# What Is the Balance of Payments?

Norman S. Fieleke
Vice President and Economist
Federal Reserve Bank of Boston

Federal Reserve Bank of Boston

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# Hypothetical Transactions between U.S. Residents and Foreign Residents (In millions of dollars)

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Line	Account	Debits		Credits		Excess of Debits (–) or Credits (+)
1	Exports of goods and services, and income received			60		+ 60
2 3 4	Goods Services Income on U.S. investments abroad			(1) 49 (1) 1 (3) 10		+ 49 + 1 + 10
5	Imports of goods and services, and income paid	70				- 70
6 7 8	Goods Services Income on foreign investments in U.S.	(4) 65 (5) 5				- 65 - 5
9	Unilateral transfers	(6) 1				- 1
10	Changes in U.S. claims on foreigners <sup>1</sup>	100		61		- 39
11 12 13 14 15 16 17 18	U.S. official reserve assets Gold Foreign currency balances Other Other U.S. Government claims U.S. private claims Direct investments Other U.S. private "long-term" claims U.S. private short-term claims	(7) 40 (1) 50	(3) 10	(2) 50 (6) 1	(4) 10	- 40 + 1
20	Changes in foreign claims on U.S. (i.e., in U.S. liabilities to foreign residents) <sup>2</sup>	75		125		+ 50
21 22 23	Foreign official claims  Foreign private short-term claims  Other	(2) 50	(8) 25	(8) 25 (4) 55 (7) 40	(5) 5	+ 25 + 25
24	Total	246		246		0
25 26 27	Memoranda: Balance on goods and services (lines 2, 3, 6, & 7) Balance on current account (lines 1, 5, & 9) Transactions in U.S. official reserve assets and in foreign official assets in the United States (lines 12, 13, 14, & 21)					- 20 - 11 + 25

<sup>&</sup>lt;sup>1</sup>Including U.S. real property abroad. <sup>2</sup>Including foreign real property in the United States.

### A Short Definition

A country's balance of payments is commonly defined as the record of transactions between its residents and foreign residents over a specified period. Each transaction is recorded in accordance with the principles of double-entry bookkeeping, meaning that the amount involved is entered on each of the two sides of the balance-of-payments accounts. Consequently, the sums of the two sides of the complete balance-of-payments accounts should always be the same, and in this sense the balance of payments always balances.

However, there is no bookkeeping requirement that the sums of the two sides of a *selected number* of balance-of-payments accounts should be the same, and it happens that the (im)balances shown by certain combinations of accounts are of considerable interest to analysts and government officials. It is these balances that are often referred to as "surpluses" or "deficits" in the balance of payments.

This monograph explains how such measures of balance are derived and presents standard interpretations of them. Full understanding requires a grasp of elementary balance-of-payments accounting principles, so these principles are outlined and illustrated in the first two sections.

# **Recording of Transactions: General Principles**

The double-entry bookkeeping used in accounting for the balance of payments is similar to that used by business firms in accounting for their transactions. In ordinary business accounting the amount of each transaction is recorded both as a debit and a credit, and the sum of all debit entries must, therefore, equal the sum of all credit entries. Furthermore, in business accounting it is recognized that the total value of the assets employed by the firm must be equal to the total value of the claims against those assets, that is, that all the assets belong to someone. As is well known, the claims against the assets are called the liabilities of the firm. (Assets of the firm not

subject to the claims of creditors are, of course, the property of stockholders, so that, broadly speaking, the firm has two classes of liabilities: those due to creditors and those due to stockholders.) By accounting convention, a debit entry is used to show an increase in assets or a decrease in liabilities, while a credit entry is used to show an increase in liabilities or a decrease in assets. Since a debit entry is always accompanied by a credit entry, it follows that the value of total assets on the books of a going concern is always equal to the value of total liabilities (including the claims of stockholders).

These elementary principles can be applied to the recording of transactions in the balance of payments. For example, when a foreigner gives up an asset to a resident of this country in return for a promise of future payment, a debit entry is made to show the increase in the stock of assets held by U.S. residents, and a credit entry is made to show the increase in U.S. liabilities to foreigners (that is, in foreign claims on U.S. residents). Or when a U.S. resident transfers a good to a foreigner, with payment to be made in the future, a debit entry is made to record the increase in one category of U.S. assets (U.S. financial claims on foreigners, that is, U.S. holdings of foreign IOUs), and a credit entry is made to record the decrease in another category (goods).

