Statement of Rudolph G. Penner Director Congressional Budget Office

before the
Subcommittee on Economic Stabilization
Committee on Banking, Finance and Urban Affairs
U.S. House of Representatives

July 18, 1985

There should be no release of this statement until its delivery, scheduled for 10:00 a.m. (E.D.T.) Thursday, July 18, 1985 Mr. Chairman, it is a pleasure to appear before this Subcommitee to discuss our twin problems of federal and external deficits and debts. In my testimony today, I will discuss several aspects of these problems:

- o The connections among the relevant economic variables;
- o Reasons for our enormous current account deficit; and
- o The impact of the imbalance in our external accounts on the U.S. economy.

I will conclude with a brief evaluation of policy alternatives to deal with the problem of the current account deficit.

FEDERAL AND EXTERNAL DEFICITS IN A GNP ACCOUNTING FRAMEWORK

It is useful to start analyzing the connections between federal deficits and external deficits by reviewing basic national income accounting identities that are, by definition, satisfied in each accounting period. If there were no outside world, federal deficits in any given year would have to be financed by government borrowing from savers outside the federal sector-households, business firms, and state and local governments. This obviously tends to leave less private and public savings available to finance private investment, but in the end, total savings and investment must be equal. One of the ways that investment and savings are brought into

balance is through rising interest rates. 1/ To the extent that this depresses private investment, it is often said that "crowding out" occurs.

Why then is widespread crowding out not taking place? After all, despite the enormous federal deficits of recent years, business investment has been very strong and consumer credit demand is at or near record levels. Crowding out has been reduced during the expansion by business tax cuts, accommodative monetary policy, and by other factors as well. A very important reason, however, for the apparent absence of a widespread "crowding out" effect by the enormous federal deficits of recent years has been a net inflow of international capital. This inflow has made it possible for the sum of net private investment plus federal government deficits to exceed the amount of net domestic private savings (inclusive of state and local surpluses).

The Twin Deficits

To simplify our present discussion, state and local surpluses, currently at about 1.4 percent of GNP, will be considered to be part of private savings. Then the basic national income identity tells us that the excess of net private investment over net private saving plus the federal deficit equals

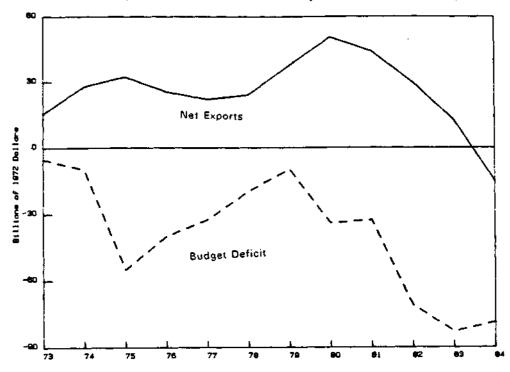
In Keynesian theory, balance can also be achieved because the deficit stimulates production and income. The stimulus proceeds until the savings planned out of enhanced income exactly equals planned investment. However, unless monetary policy is extremely accommodative, interest rates are likely to rise and, as a result, some crowding out of planned investment is probable.

the supply of saving from abroad. The basic balance of payments identity tells us, in turn, that the net inflow of international capital must be matched by a current account deficit.

Assuming that there are no imperfections in reporting and collecting the pertinent data, national income accounting identities leave no room for doubt that federal deficits and external deficits are very tightly connected. In fact, were it not for variations in net private domestic saving and investment, any change in the federal deficit would, after the fact, be reflected exactly in the current account deficits. Figure 1 depicts recent behavior of the two deficits. As can be seen, the correlation between the two measures, while far from perfect, is unmistakable.

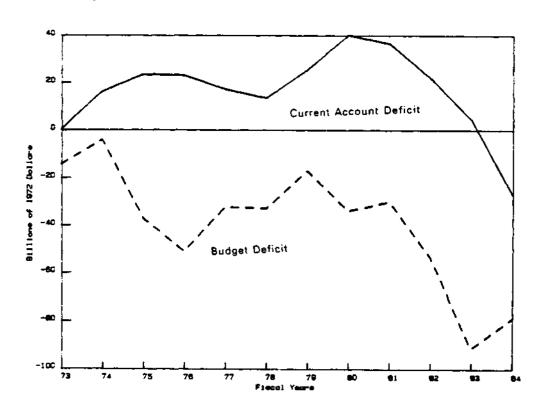
To find a connection between two economic aggregates is, of course, much easier than to identify the precise nature of a causal link between them. The distinction is crucially important for designing sound public policies. For example, over the last year, the increase in our current account deficit was noticeably more pronounced than the widening of the federal deficit. Because of changes in private investment or savings, the very nature of the connection between the two variables leaves plenty of room for such divergences. Nonetheless, some observers maintain that our foreign trade deficit has little to do with our fiscal policies. They claim that these deficits are solely the result of, say, superior growth prospects and investment opportunities in the United States compared with abroad, and that a change in our fiscal stance would have no significant

Figure 1-A.
U.S. Budget Deficit and Net Exports (NIPA Basis)



SOURCE: U.S. Department of Commerce.

Figure 1-B.
U.S. Budget Deficit and Current Account Deficit (Unified Budget Basis and Balance of Payments Basis)



SOURCE: U.S. Department of Commerce.

effect on the eagerness of foreigners to lend to Americans. Others attribute our deficits predominantly to unfair trade practices in other countries and call for dealing with the external deficit problem by restricting imports of goods or capital from abroad. While all foreign countries engage in some protectionist practices, it is impossible to explain the large <u>increase</u> in our trade deficit by an <u>increase</u> in foreign protectionism.

These, and other, explanations for our mounting external deficits are superficially appealing because all of them contain an element of truth. After all, America enjoyed higher rates of growth in recent years than most other countries, and foreign investments in the United States are generally treated more hospitably than almost anywhere in the world. These facts do not, however, refute the view that federal deficits in recent years contributed importantly, I would even say decisively, to the unprecedented deterioration of our foreign trade and current accounts.

REASONS FOR CAPITAL INFLOWS

As suggested above, our current account deficit represents the net amount of resources foreign residents are willing to lend to us every year plus the amount of American-owned assets abroad that U.S. investors are willing to bring home. A question that needs to be explored is: why do international capital owners prefer to place their savings in the U.S. rather

than to keep them in other countries? Those factors that are responsible for pushing capital out of the countries where saving is generated can be labeled the "push factors"; those responsible for drawing this capital into the United States can be labeled the "pull factors."

