

3. Balance of Payments Accounts

a. Conceptual framework of the balance of payments

According to the *Balance of Payments Manual*, the balance of payments is “a statistical statement that systematically summarizes, for a specific time period, the economic transactions of an economy with the rest of the world.”¹ There are three conspicuous differences between this set of accounts and the national income and product accounts discussed in Chapter 1. This first is, for all transactions included in the BOP, one party is a resident and the other is a nonresident. The second difference is, the BOP accounts include exchanges of assets and liabilities as well as newly produced goods, services and incomes. The BOP accounts record *all* transactions between residents and nonresidents, so that the sale or purchase of stocks, bonds, loans, and bank deposit balances are included. The third difference is that the balance of payments shows both the items traded (good, service, income, or asset) and also the associated payment or credit flows. As a consequence, all transactions appearing in the balance of payments are entered twice, in principle.

(1) Basic conventions

The double-entry accounting system

The basic convention applied in constructing the balance of payments is the double-entry accounting system. Every transaction is represented by two entries with equal values but opposite signs, a debit (–) and a credit (+). By convention, certain items are recorded as debits and others as credits, as follows:

Exports of goods and services	Credit (+)
Imports of goods and services	Debit (–)
Increase in financial liabilities	Credit (+)
Increase in financial assets	Debit (–)
Decrease in liabilities	Debit (–)
Decrease in assets	Credit (+)

¹The International Monetary Fund publishes guidelines for the compilation and presentation of balance of payments statistics by member countries. The various editions of the *BOP Manual* have been based on member country practices and an on-going dialogue between the Fund staff and statistical officials and experts. The quotation is from International Monetary Fund, *Balance of Payments Manual* (Washington: International Monetary Fund, 5th ed., 1993), p.6.

The payment or receipt associated with each type of transaction would have the opposite sign as the one shown in the list above. For example, while exports give rise to credits in the BOP accounts, payments for exports are debits. Suppose payment takes the form of an increase in an account of the exporter's domestic commercial bank with one of its foreign correspondent banks. In the BOP accounts of the exporting country, this would be an increase in foreign assets, which the list indicates as being a debit transaction. The example in Box 3.1 illustrates how a shipment of cars exported from Russia to Poland, and involving a payment by a Polish importer through the banking system, is recorded under the above conventions.

Box 3.1. An Example of Double-entry Accounting

Russia's Accounts		Poland's Accounts	
Exports	Credit	Import	Debit
Bank deposit increase	Debit	Decline in bank deposit	Credit

With double-entry bookkeeping, the sum of all credits should in principle be identical to the sum of all debits, and the overall balance must equal zero. In this sense, the balance of payments is always in balance.

Several other aspects of the double-entry system are important for understanding balance of payments data:

- **Output transactions and financial transactions.** "Output" flows involve goods and services (such as merchandise, travel, and shipping). Such items contrast with financial transactions, or changes in levels of financial assets and liabilities (for example, the repayment of principal on an outstanding loan, a reduction in a liability). Transactions in goods and services are recorded in the *current account* of the balance of payments, along with income flows and some transfers. Financial transactions are recorded in the *capital and financial account* of the balance of payments.
- **Transfers.** Unrequited transfers across national borders are one-sided transactions. Suppose, for example, that the Japanese Government gives the Kyrgyz Republic some buses for public transportation. To account for such transactions, which involve no financial compensation, the balance of payments includes a category called

“transfers.” This convention allows one-sided transactions to be converted to standard two-sided transactions. The donated buses are recorded as an import (a debit entry) in the accounts of the Kyrgyz Republic, having been “paid for” by a transfer (a credit entry). More generally, all gifts having an economic value, when no *quid pro quo* is involved, give rise to a counter-entry, which is either a current or capital transfer. Current transfers include cash transfers, gifts in kind (such as food and medicines), contributions to international organizations, and remittances sent by workers residing abroad to families back home. Capital transfers typically involve a fixed asset or debt forgiveness (see Section b(3)).

- ***Errors and omissions.*** In practice, the BOP accounts may not balance. This may be because data are derived from different sources or because some items are over- or under-recorded or not recorded at all. Balance of payments accounts therefore contain an item, “net errors and omissions,” that is set equal to the sum of all of the other lines in the account, with algebraic sign reversed. Defining Net Errors and Omissions as a residual ensures that the balance of payments will sum to zero in practice.

Because this line is recorded net, credit errors offset debit errors. An underestimation of exports may be partly offset by an underestimation of imports, or by an underestimation of payments for exports, or randomly by any other entry that is misrecorded. Since credit and debit errors offset each other to some extent, the size of the net residual cannot be taken as an indicator of the relative accuracy of the balance of payments statement. Nonetheless, large net residuals impede the interpretation and analysis of the balance of payments for an individual country.

