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# The U.S. Current Account: The Other Deficit

*By Craig S. Hakkio*

Considerable attention has been focused recently on the size and persistence of the U.S. budget deficit. Somewhat lost in the headlines is growing concern among many economists and policymakers over “the other deficit”—the U.S. current account deficit. Before 1982, U.S. current account deficits were small and temporary, as imports of goods and services rarely exceeded exports for an extended period. Since 1982, however, this deficit has increased significantly and many analysts expect the deficit to remain high well into the next century.

Large current account deficits pose both a short-term risk and a long-term problem for the United States. At present, the United States depends on a commensurately large flow of foreign capital into U.S. markets to finance the current account deficit. If market sentiment were to shift against the United States, higher interest rates and a lower exchange value of the dollar might be necessary to continue to attract foreign capital. A few years ago, this short-run risk was minimal. Today, with increasingly volatile short-term capital flows, such fears cannot be dismissed so easily.

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Current account deficits also pose a long-term problem for the U.S. economy. Because financing a chronic deficit requires the United States to borrow from abroad, future interest payments on this debt could lower the standard of living in the United States. Unfortunately, like the budget deficit, there is not an easy solution to the current account deficit. In fact, the two deficits are interrelated and reducing the current account deficit requires significant actions to reduce the budget deficit and to stimulate private saving in the United States.

This article examines the current account deficit and its implications. The first section discusses why the current account deficit became large and persistent in the early 1980s. The second section analyzes the short-term risk that current account deficits pose for the U.S. economy. The third section analyzes the long-term problem associated with a chronic current account deficit.

## THE U.S. CURRENT ACCOUNT DEFICIT

Before 1982, U.S. current account deficits were small and temporary. Deficits in some years were typically offset by surpluses in other years. Since 1982, though, the United States has experienced large and chronic current account deficits. Insight into their causes can be gained by studying the net

inflows of foreign capital used to finance the current account. Analysis of these capital flows suggests that low private saving and large government budget deficits in the United States are the key factors behind the large current account deficit.

### *The U.S. current account deficit: large and persistent*

The current account is the broadest measure of a country's trade with the rest of the world. The current account has four major components. The most familiar component is the merchandise balance of trade. A balance of trade deficit occurs when more goods are imported from abroad than are exported. A second component is the service account balance, which includes the net sale of insurance, real estate, shipping, and similar tradable services. A third component is the investment income balance, which equals interest payments to foreign investors minus interest receipts of domestic residents on foreign investments. The last component is unilateral transfers, which equal the value of gifts, foreign aid, and nonmilitary economic development grants. The sum of these four balances equals the current account balance.

The current account deficit changed in two ways starting in 1982. First, the size of the deficit increased significantly. Chart 1 shows the current account deficit from 1960 to 1994. In the top panel, the dotted line shows that the current account surplus averaged \$1.7 billion per year from 1960 to 1981. This small current account surplus turned into a large current account deficit beginning in 1981, averaging \$96.7 billion per year from 1982 to 1994. Since the U.S. economy was 13 times larger in 1994 than in 1960, the current account might have grown simply because the U.S. economy grew. But even after controlling for the size of the economy, the current account deficit increased significantly. The bottom panel of the chart shows the current account as a share of GDP. As in the top panel, the dotted line shows that from 1960 to 1981 the average

current account surplus was 0.3 percent of GDP; from 1982 to 1994, the average current account deficit grew to 2.0 percent of GDP.

The increase in the current account deficit was split among the four components of the deficit. Chart 2 shows the average size of each component during the 1960-81 and 1982-94 periods. As indicated, the increase in the current account deficit was mainly due to the deterioration in the merchandise trade balance. This is not too surprising since merchandise trade is about two-thirds of total trade.<sup>1</sup>

