetic reflects errors and omissions in our measurements of international transactions, plus some other adjustments that typically are small in magnitude.[3]

Table 1 presents similar data for the United States since 1980. To facilitate comparisons over time, the data are expressed as percentages of GNP. The table shows that the increase in the U.S. current-account deficit since 1980 has been associated with an increase in the total government budget deficit and, since 1982, with a narrowing in private savings relative to private investment. The growth in the total government budget deficit reflects the huge federal

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*The views stated herein 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.*

1. Most textbooks on international economics present this argument; it stems from S.S. Alexander, "Effects of Devaluation on a Trade Balance," *International Monetary Fund Staff Papers,* vol. 2 (April 1952), pp. 263-78. See also *Economic Report of the President,* U.S. Government Printing Office, Washington, D.C., transmitted to the Congress January 1987, Chapter 3.

2. These are preliminary data; complete final data for 1986 are not yet available.

3. In the actual measurement of the accounting framework, the U.S. Department of Commerce sets gross private savings, less gross private investment, less the total government budget deficit equal to "net foreign investment." Net for-

**Table 1 National Income Accounts and the Current-Account Deficit**
(Percent of GNP)

| | Gross Private Savings | Gross Private Investment | Savings Less Investment | Total Government Deficit | Current-Account Balance[a] |
|---|---|---|---|---|---|
| 1980 | 17.5% | 16.0% | 1.5% | -1.3% | 0.5% |
| 1981 | 18.0 | 16.9 | 2.9 | -1.0 | 0.3 |
| 1982 | 18.3 | 14.7 | 3.6 | -3.6 | 0.0 |
| 1983 | 17.4 | 14.7 | 2.7 | -3.8 | -1.0 |
| 1984 | 17.9 | 17.6 | 0.3 | -2.7 | -2.4 |
| 1985 | 17.2 | 16.5 | 0.7 | -3.4 | -2.9 |
| 1986[b] | 16.2 | 16.3 | -0.1 | -3.4 | -3.4 |

a. We measure the current-account balance by net foreign investment (see footnote 3 in text).
b. Preliminary data.
SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis. Data are found in *Economic Report of the President,* January 1987, table B-27.

budget deficit, since state and local governments typically run surpluses. In general, a current-account deficit reflects a decision to consume, both privately and publicly, and to invest more than we currently are producing.

The purpose of table 1 is not to specify a channel of causation, but simply to show a tautological relationship among private savings, private investment, the government budget deficit, and the current-account balance. Nevertheless, the important implication is that steps taken to correct the current-account deficit also must change private savings, private investment, the government budget deficit, or all three. Policies or events that fail to affect both sides of the relationship permanently will not alter the current-account deficit.

## Financing the Current-Account Deficit

As previously explained, our current-account deficit reflects a situation in which society saves less than is necessary to finance its private investment and government deficit. One can understand better the nature of the current-account deficit and our concern about its persistence by considering how we finance our deficits.

The necessary counterpart to the U.S. current-account deficit is a current-account surplus, on balance, in the rest of the world. According to the accounting framework, the rest of the world must be saving more, on balance, than is necessary to finance its private investments and any government budget deficits.

The United States finances its current-account deficit by reducing claims on foreigners and by selling assets to foreigners.[4] These assets include stocks, bonds, bank accounts, and physical property in the United States. As foreigners buy these assets, they channel their savings into the United States and help to finance U.S. private investment and the government budget deficit at interest rates lower than otherwise would prevail. Worldwide, these savings flows respond to various economic variables, particularly interest rates and exchange rates, which adjust continually to balance supplies of, and demands for, credit.

A country that constantly runs a current-account deficit eventually will become a debtor nation, with obligations to foreigners exceeding its claims on foreigners. The United States had been a creditor nation since the early part of the twentieth century. Our net investment position reached $141 billion in 1981, but subsequently deteriorated because of our current-account deficits. By the end of 1985, the United States had amassed $107 billion in external debt. Final data for 1986 probably will show an external debt of $250 billion.

