

Financing the U.S. Current Account Deficit

Over the past two years, the U.S. current account—the broadest measure of a country's international trade in goods and services—has moved into heavy deficit. That deficit is continuing to grow rapidly.

The sharp rise in the deficit—from roughly \$10 billion in 1982 to about \$40 billion last year, and to an estimated \$80-100 billion per year this year and next—has understandably raised many questions about whether and, if so, how deficits of these magnitudes can be financed.

This article has three purposes:

- To review the simple analytics of current account financing that apply to any country;
- To compare the pattern of financing for recent U.S. deficits with past financing patterns of this country and other industrial countries; and
- To suggest how the financing pattern might change under a few plausible scenarios (but not predictions) about the future.

It's worth anticipating a few of the main conclusions:

(1) To ask *whether* a current account deficit can be financed is basically the wrong question. If a current account deficit can't be financed, it can't be incurred in the first place. The real question is under what financial market conditions and with what mix of relative interest rates and exchange rates will the financing be forthcoming.

(2) The United States does have financing options that

virtually no other country has because of the dollar's unique international role as the principal currency that foreign official monetary institutions hold in their reserves. But during the past two years, when the current account deficit has been rising rapidly, the United States hasn't been relying on financing of the type ordinarily associated with the dollar's special role—increases in official reserves. Instead, the deficit has primarily been financed through the U.S. banking system, by drawing in essentially private short-term funds from abroad, and by various unrecorded capital inflows.

(3) There is no *necessary* point at which the U.S. current account deficit can no longer be readily financed; in that sense, the present pattern of financing is, at least in principle, sustainable.

(4) But there is ample precedent in practice to support the view that the present financing pattern, with its heavy reliance on foreign acquisition of short-term dollar assets, is obviously vulnerable to shifts in how foreign investors perceive U.S. inflation trends and prospects for movements in dollar exchange rates. Moreover, an important part of the recent financing pattern is foreign-trade-related, an incidental by-product of the rapid surge in U.S. imports. As U.S. import growth slows, this incidental financing must also tend to decelerate.

(5) Even so, an abrupt shift in financing patterns is hardly likely to force the United States to suffer a sudden, sharp cutback of imports—the usual adjustment other countries make in the face of obstacles to financing large current account deficits.

Methods of Current Account Financing

There are many channels through which current account deficits may be financed. Generally, they are distinguished according to who provides the financing and what type of instrument is involved. Six distinctions are natural:

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- between the private sector and government;
- between domestic residents or institutions and foreign residents or institutions;
- between banks and other institutions;
- between short-term instruments and long-term instruments;
- between local currency instruments (e.g., dollars for the United States, yen for Japan) and foreign currency instruments (e.g. yen, marks, or Swiss francs for the United States); and
- between changes in existing asset holdings and changes in levels of debt.

A couple of examples illustrate how these distinctions work:

1. A U.S. domestic private sector company sells a factory it owns in France, converts the French francs it gets into dollars and uses the proceeds in its U.S. domestic operations. That transaction will (inadvertently) help finance a U.S. current account deficit.
2. A Latin American government-owned development bank borrows dollars from private commercial banks in London for six months. It lends those dollars to the domestic telephone company to enable it to finance a shipment of switching equipment. That will help the Latin American country finance its current account deficit.

The problem with applying this framework is that it leads to literally dozens of possible combinations, even without bringing in the role of international organizations like the International Monetary Fund (IMF) or the World Bank. What's necessary then is to simplify the analysis in a way which is instructive and which fits well with the data available in published balance-of-payments statistics.

The most useful starting point is to separate private from official capital flows and identify the main components of each. *Private* flows incorporate:

- *Net flows through the banking system.* These flows represent changes in bank assets and liabilities with respect to the rest of the world. To finance a deficit, either external assets must be reduced or liabilities to foreigners must be increased.
- *Net direct investment.* When foreigners bring in funds to establish businesses in domestic markets, acquire existing domestic companies or commercial real estate, or add to their current holdings, the result is inflows which offset part of a current account deficit. Alterna-

tively, domestic companies can reduce their ownership stake in operations abroad, as in the first example above.