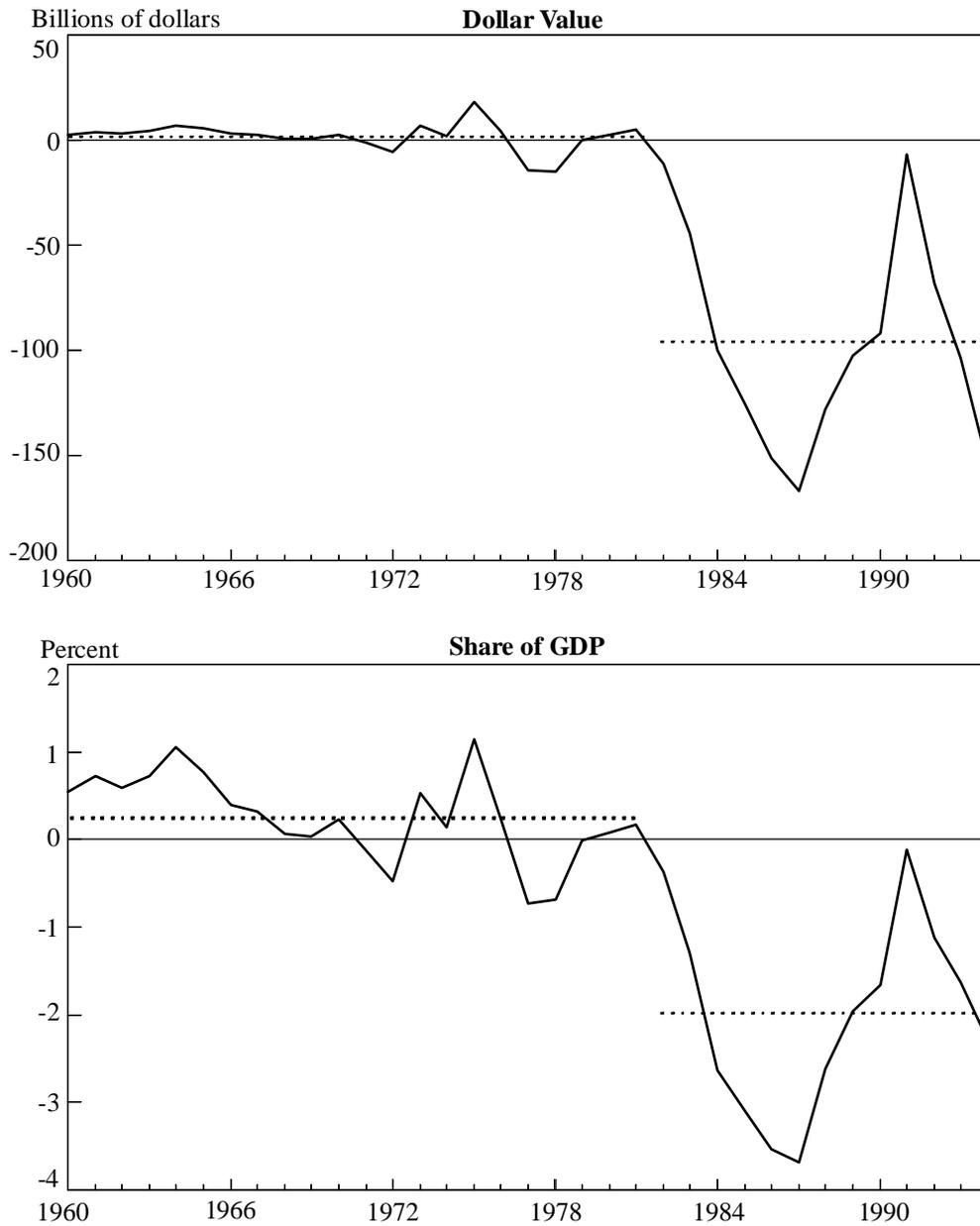
The second change was that the current account deficit became persistent after 1982. From 1960 to 1981, the current account was sometimes in deficit and sometimes in surplus. After 1982, however, the current account has been consistently in deficit. Moreover, analysts expect the deficit to continue for years to come. The International Monetary Fund projects a U.S. current account deficit of 2.4 percent of GDP from 1995 to 1999, and the Organization of Economic Cooperation and Development projects a deficit of 2 percent over the same period (IMF, p. 43, and OECD, p. 28). Data Resources, Incorporated, projects the current account deficit to average 1.8 percent from 1995 to 2019 (DRI, pp. A.48-49).

### *Net capital inflow: financing the U.S. current account deficit*

Insight into the causes of the deficit can be gained by looking at how the deficit is financed. In balance of payments terminology, net capital inflow is the financial counterpart of the current account deficit. Definitionally, the current account records all transactions involving goods or services flowing into or out of the United States, while the net capital account records all transactions involving capital flowing into or out of the United States.

For example, when a U.S. company borrows from abroad, foreign capital flows into the United States.

Chart 1  
U.S. CURRENT ACCOUNT DEFICIT



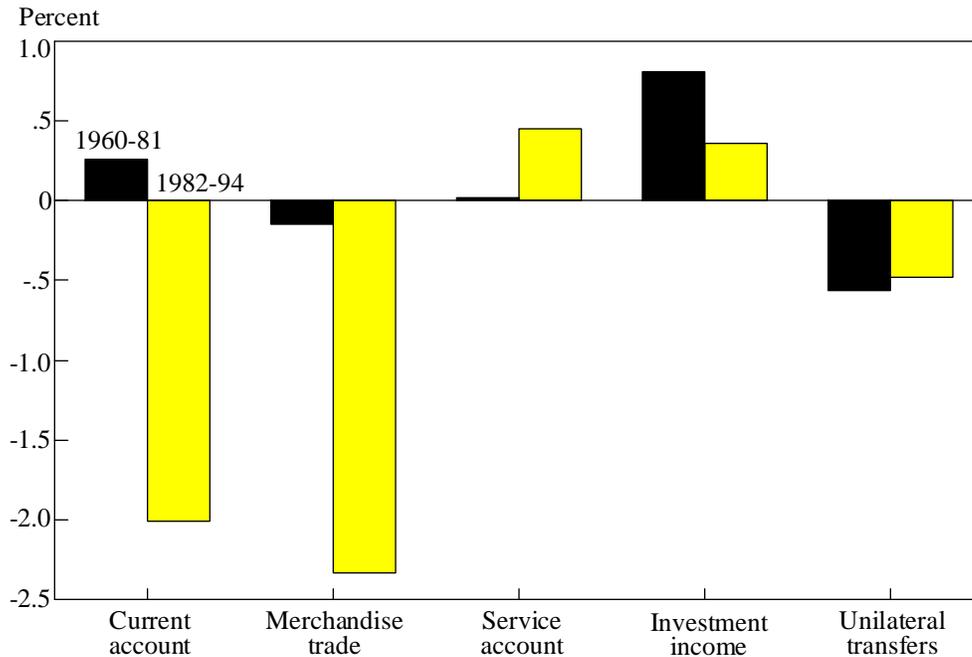
Note: The dotted line equals the average current account surplus from 1960 to 1981, and the average current account deficit from 1982 to 1994.