These principles are illustrated in greater detail in the following section, which through a series of examples constructs a hypothetical balance-of-payments statement.

## **Recording of Typical Transactions**

The balance-of-payments accounts are commonly grouped into three major categories: (1) accounts dealing with goods, services, and income; (2) accounts recording gifts, or unilateral transfers; and (3) accounts dealing basically with financial claims (such as bank deposits and stocks and bonds). This section shows how typical transactions in each of these major categories are recorded.

COMMERCIAL EXPORTS: TRANSACTION 1

Suppose that a firm in the United States ships merchandise to an overseas buyer with the understanding that the price of \$50 million, including freight, is to be paid within 90 days. In addition, assume that the merchandise is transported on a U.S. ship.

In this case U.S. residents are parting with two things of value, or two assets: merchandise and transportation service. (Transportation service, like other services supplied to foreigners, can be viewed as an asset that is created by U.S. residents, transferred to foreigners, and consumed by foreigners all at the same time.) In return for giving up these two assets, U.S. residents are acquiring a financial asset, namely, a promise from the foreign customer to make payment within 90 days. In accordance with the principles outlined above, the bookkeeping entries required to record these transactions are as follows: first, a debit of \$50 million to an account we shall call, "U.S. private short-term claims," to show the increase in this kind of asset held by U.S. residents; second, a credit of \$49 million to "Goods," and third, a credit of \$1 million to "Services." The credit entries, both in the export category, show the decreases in the assets available to U.S. residents. These figures are entered on lines 19, 2, and 3 in the table on page 2 and are preceded by the number (1) in parentheses to identify them with the first transaction discussed.

## PAYMENT FOR COMMERCIAL EXPORTS: TRANSACTION 2

To make payment in dollars for the merchandise received from the United States, the foreign customer might purchase from his local bank a demand deposit held by his bank in a U.S. bank, then transfer the deposit to the U.S. exporter. As a result U.S. demand deposit liabilities to foreign residents (that is, foreign private short-term claims) would be diminished (debited). The payment by the foreign buyer would also cancel his obligation to the U.S. exporter, so that U.S. private short-term claims on foreigners would be reduced (credited). The appropriate entries, preceded by the number (2), are on lines 19 and 22 of the table.

RECEIPT OF INCOME FROM INVESTMENTS ABROAD: TRANSACTION 3

Each year residents of the United States receive billions of dollars in interest and dividends from capital investments in foreign stocks, bonds, and the like. U.S. residents receive these payments in return for allowing foreign residents to use U.S. capital that otherwise could be put to work in the United States. Foreign residents receive similar returns from investments in the United States.

Suppose that a U.S. firm has a long-standing capital investment in a profitable subsidiary abroad, and that the subsidiary transfers to the U.S. parent (as one of a series of such transfers) some \$10 million in dividends in the form of funds held in a foreign bank. The U.S. firm then has a new (or enlarged) demand deposit in a foreign bank, as compensation for allowing its capital (and associated managerial services) to be used by its subsidiary. A debit entry on line 19 shows that U.S. private short-term claims on foreigners have increased, and a credit entry on line 4 reflects the fact that U.S. residents have given up an asset (the services of capital over the period covered) that is valued at \$10 million.

Commercial imports: transaction 4

In the balance-of-payments accounts U.S. commercial imports of goods and services have opposite results from U.S. commercial exports. Residents of the United States are acquiring goods and services rather than giving them up, and in return are transferring financial claims to foreigners rather than acquiring them.

To take an illustration, assume that U.S. residents import merchandise valued at \$65 million, making payment by transferring \$10 million from balances that they hold in foreign banks and \$55 million from balances held in U.S. banks. A debit entry on line 6 records the increase in goods available to U.S. residents, while credit entries on lines 19 and 22 record the decrease in U.S. claims on foreigners and the increase in U.S. liabilities.

#### EXPENDITURES ON TRAVEL ABROAD: TRANSACTION 5

Residents of the United States who tour abroad purchase foreign currency with which to meet their expenses. If U.S. residents transfer balances of \$5 million in U.S. banks to foreigners in exchange for foreign currency that they spend traveling abroad, the end result is that imports of services must be debited \$5 million to reflect U.S. purchases of the "asset," "travel," from foreigners, and "Foreign private short-term claims" must be credited \$5 million to show the increase in U.S. demand deposit liabilities.