- *Other private capital.* This category includes net portfolio investment, that is, the difference between net purchases of domestic stocks and bonds by foreign investors and net purchases (or sales) of foreign securities by domestic investors. It also includes suppliers' credits (usually short-term, but sometimes long-term) to finance foreign trade, other than those trade credits granted by the banking system.¹

It's illuminating to analyze private capital movements in the following way: Some of these flows are best thought of as *incidental financing*, because they are essentially a by-product of trade decisions by exporters and importers. Normally, those decisions depend on the relative strength of demand in different national markets. So, for example, when U.S. market demand is strong and exporters abroad are eager to bolster sales, because of weak demand elsewhere, sales to the United States can be routinely financed by the exporter or the exporter's bank. The financing is incidental in the sense that without the underlying trade transaction the financing (and the associated capital inflow) wouldn't have happened. In other words, the current account deficit would have been smaller, but the capital account *surplus* would have been smaller, too.

By contrast, most other private capital flows are best thought of as *incentive-driven*. They reflect the more or less continuous management of portfolios by international investors and of balance sheets by domestic companies. That process is highly sensitive to such factors as relative interest rates, exchange rates, stock market trends, property values, and commodity price developments. Flows of funds through the banking system, while primarily involving short-term funds, are also incentive-driven. They often respond to even very slight differences in interest rates between, say, the U.S. domestic money market and the Eurodollar market. Eventually, even incidental financing flows become incentive-driven as exporters abroad shift their focus from generating new sales to managing the revenues that they earn from those sales.

The second broad category, *official flows of funds*, is made up of two important elements. First is the change in official reserves. Drawing down official reserves is an important source of current account financing in many countries for short periods of time. The other main element is the change in official borrowing abroad. The borrowing—by the central government, the central bank, or certain

¹Borrowing abroad by domestic nonfinancial companies to raise funds to use at home is tricky to categorize. Sometimes it appears in direct investment, and sometimes in the "other" category, depending on the specifics of the transaction.

public sector enterprises—can be from private commercial banks, from other governments, or from international organizations like the IMF or World Bank.

The concepts of incidental and incentive-driven financing are often applicable to official, as well as private, financing flows. To the extent that public sector enterprises (a public power company is a good example) are able to finance imports by suppliers' credits from the foreign exporter, incidental financing of the current account occurs. As for incentive-driven flows, public sector enterprises can choose to seek funding abroad because it appears to be cheaper than domestic borrowing. When the decision to borrow abroad is arrived at by the same sort of financial analysis as a private firm might go through, the resulting capital inflow can be described as incentive-driven.

But most official financing is *policy-related*. It is undertaken to avoid the exchange rate and interest rate consequences that would arise if the current account deficit financing had to be left to the private sector. Policy-related financing mechanisms take a variety of forms. They range from discretionary exchange market intervention (and, therefore, discretionary use of reserves), to government directives telling public sector enterprises to borrow abroad regardless of the economic costs or risks, all the way to structural adjustment programs with the IMF providing official balance-of-payments credits to the country. At one time or

another, virtually all countries, including the United States, have undertaken foreign exchange operations that directly or indirectly provided current account financing.

To conclude this discussion of the analytics of current account financing, it's important to be aware of the major impediments to applying these basic concepts to the real world. In principle, all capital account items must sum up to a surplus that exactly equals the current account deficit. In reality, data collection is incomplete, partly because of actions taken to avoid official reporting requirements. The difference between the reported current account balance and the reported capital account balance is labeled *errors and omissions*.² For the United States, it has been a large,

²Some analysts feel that a sizable portion of U.S. errors and omissions reflects unreported current earnings on international trade in services and unreported interest and dividends. Federal Reserve Bank of New York economists feel that they reflect mainly unrecorded capital flows for two reasons:

First, comparing data for the countries *paying* for international services with relevant data for the United States and other industrial countries suggests that the under-reporting problem is considerably greater for the other industrial countries than for the United States.

Second, U.S. errors and omissions tend to follow a pattern: They show large and growing inflows when relatively well-reported banking system transactions show a net outflow and when relatively less well-reported direct and securities investments are increasing. By contrast, when the well-reported banking flows turn around, while less well-reported direct and securities investments diminish, errors and omissions usually diminish too.

The conclusion: errors and omissions behave like capital flows.

