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IMPLICATIONS OF THE U.S. CURRENT ACCOUNT DEFICIT

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ABSTRACT

In 1988, the United States recorded a current account deficit of about \$135 billion. The consensus forecast seems to be for little change in the current account in the near term. In this paper, the implications of the U.S. current account deficit and of the consequent buildup in U.S. external debt are examined. The analytical framework for thinking about the U.S. current account is first surveyed, and the results from the empirical literature on the causes of the deficits in the 1980s are then reported. The sustainability of the U.S. external position is discussed next. It is concluded that, at some point, the U.S. trade deficit has to be closed, but that it is conceivable that the U.S. current account balance could remain substantially negative. How the trade gap might be closed is addressed in the final section of the paper.

Implications of the U.S. Current Account Deficit

David H. Howard¹

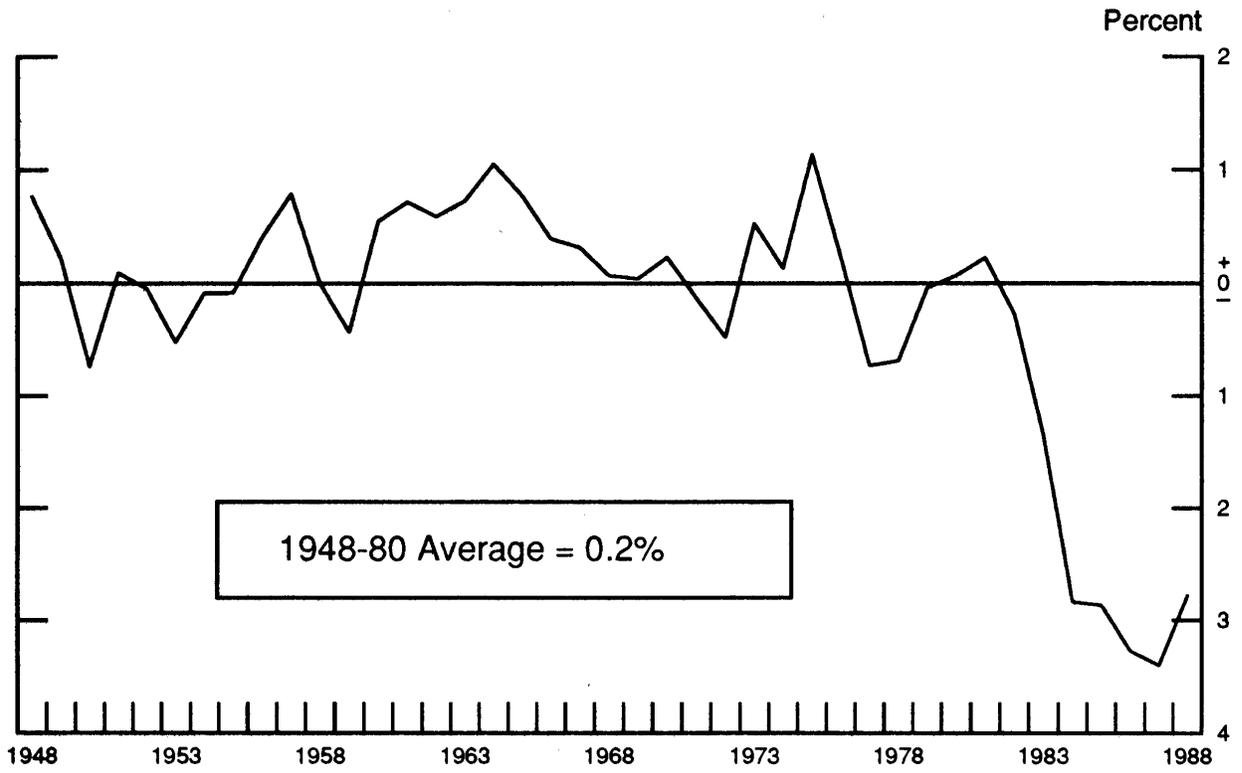
In 1988, the United States recorded a deficit of about \$135 billion on the current account of its balance of payments with the rest of the world.² This sum amounted to roughly 2-3/4 percent of GNP. The evolution of the U.S. current account is presented in Figure 1. Several conclusions can be drawn: \$135 billion is a lot of money; 2-3/4 percent is a substantial portion of GNP; the decline in the current account was precipitous; and there are signs of a turnaround. The recent path of the U.S. current account deficit and the consequent accumulation of external debts have raised many interesting economic and policy questions. Some observers have pointed to the deficits and mounting debts and have predicted a large, sharp depreciation of the dollar in the future. Others have worried about the implications of the United States as the world's largest "debtor nation": references to the heavily indebted developing