Source: U.S. Department of Commerce.

Chart 2

## COMPONENTS OF THE U.S. CURRENT ACCOUNT

Share of GDP



Source: U.S. Department of Commerce.

More generally, borrowing from abroad and selling a domestic asset to a foreigner are considered capital inflows, while lending abroad and buying a foreign asset are considered capital outflows. A *net* capital inflow, therefore, occurs when capital flowing into a country exceeds capital flowing out; or alternatively, a net capital inflow occurs when borrowing from abroad exceeds lending abroad.

Net capital inflow is often broken down into *private* net capital inflow and *official* net capital inflow. Private capital flows are undertaken by private investors and include direct investment, purchases of stocks and bonds, and bank flows. Official capital flows are undertaken by official government agencies, primarily foreign monetary authorities,

who choose to increase their holdings of international reserves, particularly dollars.<sup>2</sup>

As a matter of bookkeeping, all of a country's international transactions, those involving goods and services as well as those involving capital inflows and outflows, must sum to zero. Therefore, a current account deficit must by definition be equal to net capital inflow. Intuitively, when a nation imports more goods and services than it exports—and thus runs a current account deficit—it must finance the deficit by borrowing from abroad. This is similar to what happens when a family spends more on goods and services than it takes in as income, so it finances the excess spending by borrowing from a bank. It is important to emphasize

that some residents of a country borrow from abroad while other residents lend abroad. It is the excess of borrowing over lending, which equals the net capital inflow, that pays for the current account deficit. For this reason, the current account deficit is said to be financed by a net capital inflow.

While bookkeeping ensures that net capital inflow equals the current account deficit, it does not say how this outcome is achieved in a market economy. In a market economy, investors decide how much to borrow and lend, and firms and consumers decide how much to import and export. The decision by U.S. and foreign investors to borrow from abroad and lend abroad has little or nothing to do with a desire to finance the current account deficit. Nevertheless, all these decisions collectively must result in a net capital inflow that equals the current account deficit.

The decisions of investors and consumers are influenced by a number of economic forces. Changes in interest rates, exchange rates, prices, and income work together to ensure that the net capital inflow and the current account deficit are equal. In 1994, for example, both the U.S. current account deficit and net capital inflow were \$156 billion.<sup>3</sup> In the marketplace, this balance was brought about by changes in interest rates and exchange rates. At the prevailing rates, investors were willing to borrow and lend capital, or buy and sell assets, resulting in a net capital inflow of \$156 billion. At the same time, incomes and prices adjusted so that consumers and firms were willing to import and export enough to bring about a current account deficit that exactly equaled the net capital inflow.

#### *Causes of the U.S. current account deficit*

What caused the current account deficit to move from near balance to a large deficit in 1982, forcing the United States to depend on large foreign capital inflows? One way to answer this question is to examine the linkages between domestic savings

and investment and foreign capital inflows. A simple accounting identity relates private savings, domestic investment, the budget deficit, and the current account deficit. Investment spending and the budget deficit are the two domestic uses of funds. Domestic savings and net capital inflow are the two sources of funds. Since the sources of funds must equal the uses of funds, the funds used to finance domestic investment and the budget deficit must come from domestic savings and net capital inflow from abroad. This relationship is shown in equation (1):

$$Uses = Sources \quad (1)$$

$$I + BD = S + NKIN,$$

where  $I$  = domestic private investment,  $BD$  = budget deficit,  $S$  = domestic private savings, and  $NKIN$  = net capital inflow.

If the domestic uses of funds exceed the domestic sources of funds, the excess must be borrowed from abroad—resulting in a net capital inflow. This relationship can be seen in equation (2):

$$NKIN = I + BD - S. \quad (2)$$

Furthermore, since the current account deficit ( $CAD$ ) equals net capital inflow, equation (2) can be rewritten as:

$$CAD = I + BD - S. \quad (3)$$

Equations (2) and (3) show that a country with good investment prospects, a large budget deficit, or a low propensity to save tends to have a net capital inflow and a current account deficit. In other words, policies that promote investment spending, discourage private saving, or lead to a large budget deficit result in a current account deficit.

The rise in the U.S. current account deficit since 1982 has been associated with a decline in private

Table 1

U.S. BUDGET DEFICIT, SAVINGS, INVESTMENT, AND NET CAPITAL INFLOW  
(percent of net domestic product)

	<u>1960-81</u>	<u>1982-94</u>
Net capital inflow	-.5	2.0
Net domestic investment	7.9	5.0
Net private savings	8.9	6.5
Budget deficit	.6	3.0

savings, an increase in the budget deficit, and not a rise in domestic investment (Table 1).<sup>4</sup> Since economic growth depends on net additions to the capital stock, it makes sense to look at net investment rather than gross investment. Consequently, all measures of investment, savings, and income are net rather than gross.<sup>5</sup> Furthermore, since the economy has grown so much over the period, all figures are reported relative to net domestic product (NDP). Comparing the 1960-81 period with the 1982-94 period shows that net private savings fell from 8.9 percent of NDP to 6.5 percent, while the budget deficit rose from 0.6 percent of NDP to 3.0 percent. Rather than rising, net investment actually fell from 7.9 percent of NDP to 5.0 percent.<sup>6</sup> Therefore, the causes of the current account deficit appear to lie with the increase in the government budget deficit and the decrease in the private saving rates since 1982 rather than with an increase in investment prospects in the United States.

