

# Balance of Payments

## chapter

# 13

### LEARNING GOALS:

After reading this chapter, you should be able to:

- Understand what the balance of payments is and what it measures
- Describe the change in the U.S. balance of payments over the years
- Understand the importance of the serious deterioration of the trade balance and net international investment position of the United States in recent years

## 13.1 Introduction

In Parts One and Two, we dealt with the “real,” as opposed to the monetary, side of the economy. Money was not explicitly considered, and the discussion was in terms of relative commodity prices. We now begin our examination of the monetary aspects of international economics, or international finance. Here, money is explicitly brought into the picture, and commodity prices are expressed in terms of domestic and foreign currency units. We begin our discussion of international finance by examining the balance of payments.

The **balance of payments** is a summary statement in which, in principle, all the transactions of the residents of a nation with the residents of all other nations are recorded during a particular period of time, usually a calendar year. The United States and some other nations also keep such a record on a quarterly basis. The main purpose of the balance of payments is to inform the government of the international position of the nation and to help it in its formulation of monetary, fiscal, and trade policies. Governments also regularly consult the balance of payments of important trade partners in making policy decisions. The information contained in a nation’s balance of payments is also indispensable to banks, firms, and individuals directly or indirectly involved in international trade and finance.

The definition of the balance of payments just given requires some clarification. First of all, it is obvious that the literally millions of transactions of the residents of a nation with the rest of the world cannot appear *individually* in the balance

of payments. As a *summary statement*, the balance of payments aggregates all merchandise trade into a few major categories. Similarly, only the net balance of each type of international capital flow is included. Furthermore, the balance of payments includes some transactions in which the residents of foreign nations are not directly involved—for example, when a nation’s central bank sells a portion of its foreign currency holdings to the nation’s commercial banks.

An *international transaction* refers to the exchange of a good, service, or asset (for which payment is usually required) between the residents of one nation and the residents of other nations. However, gifts and certain other transfers (for which no payment is required) are also included in a nation’s balance of payments. The question of who is a *resident* of a nation also requires some clarification. Diplomats, military personnel, tourists, and workers who temporarily migrate are residents of the nation in which they hold citizenship. Similarly, a corporation is the resident of the nation in which it is incorporated, but its foreign branches and subsidiaries are not. Some of these distinctions are, of course, arbitrary and may lead to difficulties. For example, a worker may start by emigrating temporarily and then decide to remain abroad permanently. International institutions such as the United Nations, the International Monetary Fund (IMF), the World Bank, and the World Trade Organization (WTO) are not residents of the nation in which they are located. Also to be remembered is that the balance of payments has a time dimension. Thus, it is the flow of goods, services, gifts, and assets between the residents of a nation and the residents of other nations *during a particular period of time*, usually a calendar year.

In this chapter, we examine the international transactions of the United States and other nations. In Section 13.2, we discuss some accounting principles used in the presentation of the balance of payments. In Section 13.3, we present and analyze the international transactions of the United States for the year 2011. Section 13.4 then examines some accounting balances and the concept and measurement of balance-of-payments disequilibrium. Section 13.5 briefly reviews the postwar balance-of-payments history of the United States. Section 13.6 then examines the international investment position of the United States. The appendix presents the method of measuring the balance of payments that all nations must use in reporting to the International Monetary Fund. This ensures consistency and permits international comparison of the balance of payments of different nations.

## 13.2 Balance-of-Payments Accounting Principles

In this section, we examine some balance-of-payments accounting principles as a necessary first step in the presentation of the international transactions of the United States. We begin with the distinction between credits and debits, and then we examine double-entry bookkeeping.

### 13.2A Credits and Debits

International transactions are classified as credits or debits. **Credit transactions** are those that involve the receipt of payments *from* foreigners. **Debit transactions** are those that involve the making of payments *to* foreigners. Credit transactions are entered with a positive sign, and debit transactions are entered with a negative sign in the nation’s balance of payments.

Thus, the export of goods and services, unilateral transfers (gifts) received from foreigners, and capital inflows are entered as credits (+) because they involve the receipt of

payments from foreigners. On the other hand, the import of goods and services, unilateral transfers or gifts made to foreigners, and capital outflows involve payments to foreigners and are entered as debits (–) in the nation’s balance of payments.

**Financial inflows** can take either of two forms: an increase in foreign assets in the nation or a reduction in the nation’s assets abroad. For example, when a U.K. resident purchases a U.S. stock, foreign assets in the United States increase. This is a capital inflow to the United States and is recorded as a credit in the U.S. balance of payments because it involves the receipt of a payment from a foreigner. A capital inflow can also take the form of a reduction in the nation’s assets abroad. For example, when a U.S. resident sells a foreign stock, U.S. assets abroad decrease. This is a capital inflow to the United States (reversing the capital outflow that occurred when the U.S. resident purchased the foreign stock) and is recorded as a credit in the U.S. balance of payments because it too involves the receipt of a payment from foreigners.

The definition of capital inflows to the United States as increases in foreign assets in the United States or reductions in U.S. assets abroad can be confusing and is somewhat unfortunate, but this is the terminology actually used in all U.S. government publications. Confusion can be avoided by remembering that when a foreigner purchases a U.S. asset (an increase in foreign assets in the United States), this involves the receipt of a payment from foreigners. Therefore, it is a capital inflow, or credit. Similarly, when a U.S. resident sells a foreign asset (a reduction in U.S. assets abroad), this also involves a payment from foreigners; therefore, it too represents a capital inflow to the United States and a credit. Both an increase in foreign assets in the United States and a reduction in U.S. assets abroad are capital inflows, or credits, because they both involve the receipt of payment from foreigners.

On the other hand, **financial outflows** can take the form of either an increase in the nation’s assets abroad or a reduction in foreign assets in the nation because both involve a payment to foreigners. For example, the purchase of a U.K. treasury bill by a U.S. resident increases U.S. assets abroad and is a debit because it involves a payment to foreigners. Similarly, the sale of its U.S. subsidiary by a German firm reduces foreign assets in the United States and is also a debit because it involves a payment to foreigners. (The student should study these definitions and examples carefully, since mastery of these important concepts is crucial to understanding what follows.)

To summarize, the export of goods and services, the receipt of unilateral transfers, and financial inflows are credits (+) because they all involve the receipt of payments from foreigners. On the other hand, the import of goods and services, unilateral transfers to foreigners, and financial outflows are debits (–) because they involve payments to foreigners.

## 13.2B Double-Entry Bookkeeping

In recording a nation’s international transactions, the accounting procedure known as **double-entry bookkeeping** is used. This means that each international transaction is recorded twice, once as a credit and once as a debit of an equal amount. The reason for this is that in general every transaction has two sides. We sell something and we receive payment for it. We buy something and we have to pay for it.