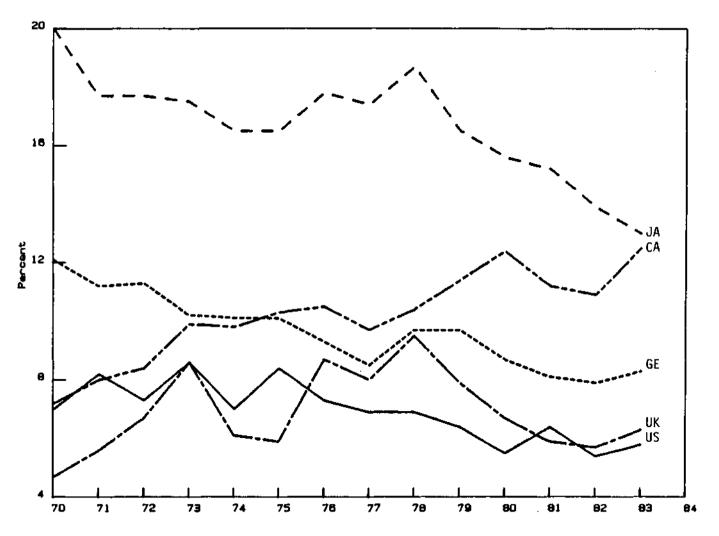
The Push Factors

All else being equal, it is obvious that a high level of net private domestic savings in a country makes it more likely to become an exporter of capital. Indeed, as Figure 2 demonstrates, households and businesses in other major industrial countries—the major sources of capital flows into the United States in recent years—save considerably more than their American counterparts. By contrast, as Figure 3 illustrates, the ratio of the U.S. federal government deficit to GNP has risen sharply in this decade, while the corresponding average ratio for other major industrial countries has remained more or less constant.

A high level of private saving and a relatively low level of public sector borrowing leaves abundant resources for domestic investment. By and large, however, investment in most industrial countries outside the United States has been weak until very recently. The main reason for this weakness has been sluggish growth in virtually all industrial countries. Until last year, their rates of real growth were well below those enjoyed by the United States (see Figure 4). Slow growth and a high degree of underutilization of resources are, understandably, not conducive to strong

Figure 2.

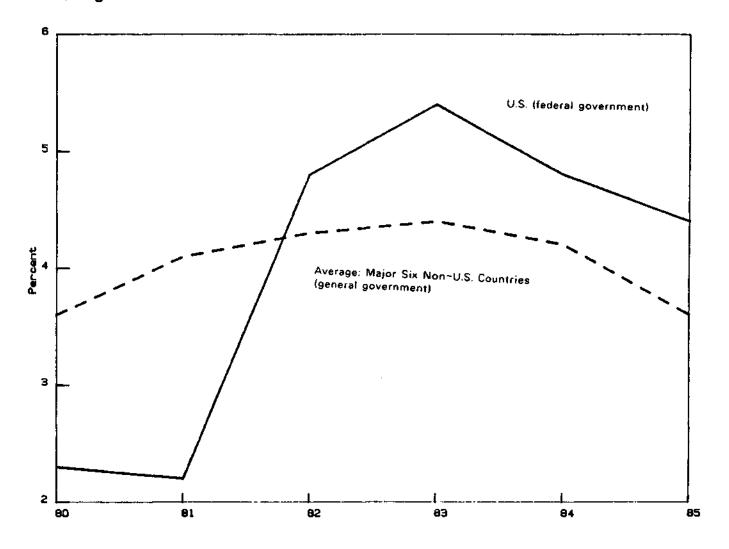
Net Private Saving as a Percentage of GDP



SOURCE: Wharton Econometric Forecasting Associates, Inc.

Figure 3.

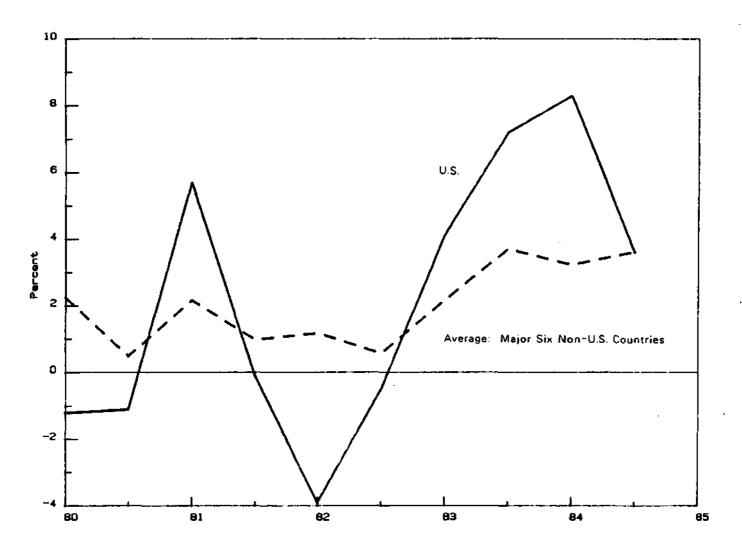
Budget Deficit as a Percentage of GNP/GDP (NIPA Basis)



SOURCE: Organization for Economic Cooperation and Development staff estimates and forecasts; Congressinal Budget Office.

NOTE: Major six non-U.S. countries are Japan, West Germany, France, United Kingdom, Italy and Canada.

Figure 4. Real GNP/GDP Growth



SOURCE: Organization for Economic Cooperation and Development.

investment. In addition, in the European Economic Community in particular, investment is dampened by long-term structural rigidities in labor markets and the over-regulation of business activity.

With high private saving rates, relatively tight budgets, and low levels of investment, Japan and the countries of Western Europe have become a major source of savings to the world. Latin American and East European countries, as a group, have also recently become net savers—a sharp reversal of their position as major importers of foreign capital in the 1970s. 2/ This reversal is partially the result of the drastic reduction in lending by U.S. banks to them, and some repayment of earlier debt. Nonetheless, on a net transactions basis, the effect is just as if they had turned from a neutral position to one of substantial providers of savings to the rest of the world.

Finally, since the early 1980s a marked shift may have occurred in international investors' preferences in favor of dollar-denominated assets. This shift is said to result from such considerations as political instability in many parts of the world, and intermittent fears of expropriations, exchange controls, and other actions generally viewed as being unfavorable to business. While the resilience the dollar has displayed until very recently in foreign exchange markets gives some credence to these explanations, it is difficult to say to what extent these factors have played an independent role in pushing capital out of the countries of its origin.

^{2.} On the other hand, the 1980s witnessed virtual exhaustion of the major source of saving in the 1970s—the OPEC current account surpluses.