#### THE SHORT-TERM RISK OF THE CURRENT ACCOUNT DEFICIT

Because the United States is dependent on a steady flow of foreign capital to finance its current account deficit, a shift in market sentiment by private investors poses a risk to the U.S. economy. If

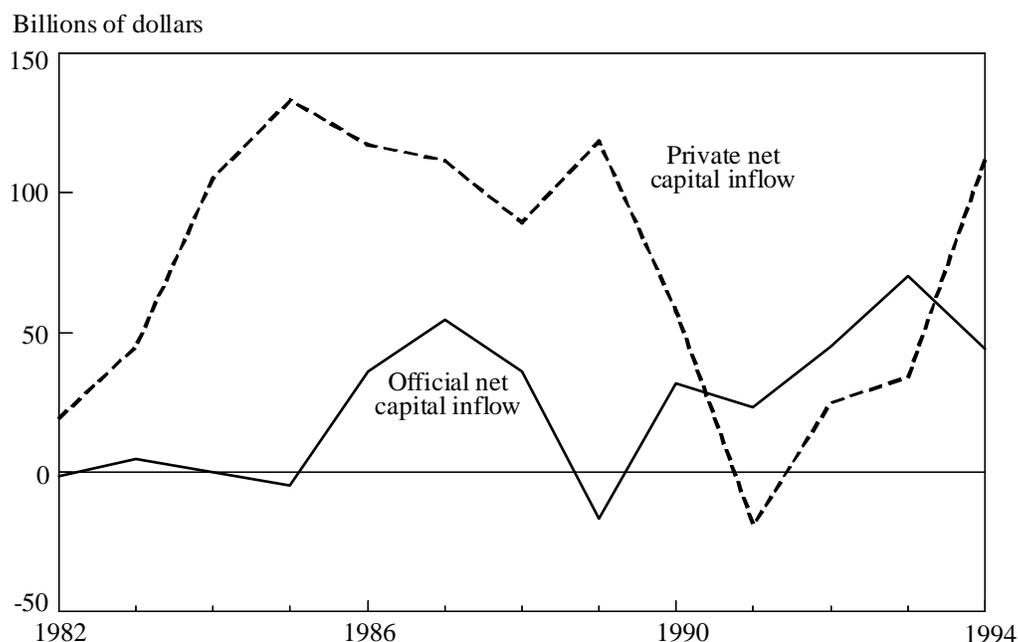
private investors become reluctant to acquire dollar securities, foreign monetary authorities could take up the slack and increase their holdings of dollar reserves. However, given the large holdings of dollar reserves by foreign monetary authorities, they may be reluctant to do so. Therefore, to attract domestic and foreign investors back to U.S. securities, U.S. interest rates would need to rise and the exchange rate would need to fall. Moreover, because global financial markets are large and liquid, the possibility of higher interest rates and a lower exchange rate is greater than if financial markets were smaller and less liquid.

#### *The role of private investors*

From 1982 to 1994, much of the current account deficit was financed by private investors. Chart 3 shows net private capital inflow and net official capital inflow during this period. Except for 1991-93, net private capital inflows were always larger than net official capital inflows. Moreover, during the 1982-94 period, net private inflows averaged \$89 billion per year compared to the average current account deficit of \$103 billion per year, indicating net private inflows financed 87 percent of the current account deficit.<sup>7</sup> While it is not possible to determine exactly who is providing the capital,

Chart 3

## U.S. NET CAPITAL INFLOWS



Source: U.S. Department of Commerce.

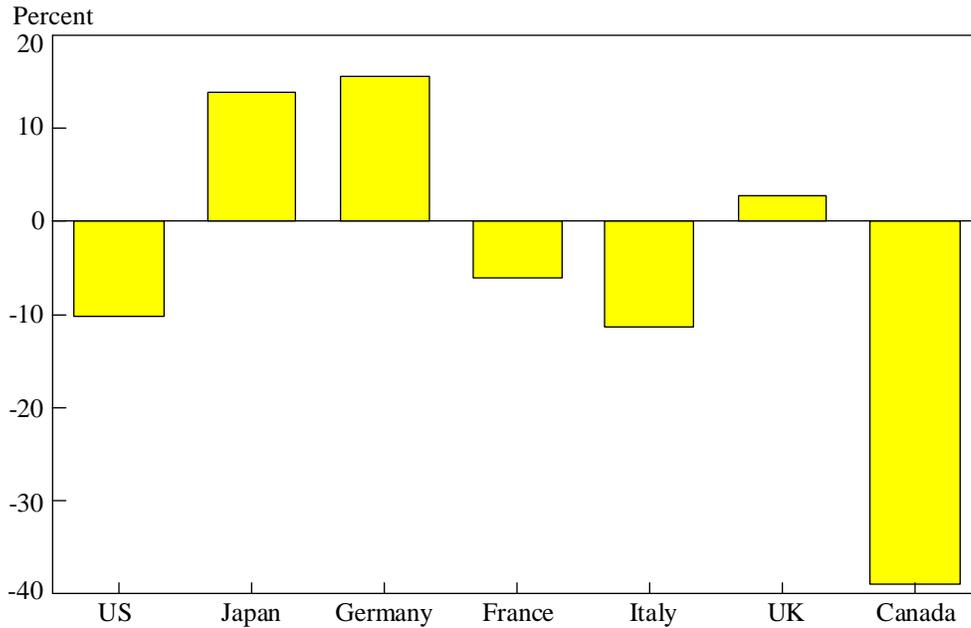
some information is available. In 1993, 74 percent of private inflows came from Western Europe and 6 percent from Canada. Additional information is available on the stock of assets held by citizens of various countries. For example, 57 percent of all U.S. securities other than Treasury securities was held by Western Europeans, 13 percent by the Japanese, and 10 percent by Canadians. Looking at foreign direct investment, 61 percent is held by Western Europeans, 22 percent by the Japanese, and 9 percent by Canadians.

