

Trade and the Balance of Payments

Learning Objectives

After studying this chapter, students will be able to:

- 9.1 Define the current, capital, and financial accounts of a country's balance of payments.**
- 9.2 Explain the importance of the three main components of the current account.**
- 9.3 Describe three types of international capital flows.**
- 9.4 Use a simple algebraic model to relate the current account to savings, investment, and the general government budget balance.**
- 9.5 Discuss the pros and cons of current account deficits.**
- 9.6 Show the relationship between a country's balance of payments and its international investment position.**

INTRODUCTION: THE CURRENT ACCOUNT

- LO 9.1 Define the current, capital, and financial accounts of a country's balance of payments.**
- LO 9.2 Explain the importance of the three main components of the current account.**

The international transactions of a nation are divided into three separate accounts: the *current account*, the *capital account*, and the *financial account*. For most countries, the capital account is relatively minor, and the two most important accounts are the current and financial accounts. The **current account** tracks the flow of goods and services into and out of the country, while the **financial account** is the record of financial transactions occurring between one country and the rest of the world, such as foreign investment, purchases, or sales of foreign stocks and bonds, and international bank lending. The **capital account** is by far the smallest of the three and is a record of transfers of specialized types of capital, such as the gift of an embassy building or the land it is on, from residents of one country to residents in another. This chapter examines the accounting system used to keep track of a country's international transactions. One of its primary goals is to understand the accounting relationships among

domestic investment, domestic savings, and international flows of goods, services, and financial assets. In addition, we will use the international accounts to examine the meaning of international indebtedness and to discuss its consequences.

The Trade Balance

In 2019, the United States imported goods and services worth \$3,114 billion. The composition of the purchases included a wide array of tangibles and intangibles, from Japanese cars to Canadian oil and from luxury Mexican vacations to tickets on the European rail system. In the same year, U.S. firms exported \$2,498 billion worth of aircraft, software, grain, trips to Disney World, and other goods and services. The difference between exports and imports of goods and services is called the **trade balance**. For the United States, the 2019 trade balance was \$2,498 billion minus \$3,114 billion, or $-\$616$ billion. Because the number is negative, the United States had a trade deficit.

Exports and imports include both goods and services, so the trade balance can be decomposed into the balance on goods and the balance on services. In the case of the United States, the goods balance was in deficit by $-\$866$ billion, while the services balance was in surplus by \$250 billion. In 2019, services were 34 percent of total exports, and for many years they have been a growing part of U.S. and world trade. The main items in services trade include travel and passenger fares; transportation services; royalties and license fees; and education, financial, business, and technical services. Although the U.S. trade balance for services is in surplus, total trade in services is still too small a share of overall trade to counteract the very large deficit in the merchandise goods trade balance.

The Current and Capital Account Balances

The merchandise goods trade balance is the most commonly cited measurement of a nation's transactions with the rest of the world. The widespread dissemination of the monthly merchandise trade balance statistics through press releases and news articles makes it the most familiar concept in international economics and the basis of most people's understanding of U.S. international economic relations.

A more comprehensive statistic is the **current account balance**, which measures all current, nonfinancial transactions between a nation and the rest of the world. It has three main items: (1) goods and services trade; (2) earned income paid abroad and received from abroad, called **primary income**; and (3) transfer payments made abroad and received from abroad, called **secondary income**. All three of these items have credit and debit components in the balance of payments and in the construction of the current account balance. The simplest framework for conceptualizing these three components is in terms of credits and debits, as portrayed in Table 9.1.

The investment income items in Table 9.1 should not be confused with the flow of investment capital that is used to buy a business or invest in another country's stock market. Investment income is the income received or paid on the

TABLE 9.1 Components of the Current Account

	Credit	Debit
1. Goods and services	Exports	Imports
2. Primary income	Investment earnings income received from foreigners and compensation of employees	Investment earning income paid to foreigners and compensation of employees
3. Secondary income	Transfers received from abroad	Transfers made to foreigners

There are three main components to the current account. Each component is divided into debit and credit elements.

existing investments. For example, financial capital sent to another country with the purpose of buying a bond would not be included, but the interest received on the bond would be. The purchase or sale of assets are counted in the financial accounts of buying and selling countries and are discussed later. It is useful to think of primary income in the current account as the payments or receipts for the use of financial capital or for use of labor. For example, if a U.S. company invests in Mexico's stock market, the initial investment will not show up in the current account but will be included in the financial account. The subsequent flow of dividends back to the U.S. company will be counted in the United States as income received and in Mexico as income paid. Conceptually, it is as if U.S. investors are receiving payment for the rental of U.S. capital to Mexican firms, which makes it similar to payments for a service. Similarly, if a U.S. company operating in Mexico pays wages from its home in the U.S., the wages are included in the primary income category of the current account and are recorded as a receipt by Mexico and a payment by the U.S.

The third item in the current account balance, secondary income, includes payments made that are not in exchange for a good or service, such as foreign aid, or the **remittances** (the transfer of wages earned in one country to residents of another country) of immigrants temporarily residing in another country. In the U.S. case, these payments are large in absolute amounts but small relative to the U.S. current account. Transfers are sometimes very important to the current account balances of developing countries receiving either substantial foreign aid or large remittances from their citizens working abroad.

Table 9.2 gives a picture of the U.S. current account in 2019. The −\$498 billion deficit is part of the long-term persistence of U.S. current account deficits, as shown in Figure 9.1. Large deficits in the current account began around 1982 and have been more or less a constant feature of the U.S. economy since then. Although the deficit turned into a small surplus of \$6.6 billion in 1991, due in part to the large flows of secondary income (transfers) received by the United States as payment for Operation Desert Storm, the pattern has been one of persistent deficits in the current account.