For example, suppose that a U.S. firm exports \$500 of goods to be paid for in three months. The United States first credits goods exports for \$500 since this goods export will lead to the receipt of a payment from foreigners. *The payment itself* is then entered as a financial debit because it represents a financial outflow from the United States. That is, by

agreeing to wait three months for payment, the U.S. exporter is extending credit to, and has acquired a claim on, the foreign importer. This is an increase in U.S. assets abroad and a debit. The entire transaction is entered as follows in the U.S. balance of payments:

|                   | Credit (+) | Debit (–) |
|-------------------|------------|-----------|
| Goods exports     | \$500      |           |
| Financial outflow |            | \$500     |

As another example of double-entry bookkeeping, suppose that a U.S. resident visits London and spends \$200 on hotels, meals, and so on. The U.S. resident is purchasing travel services from foreigners requiring a payment. (This is similar to a U.S. import.) Thus, the U.S. debits travel services for \$200. The payment itself is then entered as a credit because it represents an increase in foreign claims on the United States. Specifically, we can think of the \$200 in British hands as “securities” giving the United Kingdom a claim on U.S. goods and services, equivalent to an increase in foreign assets in the United States. Therefore, it is a financial inflow to the United States recorded as a credit of \$200. The entire transaction is entered as follows in the U.S. balance of payments:

|   | Credit (+) | Debit (–) |
|---|------------|-----------|
| Travel services purchased from foreigners |            | \$200     |
| Financial inflow                          | \$200      |           |

As a third example, assume that the U.S. government gives a U.S. bank balance of \$100 to the government of a developing nation as part of the U.S. aid program. The United States debits [unilateral transfers](#) for the \$100 gift given (payment made) to foreigners. The payment itself is the U.S. bank balance given to the government of the developing nation. This represents an increase in foreign claims on, or foreign assets in, the United States and is recorded as a financial inflow, or credit, in the U.S. balance of payments. The entire transaction is thus:

|                           | Credit (+) | Debit (–) |
|---------------------------|------------|-----------|
| Unilateral transfers made |            | \$100     |
| Financial inflow          | \$100      |           |

As a fourth example, suppose that a U.S. resident purchases a foreign stock for \$400 and pays for it by increasing *foreign* bank balances in the United States. The purchase of the foreign stock increases U.S. assets abroad. This is a financial outflow from the United States and is recorded as a financial debit of \$400 in the U.S. balance of payments. The increase in foreign bank balances in the United States is an increase in foreign assets in the United States (a financial inflow to the United States) and is entered as a credit in the U.S. balance of payments. The result would be the same if the U.S. resident paid for the foreign stock by reducing bank balances abroad. (This would be a reduction in U.S. assets abroad, which is also a financial inflow to the United States and a credit.) Note that both sides of this transaction are financial:

|  | Credit (+) | Debit (–) |
|--|------------|-----------|
| Financial outflow (the purchase of the foreign stock by the U.S. resident) |            | \$400     |
| Financial inflow (the increase in foreign bank balances in the U.S.)       | \$400      |           |

Finally, suppose that a foreign investor purchases \$300 of U.S. treasury bills and pays by drawing down his bank balances in the United States by an equal amount. The purchase of the U.S. treasury bills increases foreign assets in the United States. This is a financial inflow to the United States and is recorded as a credit in the U.S. balance of payments. The drawing down of U.S. bank balances by the foreigner is a reduction in foreign assets in the United States. This is a financial outflow from the United States and is recorded as such in the U.S. balance of payments:

|  | Credit (+) | Debit (–) |
|--|------------|-----------|
| Financial inflow (the purchase of U.S. treasury bills by a foreigner)  | \$300      |           |
| Financial outflow (the reduction in foreign bank balances in the U.S.) |            | \$300     |

If we assume that these five transactions are all the international transactions of the United States during the year, then the U.S. balance of payments is as follows:

|                          | Credit (+) | Debit (–) |
|--------------------------|------------|-----------|
| Goods                    | \$500      |           |
| Services                 |            | \$200     |
| Unilateral transfers     |            | 100       |
| Financial flows, net     |            | 200       |
| Total debits and credits | \$500      | \$500     |

The net capital debit balance of  $-\$200$  is obtained by adding together the seven capital entries ( $-\$500$ ,  $\$200$ ,  $\$100$ ,  $-\$400$ ,  $\$400$ ,  $\$300$ ,  $-\$300$ ) previously examined separately. Total debits equal total credits because of double-entry bookkeeping.

The traditional distinction between short-term capital and long-term financial transactions (i.e., with maturity of more than one year, such as a bond or a stock, as opposed to three-month treasury bills) is usually no longer made because bonds and stocks are liquid (i.e., can be sold and bought almost immediately).

## 13.3 The International Transactions of the United States

Table 13.1 presents a summary of the international transactions of the United States for the year 2011. In the table, credits are entered with positive signs and debits with negative signs. In a few instances, the sum of the subtotals differs slightly from the total because of rounding.

**TABLE 13.1.** Summary of U.S. International Transactions for 2011  
(billions of dollars)

| Current Account  | Credits | Debits |
|--|---------|--------|
| Exports of goods, services, and income   | +2,848  |        |
| Goods  | +1,497  |        |
| Services   | +606    |        |
| Income receipts on U.S. assets abroad  | +745    |        |
| Imports of goods, services, and income   |         | -3,181 |
| Goods  |         | -2,236 |
| Services   |         | -427   |
| Income payments on foreign assets in the U.S.  |         | -518   |
| Unilateral transfers, net  |         | -133   |
| U.S. government grants   |         | -47    |
| U.S. government pensions and other transfers   |         | -9     |
| Private remittances and other transfers  |         | -77    |
| Capital Account  |         |        |
| Capital Account transactions, net  |         | -1     |
| Financial Account  |         |        |
| U.S.-owned assets abroad, excluding financial derivatives<br>(increase/financial outflow (-))        |         | -484   |
| U.S. official reserve assets   |         | -16    |
| U.S. government assets, other than official reserve assets   |         | -104   |
| U.S. private assets  |         | -364   |
| Direct investment  |         | -419   |
| Foreign securities   |         | -147   |
| Nonbank claims   |         | -12    |
| Bank claims  | +214    |        |
| Foreign-owned assets in the U.S., excluding financial<br>derivatives (increase/financial inflow (+)) | +1,001  |        |
| Foreign official assets in the U.S.  | +212    |        |
| Other foreign assets in the U.S.   | +789    |        |
| Direct investment in the U.S.  | +234    |        |
| U.S. treasury securities   | +241    |        |
| U.S. securities other than U.S. treasury securities  |         | -56    |
| U.S. currency  | +55     |        |
| Nonbank liabilities  | +7      |        |
| Bank liabilities   | -309    |        |
| Financial derivatives, net   | +39     |        |
| Statistical discrepancy  |         | -89    |
| Memoranda  |         |        |
| Balance of goods trade   |         | -738   |
| Balance on services  | +179    |        |
| Balance on goods and services  |         | -560   |
| Balance on income  | +227    |        |
| Balance on goods, services, and income   |         | -333   |
| Unilateral current transfers, net  |         | -133   |
| Balance on current account   |         | -466   |

Source: U.S. Department of Commerce, *Survey of Current Business* (Washington, D.C.: U.S. Government Printing Office, July 2012), pp. 58-59.