The Pull Factors

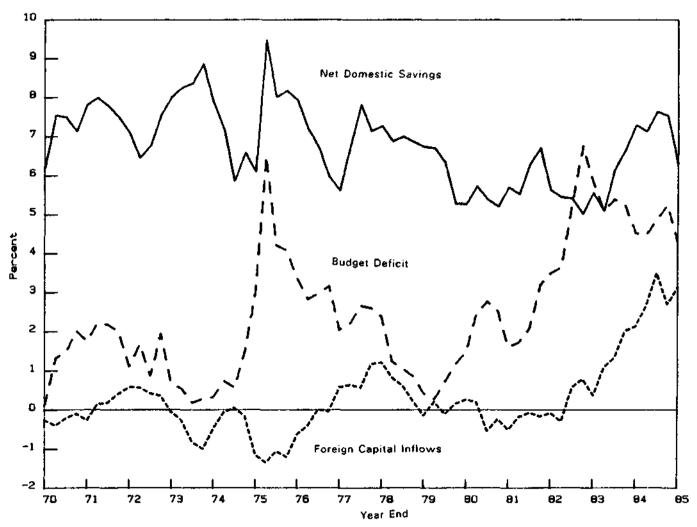
One major factor responsible for attracting capital from the rest of the world into the United States is the low level of saving by Americans. As I noted earlier, the saving ratio in the United States is the lowest of any major industrial country. Furthermore, as Figure 5 indicates, the trend of domestic savings in the United States does not appear to display any correlation with the trend of federal deficits. 3/

All other things being equal, a low saving ratio tends to make capital scarcer and its price--that is, the real interest rate--higher. In a world of high capital mobility, that alone will attract capital generated in other countries. But the differentials between U.S. savings ratios and those of other countries were about the same throughout the 1970s as they are today. Yet, international investors felt no urge to invest massively in the United States (see Figure 5). The cause of this sharp difference in the patterns of capital flows between the 1970s and the 1980s is that few other important things have remained equal.

^{3.} This observation is important in light of a frequently heard, so-called neo-Ricardian argument. According to this argument, if the increased government borrowing stems from a tax cut, then after-tax private incomes would rise by the same amount. If people expect that increased government debt would have to be serviced by future tax increases, they will decide to save most, perhaps all, of the increase in their after-tax income. As a result, net borrowing needs by the private sector will be reduced accordingly, partially mitigating (or even totally offsetting) the impact on interest rates of larger federal borrowing. Even a weak confirmation of the neo-Ricardian hypothesis would at the minimum require that the trends of (cyclically adjusted) federal deficits and net domestic saving ratios be positively correlated.

Figure 5.

Domestic Savings, Budget Deficits, and Foreign Capital Inflows (Percent of GNP, NIPA Basis)



SOURCE: U.S. Department of Commerce; Congressional Budget Office.

In my opinion, the most important difference by far between the 1970s and today is a sharp rise in cyclically adjusted federal deficits, both in current dollars and, more crucially, relative to GNP. As Figures 6 and 7 illustrate, since 1981 this rise in deficits has continued through both a deep recession and a vigorous expansion. Equally important, unless current policies change, under any reasonable projections, this rise in the structural deficit will continue unabated through the remainder of this decade.

Economic theory suggests that such rises in current and expected deficits should raise real interest rates. While real interest rates have in recent years been considerably higher than in preceding decades (see Figures 6 and 7), there are substantial disagreements among economists about the extent to which federal deficits are responsible for the high level of real interest rates or for their fluctuations. A few economists believe that there is no relationship, while others debate whether it is the size of the deficit or the level of the total public debt relative to private wealth that is important. Empirical studies have been unable to resolve this dispute because of the difficulty of separating the effects of changes in fiscal policy from the multitude of other factors affecting interest rates. 4/

^{4.} An analysis of the link between federal deficits and interest rates, and more specifically of the reasons for the apparent difficulty in obtaining solid empirical confirmation of the prevalence of such a link can be found in <u>The Economic and Budget Outlook</u>, Fiscal Years 1986-1990, Congressional Budget Office (February 1985) pp. 81-84 and pp. 93-95.

Figure 6.
U.S. Budget Deficit and Real Interest Rates (Unified Budget Basis)

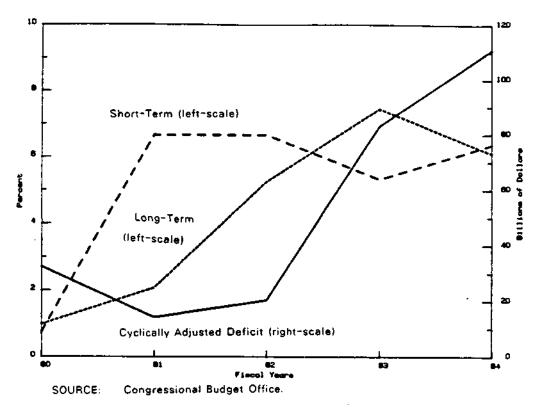
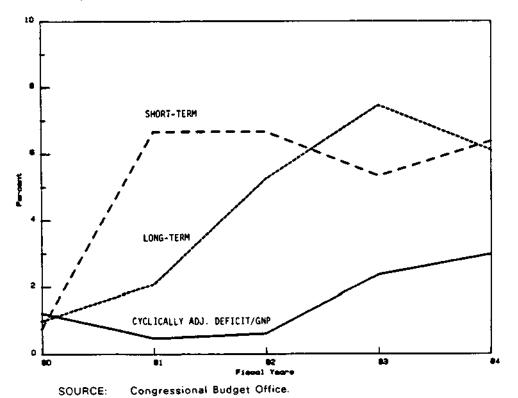


Figure 7.
U.S. Budget Deficit and Real Interest Rates (Unified Budget Basis)



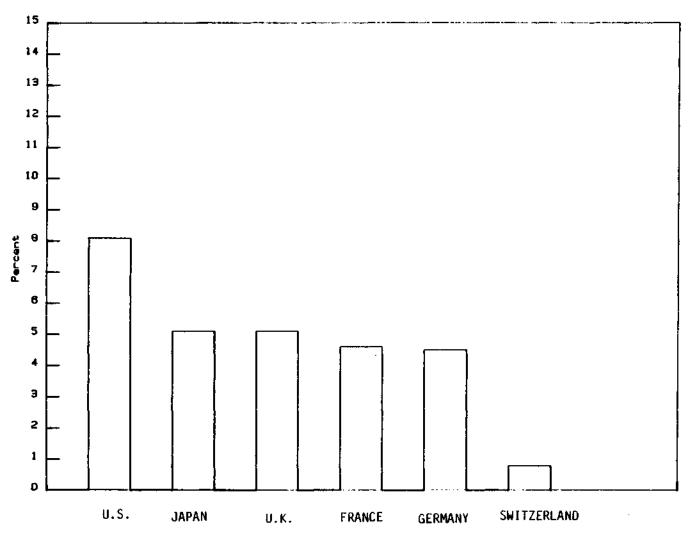
Nevertheless, common sense and economic theory suggest a relationship. Moreover, theory is particularly persuasive in enunciating a long-term
link between real interest rates and the stock of public debt. 5/ Thus, it is
likely that the strong upward trend in the debt-to-wealth ratio has exerted
continuous upward pressures on U.S. real long-term interest rates, leaving
them for the most part considerably above interest rates in other major
industrial countries (see Figure 8). 6/ This interest rate differential
provided an important attraction for dollar denominated investments
relative to investments denominated in other currencies.