TABLE 9.2 The U.S. Current Account Balance, 2019

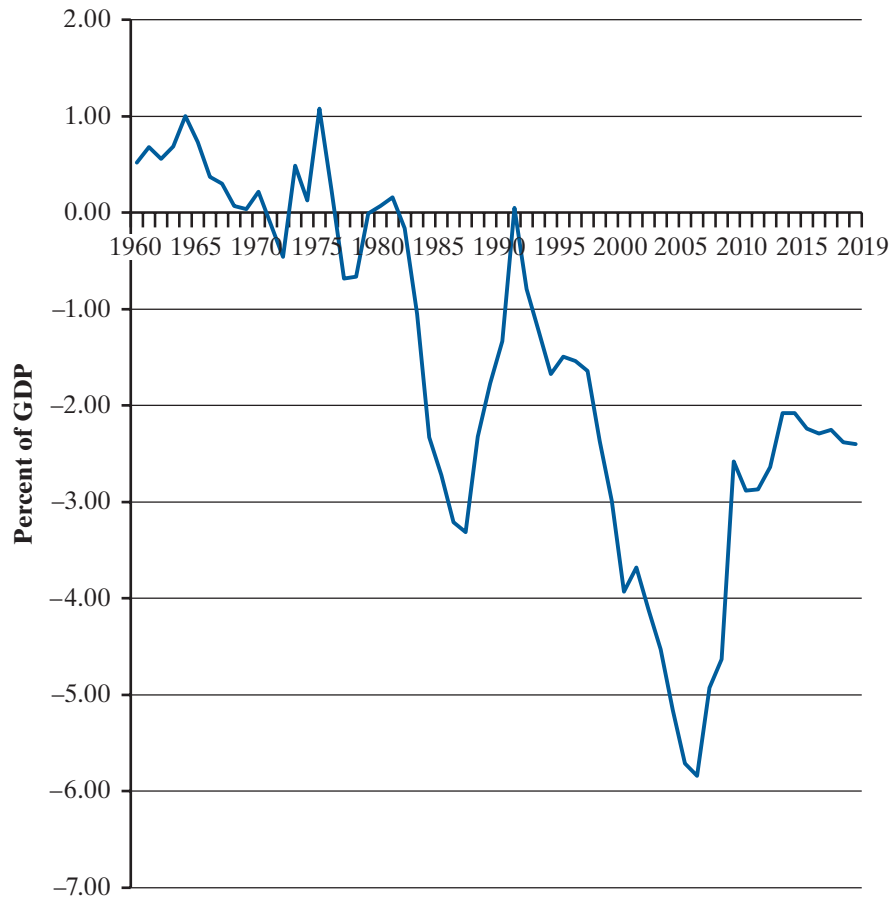
	Billions of Dollars
1. Goods and services exports (credit) (lines 1a + 1b)	2,498
1a. Goods exports	1,653
1b. Services exports	845
2. Primary income receipts (credit) (lines 2a + 2b)	1,123
2a. Investment income received	1,116
2b. Compensation of employees received	7
3. Secondary income receipts (transfers) (credit)	143
4. Goods and services imports (debit) (lines 4a + 4b)	3,114
4a. Goods imports	2,519
4b. Services imports	595
5. Primary income payments (debit) (lines 5a + 5b)	866
5a. Investment income paid	846
5b. Compensation of employees paid	20
6. Secondary income payments (transfers) (debit)	282
7. Current account balance (lines 1 + 2 + 3 - 4 - 5 - 6)	-498

The U.S. current account balance was a deficit of -\$498 billion in 2019. The deficit is largely the result of goods imports greater than exports. The U.S. has surpluses in services trade and primary income flows.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

We will explore the causes and consequences of large current account deficits later, but here it should be noted that a current account deficit is not simply a sign of weakness. On the contrary, through much of the 1990s, rapid economic growth in the United States raised incomes and created a voracious appetite for imports. Meanwhile, economic growth among the United States' main trading partners ranged between negative and sluggish, so foreign incomes did not rise as rapidly. Consequently, foreign demand for U.S. exports grew less rapidly than the U.S. demand for imports. Therefore, it can be argued that the current account deficit in the 1990s was a sign of relative U.S. economic strength. It would be a mistake to carry this argument too far, however, since everyone agrees that the deficit is not sustainable in the long run and that it could create serious future problems. We will look at this issue later in the chapter after we introduce a few more concepts.

The capital account of the balance of payments is the record of specialized capital transfers. Because it is a measure of transfers and not purchases or sales, it is somewhat similar to the category of secondary income of the current account, but with the major distinction that it applies to capital transfers and not income transfers. Normally, this is a small item and includes relatively infrequent activities such as the transfer of military bases or embassies between countries, debt forgiveness, and the personal assets that migrants carry with them when they cross borders.

FIGURE 9.1 U.S. Current Account Balances, 1960–2019

There are two periods of large current account deficits in the United States. The first lasted through most of the 1980s, while the second began in the early 1990s and continues today, although it has been moderated by the financial crisis of 2007–2009, which led to fewer imports.

Source: Data from Organization for Economic Co-operation and Development, Total Current Account Balance for the United States, © James Gerber.

INTRODUCTION TO THE FINANCIAL ACCOUNT

Types of Financial Flows

LO 9.3 Describe three types of international capital flows.

The financial account is the main record of financial flows between countries. Unlike the current account, which deals with goods and services and income flows, the financial account covers all types of financial assets that can be

bought and sold internationally. It is divided into three main categories, each with many subcomponents. The three main categories are (1) the **net acquisition of financial assets**, (2) the **net incurrence of liabilities**, and (3) changes in financial derivatives. Financial assets include bank accounts, stocks and bonds, real property such as factories, businesses, real estate, and monetary gold and foreign currencies that can be used to settle international payments. A positive net acquisition of financial assets implies that the country's residents are buying more foreign assets than they are selling. A positive net incurrence of liabilities means that foreigners are purchasing more of the home country's assets than they are selling. Seen another way, the acquisition of financial assets is a form of lending by the home country that takes place through the purchase of foreign owned real estate, stocks, bonds, or some other asset form. The net incurrence of liabilities is symmetrical in the sense that it is a form of borrowing by the home country that takes place through the sale of home country assets to foreigners.

The third category of the financial account is financial derivatives. These are assets with a value that is derived from the value of some other asset, such as commodity prices or exchange rates, or one of many other possibilities. Derivatives are an older type of asset than most people imagine. For example, farmers have used them for a long time to protect against fluctuations in agricultural prices. A wheat farmer might sign a contract in March to sell her crop in September at a price agreed when the contract is signed. The value of the contract depends on the fluctuation in wheat prices. If prices go above the agreed price, the contract becomes more valuable to the buyer because they have a guaranteed lower price, and vice versa if prices fall over the summer. The contract is a derivative since its value depends on the price of wheat. Derivatives are widely used in financial markets as a way to speculate or to protect against risk.

Table 9.3 shows the financial account in relation to the current and capital accounts. Two points about the financial account should be kept in mind. First, it presents the flow of assets during the year and not the stock of assets that have accumulated over time. Second, all flows are “net” changes rather than “gross” changes. Net changes are the differences between assets sold and assets bought, as when U.S. residents purchase shares in the Mexican stock market while simultaneously selling Mexican bonds. The net change in U.S.-owned assets is the difference between the value of the shares purchased and the bonds sold. If the stocks and bonds are equal in value, then the net change is zero. Net changes are informative because they measure the monetary value of the change in a country's financial stake in foreign economies.

Under the accounting procedure used to tabulate credits and debits in the financial account, payments made abroad to buy financial assets are a debit, while payments received from abroad for selling home country assets (net incurrence of liabilities) are a credit. In this sense, credits can be viewed as the inflow received when assets are sold to foreigners and debits are the payment outflow when financial assets are purchased by home country residents. This way of

TABLE 9.3 The U.S. Balance of Payments, 2019

	Billions of Dollars
1. Current Account Balance (See Table 9.2.)	−498
2. Capital Account Balance	0
3. Financial Account	
3a. Net U.S. acquisition of financial assets, excluding financial derivatives (increase/outflow (+))	427
3b. Net U.S. incurrence of liabilities, excluding financial derivatives (increase/inflow (+))	784
3c. Net change in financial derivatives	−38
4. Statistical Discrepancy	102
5. Memoranda	
5a. Balance on current and capital accounts (lines 1 + 2)	−498
5b. Balance on financial account (lines 3a − 3b + 3c)	−396

The financial account measures capital inflows and outflows. A positive value for the net acquisition of assets is net lending abroad while a positive value for net incurrence of liabilities is net borrowing from abroad. The financial account balance (5b) indicates net lending (positive) or net borrowing (negative). The statistical discrepancy is the difference between net lending and borrowing on financial account and the current plus capital accounts (line 5b minus line 5a).