There is also a potential risk that private investors, at some point, might become reluctant to continue financing the U.S. current account deficit. There are a number of reasons why private investors might switch from U.S. securities to foreign securities.

One reason is that investment opportunities in other countries relative to the United States may improve. For example, if U.S. economic growth slows and U.S. interest rates decline, investors might search for higher yields in other markets. Similarly, if European economic growth increases, higher foreign interest rates could cause investors to switch from U.S. securities to European securities.

A second reason investors might withdraw from U.S. markets is that investor confidence in economic policy in the United States could decline relative to other countries. For example, expectations of a rising and prolonged budget deficit might cause investors to become concerned about U.S. economic policy. Or, increased confidence in the Bundesbank and German monetary policy might cause investors

Chart 4  
NET INTERNATIONAL DEBT  
Share of GDP



Source: OECD *Economic Outlook*, June 1994.

to purchase German bonds rather than U.S. bonds. A banking crisis in the United States could also cause investors to search for safer markets in other countries. Clearly, any single event has a low probability of causing a shift in confidence. But, even a low probability of a shift in confidence is of concern to policymakers. Moreover, a confluence of such events could have a significant effect on investor confidence.

There is also a potential risk that investors might switch from U.S. to foreign securities if they become concerned about the United States running a large and persistent current account deficit. As the United States finances its persistent deficit by borrowing from abroad, U.S. international indebtedness

increases commensurately. The IMF forecasts that U.S. net international debt may continue rising to nearly 20 percent of GDP by the end of the century.<sup>8</sup> DRI predicts U.S. net international debt relative to GDP will continue to rise from its current level of 9 percent to GDP until early the next century, when it will level off in 2004 at nearly 25 percent of GDP.

At some point, private foreign investors may decide U.S. international debt is too high to continue financing the current account deficit at prevailing interest rates and exchange rates. Just as banks are reluctant to loan money to individuals with excessive debt, foreign investors may become reluctant to lend money to the United States. If this happens, either a substitute for private capital

inflows would need to be found or interest rates and exchange rates would need to adjust.

Unfortunately, neither economic theory nor the experience of other countries suggests whether 9 percent, or even 25 percent, is too high a level of net international debt. In 1992, there was a wide range of net international debt levels relative to GDP in the G7 countries (Chart 4).<sup>9</sup> Canadian net international debt was the highest at about 40 percent of GDP. France and Italy had net international debt levels near that of the United States, while Germany and Japan had net international assets of about 10 percent.<sup>10</sup>

### *The role of official financing*

If private market sentiment were to shift against U.S. securities, and private investors were to start selling U.S. securities, another source of foreign funds would need to be found. One possible source would be foreign monetary authorities. It is possible that foreign monetary authorities—that is, foreign central banks—would take up the slack by purchasing dollars. In general, official financing takes up the slack only when the inflow of private capital is insufficient to cover the deficit. That was the case for the United States from 1992 to 1994.

In the decade prior to 1992, net private capital inflows were the primary source of financing for the current account deficit. From 1982 to 1991, private capital inflows averaged \$97 billion per year and official inflows averaged only \$14 billion. From 1992 to 1994, however, private inflows averaged \$34 billion and official inflows averaged \$45 billion. The current account deficit averaged \$101 billion during the first period and \$104 billion during the second period. As a result, private inflows financed 96 percent of the current account deficit during the 1982-91 period, while official inflows financed only 14 percent.<sup>11</sup> During the 1992-94 period, in contrast, the share of the current account financed by private inflows fell to 33 percent, while the share

financed by official inflows rose to 43 percent.

Given the relatively large share of the current account deficit already being financed by official net capital inflow, there is a potential risk that an adverse shift in private market sentiment would not be offset by a further increase in official capital inflows. From 1992 to 1994, as foreign private investors became unwilling to finance the current account deficit at prevailing interest rates and exchange rates, foreign monetary authorities did step in to take up the slack. In the future, though, if foreign investors become less willing to finance the current account deficit, foreign monetary authorities may decide that fundamental changes in U.S. policy would be needed to restore the confidence of private investors. If so, foreign monetary authorities may resist the pressure to accumulate more dollar reserves until U.S. policy is changed. Thus, a reduction in the private net capital inflow may not be offset by an increase in the official net capital inflow.