Another pull factor resulted from a series of changes in the U.S. tax code since 1981. The most significant were the Accelerated Cost Recovery System combined with the investment tax credit and the recent repeal of the tax withholding provisions on interest and dividends earned by foreign residents on their U.S. investments. These tax changes increased the real effective rate of return on U.S. investments relative to investments in other countries and thereby reinforced the attractiveness of relatively high pretax rates of return available in the United States.

^{5.} In the short run, deficit-to-GNP and debt-to-GNP ratios can move in opposite directions. In fiscal year 1984, for example, the deficit relative to GNP was lower than in the prior year, but the debt-to-GNP ratio rose nonetheless.

^{6.} The increase in this ratio would have been considerably larger were it not for large capital gains realized by the public since mid-1982 on stocks and bond holdings. On the other hand, the increase in the market value of residential real estate (which is a very substantial component of private wealth) has been very modest in the last several years.

Figure 8.
Real Long Term Interest Rates (1982-1984 Average)



SOURCE: Bank for International Settlements.

The attractiveness of the United States as a place to invest has undoubtedly been reinforced by the success of the Federal Reserve in subduing inflation. The actual rate of inflation declined dramatically since 1980 and stabilized at what, by the standards of the last decade, is considered a moderate level. Further, the policy stance of the Federal Reserve has been perceived as demonstrating continuing anti-inflationary resolve. Although inflationary expectations are extremely difficult to gauge, it seems fair to say that the conduct of U.S. monetary policy in recent years substantially alleviated fears of international (and domestic) investors of a sudden and abrupt loss of purchasing power of American currency. Restoring confidence in the dollar could only have an additional positive impact on the relative attractiveness of U.S. investments.

International investors have also been attracted to the United States as a result of its superior growth performance. One may argue that rapid growth is not an independent factor but rather a result of policies and circumstances such as those discussed above. Whatever the reason for rapid U.S. econome growth in recent years, an expanding economy creates ample investment opportunities, generally reflected in a rapid cyclical growth of domestic net investment.

The long-run growth prospects of the American economy are enhanced by the flexibility of U.S. labor markets and reduced business regulation. It is obvious that factors of this nature make the United States more attractive than it would be otherwise, but it is difficult to assess their quantitative importance.

Other factors thought to be conducive to foreign investment in this country include political and institutional stability in the United States, territorial security, and a favorable business climate. These factors are, of course, very important to international investors. Measuring their importance is, however, virtually impossible.

In summary, a large number of factors have been working to push and pull international capital toward the United States. Since the late 1970s, however, the federal deficit has grown to levels unprecedented in peacetime history while the trade deficit has moved concomitantly. It is, therefore, difficult to believe that the size of the budget deficit is not a very important, or perhaps the most important, force behind the deteriorating trade balance.

THE IMPACT ON THE U.S. ECONOMY

The enormity of the flow of international capital into the United States is illustrated in Figure 9 and Table 1 summarizes the story. In barely two and a half years, U.S. net foreign assets fell from their peak value of \$150 billion (which took a generation to accumulate) to zero. Secretary of Commerce Malcolm Baldridge confirmed a few weeks ago that early this year the United States had become a net debtor nation. Data in Table 1 indicate that over the last four quarters for which data are available, net

Figure 9. U.S. Net Foreign Assets

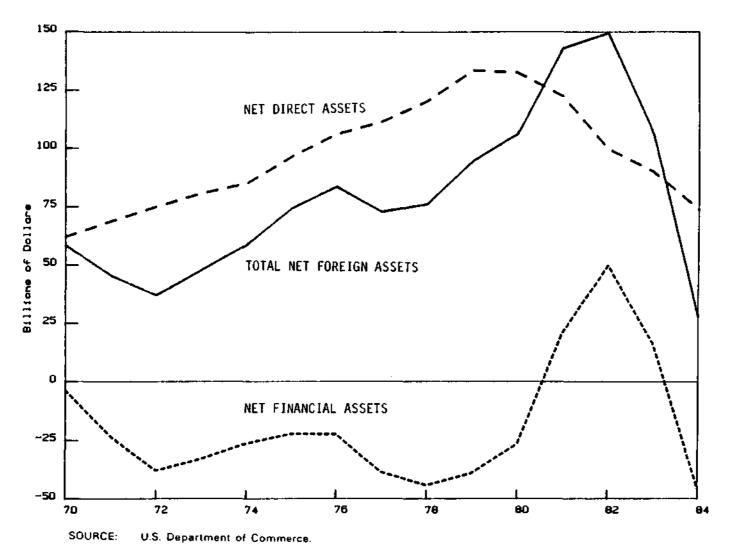


TABLE 1. INTERNATIONAL CAPITAL FLOWS (In billions of dollars, seasonally adjusted)