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

looking at it makes the credits and debits of asset flows conceptually similar to the credits and debits of exports and imports.

The current, capital, and financial accounts are interdependent. The current and capital accounts measure the flows of goods, services, and transfers between a country and the rest of the world, and the financial account measures the net flows of asset purchases and sales. Because each element in the current account must include a financial transaction that is a payment or receipt, the current plus capital account must equal the financial account. A negative value in the current plus capital account implies net borrowing by the home country. This must show up in the financial account as net borrowing as well. The financial account of the United States shows it lends as well as borrows, but on net, it borrows. Table 9.3 shows that the U.S. lent abroad through the net acquisition of financial assets worth \$426 billion. At the same time, the United States incurred liabilities or borrowed \$784 billion from foreigners. Its balance on financial account is the amount lent minus the amount borrowed, or \$426 billion minus \$784 billion plus the net change in financial derivatives, −\$38 billion, which equals −\$396 billion.

The last item to discuss in Table 9.3 is the **statistical discrepancy** on line 4. Since it is impossible to record all transactions and to ensure they are accurately measured, the amount of net lending or borrowing on the current and capital accounts rarely matches the amount implied by the financial account balance. The statistical discrepancy is calculated as the residual difference between the financial account balance minus the current plus capital account balances $(-396 - (-498)) = 102$. In a sense, it is the size of the measurement error.

While the current and financial accounts are mirror images of each other, a large share of a nation's gross financial account transactions is not in response to the current account flows of goods, services, or income. For example, a London-based investment company may buy stock in a Chilean firm, lend money to the government of Thailand, and engage in any number of financial transactions that have nothing to do with the movements of goods and services on the current account. In an accounting sense, these purely financial transactions must have a net value of zero. The reason is that the purchase of an asset is simultaneously the sale of an asset of equal value. For example, if you buy a share of stock, you obtain an asset that is partial ownership of a company while the person selling the share obtains your cash. It is the same internationally. If a Canadian citizen buys shares in the Mexican stock market (capital outflow), he or she must sell Canadian dollars or some other asset (capital inflow). (If he or she pays for the shares by writing a check drawn on a Mexican bank, then it does not enter the financial account since it is a change of one foreign asset for another.) As a result, the financial account is a complete picture of net flows of financial assets during the year.

One of the primary concerns of most governments is the form of financial flows entering and leaving the country. Some financial flows are very mobile and represent short-run tendencies. These flows are often vehicles for transmitting a financial crisis from one country to another or for generating sudden responses to changes in investor expectations about the short-run prospects of an economy. The degree of mobility of financial flows and the potential of some flows to introduce a large element of volatility into an economy have turned the type of flows that a country receives into a major issue.

As a first approach to a more detailed representation of the financial account, it is useful to subdivide the financial flows in Table 9.3 into more specific subcategories. Table 9.4 shows the 2019 financial account for the United States, divided into seven subcategories representing the main components of outflows and inflows, or net assets acquired (outflow) and net liabilities incurred (inflow).

Line 1a in Table 9.4 shows a net acquisition of \$198 billion of direct investments outside the United States, while line 2a shows a net incurrence of \$311 billion in direct investment liabilities. The first number (1a) represents the purchase of factories, businesses, real estate, office buildings, and other forms of real property outside the United States by U.S. residents and businesses. The second item (2a)

TABLE 9.4 Components of the U.S. Financial Account, 2019

	Billions of Dollars
1. Net U.S. acquisition of financial assets (net increase in assets/ financial outflow (+))	427
1a. Direct investment assets	198
1b. Portfolio investment assets	39
1c. Other investment assets	189
1d. Reserve assets	5
2. Net U.S. incurrence of liabilities, excluding financial derivatives (net increase in liabilities/financial inflows (+))	784
2a. Direct investment liabilities	311
2b. Portfolio investment liabilities	232
2c. Other investment liabilities	242
3. Net change in financial derivatives	-38

Financial outflows and inflows can be subdivided into main categories of direct investment (businesses, real estate, or other physical assets), portfolio investment (stocks, bonds, and other financial instruments), and other investment assets (primarily international bank loans). In addition, every country buys and sells reserve assets, which are monetary gold and foreign currencies used for international payments.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

is symmetrical in that it represents the purchase in the United States of a similar category of items by foreign residents and businesses. **Foreign direct investment (FDI)** was discussed in Chapter 4 where Dunning's OLI theory was presented. In general, FDI varies considerably from year to year since it depends on the number of purchases and sales by foreigners and is often linked to mergers. Once made, however, FDI is probably less likely to leave a country, particularly when compared to the next category of items in lines 1b and 1c and 2b and 2c.

Portfolio investments (1b and 2b) and the other investments (1c and 2c) are paper assets and liabilities. The main portfolio items are stocks and bonds, while the other investment category mainly includes currencies, bank deposits and loans, and insurance contracts. FDI, portfolio investments, and other investments assets all give their holders a claim on a country's future output, but they are very different in their time horizons. FDI which represents real assets as opposed to paper assets tends to have a longer time-horizon and is much less liquid than most of the items in the other two categories. As such, FDI represents a longer term position in the country. Portfolio investments and most other investments, by contrast, can be long- or short-term, but they are far more liquid and easier to dispose of in the event of a sudden change in the economy or in investor expectations. This poses a significant challenge for economic policymakers.

When investor expectations change, it can cause a **sudden stop** in inflows, followed by large destabilizing outflows. The economist Guillermo Calvo coined the term sudden stop to describe a quick reversal of portfolio or other assets and notes that they have been involved in most recent financial crises. In terms of Table 9.4, a sudden stop would appear as a shift from one period to the next in categories 2b and 2c. Specifically, there would be a drop in the net incurrence of liabilities as capital inflows ceased. In a severe crisis, net incurrence of liabilities might turn negative, implying that foreigners are selling off their holdings of home country assets. Categories 1b and 1c might drop as well, as home country residents stop acquiring foreign assets so that they can pay-off foreigners who are converting assets in the home country into cash and repatriating to their own country or to a third party country. If home country residents are forced to sell off foreign assets in order to obtain the liquidity they need to pay-off investors, categories 1b and 1c can become negative, representing a net reduction in the home country's holding of foreign portfolio and other financial assets.

Reserve assets are shown in category 1d. These are mainly the currencies of the largest and most stable economies in the world: U.S. dollars, European Union (EU) euros, British pounds, the Japanese yen, and recently the Chinese yuan (November 2015). In addition to key currencies, reserve assets also include monetary gold and special drawing rights (SDR), the artificial currency of the IMF. Since the financial account reports financial flows, it does not indicate the stock, or total supply, of assets available. From Table 9.4, we see that the United States had a net change of \$5 billion in official reserve assets. This represents acquisition of official reserve assets, but does not indicate the total amount of reserve assets available to the United States. Since all forms of international debts can be settled with reserve assets, especially key currencies, these assets play a prominent role in international finance. When they become scarce in a country, it signals that potentially serious problems are arising. For example, when Mexico's economy collapsed in late 1994 and early 1995, it was because Mexicans owed dollars to various international investors but lacked dollars to pay them. The outflow of dollars from Mexico during 1994 severely reduced the supply of dollars and, in the short run, made it impossible for firms and the government to pay their dollar-denominated debts. Relief came when Mexico was able to arrange several loans from the IMF, the United States, and Canada, which replenished its supply of official reserve assets. (See the case study in Chapter 12.)