Table 13.1 shows that the United States exported \$2,848 billion of goods and services (including the income receipts on U.S. assets abroad) in 2011. Goods exports of \$1,497 billion included automobiles, petroleum products, chemicals, agricultural food products, computers, and electrical generating machinery (see Case Study 13-1). Service exports of \$606 billion included travel and transportation services provided to foreigners, as well as fees and royalties received from foreigners. U. S. residents also earned \$745 billion in interest and dividends on their foreign investments. Note that while a foreign investment or financial outflow from the United States is recorded as a debit under financial transactions (an increase in U.S.-owned assets abroad), the earnings from the services of U.S. assets abroad (foreign investments) are recorded here with the export of other services. The income receipts on U.S. assets abroad are recorded separately from other services because of their importance.

### ■ CASE STUDY 13-1 The Major Goods Exports and Imports of the United States

Table 13.2 shows the value of the major goods exported and imported by the United States in 2011. The major U.S. exports were automobiles, petroleum products, chemicals, agricultural food products, computers, and electrical generating machinery. U.S. imports were dominated by petroleum, automobiles, household appliances, apparel and household goods, computers, and medical products. From Table 13.2, we see that the United States had an export surplus in chemicals,

agricultural food products, semiconductors, scientific equipment, and oil drilling and construction equipment. These are the products in which the United States has a (revealed) comparative advantage. The United States had an import surplus (and comparative disadvantage) in petroleum, automobiles, household appliances, apparel and household goods, computers, medical products, electrical generating machinery, telecommunications, and civilian aircraft.

■ **TABLE 13.2.** Major Goods Exports and Imports of the United States in 2011 (billions of dollars)

| Exports                                 | Value   | Imports                         | Value   |
|---|---------|---------------------------------|---------|
| Automobiles                             | \$133.1 | Petroleum                       | \$462.3 |
| Petroleum products                      | 131.4   | Automobiles                     | 255.2   |
| Chemicals                               | 123.1   | Household appliances            | 136.4   |
| Agricultural food products              | 117.4   | Apparel and household goods     | 125.7   |
| Computers                               | 48.4    | Computers                       | 119.7   |
| Electrical generating machinery         | 48.3    | Medical products                | 91.8    |
| Semiconductors                          | 45.0    | Agricultural food products      | 84.6    |
| Medical products                        | 44.9    | Chemicals                       | 75.4    |
| Scientific equipment                    | 42.7    | Electrical generating machinery | 59.5    |
| Telecommunications                      | 35.9    | Telecommunications              | 48.5    |
| Household appliances                    | 34.0    | Semiconductors                  | 40.4    |
| Civilian aircraft                       | 33.4    | Scientific equipment            | 35.9    |
| Oil drilling and construction equipment | 32.9    | Civilian aircraft               | 35.5    |

Source: U.S. Department of Commerce, *Survey of Current Business* (Washington, D.C.: U.S. Government Printing Office, July 2012), pp. 70–71.

On the other hand, the United States imported goods and services (including income payments on foreign assets in the United States) for \$3,181 billion in 2011. Goods imports included petroleum, automobiles, household appliances, apparel and household goods, computers, medical products, and many other products for a total of (–)\$2,236 billion. The \$427 billion imports of services included the travel and transportation services purchased by U.S. residents from other nations, fees and royalties paid to foreigners, as well as \$518 billion in interest and dividends paid on foreign investments in the United States. Note that the inflow of foreign capital into the United States is recorded as a credit under financial transactions (an increase of foreign-owned assets in the United States), while the payments made to foreigners for the services of the foreign capital invested in the United States are recorded as a debit with other imported services in the U.S. balance of payments.

The United States made net unilateral transfers to foreigners of (–)\$133 billion during 2011. These included net U.S. government economic and military grants to foreign nations (–\$47 billion), net U.S. government pensions and other transfers to foreign nations (–\$9 billion), and net private remittances and other transfers (–\$77 billion). Private remittances and other transfers refer to the immigrant remittances to relatives “back home” and other private gifts. Since more of these private transfers were made to foreigners than were received by U.S. residents from abroad, the United States had a net debit entry of (–)\$133 billion for private remittances and other transfers.

Next, Table 13.1 gives the small net debit **capital account** transactions (capital outflows) of (–)\$1 billion for the United States in 2011. This includes, for the most part, debt forgiveness and goods and financial assets that migrants take with them as they enter or leave the country.

Following this, Table 13.1 shows that the stock of U.S.-owned assets abroad excluding financial derivatives increased (a capital outflow of the United States and a debit) by the net amount of (–)\$484 billion during 2011. This resulted from an increase in the stock of U.S. official reserve assets of (–)\$16 billion, a net increase in the stock of U.S. government assets other than official reserve assets of (–)\$104 billion, and a net increase of (–)\$364 billion in the stock of U.S. *private* assets abroad. The latter include a net increase in U.S. foreign direct investments abroad of (–)\$419 billion, a net increase in U.S. holdings of foreign securities of (–)\$147 billion, a net increase of (–)\$12 billion in U.S. nonbank claims on foreigners, and a net *decrease* in U.S. bank claims on foreigners of (+)\$214 billion.

The official reserve assets of the United States include the gold holdings of U.S. monetary authorities, Special Drawing Rights, the U.S. reserve position in the International Monetary Fund, and the official foreign currency holdings of U.S. monetary authorities. Special Drawing Rights (SDRs, or “paper gold”) are international reserves created on the books of the International Monetary Fund (IMF) and distributed to member nations according to their importance in international trade. The reserve position in the IMF refers to the reserves paid in by the nation upon joining the IMF, which the nation can then borrow automatically and without questions asked in case of need. Membership in the IMF allows nations to borrow additional amounts subject to the conditions imposed by the IMF. (SDRs and the nation’s reserve position in the IMF are discussed in detail in Chapter 21.)

Table 13.1 also shows that the stock of foreign-owned assets in the United States excluding financial derivatives increased (a capital inflow to the United States and a credit) by the net amount of (+)\$1,001 billion in 2011. This included a net increase in the stock of foreign official assets in the United States of (+)\$212 billion and a net increase in other



(than official) foreign assets in the United States of (+)\$789 billion. The latter included a net increase of (+)\$234 billion in foreign direct investments in the United States, (+)\$241 billion in foreign holdings of U.S. treasury securities, (+)\$55 billion in U.S. currency, (+)\$7 billion in U.S. nonbank liabilities to foreigners, (+)\$309 billion in U.S. bank liabilities to foreigners, and a net *decrease* of (–)\$56 billion in U.S. securities other than U.S. treasury securities.