1. The author is a staff economist in the Division of International Finance. This paper represents the views of the author and should not be interpreted as reflecting the views of the Board of Governors of the Federal Reserve System or other members of its staff. I would like to thank Richard Freeman, William Helkie, Dale Henderson, Peter Hooper, Karen Johnson, Linda Kole, Michael Leahy, Ellen Meade, Larry Promisel, Kenneth Rogoff, Carl Shapiro, Charles Siegman, Ralph Smith, Joseph Stiglitz, Timothy Taylor, and participants in the International Finance Division's Monday workshop for their helpful comments and suggestions.

2. The current account balance is equal to the trade balance (merchandise exports minus merchandise imports) plus net service transactions plus net unilateral transfers, all expressed in nominal terms, that is, in current dollars. A convenient method of scaling this aggregate is to express it as a percentage of nominal GNP. However, for many purposes a better method of measuring the "real" or deflated balance is to express it in volume terms, that is, in constant dollars where the price deflators refer to the specific baskets of export and import goods (and services) rather than the general GNP deflator.

Figure 1

U.S. Current Account Relative to GNP



Source: Bureau of Economic Analysis, Department of Commerce.

countries and the "debt crisis" have been voiced, as have been concerns about the growing foreign control implied by the growth in foreign claims on the United States.

The consensus forecast appears to be for little change in the nominal current account balance in the near term. However, based on current policies, mainstream assumptions about U.S. and foreign growth rates, and limited further currency realignments, many observers expect that within a few years the U.S. current account deficit will resume widening. The consensus forecast seems to be that a U.S. current account balance in the neighborhood of zero is not even a remote possibility in the near or not-so-near future.

As might be expected, the red ink recorded in the U.S. current account during the 1980s has affected markedly the country's net external asset position, since the excess of imports over exports had as a counterpart some type of credit transaction with foreigners. The exact level of net external assets in any particular year is not precisely known for a variety of reasons.³ However, what is certain is that the

3. The reasons for doubting the accuracy of the data include the use of book value rather than market value for direct investments and the interpretation of the statistical discrepancy in the balance of payments accounts. A large part of the stock of U.S. direct investment abroad was made before foreign direct investment activity in the United States became significant. Thus, presumably the book value of U.S. direct investment understates its true market value to a larger extent than does the book value of direct investment in the United States. If so, the U.S. net position is understated. On the other hand, unrecorded capital transactions are not estimated, they are simply omitted. Since the large positive statistical discrepancy in the U.S. balance of payments accounts that has been in evidence since 1978 may indicate large unrecorded net capital inflows into the United States, a significant amount of foreign assets in the United States may be inappropriately excluded. It also should be noted that despite the United States' supposedly large net external debt position in 1987, the country's net investment income was positive, reflecting a systematic (positive) differential between the

(Footnote continues on next page)

cumulated U.S. current account deficit of nearly \$700 billion for the 1983-1988 period seriously eroded the U.S. net external asset position, and probably transformed the United States from a substantial net creditor nation into a substantial net debtor. Indeed, the consensus forecast for the U.S. current account indicates that U.S. net external assets will continue to fall steeply for at least the next few years. The official estimate of the net external asset position (the "net international investment position") at the end of 1987 -- negative \$368 billion -- was about 8 percent of 1987 GNP.

It is useful to put the recent U.S. experience in perspective. As shown in Figure 1, the size of the 1983-1988 current account deficits as a proportion of GNP is unprecedented (by a wide margin) since 1948. Data reported in Eichengreen (1987) indicate that the deficits have no historical precedent in the United States going back as far as 1890. However, the scale of the present U.S. current account deficit, but not necessarily the circumstances associated with it, does have precedents in other countries' experiences. Leaving aside the history of current accounts in developing countries as irrelevant to an advanced industrial country like the United States, there are many instances in which an industrial country's current account deficit has been on the order of 2-4 percent of its GNP or GDP. For example, in the five-year period, 1975-1979, Canada's current account deficit averaged over 2 percent of GDP; in 1974, the British and Italian deficits were 4 percent of GDP, and in some

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rates of return earned on U.S. assets abroad and foreign assets in the United States, and, perhaps, an overstatement of the underlying U.S. net external debt position as well.