There is nothing intrinsically wrong with a nation being a debtor, but debtor status raises two concerns. The first has to do with the willingness of foreigners to hold dollar-denominated assets. International investors, at some point, could become increasingly reluctant to hold dollar-denominated assets in their portfolios, and might shift rapidly out of those assets. This reluctance could stem from an acceleration in inflation or from a slowdown in the U.S. economy relative to other countries, and could result in higher real interest rates in the United States and a rapid depreciation of the dollar. At present, foreign investors do not seem saturated with dollar-denominated assets, nor are they rapidly attempting to diversify out of dollar assets.

A second concern about the debt has to do with servicing it. In the future, the United States will need to pay a portion of its income to foreigners to meet obligations associated with our international debt. This will represent a transfer of real resources that will no longer be available for domestic consumption. Consequently, the debt can have important implications for lowered growth in our standard of living.

The relationship between external debt and the standard of living depends on how the debtor country uses foreign savings. When a country borrows to finance private or public investments in new capital, the additional investments tend to generate a stream of income growth that helps to service the debt. A nation can borrow, invest the funds, repay the debts, and generate faster growth in its standard of living.

A problem arises when a nation borrows to finance consumption rather than investment. Then, future income growth is not enhanced and, as future income is diverted from domestic consumption to service foreign debts, growth in the domestic standard of living slows. Some economists worry that, because the current-account deficit is primarily associated with a rise in the government budget deficit, the need to finance our international debts will result in a reduction in the growth of our standard of living.

eign investment is equal to the current-account balance, plus interest paid by the government, plus capital grants, plus errors and omissions. We ignore the usually small difference between net foreign investment and the current-account balance because we do not wish to add another degree of difficulty to the exposition. This alters none of our arguments.

4. Because of difficulties in measuring international transactions, the current-account balance typically differs from the net transactions that channel foreign savings into the United States and that help finance the current-account deficit by an errors-and-omissions component.

## Some Magnitudes

The following scenarios attempt to illustrate possible magnitudes of U.S. international indebtedness. We do not intend them as forecasts of likely outcomes, but rather as a simulation of conceivable dimensions under reasonable assumptions about long-run average nominal GNP growth and long-run average nominal interest rates.

Most economists believe that the trade deficit will begin a period of continuous improvement in late 1987. Nevertheless, even as we unwind our trade deficit, our net international indebtedness could easily double or triple from its 1986 level. Assume, for example, a $20 billion per year improvement in our trade deficit; assume an annual 6.5 percent nominal GNP growth; and assume an interest rate of 6.0 percent on outstanding debts.[5] In this case, the trade deficit could disappear in 1995, but our net indebtedness could continue to grow through 1999 because of the interest due on our outstanding debts. In this scenario, our international debt could reach nearly $1.4 trillion by late in the next decade.

Under these assumptions, interest payments to foreigners could rise to approximately 1 percent of GNP by 1994 and could remain near that level until 1997. Over these years, therefore, we could divert approximately 1 percent of our total national output to foreigners. This represents a payment for the privilege of presently consuming and investing more resources than we are producing. While 1 percent of GNP does not seem to be a large amount, it represents a significant departure from past trends, and it implies a smaller share of GNP available for domestic consumption and investment.

Of course, many things could alter our scenario. For example, higher interest rates or a failure to cut the trade deficit could aggravate U.S. international indebtedness. On the other hand, lower interest rates or a faster reduction in the trade deficit could reduce the future burden of interest payments. With an annual $40 billion improvement in the trade balance, the trade deficit could disappear by 1992. Interest payments to foreigners might remain below 0.8 percent of GNP and quickly fall. The United States could achieve creditor status again in the late 1990s. This scenario implies, however, that the current account eventually shows a surplus of 3.4 percent of GNP, a ratio quite large in a historical perspective.

## Policy and the Deficit

Concerned about the magnitude of our external balance, about the future implications of our indebtedness, and about the growing tide of protectionism, U.S. authorities, in accord with the Plaza agreement of September 1985, promoted a depreciation of the dollar and continue to encourage Japan and Germany to stimulate their economies. However, the accounting framework indicates that if a country wishes to eliminate its current-account deficit, it must adopt policies to increase its private savings relative to its private investment and must reduce its government budget deficit.

The accounting framework does not deny that promoting a currency depreciation or encouraging growth abroad cannot speed or improve the adjustment process. Nor does the accounting framework deny that a currency depreciation and faster growth abroad might not be a necessary part of *any* adjustment process. The accounting framework, however, indicates that currency depreciation and growth abroad are not enough in themselves to eliminate the current-account deficit. They may be necessary, but they are not sufficient for adjustment.