Next, Table 13.1 shows a net decrease in foreign-owned financial derivatives in the United States (a U.S. capital inflow and credit) of \$39 billion. Financial derivatives are complex assets or securities whose values often depend on the values of stocks and bonds. Financial derivatives were at the center of the global financial crisis that started in 2007 and will be discussed in Chapter 16.

When we sum the total credits of (+)\$2,848 billion for U.S. exports of goods, services, and income, the (+)\$1,001 billion net increase in foreign-owned assets in the United States, and the (+)\$39 billion of net inflow of financial derivatives, we get the overall credit total of (+)\$3,888 billion for the U.S. international transactions during 2011. On the other hand, adding up the debits of (–)\$3,181 billion for the U.S. imports of goods, services, and income, the (–)\$133 billion for the net unilateral transfers, the (–)\$1 billion net capital account balance, and the (–)\$484 billion net increase in U.S.-owned assets abroad, we get the overall debit total of (–)\$3,798 billion. Since the overall credit total of (+)\$3,888 billion exceeds the overall debit total of (–)\$3,798 billion by (+)\$90 billion, there is a *negative* entry called **statistical discrepancy** of (–)\$89 billion (with a –\$1 billion of rounding error) in Table 13.1 This entry is required to make the total credits (including the statistical discrepancy) equal to the total debits, as required by double-entry bookkeeping.

Note that a statistical discrepancy results from incorrectly recording or from not recording at all only one side of some transactions. (If both sides of a transaction are reported incorrectly or are not reported at all, no statistical discrepancy between total debits and total credits would arise because of double-entry bookkeeping.) Statistical discrepancies are particularly likely to arise in recording short-term international private capital flows. Thus, the (–)\$89 billion statistical discrepancy is likely to reflect unrecorded net short-term private capital *outflows* from the United States during 2011. The memoranda items at the bottom of Table 13.1 are discussed next.

## 13.4 Accounting Balances and the Balance of Payments

The first accounting balance in the memoranda at the bottom of Table 13.1 is the balance on goods trade. In 2011, the United States exported \$1,497 billion and imported \$2,236 billion of goods, for a net debit balance on goods trade of (–)\$738 (with a +\$1 billion rounding error). On the other hand, the United States had a net credit balance on services of \$179 billion (from the \$606 billion export of services minus the \$427 billion import of services). Thus, the United States had a net debit balance on goods and services of (–)\$560 billion (with a –\$1 billion rounding error). The United States also had a net surplus balance of (+)\$227 billion on investment income (from the \$745 billion interest and dividends earned on U.S. investment abroad minus the \$518 billion income payments on foreign assets in the United States). The United States, therefore, had a net debit balance on goods, services, and income of (–)\$333 billion.

Adding the net debit balance of (–)\$133 billion of unilateral transfers to the net debit balance of (–)\$333 billion on goods, services, and income, we get the current account net debit balance of (–)\$466 billion. Thus, the **current account** lumps together all sales and purchases of currently produced goods and services, investment incomes, and unilateral transfers and provides the link between the nation's international transactions and its national income. Specifically, a current account surplus stimulates domestic production and income, while a current account deficit dampens domestic production and income. (This link between the nation's international trade and current account and its national income will be examined in detail in Chapter 17.)

Table 13.1 then shows the net debit balance of (–)\$1 billion on capital account transactions (capital outflow) for the United States in 2011. As we have seen, the capital account includes, for the most part, debt forgiveness and goods and financial assets that migrants take with them as they leave or enter the country. As shown next, the U.S. deficit in the current and capital accounts in 2011 is financed or covered by an equal net inflow of capital from abroad.

Below the current and capital accounts there is the financial account. The **financial account** shows the change in U.S.-owned assets abroad and foreign-owned assets in the United States. From Table 13.1, we see that in 2011, U.S.-owned assets abroad excluding financial derivatives increased (a financial outflow from the United States and debit) by (–)\$484 billion, while foreign-owned assets in the United States excluding financial derivatives increased (a financial inflow to the United States and a credit) by (+)\$1,001 billion, giving a net credit balance of (+)\$517 billion. Adding the net credit balance (+)\$39 billion of financial derivatives and the net capital account debit balance of (–)\$1 billion gives the net credit financial account balance of (+)\$555 billion. Adding to this the statistical discrepancy of (–)\$89 billion (net unrecorded capital outflows to the United States) gives the net credit balance of (+)\$466 billion on financial account and statistical discrepancy for the United States in 2011. This exactly matches the sum of the net current account balance of (–)\$466 billion of the United States in 2011. Thus, the United States covered its current account deficit with an equal net financial account (including the statistical discrepancy) surplus.

We have seen above that the financial account includes both private and official capital flows. If the net *private* capital inflows to the nation are not sufficient to cover the deficit in the nation's current and capital accounts, the nation is said to have a deficit in its balance of payments equal to the difference, which needs to be covered by a net credit balance on official (i.e., monetary authorities) reserve transactions.

The balance on official reserve transactions is called the **official settlements balance** or simply the *balance of payments*, and the account in which official reserve transactions are entered is called the **official reserve account**. The official settlements balance or balance of payments is given by the sum of the current account balance, the capital account balance, the balance in the financial account (excluding official or reserve transactions or flows but including the net balance of financial derivatives), and the statistical discrepancy. If the sum of these balances is negative, the nation has a **deficit in the balance of payments**, which must be covered by an equal amount of official reserve transactions (reduction in the international reserves of the nation or increase in foreign holdings of official assets of the nation). In the opposite situation the nation has a **surplus in the balance of payments**, which needs to be settled by an increase in the nation's international reserves and/or reduction in foreign official holdings of the nation's assets.

From Table 13.1, we get that the United States had a balance of payments deficit of (–)\$196 billion in 2011. This is obtained by adding the current account deficit of (–)\$466 billion, the net –\$1 billion capital account balance, the increase in U.S.-owned assets abroad other than U.S. official reserve assets of (–)\$468 billion (the \$484 billion total *minus* (–)\$16 billion of U.S. reserve assets), the increase in non-official foreign-owned assets in the United States of (+)\$789 billion (\$1,001 billion total minus the \$212 billion increase in foreign official assets in the United States), the positive credit balance of (+)\$39 billion on net financial derivatives, and the statistical discrepancy of (–)\$89 billion. The U.S. balance of payments deficit of (–)\$196 billion was covered by an equal credit balance of (+)\$196 billion in official reserve transactions (\$212 billion minus \$16 billion) in 2011.

Thus, a balance of payments deficit is given (can be measured) either by the net *debit* balance on all non-official or **autonomous transactions** (the transactions undertaken for purely business purposes, except for unilateral transfers) or by the equal *credit* balance on official reserve or **accommodating transactions** (those transactions undertaken or needed to balance international transactions).