of the smaller industrial countries, annual deficits have been well in excess of 4 percent of GNP or GDP.⁴

Thinking about the implications: analytical framework

The implications of a current account deficit depend in part on what caused the deficit in the first place and how the economy adjusts in response -- for example, how the deficit is eventually closed. The U.S. current account balance is a general equilibrium phenomenon: it is jointly determined with other endogenous variables in the world economy. The usual proximate determinants of the current account balance -- chiefly the terms of trade and relative rates of growth of economic activity -- are themselves endogenous variables. Analysis of the current account deficit requires that the fundamental causes as well as the proximate causes be identified. Moreover, spillovers involving other markets and foreign economies must be taken into account. In the present exercise -- analyzing the implications of the historically very large U.S. current account deficit -- the general equilibrium nature of the problem is not just a theoretical fine point. Anticipating the discussion of the next section of the paper, the conclusion of most economists who have studied the issue is that the U.S. current account deficit is largely the product of the macroeconomic policy mix pursued by the United States and its major trading partners during the 1980s. Reducing the deficit probably, although perhaps not necessarily, would involve a significant reversal of those particular policy choices. Since changes in macroeconomic policies have consequences for the entire world economy -- not just the U.S.

4. See OECD (1987). Eichengreen (1987) discusses some earlier episodes of large deficits in Canada and the United Kingdom.

balance of payments -- it is imperative that the entire world economy be incorporated in the analysis.

The economics literature provides several lines of approach for thinking about current account balances. The conventional method -- at least in the empirical literature -- entails an eclectic model in which trade flows are essentially determined by prices and income flows, supplemented with judiciously and pragmatically chosen additional variables. These explanatory variables are for the most part only the proximate determinants of trade flows, and the trade equations are explicitly or implicitly considered to be a component of a more complete empirical model of the economy. In fact, one approach to modeling the current account involves an econometric model of the entire world economy, consisting of linked individual country models. In these models, trade flows and their proximate determinants are determined endogenously and simultaneously as part of a general equilibrium outcome. Exercises involving such models or components of such models form the basis of what is known -- or is believed to be known -- quantitatively about the causes of the current U.S. deficit as well as the prospects for its improvement.

Another empirically oriented approach to thinking about current account balances focuses on one aspect of the general equilibrium problem by manipulating the national income accounts in order to arrive at the identity:

$$(1) \quad X - M = S - I,$$

where X and M represent exports and imports of goods and services, respectively, and S and I denote domestic (including the public sector) saving and investment, respectively. Expressed in this manner, it is natural to view the current account [approximately (X - M)] as being

reflective of a country's saving-investment behavior and imbalances. For example, in terms of equation (1), the U.S. current account deficit can be thought of as being the result of a shortfall in U.S. saving, in which case the level of domestic investment is being supported by flows of foreign saving (equal to the negative of the current account balance). However, viewed in this manner, it is also easy to lose sight of the fact that equation (1) is an identity with no causal significance, and that all four variables are endogenously determined as part of a general equilibrium outcome for the entire international economy. The current account ($X - M$) and the saving-investment balance ($S - I$) are actually functions of many variables, including importantly income, the exchange rate, and the interest rate. The equilibrium external balance is determined by the intersection of the ($X - M$) and ($S - I$) functions. Thus, the actual external balance can reflect changes in export and import behavior as well as changes in domestic saving and investment behavior.

Another strand of the economics literature can also be brought to bear on the question of the U.S. current account deficit. The classic Diamond (1965) overlapping generations growth model of public debt provides an analysis of the implications of funding a public sector deficit by borrowing abroad. The open economy aspects of the Diamond model are more fully articulated in Persson (1985). One of the Persson's conclusions is particularly interesting (p. 82): "The adjustment towards the higher external debt implied by a higher public debt was shown to involve an extended period of current account deficits following an initial government budget deficit." Persson's explanation of this result essentially involves the use of foreign saving flows (and therefore current account deficits) to supplement domestic saving both during the

initial period of the government deficit and during subsequent periods, when domestic saving is depressed by taxes used to service the higher public debt. In fact, Persson's analysis of the interaction between the public sector and current account deficits is similar to that underlying the more-or-less conventional view in official and international financial circles of the relationship between the U.S. budget and current account deficits (the so-called "twin deficits").