Table 1

Decomposition of the U.S. Balance of Payments

In billions of dollars; seasonally adjusted annual rates (+ is an inflow, - is an outflow)

	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984-1
Balance on current account ...	1.9	18.1	4.2	-14.5	-15.4	-1.0	1.9	6.3	-9.2	-41.6	-19.4
Net private capital	-11.4	-20.8	-15.1	-18.2	-14.3	18.4	-5.2	-2.1	16.9	42.4	24.9
Net bank	-3.5	-12.9	-10.4	-4.7	-17.5	6.4	-36.1	-42.0	-45.1	23.7	9.4
Net direct investment	-4.3	-11.6	-7.6	-8.2	-8.2	-13.3	-2.3	13.5	19.6	6.4	-1.3
Other private capital net	-2.2	-2.2	-7.7	-3.3	-1.2	-0.1	8.2	4.1	9.6	3.0	3.2
Errors and omissions	-1.5	5.9	10.5	-2.0	12.5	25.4	24.9	22.2	32.9	9.3	13.5
Net official	9.4	2.7	10.9	32.7	29.8	-18.5	2.2	-5.3	-7.8	-0.9	-5.5
Industrial countries	*	*	*	28.5	28.9	-21.0	-6.1	-12.5	-5.3	11.1	-1.3
Other	*	*	*	4.2	0.9	2.5	8.3	7.2	-2.5	-12.0	-4.2
U.S. assets	-1.1	-4.3	-6.8	-4.1	-3.9	-4.9	-13.3	-10.3	-11.1	-6.2	-2.6
Industrial countries	*	*	*	-0.2	-5.5	0.2	-7.0	-1.0	1.2	1.0	-0.4
Other	*	*	*	-3.9	1.6	-5.1	-6.3	-9.3	-12.3	-7.2	-2.2
U.S. liabilities	10.5	7.0	17.7	36.8	33.7	-13.7	15.5	5.0	3.3	5.3	-2.9
Industrial countries	*	*	*	28.8	34.3	-21.1	0.9	-11.5	-6.5	10.1	-0.9
Opec	*	*	*	6.4	-1.1	5.5	12.8	13.1	7.3	-8.6	-2.5
Other	*	*	*	1.5	0.1	1.9	1.8	3.4	2.5	3.8	0.5
SDR allocations	0	0	0	0	0	1.1	1.2	1.1	0	0	0

*Not available.

Source: U.S. Department of Commerce.

and highly variable, component of the balance-of-payments statistics. In this article, errors and omissions are treated as unrecorded private and official capital flows because they appear to fluctuate over time more like capital flows than like current account transactions. But admittedly, by their very nature errors and omissions cannot be specified with certainty.

How have U.S. current account deficits been financed?

Past financing patterns

In only one other time period besides the present did the United States have a substantial current account deficit: 1977 and 1978, when the deficits added up to about \$30 billion. The statistics show (Table 1) that those deficits were financed very differently from the current ones. In 1977 and 1978, the balancing item was a very substantial inflow reflecting net official transactions: purchases of dollars through foreign exchange market intervention by the central banks of the main industrial countries. The official inflow also reflected actions the U.S. authorities took to support the dollar.

In contrast, net private capital movements were entirely adverse in every single category during 1977-78: Banking transactions yielded an outflow of over \$20 billion. Net direct investment produced an outflow of over \$16 billion. Securities transactions of various types yielded an outflow of nearly \$5 billion. The only inflows came from unrecorded net positive errors and omissions. That is, not only did the United States *not* finance its current account through private capital inflows, but it even had to finance private capital outflows. For 1982 to the present, the pattern is completely different.

Recent current account financing patterns

The United States began to run a current account deficit in 1982. Unfortunately, for that year, the sources of offsetting financing cannot be identified. The \$9.2 billion current account deficit, together with large net official capital outflows and an enormous \$45 billion outflow through the banking system, was essentially offset by huge unrecorded capital flows. To be sure, sizable private capital inflows were identifiable. Foreigners bought, on balance, substantial quantities of stocks and bonds; foreign companies made substantial direct investments. But far greater amounts of flows went unrecorded. In other words, errors and omissions, amounting to \$33 billion, financed the current account deficit and a lot besides.

Last year, the financing pattern of the enlarged \$41.6 billion current account deficit was very different. Flows into the U.S. stock and bond market continued. Moderate amounts of net inward direct investment also continued. But by far the most important element was a new one: a massive switch in the direction of banking transactions between the Eurodollar market and the domestic money markets.