## 13.5 The Postwar Balance of Payments of the United States

In this section, we present a brief balance-of-payments history of the United States with the aid of Table 13.3. From Table 13.3, we see that the U.S. positive trade balance on goods (column 4) of the 1960s gave way to a negative trade balance on goods in the 1970s (for

■ **TABLE 13.3.** Summary of U.S. International Transactions: 1960–2011 (billions of dollars)

| Year<br>(1) | Exports of<br>Goods,<br>Services,<br>and Income<br>(2) | Imports of<br>Goods,<br>Services,<br>and Income<br>(3) | Balance on<br>Goods<br>Trade<br>(4) | Balance on<br>Goods,<br>Services,<br>and Income<br>(5) | Balance<br>on<br>Current<br>Account<br>(6) | Increase (–) in<br>U.S. Official<br>Reserve<br>Assets<br>(7) | Increase (+) in<br>Foreign Official<br>Assets in the<br>United States<br>(8) |
|-------------|--|--|-------------------------------------|--|--|--|--|
| 1960        | 31   | –24  | 5                                   | 7  | 3  | 2  | 1  |
| 1965        | 43   | –33  | 5                                   | 10   | 5  | 1  | 0  |
| 1966        | 46   | –38  | 4                                   | 8  | 3  | 1  | –1   |
| 1967        | 49   | –41  | 4                                   | 8  | 3  | 0  | 3  |
| 1968        | 55   | –49  | 1                                   | 6  | 1  | –1   | –1   |
| 1969        | 60   | –54  | 1                                   | 6  | 0  | –1   | –1   |
| 1970        | 68   | –60  | 2                                   | 8  | 2  | 3  | 7  |
| 1971        | 72   | –66  | –1                                  | 6  | –1   | 3  | 27   |
| 1972        | 82   | –79  | –6                                  | 3  | –6   | 1  | 10   |
| 1973        | 113  | –99  | 1                                   | 14   | 7  | 0  | 6  |
| 1974        | 148  | –137   | –6                                  | 11   | 2  | –1   | 11   |
| 1975        | 158  | –133   | 9                                   | 25   | 18   | –1   | 7  |
| 1976        | 172  | –162   | –9                                  | 10   | 4  | –3   | 18   |
| 1977        | 185  | –194   | –31                                 | –9   | –14  | 0  | 37   |
| 1978        | 221  | –230   | –34                                 | –9   | –15  | 1  | 34   |
| 1979        | 288  | –282   | –28                                 | 6  | 0  | 0  | –14  |

(continued)

■ TABLE 13.3. (continued)

| Year<br>(1) | Exports of<br>Goods,<br>Services,<br>and Income<br>(2) | Imports of<br>Goods,<br>Services,<br>and Income<br>(3) | Balance on<br>Goods<br>Trade<br>(4) | Balance on<br>Goods,<br>Services,<br>and Income<br>(5) | Balance<br>on<br>Current<br>Account<br>(6) | Increase (–)<br>in U.S. Official<br>Reserve<br>Assets<br>(7) | Increase (+) in<br>Foreign Official<br>Assets in the<br>United States<br>(8) |
|-------------|--|--|-------------------------------------|--|--|--|--|
| 1980        | 344  | –334   | –26                                 | 11   | 2  | –7   | 15   |
| 1981        | 381  | –364   | –28                                 | 17   | 5  | –4   | 5  |
| 1982        | 367  | –356   | –36                                 | 11   | –6   | –5   | 4  |
| 1983        | 356  | –377   | –67                                 | –21  | –39  | –1   | 6  |
| 1984        | 400  | –474   | –112                                | –74  | –94  | –3   | 3  |
| 1985        | 388  | –484   | –122                                | –96  | –118                                       | –4   | –1   |
| 1986        | 407  | –530   | –145                                | –123   | –147                                       | 0  | 36   |
| 1987        | 457  | –594   | –160                                | –137   | –161                                       | 9  | 45   |
| 1988        | 568  | –664   | –127                                | –96  | –121                                       | –4   | 40   |
| 1989        | 648  | –722   | –118                                | –73  | –99  | –25  | 9  |
| 1990        | 707  | –759   | –111                                | –52  | –79  | –2   | 34   |
| 1991        | 728  | –735   | –77                                 | –7   | 3  | 6  | 17   |
| 1992        | 751  | –766   | –97                                 | –15  | –50  | 4  | 40   |
| 1993        | 779  | –824   | –132                                | –47  | –85  | –1   | 72   |
| 1994        | 870  | –951   | –166                                | –81  | –122                                       | 5  | 40   |
| 1995        | 1,005  | –1,080   | –174                                | –75  | –114                                       | –10  | 110  |
| 1996        | 1,078  | –1,159   | –191                                | –82  | –125                                       | 7  | 127  |
| 1997        | 1,191  | –1,287   | –198                                | –96  | –141                                       | –1   | 19   |
| 1998        | 1,195  | –1,357   | –248                                | –162   | –215                                       | –7   | –20  |
| 1999        | 1,262  | –1,514   | –336                                | –251   | –302                                       | 9  | 44   |
| 2000        | 1,425  | –1,783   | –446                                | –358   | –416                                       | 0  | 43   |
| 2001        | 1,300  | –1,632   | –421                                | –332   | –397                                       | –5   | 28   |
| 2002        | 1,264  | –1,656   | –474                                | –392   | –457                                       | –4   | 116  |
| 2003        | 1,346  | –1,793   | –540                                | –447   | –519                                       | 2  | 278  |
| 2004        | 1,579  | –2,119   | –664                                | –540   | –629                                       | 3  | 398  |
| 2005        | 1,825  | –2,465   | –781                                | –640   | –746                                       | 14   | 259  |
| 2006        | 2,144  | –2,854   | –836                                | –709   | –801                                       | 2  | 488  |
| 2007        | 2,488  | –3,084   | –819                                | –595   | –710                                       | 0  | 481  |
| 2008        | 2,657  | –3,208   | –830                                | –551   | –677                                       | –5   | 555  |
| 2009        | 2,181  | –2,440   | –506                                | –259   | –382                                       | –52  | 480  |
| 2010        | 2,519  | –2,830   | –645                                | –311   | –442                                       | –2   | 398  |
| 2011        | 2,848  | –3,181   | –738                                | –333   | –466                                       | –16  | 212  |

Source: U.S. Department of Commerce, *Survey of Current Business* (Washington, D.C.: U.S. Government Printing Office, July 2012), pp. 58–59 and various previous issues.

the first time in over 50 years), which became very large after 1982. To a large extent, this reflected the sharp rise in the price of imported petroleum products during the 1970s, the high international value of the dollar in the 1980s, and the more rapid growth of the United States than Europe and Japan during the 1990s and 2000s. Case Study 13-2 gives the major trade partners of the United States and the trade balance with each of them in 2011, while Case Studies 13-3 and 13-4 examine, respectively, the U.S.–Japan and the U.S.–China trade deficits and trade during the past two-and-a-half or three decades.