| | | 1984 | 1984 | | | | 1985 <u>a</u> / |
|--|------|-------|------|------|-------|------|-----------------|
| | 1983 | | Ī | II | III | IV | I |
| Change in Foreign Owned U.S. Assets (a) | 81.7 | 97.3 | 19.3 | 41.6 | 3.1 | 33.3 | 16.5 |
| Official Foreign Assets (b) | 5.3 | 3.4 | -2.8 | -0.2 | -0.7 | 7.1 | -11.4 |
| Private Assets | 76.4 | 93.9 | 22.1 | 41.8 | 3.8 | 26.2 | 27.9 |
| Direct investment | 11.3 | 22.5 | 3.3 | 9.3 | 5.2 | 4.7 | 2.7 |
| Treasury securities | 8.7 | 22.4 | 1.4 | 6.5 | 5.1 | 9.5 | 2.7 |
| Other securities | 8.6 | 13.0 | 1.5 | 0.5 | 1.6 | 9.4 | 9.5 |
| Other reported by nonbanks | -1.3 | 4.3 | 4.5 | 4.6 | -2.9 | -1.9 | n/a |
| Other reported by banks | 49.1 | 31.7 | 11.3 | 21.0 | -5.1 | 4.5 | 13.0 |
| Change in U.S. Owned Foreign Assets (c) | 49.5 | 20.4 | 5.0 | 19.0 | -18.4 | 14.8 | 3.2 |
| U.S. Government Assets (d) | 6.2 | 8.6 | 2.7 | 1.9 | 2.2 | 1.8 | 1.0 |
| Private Assets | 43.3 | 11.8 | 2.3 | 17.1 | -20.5 | 13.0 | 2.2 |
| Direct investment | 4.9 | 4.5 | 3.1 | -2.0 | -2.0 | 5.4 | -0.6 |
| Securities | 7.7 | 5.1 | -0.7 | 0.8 | 1.3 | 3.7 | 2.5 |
| Other reported by nonbanks | 5.3 | -6.3 | -1.3 | -1.9 | -2.1 | -1.0 | n/a |
| Other reported by banks | 25.4 | 8.5 | 1.1 | 20.2 | -17.7 | 4.9 | 0.3 |
| Net Capital Inflows on a Reported Basis | | | | | | | |
| $(\mathbf{e} = \mathbf{a} \cdot \mathbf{c})$ | 32.2 | 76.9 | 14.3 | 22.6 | 21.5 | 18.5 | 13.3 |
| Net official capital inflows (f=b-d) | -0.9 | -5.2 | -5.5 | -2.1 | -2.9 | 5.3 | -12.4 |
| Net private capital inflows (e-f) | 33.1 | 82.1 | 19.8 | 24.7 | 24.4 | 13.2 | 25.8 |
| Statistical Discrepancy (g) | 9.3 | 24.7 | 4.8 | 1.9 | 11.0 | 7.0 | 16.7 |
| Net Capital Inflows Including | | | | | | | |
| Statistical Discrepancy $(h = e + g)$ | 41.6 | 101.5 | 19.1 | 24.5 | 32.5 | 25.5 | 30.0 |
| Net official capital inflows (f) | -0.9 | -5.2 | -5.5 | -2.1 | -2.9 | 5.3 | -12.4 |
| Net private capital inflows (h-f) | 42.4 | 106.8 | 24.6 | 26.6 | 35.4 | 20.2 | 42.4 |

 $SOURCE: \quad U.S.\ Department\ of\ Commerce,\ Bureau\ of\ Economic\ Analysis.$

a. Preliminary data.

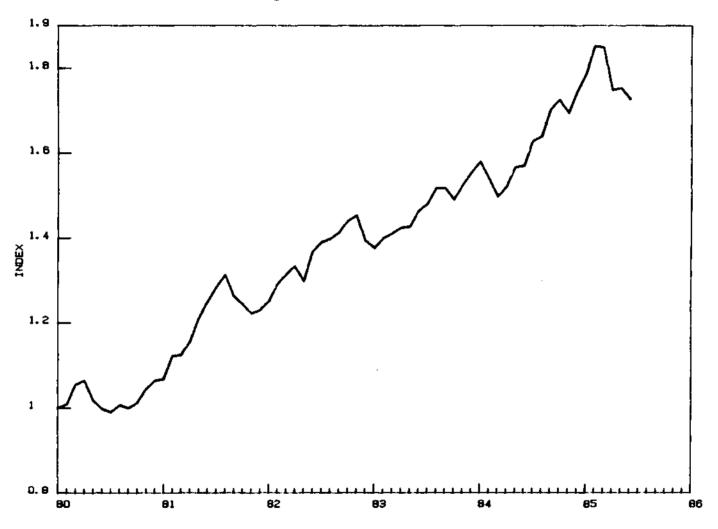
\$6.5 billion a month. If the category "statistical discrepancy" as a proxy for unreported capital flows is included, net capital inflows over the last four quarters average almost \$9.5 billion per month. Even these enormous capital inflows probably understate worldwide private demand for dollars. In recent years, the increase in the value of private dollar liabilities in the Eurobond and Eurocurrency markets (exclusive of interbank deposits) have exceeded by a large margin the depletion of dollar-denominated assets held by foreign governments.

Conversions of other currencies into dollars on the magnitude suggested by the size of net capital inflows into the United States have had a dramatic effect on the exchange rate of the dollar. As Figure 10 illustrates, the effective exchange rate of the dollar (as measured by the Federal Reserve Board) rose from 1980 through the first quarter of 1985 by over 85 percent in nominal terms (and by about 70 percent in real terms), before dropping in the last few months.

It is worth pointing out that capital flows from abroad have helped a great deal to keep U.S. interest rates below what they would have been otherwise. Similarly, the appreciation of the dollar accompanying these inflows has helped to keep inflation below what it would have been otherwise. Without these capital inflows, the adverse impact of the mounting federal debt on long-term growth prospects of the economy would

Figure 10.

Nominal Effective Exchange Rate



SOURCE: Federal Reserve Board.

have been much more pronounced, because the crowding out of U.S. capital formation would have been greater.

A counterpart of these capital inflows and a partial result of the simultaneous appreciation of the dollar has been a massive deterioration of our foreign trade and services balances, a deterioration that is expected to continue for some time even if the dollar depreciates further (see Figure 11). The same picture of an entirely unprecedented deterioration in our external accounts can be seen in Figure 12. As a percentage of GNP, our current account deficit this year would be about three times larger than anything this nation has experienced in the 60 years prior to 1981, including periods of wars.

Has the deterioration in our external account affected the rate of growth of the U.S. economy? If, as argued above, increased federal deficits have been crucially important in creating the trade deficit, the depressing effect of the trade deficit cannot be viewed in isolation from the stimulative effect of the budget deficit. However, numerous complicating forces, also discussed earlier, prevent the federal deficit and the trade deficit from moving in lock step. Data suggest that the increasing drag on the economy originating in the external sector was more than offset, especially until mid-1984, by stimulative effects of the ongoing fiscal expansion. More recently, the negative effects of rapidly deteriorating net exports appear to have dominated fiscal policy impacts, thus depressing overall U.S. economic performance.

Figure 11.
U.S. Merchandise Trade and Services Balances (NIPA Basis)