Not only may official net capital inflow not rise to offset an adverse shift in market sentiment, but official inflows could fall if countries decide to accumulate fewer dollar reserves. The rise in official inflows during 1992-94 reflected, in part, the action of some Latin American countries to increase their dollar reserves.<sup>12</sup> These capital inflows resulted from improvements in Latin American growth and investment prospects, continued privatization sales of Latin American government-owned enterprises, and large private inflows into some Latin American countries. Moreover, several fast-growing, newly industrialized countries in Asia also accumulated dollar assets.<sup>13</sup> Since some of the reasons for the buildup in reserves no longer apply, these countries may no longer accumulate dollar reserves. Furthermore, following the Mexican exchange rate crisis, some Latin American countries may no longer increase their holdings of dollar reserves, leading to a decline in the U.S. foreign official inflow. Finally, from 1992 to 1994, many industrial countries acquired U.S. official assets as

part of their foreign exchange market intervention operations. Because foreign exchange market intervention is not likely to be a long-term source of capital inflow, official net capital inflow could actually decline.

In short, a shift in market sentiment away from dollar securities to foreign securities may not necessarily be offset by a rise in official net capital inflow. Therefore, foreign private investors would need to be attracted back to U.S. financial markets. Doing so, however, would require higher interest rates and a lower exchange rate to make U.S. securities more attractive. That is, higher interest rates and a lower exchange rate would be the price the United States might need to pay to offset an adverse shift in market sentiment.

### *The risk of short-term financing*

The risk posed by an adverse shift in private market sentiment may be exacerbated because global financial markets are highly liquid and well-developed. In such an environment, both foreign and domestic investors can quickly sell U.S. securities, thereby leading to even higher interest rates and a lower exchange rate.

Today's financial markets are highly efficient. For example, transactions costs have declined dramatically in recent years, making it inexpensive for investors to sell U.S. securities and buy foreign securities (Mussa and Goldstein, pp. 250-51).<sup>14</sup> In addition, the markets for government securities, equity, corporate debt, commercial paper, bank CDs, asset-backed securities, and derivative instruments are all highly liquid (Mussa and Goldstein, p. 250). Finally, investors have a wide range of securities available to them.

Such efficiency in financial markets compounds the risk of running a current account deficit. Because the markets are so efficient, both foreign and domestic investors could easily speculate against U.S.

securities in the event of an adverse shift in market sentiment. Moreover, investors can sell U.S. securities and buy foreign securities—quickly, easily, and at little cost. As a result, large changes in interest rates and the exchange rates can occur quickly. Thus, in a broad sense, interest rates and the exchange rate are vulnerable to an adverse shift in market sentiment.

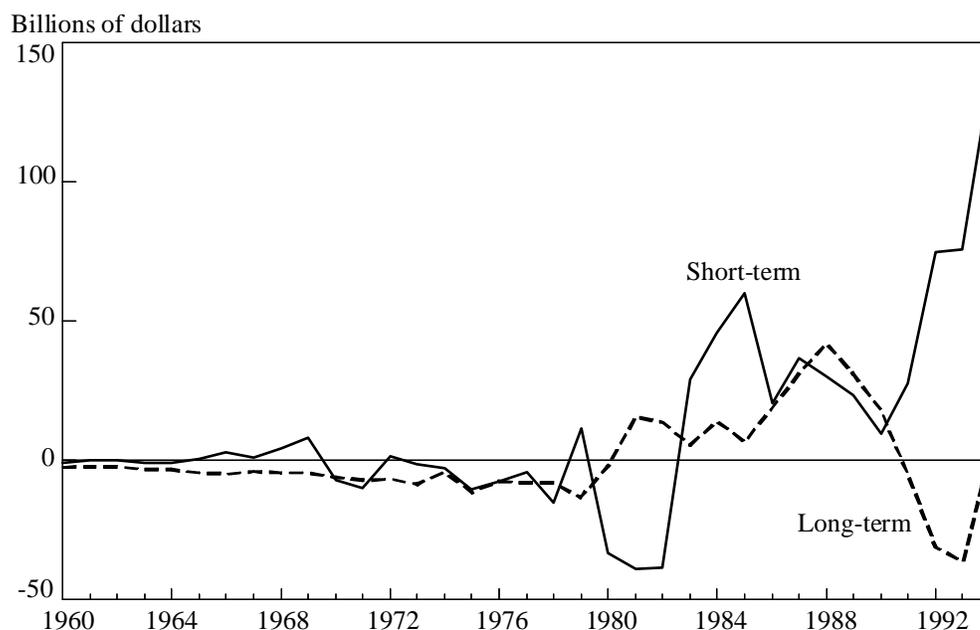
In a more specific sense, the dollar may be vulnerable to an adverse shift in market sentiment because the U.S. current account deficit has been increasingly financed by short-term, highly liquid, capital flows (Chart 5). In the chart, short-term capital flows are defined as foreign purchases of U.S. Treasury securities and foreign and domestic banking flows, which occur in markets that are highly liquid and have low transactions costs. Long-term capital flows are defined as direct investments, which comprise a less liquid market with higher transactions costs.<sup>15</sup> As the chart shows, net short-term financing has grown dramatically since 1990, while net long-term financing has been negative. In the 1990s, short-term net capital inflows averaged \$64.9 billion and long-term net capital outflows averaged \$10.6 billion. During the 1980s, in contrast, net long-term inflows averaged \$17.5 billion, while short-term, liquid, net capital inflows averaged \$13.5 billion. Since the financing of the deficit is now taking place in highly liquid global financial markets, the risk of higher interest rates and a lower exchange rate has been heightened.