Reserve assets are used to settle international debts; consequently, central banks and treasury ministries use them as a store of value. For example, when an importer in a small country such as Chile purchases goods from Europe, payment may be in dollars or another reserve currency, but the supplier probably would not accept Chilean pesos from the purchaser. The importer must convert some pesos into a reserve currency that it can use to pay for its imports. If the Chilean Central Bank cannot provide dollars or another reserve currency to Chilean banks and importers, then the import business grinds to a halt unless the importer can secure some form of credit from the seller.

Limits on Financial Flows

Throughout the second half of the twentieth century, many nations limited the movement of financial flows across their national borders. A typical pattern was to allow financial flows related to transactions on the current account, but to limit and regulate financial account transactions. If an importer needed a foreign loan to purchase goods abroad, or if an exporter needed foreign financing to buy materials to make goods for export, the financial flows were regulated but generally allowed. Conversely, if a bank wanted to borrow abroad to make loans at home, then the inflow of financial capital to the bank was prohibited or subjected to such onerous terms and conditions that it was undesirable. These types of restrictions on financial flows were a normal part of the international economic landscape, even in many high-income industrial economies, until the 1980s and 1990s.

A movement toward more open financial markets over the last several decades included a significant lifting of controls on financial flows across international boundaries. This change in international economic policy was seen as desirable because restrictions on financial flows limit the availability of financial capital. Low- and middle-income countries, in particular, were thought to benefit from the liberalization of capital markets since they have the greatest scarcity of financial capital. Frequently, the quantity of investment in low- and medium-income countries depends on their access to the financial capital of high-income countries.

In addition to the positive benefits for growth, it is sometimes impossible for regulators to identify and separate financial flows that occur for reasons of financial transactions from those that are related to transactions on the current account. Consequently, it can be difficult to regulate or control international financial flows and the attempt to do so can lead to red tape, bureaucratic delay, and arbitrariness, all of which can reduce economic efficiency. For over two decades, from the 1980s until the crisis of 2007–2009, many economists argued that it is better to allow financial capital to move freely across international borders.

In recent decades, the extreme volatility in some financial markets and the severe damage it has caused to many countries have revived interest in regulations to limit the damage caused by unexpectedly large financial outflows. As the pendulum has swung back toward seeing benefits in more regulation of financial flows, it has generated a certain amount of tension between policymakers, politicians, and businesspeople. It is easy to understand why. On the one hand, foreign capital inflows are beneficial because they enable countries to increase their investments in factories, ports, and other physical assets that help raise living standards and incomes. On the other hand, the sudden outward flight of foreign financial capital can generate a debt crisis and throw a country into deep depression. The key is to capture the benefits of increased investment while minimizing the risks of capital flight. At this point there is not much consensus among economists about the best policies. We will look at this issue in more detail in Chapter 12 after we introduce several more concepts.

CASE STUDY**The Crisis of 2007–2009 and the Balance of Payments**

The global financial crisis that began in 2007 had both medium-run and short-run impacts on the balance of payments. In the United States and elsewhere, the first stages of the crisis began in the late summer of 2007 with severe strains in financial markets. Throughout late 2007 and into 2008, banks and other financial services firms such as insurance companies and securities dealers reassessed their portfolios and tried to reduce their risk exposure by selling their foreign assets in large quantities. The goal was to build reserves of short-term, highly liquid, and secure assets such as cash and U.S. Treasury securities. These strains continued into 2008 and then intensified with the bankruptcy of several large financial services firms that had significant international business.

Banks and financial firms knew that some of the assets they held were “toxic” and unlikely to maintain their value or any value at all in some cases. As the crisis progressed, problems grew more intractable as it became increasingly difficult to determine a market value for assets that had stopped trading and had no reference prices available. If banks could not sell their assets, then they could not build their cash reserves for handling their potential losses. The consequences would be disastrous, since they would lack the liquidity to pay their own debts. The shifts in financial markets that began in late summer and early fall of 2007 were sudden and continued throughout 2008. The reversal in the normal pattern of global finance is illustrated in Table 9.5, which shows the main components of the financial account of the United States for 2007 and 2008.

Table 9.5 shows that both foreign and U.S. domestic interests shifted toward a defensive stance from 2007 to 2008 as they stopped accumulating each other’s assets altogether or greatly reduced their purchases. In 2007, the United States acquired over \$1.5 *trillion* in financial assets (\$1,572,509,000,000). The crisis year of 2008 was entirely different, however, and U.S. interests were net sellers of financial assets. The negative value of –\$309 billion represented a selling off of foreign financial assets, as opposed to the normal pattern in which U.S. interests are net purchasers. All of the subcategories under line 1 declined in value, but the primary causes of the net sell-off were declines in portfolio holdings abroad (stocks and bonds) and other investments, which is mostly bank lending. In other words, U.S. households and businesses sold their foreign stocks and bonds, and they reduced the loans they were making abroad. Net purchases of businesses, real estate, and other forms of foreign direct investment remained positive, illustrating the less volatile nature of that type of foreign capital flow.

(continued)

TABLE 9.5 The U.S. Financial Accounts, 2007–2008 (Billions of Dollars)

	2007	2008
1. Net U.S. acquisition of financial assets excluding financial derivatives (net increase in assets/financial outflow (+))	1,573	−309
1a. Direct investment assets	533	351
1b. Portfolio investment assets	381	−284
1c. Other investment assets	659	−381
1d. Reserve assets	0	5
2. Net U.S. incurrence of liabilities, excluding financial derivatives (net increase in liabilities, financial inflows (+))	2,182	454
2a. Direct investment liabilities	340	333
2b. Portfolio investment liabilities	1,157	524
2c. Other investment liabilities	687	−402

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Line 2 shows that foreigners accumulated far fewer U.S. assets in 2008 than they did in 2007 (\$2,182 trillion versus \$454 billion). The biggest change occurred in the area of loans to U.S. banks and nonfinancial firms, which moved from a net inflow to the United States of nearly \$687 billion to a net outflow of −\$402 billion (line 2c). At the same time, foreign purchases of securities fell by over \$600 billion.

In general, Table 9.5 illustrates how firms in both the United States and abroad sought to protect themselves against the spreading crisis by reducing new investments outside their home country and by bringing liquid assets home.

THE CURRENT ACCOUNT AND THE MACROECONOMY

LO 9.4 Use a simple algebraic model to relate the current account to savings, investment, and the general government budget balance.

LO 9.5 Discuss the pros and cons of current account deficits.