Causes of the current account deficit

Between 1981 and 1987, the annual U.S. current account balance declined by \$160 billion. Quantifying, or even identifying, the main causes of this marked weakening in the current account is difficult for a variety of reasons: it requires an econometrically fitted model with fairly precise and generally accepted estimated coefficients; it requires a view as to what counterfactual baseline should be used for comparison; and such an exercise almost necessarily involves some amount of implicit or explicit causal ordering among simultaneously determined endogenous variables. Nevertheless, some of the leading econometric models of the international economy have been used to address this question.⁵

The explanation of the behavior of the U.S. current account during the 1980s that emerges from the empirical literature is one in which the fundamental cause is the macroeconomic policy mix pursued in the

5. The models' answers are reported in Bryant, Holtham, and Hooper (1988) -- see especially the paper by Helkie and Hooper -- and Hooper and Mann (1987). These studies are based primarily on simulations run by several different modeling groups for a conference and workshop held at the Brookings Institution in 1986 and 1987. See also Bryant and others (1988). Most of the simulations do not involve the full models and thus do not reflect all of the feedbacks and spillovers involved. [See also Krugman and Baldwin (1987).]

United States and its major trading partners. At the beginning of the decade, the anti-inflation stance of U.S. monetary policy drove real interest rates and the dollar upward. However, the dollar's strength had little effect on the current account since the ensuing U.S. recession dampened the demand for imports. Starting in about 1982, the strongly expansionary course of U.S. fiscal policy began to impart additional upward impetus to U.S. interest rates and the dollar while at the same time fostering a recovery in U.S. economic activity and U.S. demand for imports. The result was a sharp deterioration in the current account in 1983-1984, which was exacerbated by the restrictive posture taken by fiscal authorities in the major foreign industrial countries and the economic problems of the heavily indebted developing countries.⁶ The widening of the U.S. current account deficit meant that foreigners in effect were financing more and more of the U.S. government budget deficit, thereby allowing the U.S. private sector to maintain higher levels of consumption and investment expenditures than it otherwise could have.⁷

Steps toward tightening U.S. fiscal policy, starting in 1985, appear to have played a role in reversing the course of the dollar and the current account. Another instrumental factor seems to have been financial market concerns about the longer-run sustainability of the U.S. external position and the recognition that at some point some adjustment would be necessary, a topic that is discussed in the next section of the present paper.

6. U.S. exports to Latin America declined by some \$17 billion (40 percent) between 1981 and 1983.

7. Of course, the foreigners did not necessarily buy U.S. government securities directly, but, since funds are fungible, the capital inflow facilitated the financing of the budget deficit.

The attempts to quantify the various causes of the U.S. current account deficit are, of course, rough, and, as one might expect, the results are far from unanimous across models. Nevertheless, the conclusion that one can draw from the empirical literature is that less than half of the deterioration in the current account was associated with the relative strength of U.S. economic activity compared with that abroad, and more than half was associated with the loss of price competitiveness of U.S. goods and services, owing largely to the strong appreciation of the dollar in the first half of the 1980s.

The pace of economic activity at home and abroad as well as the course of the dollar were proximate causes only. Various econometric models indicate that expansionary U.S. fiscal policy coupled with restrictive fiscal policy in the major foreign industrial countries and the anti-inflation stance of U.S. monetary policy can explain a sizable amount of the developments in economic activity and exchange rates. There nevertheless remains a significant portion -- perhaps one third -- of the rise in the dollar that remains unexplained, and which perhaps reflects a speculative bubble, and therefore some of the weakening in the U.S. current account is also unexplained.

The models also have been used to investigate the seemingly puzzling persistence of the current account deficit in the face of the dollar's steep decline since early 1985. Several points can be made with regard to the persistence of the deficit. First, in the absence of the dollar's fall, the nominal current account balance probably would have been weaker than the rates actually recorded. Second, the persistence is not too surprising in that the econometric models do not predict a rapid turnaround: trade volumes react with a fairly substantial lag (usually

distributed over two years) to changes in prices, and the dollar prices of imports also respond with a lag (again typically distributed over two years) to changes in exchange rates. Moreover, much of the dollar's initial decline represented simply a reversal of its surge at the end of 1984 and early 1985, which probably was not reflected in prices or trade volumes anyway. Finally, the dollar's depreciation between early 1985 and the end of 1987 was more-or-less continuous so that a series of so-called J-curve effects -- a weakening of the current account as import prices in dollars rise before import volumes decline in response -- would tend to mask the improvement in the underlying current account position for a while. There have been some special (and unpredicted) factors as well, such as the vagaries of the oil market.