That swing—from a \$45 billion outflow through the banking system in 1982 to \$24 billion inflow in 1983—accounted for more than half the total financing of the 1983 deficit. In other words, the banking sector provided far more of an increase in financing than the increase in the current account deficit alone required. This turnaround is all the more impressive considering that there had been net outflows through the banking system for every year but one over the past decade, resulting in a cumulative outflow of nearly \$170 billion since 1974.

First quarter 1984 statistics are also available. The current account deficit of \$19.4 billion was again financed importantly by net bank inflows amounting to \$9.4 billion. Reported securities transactions yielded a net inflow of \$3.3 billion. By contrast, official capital movements produced a net outflow of \$5.5 billion; net direct investment swung to a \$1.3 billion outflow. The balancing item, errors and omissions, turned out to be an inflow of \$13.5 billion.³

What components of bank assets and liabilities have changed to produce this large-scale swing?

Banks make international financial transactions for their own portfolios and, as fiduciaries, for their customers. For instance, U.S. money market mutual funds invest in the Eurodollar market and hold the physical instruments with a U.S. bank. Changes in these holdings are reported by the custodian bank as part of the balance-of-payments data collected by the U.S. Treasury. The largest part of the movement between 1982 and 1983 came through changes to the banks' own portfolios. New claims on foreigners (mainly new loans to foreign enterprises, governments, and banks) dropped precipitously at a time when the buildup of foreign deposits in U.S. banks remained fairly strong.

Some background on these asset-liability developments might be helpful. Banks located in the United States (and that includes U.S. agencies, branches, and subsidiaries of foreign banks, too) build up their external assets in three ways. First, they lend money to their own branches abroad, who in turn lend the money to foreign banks, companies, and governments. Second, U.S. banks also build up claims on unaffiliated banks abroad when, for example, a New York bank lends funds to a German bank subsidiary in Luxembourg—a typical transaction in the Eurodollar market. Finally, banks lend money from their domestic offices, including their recently established International Banking Facilities (IBFs), to foreign customers. All of these transactions represent capital outflows. By contrast, banks build up their external liabilities by taking deposits from banks and other foreigners. That buildup represents a capital inflow.

In 1982, banks located in the United States increased

³That's for the time being. Some of the as yet unrecorded inflows may reflect borrowing abroad by U.S. companies from non-U.S. banks and it is conceivable that data on these transactions will be reported, at least in part, in due course.

Table 2

Net Private Bank Flows

In billions of dollars (+ is an inflow; - is an outflow)

Flows	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984-1
Net bank	-3.5	-12.9	-10.4	-4.7	-17.5	6.4	-36.1	-42.0	-45.1	23.7	9.4
Net dollar	-4.6	-12.4	-10.4	-4.0	-18.1	5.8	-35.9	-39.9	-43.7	23.6	14.9
Net own dollar	-4.7	-12.2	-10.4	-4.1	-16.8	14.0	-30.6	-34.9	-40.4	16.9	14.9
Own dollar claims	-17.4	-13.1	-20.1	-10.2	-33.4	-18.4	-38.6	-74.3	-104.1	-32.0	4.1
1) On banks	-11.9	-10.2	-16.7	-8.8	-23.4	-6.3	-26.9	-51.6	-77.3	-18.1	2.1
2) On other foreigners	-5.5	-2.9	-3.4	-1.4	-10.0	-12.1	-11.8	-22.7	-26.8	-13.9	2.0
Own dollar liabilities	12.7	0.9	9.7	6.1	16.6	32.4	8.1	39.4	63.7	48.9	10.8
1) To banks	10.6	-0.7	7.1	4.5	15.3	30.7	7.2	33.8	45.1	35.5	8.2
2) To other foreigners	2.1	1.6	2.6	1.5	1.3	1.7	0.9	5.5	18.6	13.3	2.6
Net custody dollar claim	0	-0.2	0	0.1	-1.3	-8.2	-5.3	-5.0	-3.3	6.7	0
Net foreign currency	-0.4	-0.4	-0.2	-0.4	-0.2	0.5	-0.3	-1.0	-1.1	-0.5	-0.2
Residual	1.5	-0.1	0.2	-0.3	0.8	0	0.1	-1.1	-0.3	0.6	-5.4

Source: U.S. Treasury and U.S. Department of Commerce. Figures prior to April 1978 are FRBNY staff estimates based on data with different categories than shown here.

their claims on foreigners by more than \$100 billion. Around half of this was an increase in claims on unaffiliated banks, principally those operating in the Eurodollar market. On the other side of the balance sheet, banks' external liabilities to foreigners increased by a substantial \$64 billion. Nevertheless, the net changes in bank assets and liabilities produced a capital outflow of some \$40 billion.