### THE LONG-TERM PROBLEM OF THE CURRENT ACCOUNT DEFICIT

Large and persistent U.S. current account deficits also pose a long-term problem for the U.S. economy. As the United States continues to run a deficit, U.S. indebtedness to the rest of the world increases, causing debt service to consume an ever larger share of income. The degree to which servicing the debt will burden future generations and lower the U.S. standard of living depends on whether the net

Chart 5

## SHORT-TERM AND LONG-TERM FINANCING OF THE U.S. CURRENT ACCOUNT DEFICIT



Source: U.S. Department of Commerce

capital inflow is used to finance current consumption or productive investment.

A large and persistent current account deficit is not a problem if the associated net capital inflow is used to finance productive investment. During the 19th century, for example, net capital inflow into the United States was large and persistent. Net capital inflows were about 13 percent of GNP during the 1860s, 4 percent during the 1870s, and 11 percent during the 1880s, significantly larger than those in the 1980s and 1990s.<sup>16</sup> However, these borrowings from abroad were used to finance the building of railroads and other productive capacity. The increased production and income provided by

those investments more than offset the interest payments on the inflows, boosting U.S. living standards in the process.

Future living standards could be eroded, though, if the net capital inflow is used to finance current consumption. Without the increased future production made possible by investment, the United States will eventually have to consume less than it produces to meet its future interest obligations. That is, average living standards will be lower than they otherwise would be. In effect, by using capital inflow from abroad for consumption rather than investment, the United States will be borrowing from future consumption to finance current

consumption. If the current account deficit were temporary—for example, if capital inflow were used to finance the recovery from an earthquake—then borrowing from future consumption to finance current consumption would make sense. But if the current account deficit is used to finance persistently higher consumption, then borrowing from future consumption makes little economic sense.

One way to determine whether future living standards may be eroded is to see whether investment increased after 1982 when the United States began to run a large and persistent current account deficit. Regardless of the measure used, U.S. investment has declined since 1982. Gross domestic private investment as a share of GDP fell from 16.3 percent in 1960-81 to 15.7 percent in 1982-94, and net domestic private investment as a share of NDP fell from 7.9 percent to 5.1 percent over the same period. In other words, while the United States has increased its borrowing from abroad, it has reduced its rate of investment.<sup>17</sup> Consequently, running a large and persistent current account deficit threatens to reduce future living standards relative to what they would otherwise be.

## CONCLUSIONS

The shift in the U.S. current account from balance to a large and persistent deficit beginning in 1982 poses both a short-term risk and a long-term problem for the United States. In the short term, a shift in market sentiment against U.S. securities could lead to higher interest rates and a lower exchange rate in order to attract the foreign capital needed to finance the current account deficit. In the long term, a large and persistent current account deficit threatens future living standards because the

associated borrowing from abroad has not been used to finance investment spending. Reducing the current account deficit would lessen the short-term risk and help address the long-term problem.

Reducing the current account deficit would lessen the short-term risk in two ways. First, a smaller current account deficit would reduce the likelihood that private investors would lose confidence in U.S. markets and thus shift to other markets. Second, in the event that an adverse shift in market sentiment occurs for some other reason, the effect on interest rates and exchange rates would be smaller if the United States were less dependent on an inflow of foreign capital to finance its smaller current account deficit.

Reducing the current account deficit would also lessen the long-term problem. A smaller current account deficit would slow the increase in net international debt, or even reduce the level of debt. As a result, a smaller debt-servicing burden would be imposed on future generations.

To be effective in reducing the current account deficit, economic policy must either reduce investment, increase private savings, or reduce the budget deficit. This prescription simply recognizes the fact that if the domestic uses of funds—investment and the budget deficit—exceed the domestic source of funds—private savings—the excess must be borrowed from abroad, resulting in a net capital inflow. Clearly, reducing investment in order to reduce the current account deficit is not in the economy's long-run interest. Hence, the best prescription to reduce the U.S. current account deficit is for economic policy to encourage domestic savings and to reduce the budget deficit.

## ENDNOTES

<sup>1</sup> Merchandise trade equals merchandise exports plus merchandise imports, and total trade equals total exports plus total imports.

<sup>2</sup> According to the Commerce Department (1990, p. 108), "Foreign official agencies are defined as the treasuries, including ministries of finance or corresponding departments of national governments; central banks; stabilization funds, exchange control offices, or other governmental exchange authorities' fiscal agents of national governments that have as an important part of their functions activities similar to those of a treasury, central bank, or stabilization fund; diplomatic and consular establishments; and other agencies of national governments." Official foreign reserves held by the United States are liquid foreign assets held by U.S. monetary authorities, which includes the U.S. Federal Reserve and the Department of the Treasury. These liquid assets include gold, SDRs, balances at the IMF, and foreign currency in foreign banks. Foreign monetary authorities also hold these same official reserves. In addition, since the dollar is an international reserve currency, dollar holdings by foreign monetary authorities belong to their official reserves.

<sup>3</sup> The current account deficit does not equal the measured net capital inflow because there is a statistical discrepancy. Most analysts believe the statistical discrepancy represents unrecorded capital flows. As a result, this article defines the net capital inflow as the measured net capital inflow plus the statistical discrepancy.

<sup>4</sup> Rather than looking at gross domestic product and gross investment, the table examines net saving and net investment, relative to net domestic product (NDP).

<sup>5</sup> The capital consumption allowance is the difference between gross investment and net investment, GDP and NDP, gross private saving and net private saving.

<sup>6</sup> Similar results follow if gross figures are used. The net capital inflow rose from -0.4 percent of GDP to 1.8 percent; gross private domestic investment fell from 16.5 percent of GDP to 15.7 percent; gross private saving fell from 17.5 percent of GDP to 17.0 percent; and the government's budget deficit rose from 0.6 percent of GDP to 2.9 percent.