#### GIFTS TO FOREIGN RESIDENTS: TRANSACTION 6

Many residents of this country, some of them recent immigrants, send gifts of money to relatives abroad. If individuals in the United States acquire balances worth \$1 million that U.S. banks have held in foreign banks and then transfer these balances to relatives overseas, there must be a credit entry of \$1 million showing the decrease in U.S. private short-term claims on foreigners. This transaction differs from the other transactions analyzed in that U.S. residents obtain nothing of material value in return for the asset given up. Yet if the books are to balance, there must be a debit entry of \$1 million. The bookkeeping convention followed in such cases is to debit an account called "Unilateral transfers" (line 9). In the official U.S. balance-of-payments presentation, this account is divided into several subsidiary accounts, some of which are used to record grants by the federal government under foreign aid programs.

#### LOANS TO BORROWERS ABROAD: TRANSACTION 7

A financial loan by a resident of the United States to a borrower in another country entails the transfer of money by the U.S. resident in exchange for a promise from the borrower to repay at a future time. Suppose that U.S. residents purchase \$40 million in long-term bonds issued by Canadian borrowers. Also assume that the bonds are denominated in

U.S. dollars, so that payment for them is made by transferring U.S. dollar demand deposits. A debit entry on line 18 records the increase in U.S. holdings of foreign bonds, and a credit entry on line 22 records the increase in demand deposits held by foreigners in U.S. banks.

In principle, direct investment abroad by a U.S. firm could have required the same accounting entries. For the \$40 million bond purchase to qualify as a direct investment (line 17), the bonds would have to be the obligations of a Canadian firm in which a U.S. party (or affiliated parties) owned at least 10 percent of the voting securities. Typically, however, direct investment abroad by a U.S. firm takes some other form, such as a purchase of foreign equity securities or a simple advance of funds to a foreign subsidiary.

At this point it is appropriate to examine the net result of the foregoing seven transactions on the short-term claims of U.S. residents and of foreign residents. As the table shows, these transactions have involved almost the same volume of debits as credits to U.S. private short-term claims on foreigners, with the net result that these claims have been diminished (credited) by \$1 million (the figure on line 19 in the last column). By contrast, as shown on line 22, foreign private short-term claims on this country have risen by \$50 million (excluding the effects of transaction 8, which remains to be discussed).

It happens that all of this \$50 million is in the form of demand deposits, and private foreigners might not wish to retain all of these newly acquired dollar balances. Those who hold demand deposit dollar balances typically do so for purposes such as financing purchases from the United States (or from non-U.S. residents desiring dollars), and no guarantee exists that such motivations will be just strong enough to make the dollar-balance holders exactly satisfied with the \$50 million increase in their holdings. For

purposes of illustration, assume that foreign residents attempt to sell \$40 million of this increase in exchange for balances in their native currencies, but that U.S. residents do not want to trade any of their foreign-currency balances for the proffered dollar balances at the going rates of exchange between the dollar and foreign currencies. In circumstances such as these the foreign-exchange value of the dollar (the price of the dollar in terms of foreign currencies) will decline.

However, some central banks might hold the view that the foreign-exchange value of their currencies was inappropriately high—that the foreign-exchange value of the dollar was inappropriately low—in which case they might sell foreign currencies in exchange for dollar balances in order to moderate the decline in the exchange price of the dollar. In the present case, suppose that foreign central banks purchased 25 million in dollar balances from commercial banks within their territories. (Typically, of course, the amounts involved would be much larger.) The U.S. balance-of-payments accounts would register an increase of \$25 million in U.S. liabilities held by foreign monetary authorities (line 21) and an equivalent decrease in short-term liabilities held by private foreigners (line 22).

It should be noted that such purchases of dollar balances by foreign central banks supply the commercial banks that sell the dollars with new reserves in their native currencies. In general, these reserves can be used by the banks to expand loans and thus to inflate the money supplies in the countries concerned, if nothing else is changed.

#### STATISTICAL DISCREPANCY

At the beginning of this monograph it was noted that a country's balance of payments is commonly defined as the record of transactions between its residents and foreign residents over a specified period. Compiling this record presents difficult problems, and errors and omissions sometimes occur in collecting the data.