### ■ CASE STUDY 13-2 The Major Trade Partners of the United States

Table 13.4 shows the value of U.S. exports and imports of goods and services, and the net balance with its 14 major trade partners in 2011 arranged by the total amount of trade with the United States. The table shows that the largest trade partners of the States in 2011 were Canada, China, Mexico, Japan, Germany, the United Kingdom, and Korea.

The table also shows that the United States had a huge trade deficit with China and this is the source of sharp trade disagreements (see Case Study 13-3). The United States also had large trade deficits with Mexico, Japan, Germany, and Canada in 2011, but clearly the U.S. trade deficit with China dominated.

■ **TABLE 13.4.** U.S. Trade in Goods and Services and Net Balance with Its Major Trade Partners in 2011 (billions of dollars)

| Country        | Exports | Imports | Total   | Net Balance |
|----------------|---------|---------|---------|-------------|
| Canada         | \$282.3 | \$320.5 | \$602.8 | \$-38.2     |
| China          | 105.3   | 400.6   | 505.9   | -295.3      |
| Mexico         | 198.7   | 267.3   | 466.0   | -68.6       |
| Japan          | 67.2    | 131.8   | 199.0   | -64.6       |
| Germany        | 49.6    | 99.4    | 149.0   | -49.8       |
| United Kingdom | 57.0    | 51.9    | 108.9   | +5.1        |
| Korea, Rep. of | 45.2    | 57.5    | 102.7   | -12.3       |
| Brazil         | 42.8    | 31.5    | 74.3    | +11.3       |
| France         | 28.5    | 40.7    | 69.2    | -12.2       |
| Taiwan (China) | 27.1    | 41.5    | 68.6    | -14.4       |
| Netherlands    | 42.6    | 24.0    | 66.6    | +18.6       |
| India          | 21.6    | 36.3    | 58.0    | -14.7       |
| Singapore      | 31.4    | 20.1    | 51.5    | +11.3       |
| Italy          | 16.2    | 34.3    | 50.5    | -18.1       |

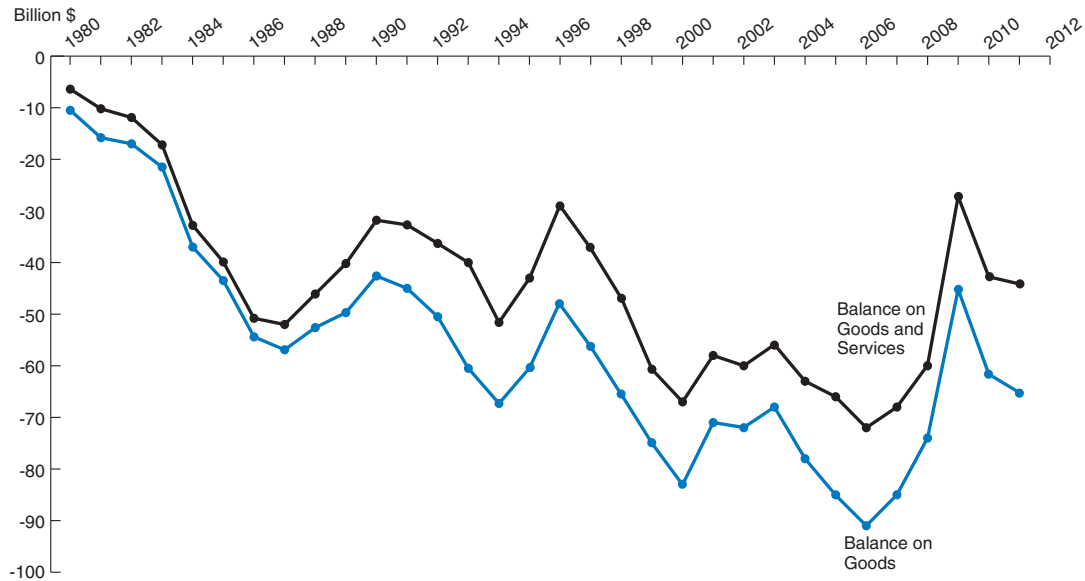
Source: U.S. Department of Commerce, *Survey of Current Business* (Washington, D.C.: U.S. Government Printing Office, July 2012), pp. 64–69.

Adding together columns 7 and 8 gives the official settlements balance. Keeping in mind that a positive official settlements balance represents a deficit in U.S. international transactions, while a negative balance represents a surplus, we see that the United States had its first large balance-of-payments deficit (of \$10 billion) in 1970. The deficit rose sharply in 1971, when it reached \$30 billion. Since 1973 the United States has had a deficit in its international transactions in every year except 1979, 1982, 1984–1985, 1989, and 1998. The yearly U.S. balance-of-payments deficit exceeded \$30 billion in 1977–1978, 1986–1988, 1990, and 1992–1994; it exceeded \$40 billion in 1992–1994, and \$100 billion in 1995–1996. Since 2003 it exceeded \$200 billion. In 2008, the United States had the largest balance-of-payments deficit on record (\$550 billion). In 2011, the U.S. balance-of-payments deficit was \$196 billion.

### ■ CASE STUDY 13-3 The U.S. Trade Deficit with Japan

Figure 13.1 shows the U.S. trade deficit with Japan in goods and in goods and services, from 1980 to 2011. The U.S. trade deficit on goods and services is smaller than the U.S. trade deficit on goods alone because of the trade surplus in services that the United States has with Japan. Both deficits increased sharply from 1980 to 1987, decreased

until 1990, increased up to 1994, decreased in 1995 and 1996, increased until 2000, and were \$65 billion and \$44 billion, respectively in 2011. The U.S. trade deficit with Japan is of particular interest because of its size and persistence, which gave rise to major trade frictions between the two countries.



**FIGURE 13.1.** The U.S. Trade Balance with Japan in Goods and in Goods and Services, 1980–2011.

The U.S. Trade Deficit with Japan in goods and in goods and services fluctuated around a declining trend and were \$65 billion and \$44 billion, respectively, in 2011.