There are two important practical reasons for learning about the balance of payments. One is to understand the broader implications of current account imbalances and to analyze the policies that might be used to tame a current account deficit. This is particularly important for small countries that are easily

buffeted about by changes in the global economy, but it is also of interest to a big economy such as the United States, where very large current account deficits have been the norm for several years. The second practical reason for studying the balance of payments is to understand how countries might avoid a crisis brought on by volatile financial flows and what policies will minimize the harmful effects of a crisis if it occurs. Economic analysis is still in its infancy when it comes to the problem of volatile financial flows, and there is some distance to travel before there is likely to be a consensus agreement on issues such as free versus restricted capital mobility or the links from financial flows to economic growth. Nevertheless, there are some basic points of agreement among economists, and we will discuss them in Chapters 10 and 12. Before then, we must examine the relationship of the current account to the macroeconomy, which requires a brief review of basic concepts from the principles of macroeconomics.

The National Income and Product Accounts

The internal, domestic accounting systems that countries use to keep track of total production and total income are called the **national income and product accounts (NIPA)**. These accounts are very detailed presentations of income, output, and other measures of a nation's macroeconomy. We will use the most fundamental concepts from this accounting system, beginning with the concept of **gross domestic product (GDP)**. Recall from the principles of economics that a nation's gross domestic product is the market value of all final goods and services produced inside its borders during some time period, usually a year. GDP is the most common measure of the size of an economy, although it is widely recognized that it ignores some important considerations, such as the value of leisure time and environmental degradation that takes place during the process of producing the nation's output. In addition, GDP includes only goods that pass through organized markets, so household production (cooking, sewing, landscaping, childcare, and so on) and other nonmarket-oriented production are left out. For these and other reasons, economists caution against using GDP as the sole determinant of the well-being of a society. In spite of these limitations, however, it provides a starting point for understanding different economies.

To avoid the problem of double counting, GDP includes only the value of *final* goods and services. This is actually a strength of the measure, since if we added the value of steel sold to a car maker and the value of the cars, we would be counting the steel twice: once as steel, and a second time as part of the value of the car. The final part of the definition states that GDP must be measured over some time period, usually a year. Most countries measure GDP every 3 months, but for most purposes, including ours, the most useful time period to consider is one year.

An alternative concept for measuring a nation's output is **gross national product (GNP)**. For most countries, the difference between the two concepts is very small, because GNP is the value of all final goods and services produced by

the labor, capital, and other resources of a country, regardless of where production occurred. In an accounting sense, GNP is equal to GDP plus investment income and unilateral transfers received from foreigners minus investment income and unilateral transfers paid to foreigners:

$$\begin{aligned}
 &\text{GDP} + \text{foreign income received} \\
 &\quad - \text{income paid to foreigners} \\
 &\quad + \text{foreign transfers received} \\
 &\quad - \text{transfers paid to foreigners} = \text{GNP}
 \end{aligned}$$

Note that the difference between GNP and GDP is precisely equal to the credits minus debits in lines 2 and 3 in Table 9.1, which is the same as net primary income plus net secondary income. This fact is useful because GDP includes exports minus imports and it enables us to bring the entire current account concept into the picture.

The usefulness of adding net primary foreign income plus net secondary income is apparent when we look at the definition of GDP based on its four main components. Table 9.6 defines the necessary variables. GDP is equal to the sum of consumer expenditures plus investment expenditures plus government expenditures on goods and services plus exports of goods and services minus imports of goods and services:

$$\text{GDP} = C + I + G + X - M \quad (9.1)$$

Given that GNP is equal to GDP plus net primary income and net secondary income:

$$\text{GNP} = \text{GDP} + (\text{net primary income} + \text{net secondary income}) \quad (9.2)$$

or

$$\text{GNP} = (C + I + G) + (X - M + \text{net primary income} + \text{net secondary income}) \quad (9.3)$$

TABLE 9.6 Variable Definitions

Variable	Definition
GDP	Gross domestic product
GNP	Gross national product
C	Consumption expenditures
I	Investment expenditures
G	Government expenditures on goods and services
X	Exports of goods and services
M	Imports of goods and services
CA	Current account balance
S	Private savings (savings of households and firms)
T	Net taxes, or taxes paid minus transfer payments received

We can write the definition of GNP in terms of the current account balance. Rewriting Equation (9.3) in a simpler form gives us the following:

$$\text{GNP} = C + I + G + \text{CA} \quad (9.4)$$

Equation (9.4) explicitly shows the relationship between the current account and the main macroeconomic variables such as consumer spending, investment, and government purchases.

As the total value of goods and services produced by the labor, capital, and other resources of a country, GNP is also the value of income received. This follows from the fact that the production of final goods and services generates incomes equal in value to output and is embodied in the basic macroeconomic accounting identity stating that every economy's income must equal its output. From the point of view of the income recipients, there are three choices or obligations: They may consume their income (C), save it (S), or use it to pay taxes (T). In reality, all of us do a combination of the three. This permits us to rewrite the definition of GNP in terms of income and its uses as follows:

$$\text{GNP} = C + S + T \quad (9.5)$$

Since Equations (9.4) and (9.5) are equivalent definitions of GNP—one in terms of the components of output, the other in terms of the uses of income—we can set them equal to each other as follows:

$$C + I + G + \text{CA} = C + S + T \quad (9.6)$$

Subtracting consumption from both sides and rearranging terms gives us the following:

$$I + G + \text{CA} = S + T \quad (9.7)$$

or

$$S + (T - G) = I + \text{CA} \quad (9.8)$$

Equation (9.8) is an accounting identity, or something that is true by definition. It is worth memorizing because it summarizes the important relationship between the current account balance, investment, and public and private savings in the economy. Equation (9.8) does not reveal any of the causal mechanisms through which changes in savings or investment are connected to the current account balance, but it does provide insight into the economy. For example, if total savings remains unchanged while investment increases, then the current account balance must move toward, or deeper into, deficit.

To see this, be sure that you understand the term on the left side, $(T - G)$. This is the combined (federal, state, and local) budget balances of all levels of government or, put another way, government savings. It is savings because (T) is government revenue (or income) and (G) is government expenditure. A positive $(T - G)$ states that the combined government budgets are in surplus, which in the governmental sector is equivalent to savings. Conversely, a negative $(T - G)$ is a deficit, or dissavings. Placing governmental budget balances on the left-hand side

emphasizes that there are two sources of savings in an economy: the private sector (S) and the public or governmental sector ($T - G$). If governments dissave (run deficits), then they must borrow from the private sector, which reduces total national savings on the left-hand side.

National Savings and Current Account Balances

From Equation (9.8) we see that a nation's savings (private plus public) is divided into two uses. First, it is a source of funds for domestic investment (I). This role is crucial because new investments in machinery and equipment are a source of economic growth. Investment is essential to upgrade the skills of the labor force, to provide more capital on the job, and to improve the quality of capital by introducing new technology. According to Equation (9.8), if government budgets are in deficit, the total supply of national savings is reduced, and all else being equal, investment will be less than it might otherwise have been. Conversely, a surplus in government budgets will augment private savings and increase the funds available for investment, all else being equal.