In 1983, the pattern was quite different. The increase in bank liabilities to foreign customers slowed a little, to just under \$50 billion. But new claims on foreigners shrank across the board, especially new claims on unaffiliated banks, which fell to virtually zero. Overall, these movements produced a capital *inflow* of \$17 billion last year.

A large shift in banks' custody accounts reinforced the shift in their own portfolios. Transactions for customers produced a net outflow of around \$3 billion in 1982 but a net *inflow* of nearly \$7 billion in 1983. Most of that swing represented a reduction of custody claims (for example, a reduction in Eurodollar CDs held in custody by banks located in the United States on behalf of money market funds).

What caused the turnaround in banking flows?

Mainly, the pace of economic recovery in the United States—and the associated demand for public and private sector credit—made U.S. credit markets taut relative to the Eurodollar market. So, relatively ample liquidity in the Eurodollar market offered the U.S. banking system a comparatively inexpensive source of short-term funding to support domestic credit expansion. The key incentive for this was that interest rates within the United States, notably on instruments such as negotiable CDs, have tended to move

upward compared to rates in the Eurodollar market. The direction of banking system flows corresponds fairly closely to this interest rate relationship.

Therefore, the question of why the banking flows shifted so much becomes one of why the Eurodollar market became so liquid. That answer is more complex.

To begin with, part of the ample liquidity stems from world exporters (to a great extent, *Asian* exporters) depositing large amounts of dollars earned from the spiraling U.S. trade deficit. This activity constitutes incidental financing of the current account deficit, as discussed earlier.

But incidental financing is a short-term phenomenon. The true question is why exporters have decided to *stay* in dollars rather than convert export earnings into local currency or into other major currencies. The answer is that they perceived a strong incentive to remain in dollar investments, albeit of short-term maturities. Relative interest rates on dollar-denominated assets remained attractive, both in nominal and in real terms throughout 1983 and into this year. That relative yield advantage has been a clear motivation for remaining in short-term dollar assets.

Yet, clearly, there was a reluctance to invest earnings in longer-term U.S. securities or equities. Views on the course of dollar exchange rates conflicted. Predictions were frequently made that dollar exchange rates would decline as a result of burgeoning U.S. current account deficits. But as time went on, and these predictions failed to be realized, expectations about dollar exchange rates came to be increasingly influenced by factors other than current account considerations. In short, the placement of dollar earnings in short-term deposits reflected a positive attitude toward short-term yields and dollar exchange

rates prospects but a more "wait-and-see" attitude toward longer-term developments.

Another major reason why the Eurodollar market remained so liquid was that the pace of economic expansion in Europe lagged behind that of the United States. Accordingly, credit demands were weaker there than here. In fact, as expansion got underway in countries such as Germany, some companies tended to use improved cash flows to repay short-term debt rather than to borrow. This not only relieved pressure on their own domestic credit markets but on the Eurocurrency markets as well.

Current account deficit financing in other industrial countries

The contrast between the two U.S. experiences shows how different current account financing can be. It depends intimately on the attitudes and expectations of private investors and private companies. To put the U.S. experience into perspective, it is also useful to compare it with that of other major industrial countries. Here, perhaps the most interesting distinction—apart from private versus official flows—is between how much of a country's current account financing is in its own currency and how much is in other currencies.

With that distinction in mind, the clearest lesson from experience is that the United States has been singularly able to finance its current account deficits in its own currency, drawing in either private or official capital flows. In fact, in the case of the United States, what foreign currency-denominated movements there have been generally have been outflows—net direct investment abroad and acquisition of foreign currency-denominated securities. Foreign currency-denominated inflows have been rare, most notably the issues of what have become known as Carter bonds during the dollar support program of 1978-79.

Going through recent episodes in other countries, it's apparent that both Germany and Japan, the two countries whose currencies are widely held in official foreign exchange reserves, have been able to finance current account deficits partly in local currency—but not to the extent the United States has (Table 3). France has been able to finance a moderate portion of its current account deficits in French francs, but on a much smaller relative scale than Germany and Japan. On the far side of the spectrum, countries like Italy and Denmark, which have gone through prolonged periods of current account deficit and whose currencies are not held in international reserves, have mainly financed their current account deficits in foreign currencies. (That is true for nearly all nonindustrial countries, too.)