Sustainability: the United States as a debtor nation

There are several statistical indicators or measures of a country's external debt "burden" or debt-servicing requirement. One common measure is the net external debt (D) to GNP (Y) ratio; another scales the debt by the value of a country's exports instead of national output. In either case, the rationale is that the denominator is related to a country's capacity to service its debt. In this paper, the debt-GNP ratio (d) is used as the indicator of the U.S. external debt burden.

The debt-GNP ratio is defined as:

$$(2) \quad d = D/Y.$$

It follows from equation (2) that the rate of change of the ratio is equal to the rate of change of D minus the rate of change of Y, or

$$(3) \quad \dot{d}/d = (\dot{D}/D) - (\dot{Y}/Y).$$

The change in the nominal net external debt is equal to the negative of the current account balance, which can be thought of as equal to the negative of the trade balance (TB) plus interest payments paid on the net external debt (rD , where r denotes the nominal rate of interest).⁸

That is,

$$(4) \quad \dot{D} = -TB + rD.$$

Substituting equation (4) into equation (3), one obtains,

$$(5) \quad \dot{d}/d = [r - (\dot{Y}/Y)] - (TB/D).$$

Thus, the rate of change in the debt-GNP ratio can be viewed as the sum of the difference between the rate of interest on the debt and the rate of growth of the economy plus the growth in debt represented by the trade deficit as a proportion of the stock of debt.

Turning to the first term on the right-hand side of equation (5), the difference between the nominal interest rate and the rate of growth of nominal income, under most circumstances this differential is approximately zero. Assuming that the interest rate - growth rate differential is small implies that the rate of change of the debt-GNP ratio is roughly equal to the trade deficit as a percent of the stock of debt:

$$(6) \quad \dot{d}/d \approx - (TB/D).$$

Interpretation of equation (6) is straightforward: the debt-GNP ratio will continue to rise indefinitely as long as the economy is running a deficit on merchandise trade. Applying this result to the current U.S.

8. A number of simplifying assumptions must be made in order to decompose the current account into these two aggregates. Two key simplifying assumptions are that there are no (net) services transactions in the balance of payments other than interest payments and that the rates of return on U.S. external liabilities are the same as those on U.S. external assets.

situation, one could conclude that the U.S. external debt burden will continue to grow until the trade balance turns around and stops recording deficits.⁹ (In 1988, the trade deficit was slightly less than the current account deficit -- about \$125 billion.) Since the debt-GNP ratio presumably cannot keep increasing forever, at some point the United States needs to stop registering trade deficits. (However, in principle, one could imagine the debt-GNP ratio increasing for a very long time, if its rate of growth were small enough.)

The question remains, however, when does the U.S. trade account have to switch to surplus (or at least a zero balance)? As mentioned in the first section of this paper, at the end of 1987 the U.S. net external debt -- strictly speaking, the U.S. net international investment position with its sign reversed -- was about 8 percent of GNP. Even making the pessimistic assumption that the U.S. current account deficits in 1988-1990 will average \$150 billion, the debt-GNP ratio is likely to be less than 15 percent at the end of 1990. Debt-GNP ratios for "highly indebted" developing countries such as Argentina, Brazil, and Mexico are considerably larger -- on the order of one quarter to one half of GNP.¹⁰ Indeed, Canada's net external debt as a percentage of GNP was 40 percent

9. In practice, a zero trade balance is not necessarily the break-even point, but the exposition is clearer if the simplifying assumptions presented in the above discussion are maintained.

10. The debt ratios for the Latin American countries are not really comparable with that for the United States, in part because there are no reliable figures on the external assets of the Latin American private sector (often referred to as "capital flight"). The one quarter of GNP figure mentioned in the text reflects a net-debt concept, incorporating a rough estimate of private capital outflows, while the one half of GNP figure is a gross-debt concept.

in 1987 -- nearly three times the likely upper bound for the 1990 U.S. ratio.

Cross-country comparisons of debt ratios are not necessarily meaningful, since the sustainable debt-GNP ratio (debt burden) of a country is a function of many things that can vary across countries and over time. Moreover, a crisis of confidence among foreign investors cannot be ruled out no matter what the country's debt-GNP ratio might be. Nevertheless, the large discrepancy between the U.S. ratio, even using pessimistic assumptions about the next few years, and current Latin American ratios suggests that a U.S. "debt crisis" is not imminent. Several other considerations, not the least being the experience of Canada -- an advanced industrial country with ready access to international financial markets -- support this proposition. It does seem certain, however, based on the dynamics of debt accumulation that are reflected in equation (6), that at some point the U.S. trade balance must turn positive or at least non-negative. Indeed, since early 1985, when the dollar's exchange value hit its peak, this seems to be the message that international financial markets have been conveying. The question of how the trade adjustment can or will take place is addressed in the next section of the paper.