Take first the matter of coverage. In spite of attempts to gather data on them, some international transactions go unreported. One category of

transactions that probably is often substantially underreported is purchases and sales of short-term financial claims; such unreported movements of short-term capital are widely believed to be a major component of total errors and omissions. No attempt is made to collect complete data on certain other transactions, which are estimated by balance-of-payments statisticians. The sample observations on which these estimates are based are sometimes of doubtful reliability, and even the best sampling and estimating techniques will not prevent errors of estimation.

Or take the matter of valuation. While import documentation, for example, may state a precise value for the merchandise imported, a different amount may eventually be paid the exporter. The discrepancy can arise for a number of reasons, ranging from default by the importer to incorrect valuation of the merchandise on the import documents.

Because of such problems total *recorded* debits do not equal total *recorded* credits in the actual balance-of-payments accounts in any given year. To provide a specific illustration of how this discrepancy arises, suppose that U.S. export documentation valued an item at \$10,000, while in fact the terms of sale called for payment of only \$9,000 by the foreign importer, who drew down his bank balance in the United States to make the payment. On the basis of the export documentation, balance-of-payments accountants would credit merchandise exports by \$10,000; but when they turned their attention to U.S. short-term liabilities to private foreigners, they would find that U.S. banks had reported a decrease of only \$9,000 (assuming no other transactions). Consequently, recorded credits would mistakenly exceed recorded debits by \$1,000. In fact, of course, the credit entry should have been in the amount of \$9,000.

It is to accommodate such discrepancies that the residual account, "Statistical discrepancy," was created. An excess of credits in all other accounts is offset by an equivalent debit to this account, or an excess of debits in other accounts is offset by an equivalent credit to this account. The account thus serves at least two purposes; it gives an indication of the net error in the balance-of-payments statistics, so that users can have some

idea of the reliability of the balance-of-payments data, and it provides a means of satisfying the requirement of double-entry bookkeeping that total debits must equal total credits. Of course, no need exists for the account in our hypothetical balance-of-payments table, which displays an equality between total debits and total credits (line 24).

## Measures of Balance

As stated at the beginning of this monograph, analysts and government officials are keenly interested in the balances shown by selected combinations of balance-of-payments accounts. Three of these measures are shown on lines 25 to 27 of the table.

The first and simplest of these measures is the balance on goods and services, which is derived by computing the net excess of debits or credits in those accounts. In our hypothetical statement there is a net debit balance, or "deficit," of \$20 million.

Such a debit balance, reflecting an excess of imports over exports, indicates that the United States received more real resources (goods and services) from other countries than it transferred to them during the period covered by the statement, while a credit balance would indicate the reverse. The balance on goods and services is of interest not only as an approximation of such net transfers of real resources but also because it is defined in roughly the same way as the "net exports of goods and services" that comprise part of the nation's gross domestic product or expenditure.

The second measure, the balance on current account, is the net excess of debits or credits in the accounts for goods, services, income, and unilateral transfers, that is, the balance on all accounts other than the financial claims, or "capital," accounts. Because total debits must equal total credits in the balance of payments, the balance on the current accounts must equal the balance on the remaining, or capital, accounts (except, of course, for the statistical discrepancy). Thus, the current-account balance is an approximation of the change in the net claims of U.S.

residents on the rest of the world; it is a major component of the change in the country's net international investment position, or "net worth," vis-à-vis the rest of the world.<sup>1</sup>

As a rule, it is more difficult to interpret the third measure, "Transactions in U.S. official reserve assets and in foreign official assets in the United States." From a simple accounting perspective, this balance measures the difference between the change in U.S. official reserves and the change in foreign official claims on the United States. A credit balance, such as that shown in the statement, indicates that foreign official claims on this country have risen more (or fallen less) than U.S. official reserve assets, while a debit balance would indicate the reverse. The description of transaction 8 makes clear that this \$25 million credit arose from central bank operations in support of the foreign-exchange value of the dollar. The amount of this credit (support) along with any observed decline in the foreign-exchange value of the dollar would then provide a joint indication of the weakness of the dollar in the foreign-exchange markets during the period in question.

Such interpretations require knowledge of the details of transactions such as #8, and the details are often difficult to come by. For example, foreign officials sometimes acquire dollar balances for investment or reserve purposes rather than as a result of supporting the dollar. In such cases dollar purchases by foreign central banks testify to the desirability or strength of the dollar in the foreign-exchange markets, rather than to its weakness.

 $<sup>^{\</sup>mbox{\scriptsize 1}}$  Other components include accounting adjustments in the value of the assets concerned.