<sup>7</sup> All figures in this article use the median as the measure of the average. The median is preferable to the simple arithmetic average when there are large outliers. The 87 percent is calculated as the median value of the net private capital inflow divided by the median value of the current account deficit. As an alternative, one could calculate the median value of the net private capital inflow divided by the current account deficit.

This calculation says that net private inflows financed 72 percent of the deficit. Either way, net private capital inflows financed a significant part of the current account deficit.

<sup>8</sup> The IMF projects a current account deficit of about 2.4 percent of GDP through the end of this century. Ignoring valuation changes and a difference between interest rates and growth rates, this means that net international debt rises by 2.4 percentage points each year. While this is a crude approximation, it generates reasonable estimates.

<sup>9</sup> The most recent data available are for 1992. The results are derived from figures provided by OECD, 1994, p. A.54. To distinguish net assets from net debt, debt is shown as a negative number and assets, a positive number.

<sup>10</sup> Economic theory does say, however, that only new information or financial turmoil could convince investors that the current or projected level of net international debt is too high. In an efficient financial market, only new information—news about the future path of the current account deficit, the economic outlook, macro policy, trade policy, or a financial shock of some kind—should cause investors to reevaluate their views of investing in the United States.

<sup>11</sup> The totals do not add to 100 percent for two reasons. First, changes in U.S. government assets are part of the current account but are not included as private capital flows or official capital flows. Changes in U.S. government assets are typically a capital outflow rather than a capital inflow. A capital outflow means that the U.S. government is making loans to foreign governments. For example, during 1982-91, private net capital inflows averaged \$97,316 million, official net capital inflows averaged \$13,807.5 million, and the change in U.S. government assets averaged -\$508 million (a capital *outflow* of \$508 million). Since the change in U.S. government assets was negative, private capital inflows plus official net capital inflows were greater than the total net capital inflow. As a result, private net capital inflows and official net capital inflows more than financed the current account deficit. Second, since the average is calculated as the median, there is no guarantee that the averages must sum to 100 percent. That is, during 1982-91, the sum of the average private, official, and government net capital inflows was \$110,616 million, yet the average current account deficit was \$101,292 million.

<sup>12</sup> Monetary authorities hold dollar reserves for three basic reasons: to intervene in foreign exchange markets, to offset international shocks, and to facilitate trade. When the Bundesbank intervenes to support the dollar, it sells deutsche marks to buy dollars, and then adds the dollars to its portfolio.

This leads to an official net capital inflow for the United States. In addition, holding foreign exchange reserves—primarily dollars—can reduce the duration and severity of balance of payments adjustment problems caused by international shocks. This precautionary motive for holding dollar reserves may be especially important for developing countries. When possible, many developing countries choose to increase their holdings of dollar assets, thus leading to an official net capital inflow for the United States. Finally, many transactions between foreigners use dollars. For example, throughout the world, oil is bought and sold using dollars. Therefore, to facilitate trade, foreign central banks often hold dollar reserves as part of their portfolio.

<sup>13</sup> See *Survey of Current Business* (1993, p. 46) for a discussion of official flows in 1992. According to the *Survey of Current Business* (1994, p. 67), “Some Latin American countries may have invested unused proceeds from international debt issues in the United States.” Chairman Greenspan, in his “Monetary Policy Report to the Congress,” February 22, 1994, stated: “In addition, various developing countries, particularly in Latin America, experienced large private capital flows into their countries and added substantially to their official holdings in the United States” (p. 210). Chairman Greenspan, in his “Monetary Policy Report to the Congress,” February 21, 1995, stated: “Increases in foreign official assets were substantial in 1994 but were somewhat smaller than in 1993. In particular, the large reserve accumulations in 1994 by certain developing countries in Latin America experiencing massive private capital inflows were not repeated in 1994” (p. 230).

<sup>14</sup> Furthermore, when transactions costs in spot markets are too high, investors can often replicate the transaction using

derivative markets, which have low transactions costs.

<sup>15</sup> The definition of liquid capital flows is probably an understatement. It excludes securities transactions. Securities transactions include securities with maturities greater than one year. While not short term, these securities are often liquid.

<sup>16</sup> These figures are very approximate. Two sources were used. Calculating the net capital inflow as a share of GNP required several assumptions. Hughes (p. 412) reports net U.S. capital movements by decades. His figures show that the average net inflow was \$876 million (1861-70), \$332 million (1871-80), and \$1,310 million (1881-90). The *Historical Statistics of the United States* (Department of Commerce, Bureau of the Census, p. 231) report U.S. GNP by a different set of subperiods. They report GNP equals \$6,710 million (1869-73), \$7,530 million (1872-76), \$9,180 million (1877-81), \$11,300 million (1882-86), and \$12,300 million (1887-91). To make them comparable, average GNP for the 1860s was estimated to be \$6,710 million; average GNP for

the 1870s was estimated as the average for the 1872-81 period, and average GNP for the 1880s was estimated as the average for the 1882-91 period.

<sup>17</sup> The conclusion that investment fell is controversial because there was an unprecedented change in the composition of investment beginning in the mid-1970s. Faust (p. 15) argues that “there was no investment boom in the 1980s—nor was there a great bust.” Even if investment were unchanged, the need to service the debt may still impose a burden on future generations.

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