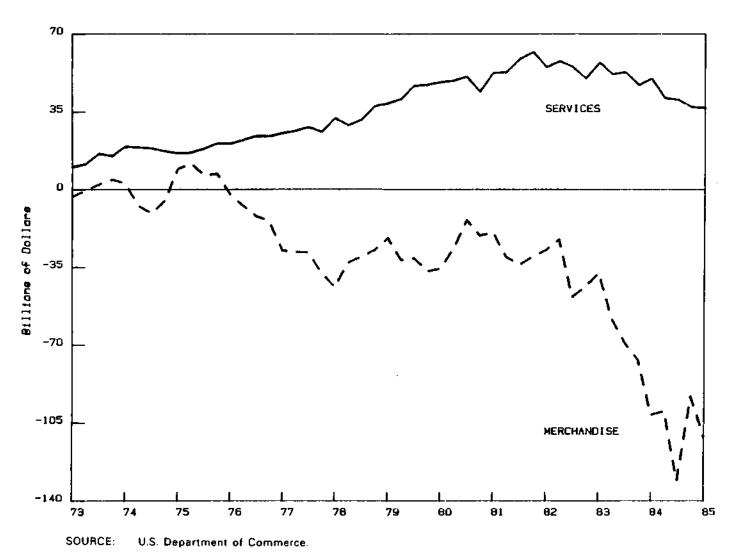
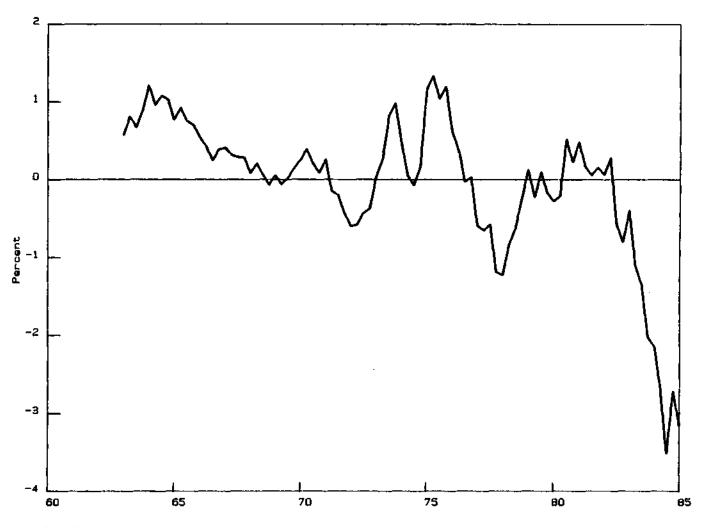


Figure 12.
U.S. Current Account as a Percent of GNP



SOURCE: U.S. Department of Commerce.

Trade Deficits and the Composition of the Economy

A separate aspect of the rising deficits in our external accounts is its impact on the composition of domestic output and on particular sectors of the economy. As seen in Figure 11, the deterioration in merchandise trade was much more pronounced than that in the services account. Other things being equal, this would lead one to expect a dramatic deterioration in the relative share of goods output in total GNP. Additionally, as is normally the case with impacts of foreign trade on the domestic economy, one would expect to notice a wide variance of effects across detailed industries.

Stagnation in Traded Goods Industries?

Surprisingly, as shown in Figure 13, the goods share of total real GNP actually reached a 30 year high in 1984, with only a slight decline in the first quarter of 1985. The rise in the goods output share was matched by a large decline of share for services, and an improvement in the share of structures from the very low level reached during the 1982 recession.

Goods output appears to have followed quite closely its normal movement relative to the business cycle. Since goods output tends to consistently respond in a stronger fashion than does nongoods output to cyclical changes in GNP (see Table 2), the unusually large goods share of total output could have been predicted based on relationships from previous recovery experiences, given that the 1984 real GNP growth rate of 6.8 percent was the highest attained since 1951. At face value, the evidence

Figure 13. Sectoral Shares of Total Real GNP

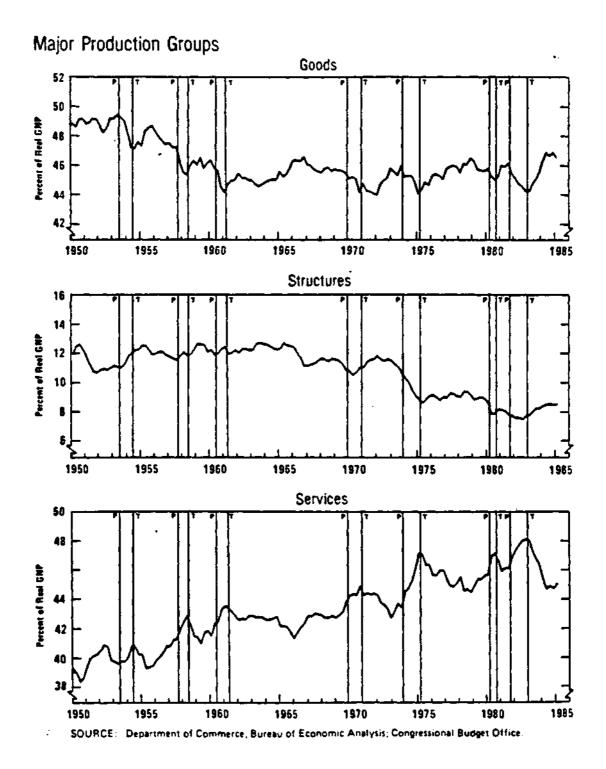


TABLE 2. REAL DOMESTIC GOODS OUTPUT AND THE REAL MERCHANDISE TRADE DEFICIT (NIA basis, annual rates)

| | (1) Real GNP (Percent Change) | (2) Real Goods GNP (Percent Change) | (3) Change in Real Goods Output (billions of 1972 dollars) | (4) Change in Real Net Merchandise Exports (billions of 1972 dollars) |
|--------|-------------------------------------|--|--|---|
| 1973 | 5.8 | 8.1 | 42.7 | 8.0 |
| 1974 | -0.6 | -1.7 | -9.8 | 7.4 |
| 1975 | -1.2 | -2.7 | -15.1 | 6.6 |
| 1976 | 5.4 | 7.3 | 39.8 | -9.0 |
| 1977 | 5.5 | 7.0 | 40.9 | -5.7 |
| 1978 | 5.0 | 5.4 | 33.9 | -1.1 |
| 1979 | 2.8 | 2.4 | 15.7 | 7.1 |
| 1980 | -0.3 | -1.4 | -9.6 | 11.5 |
| 1981 | 2.5 | 3.7 | 25.0 | -7.2 |
| 1982 | -2.1 | -4.7 | -32.5 | -9.5 |
| 1983 | 3.7 | 4.2 | 28.0 | -14.1 |
| 1984 | 6.8 | 11.0 | 76.0 | -21.4 |
| 1985:1 | 0.3 | -2.9 | -5.8 | -14.3 |

SOURCES: Bureau of Economic Analysis, U.S. Department of Commerce and Congressional Budget Office.

seems to show that goods share continues to be dominated by domestic cyclical movements, even in the face of the concurrent record merchandise trade deficits.

In fact, though, the story is more complicated. To properly assess the impact of the trade deficit on the composition of output in the economy, it is necessary to ascertain the degree to which a trade deficit exerts downward pressure on demand for goods relative to nongoods output, and then to analyze why this pressure is not currently reflected in broad sectoral trends.