Even after the United States stops recording trade deficits and the debt-GNP ratio levels off, the current account is likely to register sizable deficits, reflecting interest payments on the net external debt. At a constant debt-GNP ratio, call it d^* , equation (3) implies that the change in debt as a percent of GNP is equal to the debt ratio times the rate of growth of GNP:

$$(7) \quad \dot{D}/Y = d^*(\dot{Y}/Y).$$

Recognizing that \dot{D} is the negative of the current account balance, equation (7) can be expressed as:

$$(8) \quad -CAB/Y = d*(\dot{Y}/Y),$$

where CAB denotes the current account balance. Thus, the current account deficit as a proportion of GNP is equal to the rate of growth of GNP times the debt-GNP ratio, when that ratio is constant.

Equation (8) can be used to calculate the "sustainable" current account deficit for a specified (constant) level of the debt-GNP ratio and an assumed rate of growth of nominal GNP. In Figure 2, some plausible combinations of constant debt-GNP ratios and GNP growth rates are plotted. The shaded area bounded by debt-GNP ratios of 10 percent -- approximately the 1987 level -- and 25 percent and by nominal GNP growth rates of 5 and 10 percent represents a region in which the longer-run sustainable value of the U.S. current account balance might well lie. This longer-run sustainable current account deficit could conceivably be quite large. For example, if the constant debt-GNP ratio is 20 percent and nominal GNP growth is 6 percent, the sustainable current account position is a deficit equal to 1-1/4 percent of GNP -- about one half the size of the deficit recorded in 1988, but still considerably larger than the deficits recorded by the United States prior to the 1980s.