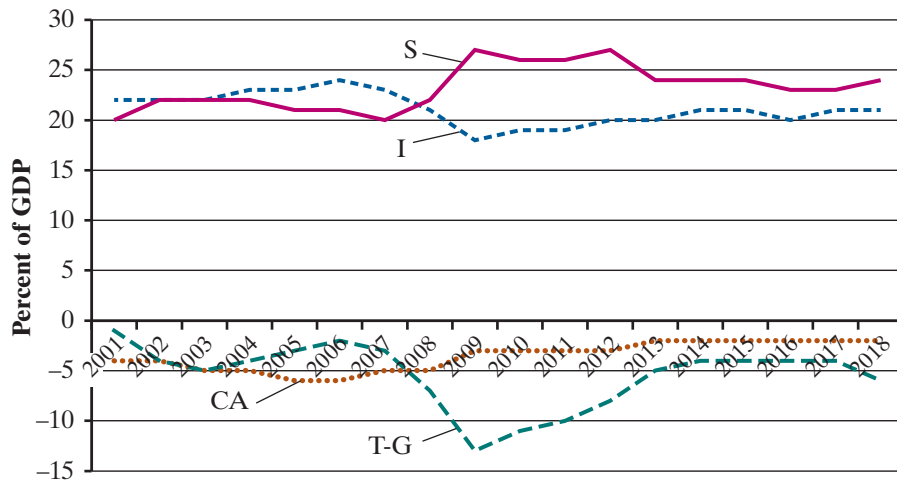
The second use for national savings is as a source of funds for foreign investment. If the current account is in surplus, national savings finances the purchase of domestic goods by foreign users of those goods. In return, or as payment, the domestic economy acquires foreign financial assets. Recall from the discussion of the relationship between the current and financial accounts that the financial account reflects the same amount of lending or borrowing as the current account. If the current account is negative, there is net borrowing that will also be visible in the financial account as net borrowing or, in the terminology of Tables 9.3 and 9.4, a net incurrence of liabilities (borrowing, or financial inflows) that is greater than the net acquisition of financial assets (lending, or financial outflows). In other words, a negative current account is associated with net borrowing in the financial account, which is an inflow of financial capital. Equivalence between the inflow's magnitude and the current account surplus (other than the statistical discrepancy) ensures that home country businesses, households, and governments obtain the financial resources they need to buy more goods and services than they sell in world markets. In a sense, surplus countries provide savings to the rest of the world, thereby making it possible for them to sell more goods abroad than they buy. For a surplus country, a financial capital outflow is an investment because it involves the acquisition of assets that are expected to pay a future return. It is not the same as domestic investment, however, because the assets are outside the country. Hence, another name for the current account balance is *net foreign investment*. A positive balance implies positive foreign investment, while a negative balance implies that foreigners accumulate more home country assets than the home country accumulates abroad.

The United States has had a current account deficit every year since 1981 with the exception of 1991, when it received large income payments in compensation for the Gulf War (see Figure 9.1). Figure 9.2 shows the current account balance since 2001 and the three related macroeconomic variables from Equation (9.8). As shown, the financial crisis and recession of 2007–2009 had a dramatic effect on

savings, investment, and government budgets and a smaller effect on the current account. Savings rose as households and businesses cut back on purchases, and investment fell as businesses saw fewer opportunities for expansion. Balances of combined state, local, and federal budgets fell into large deficits as tax payments declined and government assistance programs spent more on social benefits for the unemployed and struggling households. In addition, there was an improvement in the current account balance as falling U.S. incomes resulted in fewer imports.

The four macroeconomic variables in Figure 9.2 demonstrate that there is not a fixed relationship between current account balances and government budget balances, or between savings and investment. Each of the four variables is determined by the other three, and a change in any one of them influences all of the others. For example, during an economic recession, most countries experience government budget deficits. As noted, state, local, and federal governments all saw dramatic increases in their deficits from 2007 to 2010 as unemployment rose and tax collections fell. Nevertheless, the U.S. current account balance improved slightly due to the fall in consumption and the decline in spending on imports. Some other countries experienced the same pattern as the United States of increasing government budget deficits and falling current account deficits, (e.g., Spain), while still others watched as their budget deficits increased but the current account balances had little or no change (e.g., Germany). The link from any one of the four macroeconomic variables to any of the others is mediated by the other two, and changes in one variable can be amplified or offset by changes elsewhere.

FIGURE 9.2 Savings and Investment, 2001–2018



During the financial crisis and recession of 2007–2009, government budget deficits grew dramatically and private investment declined. The fall in consumption caused an increase in private savings and a decline in imports.

Source: Data from IMF, World Economic Outlook Database, © James Gerber.

The availability of global financial flows has made it easier for current account deficit countries to obtain the outside financing they need when their domestic savings is inadequate. Global capital flows have not completely broken the link between domestic savings and domestic investment, as most countries have savings and investment levels that are roughly similar. This is not true for every country, however, and in recent years it has been less and less true overall. For example, developing countries with relatively low savings such as Honduras, Ethiopia, and Kenya have managed to invest much larger shares of their GDP than they could if they relied on their domestic savings alone. This is possible because capital inflows are available to finance their current account deficits and to provide an additional source of funding for investment.

Are Current Account Deficits Harmful?

The relationship between the current account balance, investment, and total national savings is an identity. Consequently, it does not tell us why an economy runs a current account deficit or surplus. In Equation (9.8), the left and right sides are equal by definition. Consequently, we cannot say that the current account is in deficit because saving is too low any more than we can say it is because investment is too high.

There is a general tendency in the media and the public to interpret a current account deficit as a sign of weakness and as harmful to the nation's welfare. Another interpretation is that the deficit enables more investment than would be possible otherwise, and since higher investment is correlated with higher living standards, the current account deficit might be interpreted as beneficial. In addition, the capital inflows associated with current account deficits are an implicit vote of confidence by foreigners. For example, between 1980 and 1991, Japan invested more than \$25 billion of its trade surplus in U.S. manufacturing. By the start of the 1990s, the Japanese owned 66 steel works, 20 rubber and tire factories, 8 major car assembly plants, and 270 auto parts suppliers, employing more than 100,000 workers. Furthermore, the investment came at a time when the three major U.S.-based auto manufacturers (Chrysler, Ford, and GM) were laying off workers and relocating production abroad. Some of the Japanese firms were acquisitions (which may have closed if they had not been bought), and many were new plants built with Japanese savings. During the U.S. current account deficits of the 1990s, foreign investors continued to pour in capital, enabling the United States to raise its level of investment and increase its productivity in spite of its declining savings rate. In this particular case, the current account deficit has been beneficial because, all else being equal, it enabled more investment than was possible otherwise, given the savings rate.

Current account deficits can also generate problems, however. The capital inflows that occur with a current account deficit increase the stock of foreign-owned assets inside the home country, raising the possibility that a change in investor expectations about the economy's future can lead to a sudden surge in capital outflows. In the worst-case scenario, capital flight is followed by a

depletion of international reserves and a financial crisis. This is an experience shared by a number of developing countries since the 1980s, but it should not lead you to believe that the optimal policy for a country is to avoid current account deficits. As we have just seen, such deficits allow countries to invest more than they could otherwise, and this is particularly important for developing countries where investment capital is especially scarce. Furthermore, current account surpluses are no guarantee that a country will be able to avoid a crisis if one develops among its trading partners. International financial crises, like some biological diseases, tend to be contagious. When Mexico slipped into the peso crisis in late 1994 and early 1995, for example, economists and journalists began to write about the “Tequila effect” on Latin America. Similarly, when Thailand’s currency lost a large share of its value in July of 1997, the media reported stories of crisis spreading across East Asia and the rest of the developing world. In both cases, the size of a country’s current account balances was not a good predictor of whether it was drawn into the crisis. (See Chapter 12 for a more detailed discussion of financial crises.)