The other feature differing considerably among countries is the role of each country's banking system in financing current account deficits (Table 4).

In the United States, half the time inflows through the banks have offset current account deficits; for the other half,

outflows through the banks have magnified the financing requirement. For the other major industrial countries, banks have usually, but not always, generated net inflows. In almost half the cases of large deficits, banking inflows have accounted for an important share of current account financing. There's no way of knowing what portion was incentive-driven or what part was in response to government measures or other encouragement. But it's worth noting that in several cases (the U.K. in 1973, Italy in 1976 and 1980, and France in 1980) banking inflows mitigated the need for official financing. By comparison, when banking flows swelled financing requirements in these other countries, as in the United States during 1978, official financing often needed to be substantial.

Outlook for continuing inflows

What's unique about the current account financing pattern of the United States is that no other country in memory has managed to finance deficits on the order of 2 to 3 percent of GNP on a continuing basis—and in its own currency. There are certainly many cases of large deficits that have been financed, even for extended periods. But those were financed in foreign currencies, so the exchange risk was borne by the deficit country itself, not by the foreign saver. In the case of the U.S. financing pattern, however, the exchange risk is mainly being absorbed by foreign investors.

Therefore, the willingness to keep taking additional foreign exchange risk is the key for the future current account financing pattern. And that directly relates to expectations about the dollar. The size of the impending current account deficit is by now pretty well known, with only some modest disagreements among various experts on its precise magnitude. The continuation of a deficit on an order of \$80-100 billion would not occasion any surprise in the markets.

What would be a source of surprise? A number of potential shocks could have a serious impact on confidence:

- First, a sudden rise in U.S. inflation to well above current rates;
- Second, a major adverse reassessment by foreign investors of the medium to longer-term consequences of the likely course of U.S. fiscal and monetary policies;
- Third, a sharp improvement in investment opportunities outside the United States, that is, a relative rise in the real rate of return on foreign currency assets; and
- Fourth, some major relaxation of political and economic uncertainties in several regions of the world, since those tensions have contributed to shifts of capital to the United States for safety motives.

Any of these factors could easily discourage foreign

investments in dollar assets. But the dynamics of the subsequent outcome are paradoxical. That's because an abrupt deterioration of *intended* capital movements almost certainly would be associated, *ex post*, with the same magnitude or larger—but certainly not smaller—*actual* capital flows into the United States.

The reason is that in the very short term the current account deficit is more or less fixed. It responds to current and lagged income growth in the U.S. and abroad as well as to past exchange rates and price trends. So, there is very little scope for adjustment in the size of the current account deficit over the course of a few weeks or even a few months. It takes a number of quarters for even a relatively substantial depreciation of a currency to pay off in a meaningful improvement in a current account deficit. And what's worse, to the extent that some trade is denominated in foreign currencies (which it is, to a limited extent, for U.S. imports) there would be a small adverse valuation effect. This would make the current account deficit even larger right away, were the dollar to go down and raise the cost of buying foreign currency.

Therefore, in the short term, the current account is as large as or larger than it was before the erosion in foreign investment intentions. This means that to compensate actual capital inflows must be as large as or larger than before. And on the assumption that there is no substantial change in official flows, for instance through a stepped-up pace of

foreign exchange intervention, those inflows would have to come from the private sector.⁴

How is the capital inflow sustained even in the face of a hypothesized sharp decline in foreign investment intentions? The answer is that exchange rates, and interest rate differentials, and profit opportunities more generally between the U.S. and abroad must move in such a way as to make new investors willing to step in (and uncertain investors willing to stay in) to a greater extent than existing investors in dollar assets are moving out. Normally, that can only happen if the movements in exchange rates and/or interest rate differentials are substantial. Enough of a fall in the currency is needed to convince at least some investors that the sharp movement was overdone and that the next movement in the dollar could only be upward. Therefore, they would be willing to acquire dollar assets that other foreigners are selling and that are being generated by the ongoing trade deficit.

Alternatively, the exchange rate movement may be relatively small but then the shift in interest rate differentials would have to be relatively large. An intended shift, for example, from Eurodollar deposits to Euro-Deutsche mark deposits, reflecting the change in investor perceptions, if substantial enough in size, could lead to a downward movement in Euro-Deutsche mark deposit rates and an upward movement in Eurodollar rates. If the monetary authorities do not take steps to inhibit the effects of those movements on domestic money markets and, therefore, domestic interest rates in Germany and the United States, the movement in interest rate differentials would be able to counter the shift in investment intentions and reinstate favorable incentives for other investors to move back into dollar assets.