In general, a merchandise trade deficit develops either because domestic economic growth outpaces foreign growth, or prices for domestic goods rise relative to foreign goods. A trade deficit need not produce downward pressure on demand for domestic output. It depends on the cause of the deficit. Imports increase normally relative to exports during periods of domestic economic growth, as domestic spending increases on all goods. Trade deficits normally occur during recovery stages of business cycles, when domestic output is growing at its most rapid pace. On the other hand, trade deficits that result because of weak foreign growth, or losses of price competitiveness (for example, as a result of exchange rate appreciation) do tend to lower demand for domestic output. Studies have shown that most of the recent increase in the merchandise trade deficit was of the latter form,

exerting downward pressure on demand for domestic output of goods. 7/ This effect is illustrated in Figure 14 by examining ratios of import penetration and ratios of export contribution to demand for domestic output, which appear to be above and below trends respectively. Thus, a large proportion of the increase in the trade deficit, even accounting for the effect of the high domestic growth, should tend to reduce demand for domestic goods production and the goods share of total real GNP, all else held equal.

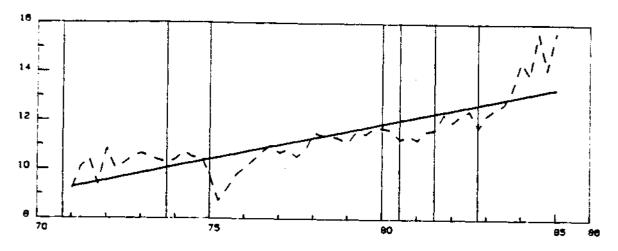
But all else was not held equal. Most important, both the large increase in defense spending and the impact of lower effective tax rates on personal income and investment spending during this period contributed to an increase in demand for goods relative to nongoods output. To date, no estimate is available for the impact of these fiscal policies relative to the trade deficit. It is likely, however, that the goods share of GNP would have been below its trend-adjusted level had not other policies offset the impact of the record trade deficit. In addition, since the full effect of exchange rate changes occurs slowly over time, the rapid dollar appreciation in 1984 is likely to continue to be felt throughout 1985. The fact that the monthly

^{7.} An analysis prepared by CBO at the request of Senator Lawton Chiles, Committee on the Budget, United States Senate, March 30, 1984, and a paper "A Forecasting Model for the U.S. Merchandise Trade Balance", by William Helkie, presented at the Fifth International Symposium on Forecasting, Montreal, Canada, June 9-12, 1985.

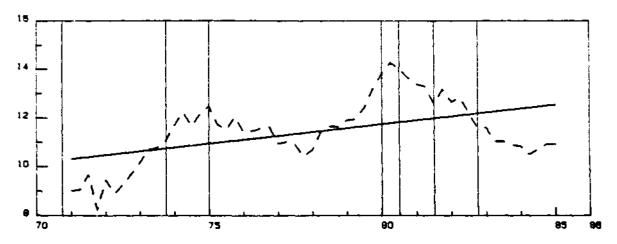
Figure 14.

Real Merchandise Imports as a Percentage of Real

Domestic Demand for Goods



Real Merchandise Exports as a Percentage of Real Goods Output



SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis; Congressional Budget Office.

trade deficit in May was the second largest ever recorded, even while domestic growth was moderated, is evidence of the importance of the lagged effect of the decline in price competitiveness induced by the appreciation of the dollar. Combining the influences of the continuing expansion in the trade deficit with the moderation in the GNP growth rate in the last two to three quarters, the goods share began to decline in the last part of 1984, and is likely to continue throughout 1985, probably at below cyclically adjusted levels.

Relative Effects Across Detailed Industries

Even though goods output has maintained its cyclically adjusted share of GNP, this masks important shifts in the relative output shares of more detailed goods producing industries. In general, sectors most sensitive to cyclical demand movements, and those sectors that benefit directly from increases in defense spending and reductions in investment tax rates were likely to fare well in recent years. Industries experiencing significant foreign competition, in both domestic and foreign markets, tended to lose. There is some overlap between these two influences, but an inspection of the share of output of more detailed sectors to total real goods output shows that electrical and nonelectrical machinery and transport machinery clearly gained shares during the 1983-1984 recovery, while primary metals, textiles,

apparel, leather products, and miscellaneous manufacturing clearly lost shares. 8/

Note that the gainers tend to be most closely related to fiscal policy incentives favoring defense and investment goods, while the losers are predominantly those sectors that have been losing domestic output share for the last 10 to 20 years, largely as a result of fundamental disadvantages they have in competing with foreign producers. These disadvantages remain present throughout various stages of domestic business cycles and exchange rate fluctuations.

Compositional Shifts in Employment

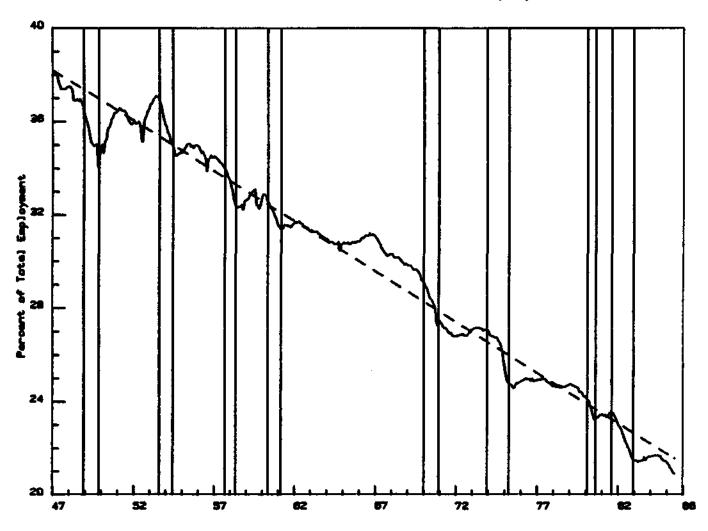
Employment in goods producing sectors relative to other sectors has been affected more than has output. Although the proportion of employment in goods producing sectors to total payroll employment rebounded on trend with the recovery from the 1982 recession, its share abruptly leveled and declined in mid-1984 and has continued to drop. Since the beginning of 1985, there has been no growth at all in goods employment, and manufacturing employment has fallen by 222,000. This decline in the relative share of goods employment appears to be below the normal trend level for the middle stage of a business recovery (see Figure 15).

The decline in the share of employment in the goods producing sector in the face of a high share of goods in total output is the result of higher

^{8.} Note that in 1985, electrical equipment appeared to lose its share by an amount greater than would have been predicted by cyclical movements.

Figure 15.

Share of Goods Producing Sector to Total Payroll Employment



SOURCE: U.S. Bureau of Labor Statistics, U.S. Department of Labor.

NOTE: Includes manufacturing and mining.

productivity growth in the goods sector than in the economy as a whole. In fact, while manufacturing productivity is currently approximately on its postwar trend, productivity in the nonfarm business sector as a whole is well below trend, and has been so since about 1979. Reasons for changes in productivity growth are not well understood, but many analysts would point to the two recessions of the 1980s, and the oil price increases of 1974-1979. as major factors in the sluggish performance of overall productivity since the late 1970s. Manufacturing does not seem to have shared in the overall weakness of productivity growth. Some think this may be in part because foreign competition in the manufacturing sector has forced more stringent cost-cutting measures than in the rest of the economy, though there are no empirical studies supporting this hypothesis. Recorded changes in productivity are also heavily affected by shifts of output between industries that are more or less labor intensive, and do not necessarily reflect any change in productivity in particular plants.