The experiences of countries in the 1980s and 1990s has taught economists that financial crises are determined by more than the size of the current account deficit and that there are no absolute thresholds between safe and dangerous levels of a deficit. While deficits of 3 to 4 percent of GDP begin to raise red flags and deficits of 7 to 9 percent are considered extremely risky, too many other factors must be taken into consideration before the probability of a crisis can be determined.

CASE STUDY

Current Account Deficits in the United States

According to economic theory, a country with a current account deficit means that not only do the overall consumption and investment exceed domestic savings but also that the net capital inflows increase as it attracts investment from abroad because it delivers higher investment returns at lower risks. Current account deficit may signal increase in future exports, but it also reflects economic trends, which may be desirable or undesirable for a country at a specific moment in time.

In the late 1970s, the U.S. current account started to be in deficit and widened in the 1980s as the U.S. economy expanded relative to the world economy. The expansionary fiscal policy applied in the 1980s supported domestic spending, GDP growth, and increased imports; therefore, the deficit increased the interest rates and the demand on capital

(continued)

markets. High interest rates appreciated the dollar value as it attracted foreign investors, and, as a result, U.S. exports became more expensive, and imports cheaper. Thus, the current account deficit widened as the U.S. economy expanded.

In the 1990s, the U.S. current account slowly widened as the federal budget moved to a small surplus. The government reduced the fiscal stimulus, thereby decreasing the demand in the economy and the interest rates to combat inflation. The dollar depreciated and slowly narrowed the current account deficit. If things were to continue in this manner, the variable would seem to follow a beneficial course. But the efficiency gains and business investments due to reduced production costs contributed to an unprecedented economic development, with low unemployment, increased consumption, and decreased personal savings. Even if public savings increased, they were not sufficient to finance the increased rate of private investment, resulting in a large and growing financial deficit.

The U.S. current account deficit narrowed in 2001 and the savings–investment gap, too, narrowed as domestic investment collapsed, leading to a slower GDP growth and an increased demand for imports. On the financial market, there had been an increased request for U.S. assets, so the dollar appreciated and the U.S. economy expanded with the improved productivity, but with little prospect for domestic savings. Thus, the deficit returned in 2002, leading the U.S. economy to seek foreign finance for its investments, both domestic and foreign. The increase in oil prices led to higher imports over the years and to a decline of the dollar against other major currencies, especially the euro.

The deficit was recorded to be \$816 billion in 2006 (a dramatic increase from \$124 billion in 1996) according to Figure 9.1. This was caused, in part, by two major hurricanes that hit production capacities, houses, military facilities, and increased government spending for disaster relief, and also due to surpluses in investment accounts. Economists started to fear that the increasing current account deficit posed a danger to the U.S. economy and must be taken seriously as warning sign of potential future financial crisis. But they also suggested that a financial crisis is a mechanism of global financial adjustment, reducing the current account deficits to sustainable levels. Since the beginning of the financial crisis of 2008, the current account deficit has fallen by half.

The U.S. current account deficit was financed by large capital inflows from surplus countries, like Germany, Russia, and East Asian countries. These countries, too, experienced asset price booms, so economists positively associated the house price appreciation and current account deficits

across many countries. During the financial crisis of 2007–2009, there were deleveraging processes of both consumers and firms, the government using stimulus measures to reactivate the economy. In the aftermath of the crisis, investment spending rebounded more strongly than domestic savings and the current account deficit started to be more stable and well below the preceding highs.

The U.S. current account deficit recovered in the 2010s, but reached a deficit of \$498 billion deficit in 2019, at 2.2 percent of GDP, according to Table 9.2. As high as it was, the deficit in 2019 is notably smaller than the one in 2006, but a cyclical behavior of the current account can be observed: a greater appetite for imports by the U.S. consumers and businesses than foreign consumers' and businesses' appetite for U.S. exports.

INTERNATIONAL DEBT

Current account deficits must be financed through inflows of financial capital. Recall from Table 9.5 and the previous discussion that capital inflows take different forms, from direct investment to purchases of stocks, bonds, and currency, to loans. Loans from abroad add to a country's stock of **external debt** and generate **debt service** obligations requiring interest payments and repayment of the principal. External debt is defined as a debt that must be paid in a foreign currency. It includes the debts on borrowings by both governments and the private sector, and long- and short-term debt, where short term is anything under a year. Theoretically, foreign loans are no more harmful than any other type of debt. That is, as long as the borrowed funds are used to increase skills and production levels, the borrower will be able to service the debt without difficulty. In practice, however, it is not uncommon for borrowed funds to be used in a manner that does not contribute to the expansion of the country's productive capacity, and often debt service becomes an unsustainable burden that holds back economic development.

Most countries, rich and poor, have external debt. In high-income countries, debt service is rarely an issue, because the amount of debt is usually relatively small compared to the size of the economy. Furthermore, many high-income countries are able to borrow in their own currencies. Countries such as the United States, Japan, Switzerland, the United Kingdom, and others have all their debt denominated in their own currencies and are relieved of the pressure of having to run large trade surpluses in order to make payments on the principal and interest of their debt. Low- and middle-income countries are another matter.

In a number of cases, the size of the external debt burden is unsustainable, given the economy's ability to make interest payments and to repay the principal.

Unsustainable debt occurs for many reasons. Sometimes, countries are dependent on exports of one or two basic commodities such as copper or coffee. The shock of a sudden drop in world commodity prices reduces the value of exports and sometimes generates unexpectedly large current account deficits. In other cases, countries experience natural disasters, such as hurricanes and earthquakes, that create a need for relief and foreign assistance, or civil conflicts that fuel a demand for arms purchases. Corruption, too, can play a role, as described later in the case of the Democratic Republic of the Congo (DRC). Even electoral politics may be a factor, as when officials try to gain support through unsustainable expenditures targeted at important constituents. Finally, the behavior of foreign lenders also plays a role, as described in the DRC case study in the next section.

Debt is a serious problem. In 2017, the world's low- and middle-income countries had total debt obligations over \$7.4 trillion, requiring more than \$195 billion a year in interest payments. Debt burdens worsen the budget position of central governments by adding payments that must be made to outsiders, and they reduce the availability of funds for important domestic needs such as infrastructure, schools, and health care. In addition, there are many examples of excessive debt burdens that have intensified and spread economic crises.

Debt problems of developing countries have received considerable attention in recent years from multilateral organizations such as the World Bank, from high-income governments, and from private organizations that have argued for debt relief. One notable movement is the Highly Indebted Poor Country (HIPC) program, which is a joint venture of the World Bank, the IMF, and high-income-country governments. The goal of the HIPC program is to provide debt forgiveness for a select group of countries that must qualify based on high levels of poverty and debt and a track record of economic reform. As of 2018, thirty-seven HIPC countries have received more than \$100 billion of debt relief.