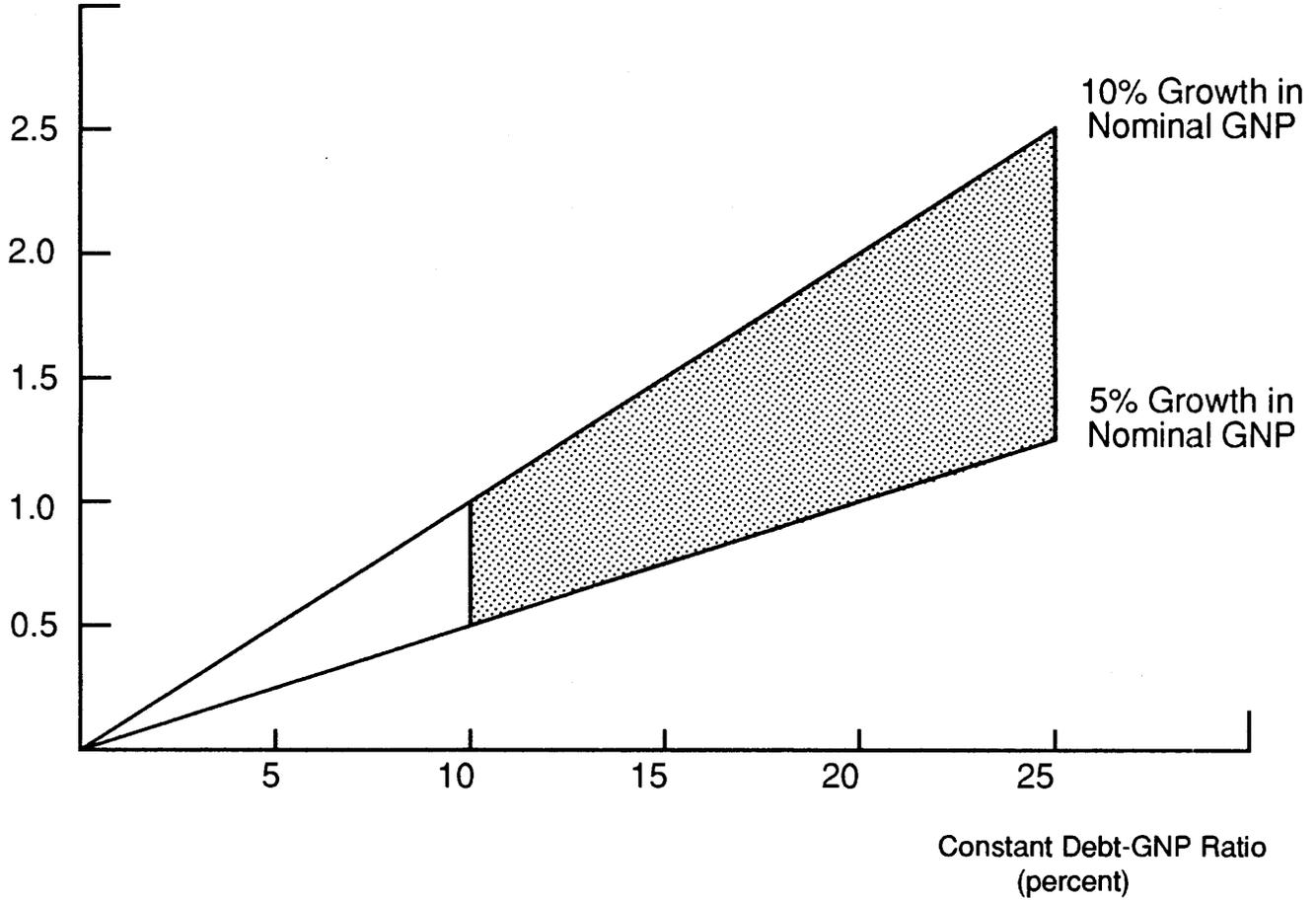
Closing the gap

Feldstein and Horioka (1980) find a substantial degree of correlation between a country's domestic saving and domestic investment rates over the medium term and argue that this finding means that capital is not very mobile across national borders. Based on the Feldstein-Horioka study, one might argue that the question of how to close the U.S.

Figure 2

"Sustainable" Current Account Deficits

Current Account Deficit-GNP Ratio (percent)



current account deficit is not particularly interesting since the supposed international immobility of capital means that significant imbalances between domestic saving and domestic investment cannot persist. However, this argument is not compelling without an explanation of the mechanism by which current accounts tend to average near zero over time. To date, the literature has not provided a convincing explanation of this apparent empirical regularity. Even more worrisome is the fact that many of the explanatory stories offered by the literature entail explicit policy responses to widening current account imbalances that have the effect of keeping the current account balance near zero over time.¹¹ If indeed the Feldstein-Horioka proposition reflects past government policies of targeting on the current account, one cannot rely on the empirical regularity to exert itself and close the U.S. trade gap without an explicit policy mechanism or response.

In 1988, the U.S. nominal merchandise trade deficit was 2-1/2 percent of GNP. Econometric models can be used to get a rough indication of what adjustments in exchange rates and/or growth rates might be required to reduce the U.S. trade deficit from 2-1/2 percent of GNP to zero over a given time period. However, the models may not adequately reflect trade responses to large movements in exchange rates such as those experienced in the 1980s. In fact, some calculations of international competitiveness suggest that, based on purchasing-power-parity considerations alone, the dollar might not need to decline from its 1988 level in order eventually to close the U.S. trade deficit. Moreover, any

11. See Dooley, Frankel, and Mathieson (1987) for a survey of the proposed explanations -- including one of their own -- of the Feldstein-Horioka results.

substantive discussion of closing the U.S. external deficit requires attention to how changes in the proximate determinants of trade flows are put into place. For example, the different ways in which an exchange rate adjustment can be brought about can have different implications for economic activity and the external accounts, as witnessed earlier in the decade when first tight monetary policy and then expansionary fiscal policy exerted upward pressure on the dollar, with radically different implications for GNP growth and the U.S. current account.

In order to eliminate the U.S. trade deficit -- and the corresponding rest-of-the-world trade surplus -- more spending has to be directed toward U.S. exports and/or less toward U.S. imports. Such an outcome can be accomplished in either of two ways (or some combination of the two): "expenditure-changing" policies or events that affect the level of aggregate demand, and "expenditure-switching" policies or events that affect the composition of demand. The former is not very attractive -- by itself -- since it would involve a slowdown in U.S. economic output growth, which in turn would be responsible for the reduction in U.S. demand for imports. Lower U.S. demand also would imply a slowdown in foreign economic activity unless there were compensatory changes in foreign demand such as expansionary macroeconomic policy measures abroad. In fact, the reduction in U.S. spending conceivably could be combined with an increase in foreign demand sufficient to close the U.S. deficit without much of an effect on the pace of economic activity in the United States. Macroeconomic stimulus in foreign industrial countries might be appropriate, but just as the expenditure-reduction option involves serious risks of recession in the United States, expansion of foreign demand -- at least on the scale likely to be necessary to close the U.S. external

deficit -- involves inflation risks in the key foreign industrial countries.