In sum, the exchange rate must move enough to give at least some international investors reason to believe that the next movement will be upward; or interest rate differentials and profit opportunities must move enough to reinstate incentives for purchasing and holding dollar assets; or some combination of both must happen.

The problem is how much, empirically, those movements have to be. A further question is whether the resulting configuration of interest rates and exchange rates is likely to become part of a chain of subsequent rate adjustments—a kind of ratchet effect or cascading of rates. The best example of that scenario is when the sharp downward movement in the exchange rate leads to a new and far more pessimistic view of the inflation potential, touching off speculation in commodity, real estate, and other asset markets. The inflationary consequences of that activity could perpetuate the erosion of confidence and require further sharp interest rate or exchange rate adjustments

⁴Any other assumption would be unfair because it would change the character of the analysis.

Table 3

**Current Account Deficits 1975-82:
Shares Financed by Domestic Currency Flows**

Country	75 percent or more	25 percent to 75 percent	less than 25 percent
United States	1977 1978 1982	*	*
Germany	1979 *	1980 1981	*
Japan	1975 1980	*	1979 *
United Kingdom	*	1975	1976
France	1980 1977	1976 *	1981 1982
Italy	*	1975 * * *	1976 1980 1981 1982
Denmark	*	1975	1976-82

*Not applicable.

Source: Estimated from International Monetary Fund, *Balance of Payments Statistics Yearbook*, Volume 34, Part I (1983).

Table 4

Financing of Large Current Account Deficits in Major Foreign Industrial Countries

Country	Year	Current Account Deficit		Sources of Finance as Percent of Total Financing			
		\$ billions	As % of GNP	Banks	Public sector borrowing	Official reserve assets (net)	Other
France	1974	-3.5	-1.3	9.6	17.5	1.7	71.2
	1976	-3.4	-1.0	-40.0	7.2	84.4	48.4
	1980	-4.2	-0.6	86.2	15.4	-157.1	155.5
	1981	-4.8	-0.8*	116.9	34.5	79.1	-130.5
	1982	-12.1	-2.2*	-21.3	30.0	30.2	61.1
Germany	1979	-6.2	-0.8	192.9	20.0	57.3	-170.2
	1980	-16.0	-2.0	-33.8	111.5	64.8	-42.5
	1981	-5.7	-0.8	-67.7	161.8	48.6	-42.7
Italy	1973	-2.5	-1.6	2.2†	40.0	-16.5	74.3
	1974	-8.1	-4.7	9.3†	45.2	13.5	32.0
	1976	-2.9	-1.5	109.0†	18.7	-64.9	37.2
	1980	-9.8	-2.5	81.5†	37.2	-9.5	-9.2
	1981	-8.6	-2.5	-17.0†	56.9	4.9	55.2
	1982	-5.8	-1.7	-39.8†	37.8	80.5	21.5
United Kingdom	1973	-2.4	-1.3	138.6	5.5	-22.5	-21.6
	1974	-7.7	-3.9	24.8	52.6	-3.3	25.9
	1975	-3.5	-1.5	24.7	13.9	41.8	19.6
Japan	1974	-4.7	-1.0	167.8	21.4	-26.3	-62.9
	1979	-8.8	-0.9	-3.9	11.0	151.2	-58.3
	1980	-10.8	-1.0	119.3	60.8	-47.0	-33.1

*Percent of GDP. GNP estimates not yet available.

†Short-term only.

Sources: Estimated from IMF *Balance of Payment Statistics* and *International Financial Statistics*.

later on in order to attract the necessary capital inflow.

To conclude, the U.S. current account deficit—and the likelihood it will continue indefinitely—raises a valid concern about future private-sector financing. In principal, the pattern can be sustained, so long as sufficient interest rate, exchange rate, and profit incentives, along with an essential underpinning of market confidence, are maintained. But this

is uncharted territory. No other country has financed such a large deficit in the private capital markets for so long in its own currency. All old capital inflows have to be retained; there is no room for any net diversification out of the dollar by existing holders. And new capital inflows of \$80-100 billion a year must be attracted for some time to come. The challenge of securing such financing is imposing.

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