Declines in employment shares of several detailed sectors have been especially pronounced. Some industries, such as steel, textiles and apparel, and leather products, have lower employment levels in mid-1985 than at the trough of the 1982 recession. Table 3 shows changes in employment from June 1984 to June 1985. Of particular note is the low employment growth in goods industries relative to services and construction, and the large declines in employment in primary metals, textiles, apparel leather, and refined petroleum and coal products. Employment growth in the manufacturing of

TABLE 3. PERCENT GROWTH IN EMPLOYMENT (June 1984 to June 1985)

| Sector | Percent Growth |
|-------------------------------------|----------------|
| Total | 3.4 |
| Goods Producing | 1.0 |
| Mining | -0.1 |
| Construction | 7.1 |
| Manufacturing | -0.3 |
| Durable | 0.1 |
| Lumber | -2.1 |
| Furniture | 1.2 |
| Stone, clay, glass | 0.5 |
| Primary metals | -6.0 |
| Fabricated metals | 0.6 |
| Machinery, except electric | -0.7 |
| Electrical and electronic equipment | -0.1 |
| Transportation equipment | 4.3 |
| Instruments | 1.2 |
| Miscellaneous manufacturing | -1.5 |
| Nondurable | -0.9 |
| Food | 1.5 |
| Tobacco | 1.8 |
| Textile mill products | -7.0 |
| Apparel | -4.7 |
| Paper | 0.1 |
| Printing and publishing | 3.4 |
| Chemicals | -0.8 |
| Petroleum and coal | -4.0 |
| Rubber | 0.9 |
| Leather | -11.2 |
| Service Producing | 4.2 |
| Transportation, public utilities | 3.0 |
| Wholesale trade | 4.2 |
| Retail trade | 5.5 |
| Finance, insurance, real estate | 4.1 |
| Services | 5.7 |
| Government | 1.3 |

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor.

durable goods stayed about constant, while employment in the manufacturing of non-durable goods declined by almost one percent.

POLICY CONSIDERATIONS

CBO's analysis suggests that the current value of the dollar is to a very large extent determined by the magnitude of U.S. budgetary deficits and a concomitant demand for foreign capital by the United States.

On the other hand, even with a balanced federal budget, the competing uses for capital worldwide imply that net international capital flows may persist over very long periods of time and may in fact be entirely appropriate. Such a situation would imply the persistence of current account surpluses and deficits among all of our trading partners. Indeed, for much of the 20th century the United States has been a net supplier of capital to the rest of the world. It may also be appropriate for the United States to be a capital importer for brief periods if those resources are invested in productive investments as opposed to being used to finance public deficits.

Furthermore, because bilateral trade is the result of comparative advantages of the different international traders, it is almost certainly true that our trade balance with some individual countries will always be in surplus or deficit even if all countries were simultaneously in current account balance in their overall trading relationships.

The discussion above suggests that to a large extent the source of our trade problems can be traced to our own fiscal policies. This does not mean

that we should not continue to press vigorously for freer access of U.S. exports to foreign markets. The discussion above does suggest, however, that our trade problem will not be solved by imposing restrictions on imports of goods, services, or capital. Such restriction would only reduce the efficiency of the economy without causing a major reduction in the trade deficit. 9/

Without action, the absolute size of the federal budget deficit is likely to get worse. CBO's baseline projections of last February had federal deficits in nominal terms rising through the end of the decade and approximating \$300 billion by 1990--over \$100 billion more than in the last fiscal year. With such a widening of the fiscal deficit, further deterioration in the current account is exceedingly likely. It is therefore imperative to reduce the federal budget deficit in order to reduce the likelihood of further increases in our trade and current account deficits.

The magnitudes of budget deficit reductions implied by the separate budget resolutions adopted by the House and the Senate would noticeably reduce the pace of federal debt accumulation relative to private wealth and therefore reduce the upward pressure on real interest rates. In the absence of other strongly offsetting influences, the dollar should depreciate in real

^{9.} The economic consequences of an import surcharge are discussed in detail in my statement on this subject before the Committee on Finance, U.S. Senate, April 24, 1985.

terms against other currencies. In time, such depreciation will help to halt deterioration in our external accounts. One should, however, be aware that, even with a significant turnaround in the value of the dollar, improvements in our external accounts will not be immediate.

It usually takes several years for the full effects of a change in the exchange rate to work their way through prices and volumes of traded goods, as well as through the domestic sectors of the economy affected by trade. Moreover, since exchange rate changes affect import prices fairly rapidly relative to export prices, the value of imports may initially increase more than exports improve or import volumes decrease. The result would be a short-lived worsening of the nominal trade balance along with a weak improvement in the real trade balance. Over time, import volumes decline and export volumes and prices increase sufficiently in response to the depreciation to produce the expected improvement in the trade balances. 10/

^{10.} The above observations concerning the timing of nominal and real trade balance responses to exchange rate depreciation assume that future actions mimic past behavior. Some observers have predicted that the near-term response of U.S. trade balances to a gradual dollar decline of moderate proportions may have little impact on trade volumes in today's economic environment, as profit margins are adjusted to maintain relative prices and market shares. This profit margin flexibility originates from the strong dollar appreciation since mid-1980 and is likely to be stronger on the import side, where profit margins have been inflated by the strong dollar, than on the export side, where profit margins have been squeezed. To the degree that this occurs in a more radical fashion than in the past, the impact of a depreciation will have less effect on real net trade flows than observed previously. In fact, several analysts expect that it will have almost no effect on import volumes.

A combination of many different factors has caused unprecedented deterioration of U.S. international trade position. Among these factors, it is my judgement that huge federal budget deficits bear the main responsibility for drawing into the United States very large amounts of foreign capital, and for the associated phenomena of dollar appreciation and increased current account deficits. The dollar appreciation and record trade deficit have not tended to have significant impacts on the share of domestic goods production relative to total GNP. It has caused, however, important shifts in output shares of more detailed sectors, resulting in an uneven distribution of adjustment across sectors to the trade deficit. While the share of goods output has proved to be quite resilient, the share of employment in goods producing sectors appear to have declined below trend-adjusted levels.

Reducing future budget deficits does not guarantee a commensurate reduction in future current account deficits. Other factors exerting influence on our external position may temporarily offset the beneficial effects of federal deficit reductions on our current account balance. At any rate, the improvement in our international account will not be immediate. Without decisive action on the budget deficit, however, it is highly likely that our trade and current account deficits will continue to deteriorate from their present levels.