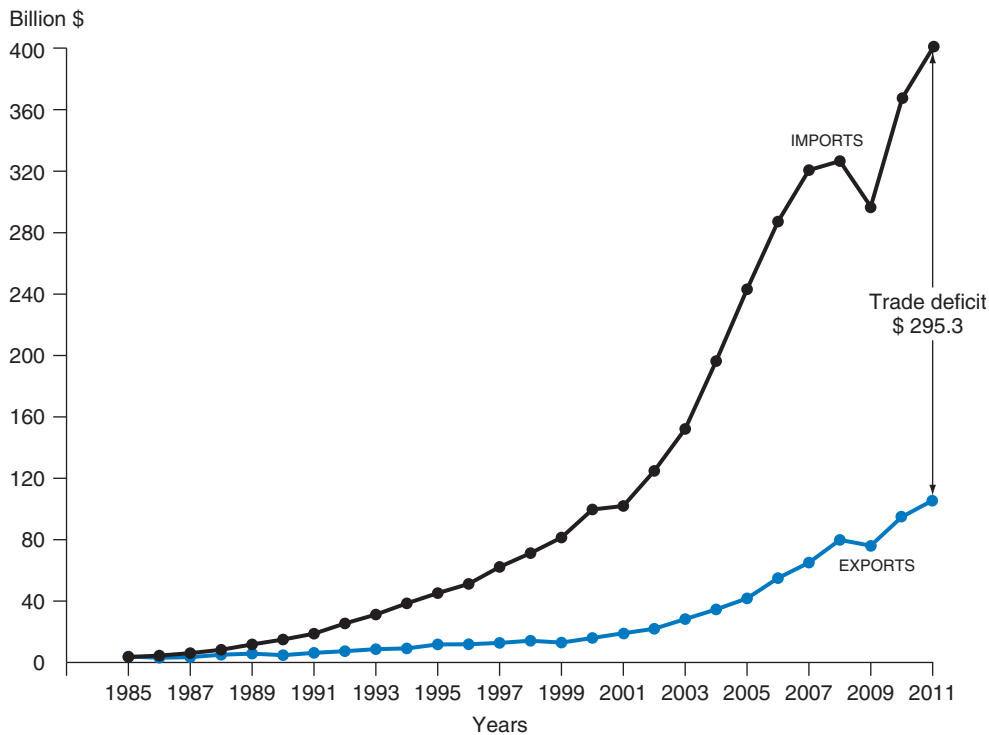
Source: U.S. Department of Commerce, *Survey of Current Business* (Washington, D.C.: U.S. Government Printing Office, various issues).

Several important points must be kept in mind in examining a nation's balance of payments. First, too much attention is generally placed on the balance on goods and on short-term data. The reason may be that data on the quarterly trade balance on goods are the first to become available. It is also dangerous to extrapolate for the year based on quarterly data. Even the notion of a positive trade balance on goods being favorable is somewhat misleading because a positive trade balance means that the nation has fewer goods to consume domestically. On the other hand, a large and persistent trade deficit (say, in excess of 2 or 3 percent of GDP) may not be sustainable in the long run for an individual country. This problem will be examined in Chapter 17.

### ■ CASE STUDY 13-4 The Exploding U.S. Trade Deficit with China

Figure 13.2 shows the value of U.S. goods exports and imports from China from 1985 to 2011. U.S. imports from China grew much faster than U.S. exports and resulted in a very large and fast-rising U.S. trade deficit with China (\$295.3 billion in 2011). In fact, in 2000 China replaced Japan as the nation with which the United States has the

largest trade deficit; in 2011, the U.S. trade deficit with China was 4.6 times the U.S. trade deficit with Japan. Although it is normal for a large and rapidly growing developing country such as China to have a trade surplus, its huge size and extremely rapid growth are creating major difficulties in U.S.–China trade relations.



**FIGURE 13.2.** U.S. Exports, Imports, and Net Trade Balance in Goods with China, 1985–2011 (billions of dollars).

U.S. imports from China grew much faster than its exports. This resulted in a huge trade deficit.

Source: U.S. Department of Commerce, *Survey of Current Business* (Washington, D.C.: U.S. Government Printing Office, various issues).

Second, it is also important to keep in mind that international transactions are closely interrelated rather than independent. For example, cutting U.S. foreign aid programs also reduces the ability of recipient nations to import from the United States. Therefore, the possible improvement in the U.S. balance of payments is likely to be much less than the reduction in the amount of foreign aid given, particularly if the aid is tied to (must be spent in) the United States. Third, an attempt to reduce the U.S. trade deficit with respect to a

nation such as China is likely to reduce the U.S. surplus with respect to Brazil because Brazil pays for U.S. goods partly through natural resource exports to China. In a world of multilateral trade and highly interdependent transactions, the interpretation of a nation's statement of international transactions must be approached very cautiously, especially when trying to establish causality.

## 13.6 The International Investment Position of the United States

While a nation's balance of payments measures the international *flow* of goods, services, and capital *during a one-year period*, the **international investment position** measures the total amount and the distribution of a nation's assets abroad and foreign assets in the nation

■ **TABLE 13.5.** The U.S. International Investment Position, Selected Years: 1980–2011 (at current cost, billions of dollars at year end)

|  | 1980  | 1990    | 2000      | 2005      | 2010      | 2011*     |
|--|-------|---------|-----------|-----------|-----------|-----------|
| Net international investment position of the United States             | \$360 | \$– 230 | \$– 1,337 | \$– 1,932 | \$– 2,474 | \$– 4,030 |
| Net international investment position, excluding financial derivatives | 360   | –230    | –1,337    | –1,990    | –2,584    | –4,157    |
| U.S.-owned assets abroad   | 930   | 2,179   | 6,239     | 11,962    | 20,298    | 21,132    |
| U.S.-owned assets abroad, excluding financial derivatives              | 930   | 2,179   | 6,239     | 10,772    | 16,646    | 16,428    |
| U.S. official reserve assets   | 171   | 175     | 128       | 188       | 489       | 536       |
| Gold   | 156   | 102     | 72        | 134       | 368       | 400       |
| SDRs   | 3     | 11      | 11        | 8         | 57        | 55        |
| Reserve position in IMF  | 3     | 9       | 15        | 8         | 12        | 30        |
| Foreign currencies   | 10    | 52      | 31        | 38        | 52        | 51        |
| Other U.S. government assets   | 66    | 84      | 85        | 78        | 75        | 179       |
| U.S. private assets  | 693   | 1,920   | 6,025     | 10,506    | 16,082    | 15,713    |
| Direct investments   | 388   | 617     | 1,532     | 2,652     | 4,307     | 4,682     |
| Foreign securities   | 62    | 342     | 2,426     | 4,329     | 6,336     | 5,922     |
| Other  | 243   | 961     | 2,067     | 3,525     | 5,439     | 5,109     |
| Foreign-owned assets in the U.S.                                       | 569   | 2,409   | 7,576     | 13,894    | 22,772    | 25,163    |
| Foreign-owned assets in the U.S., excluding financial derivatives      | 569   | 2,409   | 7,576     | 12,762    | 19,230    | 20,584    |
| Foreign official assets in the U.S.                                    | 181   | 380     | 1,037     | 2,313     | 4,913     | 5,251     |
| Other foreign assets   | 388   | 2,029   | 6,539     | 10,448    | 14,317    | 15,333    |
| Direct investments   | 127   | 505     | 1,421     | 1,906     | 2,598     | 2,909     |
| Other  | 261   | 1,524   | 5,118     | 8,542     | 11,719    | 12,424    |

\*Data for 2011 are preliminary; final (revised) data are in July 2013 *Survey of Current Business*.