CASE STUDY

Odious Debt¹

Countries classified as HIPC are some of the poorest in the world. Their average income per capita in 2014 was \$899 and life expectancy at birth was 60.3 years (2013). Given the countries' conditions of extreme poverty, it is

¹Sources: Based on Birdsall and Williamson, *Delivering on Debt Relief*, 2002, Center for Global Development and Institute for International Economics, Washington, DC; World Bank, *Global Development Finance*, 2003, World Bank, Washington, DC, © James Gerber.

hard to argue against debt relief, yet some people question its value. Their primary argument is that it would be wasted money since the conditions that created debt are likely to persist, leading to a new round of borrowing and a return to previous levels of debt. Others worry that debt relief might cause some countries to borrow excessively in the belief that their debt burden will be forgiven later.

Economists do not have a single point of view on this issue, although many favor some sort of debt relief despite the arguments just made. The cost of debt forgiveness for the most severely indebted poor countries is inconsequential compared to the economies of the high-income countries, which are the ones that would be called upon to forgive the debts. In addition, some share of the debt is classified as odious debt, and in those cases the arguments in favor of debt relief are impossible to ignore. **Odious debt** is legally defined as debt incurred without the consent of the people and that is not used for their benefit. It is associated with corrupt governments and countries where freedom is severely limited.

Many cases of odious debt can be found among the thirty-nine countries that qualify for the HIPC initiative. For example, in sub-Saharan Africa, the DRC (formerly Zaire), Kenya, and Uganda almost certainly fall into this category, while at least part of the debt of many other countries would qualify them as well. Between 1972 and 1999, about 60 percent of the loans to HIPC went to regimes considered “not free” by Freedom House, an international organization that ranks countries as free, partly free, or not free; and between 1985 and 1995, about 67 percent of the loans made to HIPC went to places considered corrupt by the *International Country Risk Guide*, a risk analysis service.

The DRC is a clear-cut case. From 1965 to 1997, the DRC was ruled by the dictator Mobutu Sese Seko. During Mobutu’s reign, real GDP, measured in the equivalent of U.S. dollars at 2000 prices, fell from \$317 per person to \$110 per person, while the regime amassed billions of dollars in foreign aid and loans. Mobutu’s personal fortune was estimated to have reached \$4 to \$6 billion, most of which was deposited in Swiss bank accounts. In 2004, per capita income was at \$88 and international debts were around \$12 billion. The latter was equivalent to about 225 percent of GDP and 1,280 percent of a year’s exports.

Given the continued decline in incomes and the large number of unfinished projects financed by various governments and multilateral agencies, there is little evidence that the borrowed money was successfully used for development purposes. Furthermore, lenders knew the situation when they made their loans, but they went ahead anyway since they wanted to secure access to the DRC’s mineral deposits of cobalt and other strategic metals. In cases like the DRC, it is difficult to argue that citizens should be forced to pay off the debt. In 2003, the DRC was admitted to the HIPC program and qualified for up to 80 percent debt forgiveness, and by 2010, more than half of its debt had been forgiven.

THE INTERNATIONAL INVESTMENT POSITION

LO 9.6 Show the relationship between a country's balance of payments and its international investment position.

Each year that a nation runs a current account deficit, it borrows from abroad and adds to its indebtedness to foreigners. Each year that it runs a current account surplus, it lends to foreigners and reduces its overall indebtedness. If the total of all domestic assets owned by foreigners is subtracted from the total of all foreign assets owned by residents of the home country, the result is the **international investment position**. If the international investment position is positive, then the home country could sell all its foreign assets and have more than enough revenue to purchase all the domestic assets owned by foreigners. If it is negative, then selling all foreign assets would not provide enough revenue to buy all the domestic assets owned by foreigners.

Consider the international investment position of the United States at the end of 2019. The market value of all assets outside the United States and owned by governments, businesses, and residents of the United States was \$29,317 billion. Among other things, these assets included factories, shares of stock, bonds, foreign currency, and bank loans. At the same time, the market value of assets located in the United States and owned by governments, businesses, and residents abroad was \$40,308 billion. As a result, the international investment position of the United States at the end of 2019 was \$10,991 billion. To summarize:

International investment position

$$\begin{aligned} &= \text{domestically owned foreign assets} - \text{foreign owned domestic assets} \\ &= \$29,317 \text{ billion} - \$40,308 \text{ billion} \\ &= \$10,991 \text{ billion} \end{aligned}$$

The large current account deficits of the 1980s, 1990s, and 2000s have eroded the United States' investment position from a positive \$288.6 billion in 1983 to zero in 1989, and negative since then. Each year a country experiences a current account deficit, foreigners acquire more assets inside its boundaries than its residents acquire abroad, and the international investment position shrinks further.

We have considered many of the costs and benefits of capital inflows. They enable countries to invest more than would otherwise be the case, but they also make it possible for governments and consumers to spend more (save less). One of the benefits not discussed so far is the possibility of **technology transfer**. When capital inflows take the form of direct investment, they may bring new technologies, new management techniques, and new ideas to the host country. This transfer is particularly important for developing countries that lack access or information about newer technologies, but it is also important for high-income countries. Technology transfer is by no means an inevitable outcome of foreign direct investment, and much of the current research on this type of capital flow seeks to understand the conditions that encourage or discourage it.

One of the costs of capital inflows is their potential to provide access to political power. Much depends on the political culture of the host country receiving the capital inflows, but large direct investment flows, as well as portfolio investment flows, are likely to provide access to politically significant people. This is the case in large and small countries, but it is particularly important in low- and middle-income countries, where wealth encounters fewer countervailing powers or contending interests.

Summary

- Every nation's transactions with the rest of the world are summarized in its balance of payments. The balance of payments has three components: the current account, the capital account, and the financial account. The two most important components are the current and financial accounts.
- The current account is a record of a nation's trade, income, and transfers between it and the rest of the world.
- The financial account is a record of financial capital flows between a country and the rest of the world. It is measured as net acquisition of foreign assets and net incurrence of foreign liabilities.
- Capital flows in the financial account are categorized as direct investment, portfolio investment, other investment, which includes mostly bank loans, and reserve assets. In general, direct investment is longer term and, therefore, less volatile.
- Large, sudden outflows of financial capital have created economic instability in many countries, particularly during the 1990s. This has created an active debate over the merits of restricting foreign capital flows. Economists are divided on this point, with some favoring restrictions and some favoring free capital mobility.
- There is a fundamental economic identity that total private and public saving in an economy must be equal to domestic investment plus net foreign investment. The current account balance is equal to net foreign investment, and a negative balance is equivalent to disinvestment abroad.
- Current account deficits enable a country to invest more than it could otherwise, which has a beneficial effect on national income. If deficits are too large, however, they increase the vulnerability of a country to sudden outflows of financial capital.
- Thirty-nine low-income countries are classified as highly indebted poor countries (HIPC). All have unsustainable debt levels, some of which may be considered odious debt because it is incurred without the consent of the country's citizens and is not used for their benefit.