Consider, for example, an attempt by the United States to foster a dollar depreciation. Attempts to induce a sustained depreciation of a currency generally require a nation to increase its rate of money growth relative to that of its trading partners.[6] Indeed, since 1985 money growth in the United States has increased and interest rates have fallen relative to most foreign countries. While most economists agree that a change in the money growth rate can have a profound impact on exchange rates, the links between money and the trade balance are weak at best. Consequently, we should not be sanguine about our ability to engineer a lasting improvement in the trade balance solely through a depreciation of the dollar.

Most economists would agree that a permanent, unanticipated increase in a nation's money growth rate will reduce interest rates, at least temporarily, on short-term money-market instruments. Assuming that foreign money growth and interest rates remain constant, the reduction in U.S. interest rates could induce international investors to shift funds out of dollar-denominated assets and into foreign-currency-denominated assets. This shift will cause the dollar to depreciate. *Nominal* exchange rates (foreign currency units per dollar) as well as *real* exchange rates would fall, at least temporarily.

*Nominal* exchange rates are the rates typically quoted in financial transactions, while *real* exchange rates are equal to nominal exchange rates plus an adjustment for inflation differentials among the United States and its major trading partners. Because real exchange rates take into account both exchange-rate movements and relative price movements, the real exchange rates determine trade flows.

A depreciation of real exchange rates will improve the U.S. current-account deficit by raising the dollar price of foreign goods and lowering the foreign-currency price of U.S. goods. This development, however, will be temporary.

The faster pace of money growth in the United States will induce other effects that ultimately will offset the dollar's real depreciation. If faster money growth lowers real interest rates (interest rates adjusted for inflation), it could encourage consumption and investment while discouraging savings. As the accounting framework illustrates, these developments will tend to offset any initial improvement in the trade balance.

More important, however, a faster rate of money growth in the United States eventually will translate into a faster rate of inflation. Higher inflation in the United States would make our goods less competitive worldwide despite a nominal depreciation of the dollar. In other words, the faster pace of inflation will reverse the real depreciation of the dollar, eliminating chances for an improvement in trade.

5. One can think of these assumptions as embodying a 3.0 to 3.5 percent average rate of inflation, a 2.5 to 3.0 percent average rate of real economic growth, and a 2.5 to 3.0 percent average real interest rate. We do not assume an acceleration in real long-term growth.

6. We assume that money demand is stable in the following example.

The speed at which faster money growth translates into higher inflation depends on expectations and on the amount of slack in the economy. When inflation expectations are widespread or when little capacity is available to accommodate foreign demand through increased output, faster money growth translates quickly into higher prices. Under such conditions, faster money growth might not result in even a transitory improvement in the trade balance.

Similar comments apply to the policy of encouraging growth in Japan and Germany. Such policies seek to increase demand for U.S. goods and services. If the United States is operating below full capacity, U.S. manufacturers can satisfy the increased demand through additional production. If the economy is operating at full capacity, however, prices in the United States will rise to choke off the increase in demand. The trade balance will not improve.

## Conclusion

Any near-term success from promoting a dollar depreciation and encouraging faster growth abroad will owe much to the fact that the U.S. economy is not operating at full capacity. With unused resources, the increased demand for U.S. goods can generate increased production, employment, and real income. The higher income could generate savings and could help reduce the government budget deficit.

Economists, unfortunately, are not adept at measuring capacity or at predicting when capacity constraints will become binding. Although we do not expect that the United States soon will experience capacity constraints, the unemployment rate is reaching levels that many economists associate with "full" or noninflationary employment, and many economic forecasts now expect inflation to accelerate, although modestly.

Once the U.S. economy reaches full capacity, resources will be unavailable to satisfy foreign demand, and domestic prices will rise. Inflation-induced increases in income are not likely to generate additional employment, to encourage savings, or to help lower the total government budget deficit. Consequently, as the U.S. economy reaches full capacity, policies of promoting a dollar depreciation and of encouraging faster growth abroad will not be sufficient to lower the current-account deficit. The United States will need other measures to encourage private savings relative to private investment and to lower the government budget deficit.

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