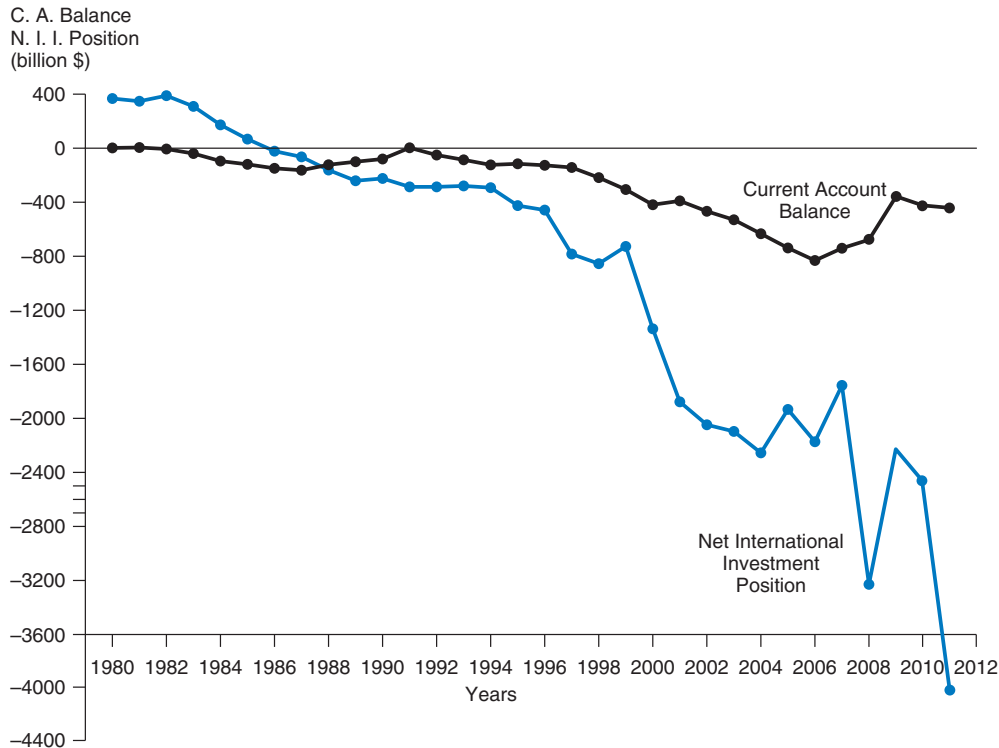
Source: U.S. Department of Commerce, *Survey of Current Business* (Washington, D.C.: U.S. Government Printing Office), July 2011, pp. 122–123 and July 2012, p. 17.



at the end of the year. Thus, the balance of payments represents a flow concept, and the international investment position (often called the *balance of international indebtedness*) represents a stock concept.

The statement of a nation's international investment position can be used to project the future flow of income or earnings from the nation's foreign investments and the flow of payments on foreign investments in the nation. Furthermore, adding the nation's capital flows during a particular year to its international investment position at the end of the *previous* year should give the international investment position of the nation at the end of the particular year, in the absence of a statistical discrepancy and if the stock of U. S. direct investments abroad and foreign direct investments in the United States were revalued to reflect price and exchange rate changes during the year.

Table 13.5 gives the international investment position of the United States at the end of 1980, 1990, 2000, 2005, 2010, and 2011, with foreign direct investment valued at current (i.e., replacement) cost. From the table, we see that the U.S. international investment position deteriorated sharply from +\$360 billion at the end of 1980 to (–)\$4,030 billion at the end of



**FIGURE 13.3.** The U.S. Current Account Balance and the Net International Investment Position, 1980–2011.

The United States had current account deficits in every year except 1980, 1981, and 1991. U.S. current account deficits became very large and increased rapidly after 1997. The U.S. net international investment position was positive from 1980 to 1985 and negative thereafter, and it increased sharply after 1999.

Source: U.S. Department of Commerce, *Survey of Current Business* (Washington, D.C.: U.S. Government Printing Office, July 2011), pp. 70–71 and 122–123.

2011. Table 13.5 also shows that the amount of U.S.-owned assets abroad increased 23 times from \$930 billion in 1980 to \$21,132 billion in 2011. Foreign-owned assets in the United States increased even faster (44 times), from \$569 billion in 1980 to \$25,163 billion in 2011. Figure 13.3 shows the sharp increase in the U.S. current account deficit after 1997 and the deterioration in its net international investment position after 1999. As a result, the United States became a large (in fact the largest) debtor nation in the 1990s (see Case Study 13-5).

### ■ CASE STUDY 13-5 The United States as a Debtor Nation

The shift of the United States from net creditor to debtor nation in 1985 gave rise to a lively debate among economists, politicians, and government officials on the benefits and risks of this development. On the benefit side, large foreign investments allowed the United States to finance about half of its budget deficit during the mid-1980s without the need for higher interest rates and more “crowding out” of private investments. A portion of foreign investments also went into businesses, farms, real estate, and other property, which made more rapid growth possible in the United States. It has been estimated that foreign investments created about 2.5 million additional jobs in the United States during the 1980s and also helped spread some new and more efficient managerial techniques from abroad.

To the extent that foreign investments went into directly productive activities with returns greater than the interest and dividend payments flowing to foreign investors, this investment was beneficial to the United States. On the other hand, the portion of foreign investments that simply went to finance larger U.S. consumption expenditures led to interest and dividend payments to foreign investors and represents a real burden or drain on future consumption and growth in the United States. As the largest and richest nation in the world, there is no question that the United States could repay its foreign debt if called upon to do so. At about 18 percent of its gross national income (GNI), the U.S. foreign debt is relatively smaller than that of much poorer developing nations. It is the burden that the foreign debt imposes on future generations as well as the siphoning off of capital from poorer nations that are more troublesome.

There is also the danger that foreigners, for whatever reason, may suddenly withdraw their funds. This would lead to a financial crisis and much higher interest rates in the United States. Rising income payments to foreigners on their investments also means a worsening of the U.S. current account balance in the future. They also drain resources and reduce growth in the rest of the world. On a more general level, some people fear that foreign companies operating in the United States can transfer advanced American technology abroad. This could also lead to some loss of domestic control over political and economic matters in the United States as foreign executives and their lobbyists become ever more familiar figures in the corridors of Congress, state houses, and city halls. There is a bit of irony in all of this—these were the very complaints usually heard from Canada, European nations, and developing countries with regard to the large U.S. investments in their countries during the 1950s, 1960s, and 1970s. With the great concern often voiced during the second half of the 1980s about the dangers of foreign investments to the United States, the tables seemed to have turned. Such fears all but disappeared during the 1990s (when most nations eagerly sought to attract foreign direct investments) only to resurface in the last decade.

*Sources:* “A Note on the United States as a Debtor Nation,” *Survey of Current Business* (Washington, D.C.: U.S. Government Printing Office, June 1985), p. 28; and “The International Investment Position of the United States,” *Survey of Current Business* (July 2008–2012).