The more attractive alternative is that of expenditure switching -- U.S. residents and foreigners are induced to direct more of their total spending (domestic demand) on U.S. products. The expenditure-switching option would boost domestic demand (that is, consumption plus domestic capital formation plus government spending) relative to output in foreign countries and reduce domestic demand relative to output in the United States. In principle, coupled with suitable changes in aggregate demand levels, expenditure switching need not affect the level of output in either the United States or its trading partners.

Any redirection of demand almost certainly would entail a reallocation of productive resources (labor and capital) within the economies involved, and such reallocations might well be painful in the short run. Macroeconomic policy can ease the transition during which foreign economies become less dependent on U.S. demand for their products, but nothing can negate the need for adjustment in the rest of the world if the United States is to adjust its external position. The simple fact is that by definition closing the U.S. external deficit means that the trading partners of the United States -- taken as a group -- have to close their external surplus.

A switch in world expenditures toward U.S. products can be achieved by a real depreciation of the dollar, that is, a nominal depreciation of the dollar in excess of the inflation rate differential. Another way of implementing an expenditure-switching policy is through trade policy -- the imposition of tariffs and quantitative restrictions on trade flows. However, trade policy typically distorts the allocation of

resources, and even a system of import tariffs and export subsidies that just duplicated the effects of an exchange rate depreciation almost certainly would evoke foreign retaliation.¹² Moreover, with flexible exchange rates, the tariffs and subsidies could be offset by a strengthening of the exchange rate in reaction to the trade policy actions. Thus it would appear that the preferred method for switching expenditures toward U.S. products is by means of a real depreciation of the dollar. How the depreciation takes place has important implications for subsequent economic developments.

One approach to the adjustment in the U.S. external accounts is to let international financial markets dictate its timing; that is, accept whatever exchange rate is needed to equilibrate private supply and demand at any particular moment on the markets for foreign exchange. This approach has some appeal, but it carries a significant risk: the eventual decline in the dollar could be precipitous, even by recent standards, and perhaps excessive as well. Such an outcome could exert a substantial amount of upward pressure on U.S. prices over a fairly short period and create a situation that might elicit a contractionary policy response on the part of U.S. policymakers. (Symmetrical problems could arise abroad.) Thus, inflation and recession, along with external adjustment, might result owing to the sudden nature of the exchange rate fall. A more gradual depreciation of the dollar, which also is a possible market-dictated outcome, would lower the chances of the inflation/recession occurring, since the price-level effects of the exchange-rate adjustment

12. Efforts to open foreign markets to U.S. exports would aid the adjustment process, but closing U.S. markets to foreign goods would be, if anything, counter-productive even in the short run because of the retaliatory actions likely to be taken in foreign markets.

could be assimilated more smoothly by the economy, without the disruptive effects of a sudden burst in the rate of change of prices.

Another approach to U.S. external adjustment is to use macroeconomic policy to "manage" the pace and impact of the adjustment process. Presumably some combination of macroeconomic policy measures in the United States and other countries (for example, a tightening of U.S. fiscal policy, an easing of U.S. monetary policy, and expansionary fiscal actions abroad) could in principle produce a lower dollar, an undisturbed level of economic activity, and a stronger U.S. trade balance. It is easy to exaggerate the precision with which a change in the macroeconomic policy mix could be used to influence the external adjustment process, but the idea would be to put the real exchange rate on a path that would be likely to be less disruptive than the path determined by the financial markets alone. This approach is especially appealing if the macroeconomic policy changes are viewed as desirable in their own right in any case.

As mentioned earlier in this paper, analyses of the causes of the U.S. current account deficit have tended to focus on the U.S. fiscal deficit as a primary factor. U.S. fiscal policy adjustment (contraction), undertaken for its own sake, would appear to represent a major channel through which the U.S. external deficit could be reduced. If, however, a U.S. fiscal correction proves to be unwarranted or infeasible on its own merits, it is not clear if any other policy measures aimed at the external imbalance would be appropriate.¹³ Under such circumstances, the market-dictated path of the exchange rate might win by default.

13. The need for U.S. fiscal adjustment, independent of the problem of the current account deficit, is another matter and is beyond the scope of the present paper.

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