The balance of payments of the global economy will sum to zero in principle because of the double-entry accounting system, and also for a second reason: for each item, the sum of world credits must equal the sum of world debits. Countries’ exports are other countries’ imports; summing across all countries, the value of net merchandise trade should be zero. This is true, as well, for each type of flow in the BOP—services, incomes, long-term finance, and so forth. However, for the world as a whole, the sums for individual BOP items typically are not equal to zero in practice because of asymmetries in reporting. Some items tend to be missed by both partners to a transaction (such as reinvested earnings of foreign subsidiaries), whereas other discrepancies tend to occur systematically (the timing asymmetry between exports

and imports²) or because of dissimilar reporting practices or errors between pairs of trading partners.³

- **Flows and stocks.** The balance of payments accounts record primarily flows. These flows are distinguished from the stocks associated with a country's international investment position—that is, the value of a country's assets and liabilities. Flows are measured for a specific time period, whereas stocks are recorded at a point in time, often the end of the recording period. Two stock concepts discussed explicitly in this chapter are the level of international reserves (external assets) and the level of external debt (external liabilities).

Residency

The concept of residency in the balance of payments is based on the transactor's location, not on the transactor's nationality. This practice follows the System of National Accounts (SNA) presented in Chapter 1. The main considerations relating to economic territory are as follows:

Individuals in a country are generally considered residents if they have lived there for at least 12 months. Nonresidents include visitors (tourists, crews of

²William L. Hemphill, "Estimation of the Timing Asymmetry in International Trade" *IMF Staff Papers*, March (Washington: International Monetary Fund, 1980).

³A major purpose of the *BOP Manual* is to encourage countries to prepare external-sector data so that published reports are comparable with those of other countries and asymmetric accounting practices are minimized. For a number of years, however, data on the global current account balance have shown a large discrepancy in the form of an excess of recorded debits. Conversely, the global capital account has shown a large positive balance, an excess of recorded credits. Such discrepancies can undermine the credibility of analyses of global economic developments, hinder the formulation of appropriate policies, and even contribute to protectionist pressures owing to mistaken perceptions of countries' balance of payments situations. In 1987, under a special working party, the IMF investigated the causes of the current account discrepancy and recommended procedures to improve statistical practices in these areas. In 1992, a similar effort was undertaken to assess procedures for the collection of capital account statistics in the light of the growth and complexity of international capital account transactions. See the final *Report of the Working Party on the Statistical Discrepancy in World Current Account Balance* (Washington: International Monetary Fund, 1987) and *Report on the Measurement of International Capital Flows* (Washington: International Monetary Fund, September, 1992). An IMF committee on Balance of Payments Statistics, made up of experts from member countries and other international organizations, now meets on a regular basis to continue the assessment of data adequacy in light of developments in international trade and finance and to make recommendation for further improvements. This committee publishes an *Annual Report* on its findings and recommendations.

ships or aircraft, and seasonal workers); border workers (who are considered to be residents of the country in which they live); and diplomats and consular representatives and members of armed forces stationed in a foreign country, who are nonresidents irrespective of the duration of their stay.

Enterprises are considered residents of the economy where they are engaged in business provided they have at least one productive establishment there and plan to operate it over a long period of time. Subsidiaries of foreign-owned companies are considered to be resident in the country in which they are located.

General government, including all agencies of central, regional, and local governments, together with embassies, consulates, and military establishments located abroad, are considered to be resident of the home country, not of the foreign country in which they are located. Treatment of officials thus differs from treatment of enterprises and of individuals not employed as government officials.

Time periods and the timing of recording

The time period for recording balance of payments flows may be of any length. However, this aspect is usually dictated by practical considerations, especially the frequency of data collection. Many countries prepare balance of payments data annually because firm estimates for some balance of payments transactions are available only once each year. However, since other data (for example, for exports and imports) are often available quarterly and sometimes monthly, some countries prepare quarterly balance of payments data consistent with quarterly estimates of the national accounts.

By convention, both parties to an international transaction record it at the time at which there is a legal change of ownership. In principle, they record it according to the principles of accrual accounting (when transactions such as interest payments are due, not when cash settlements are made). In practice, however, trade, service, and financial transactions may be recorded at different times by the two parties.

Valuation

A balance of payments transaction should be valued at market price, which means it should “reflect the terms of an exchange between a willing buyer and a willing seller.” Besides ruling out coercive terms, this definition is also intended to give guidance to statistical compilers especially in three difficult cases:

- barter transactions, which involve a direct exchange of goods for other goods rather than for money;
- transactions between affiliated enterprises (for example, sales of intermediate goods between a subsidiary and the parent company at imputed prices that could affect the apparent location of the source of profits and thus cause the company to benefit from a lower rate of taxation in one of the countries); and
- transfers, which may not have a market price.

Exports and imports are shown f.o.b. ("free on board"), which means that the reported value excludes the cost of transportation beyond national borders. Imports are usually recorded in customs procedures on a c.i.f. basis, including the cost of international insurance and freight. However, in the balance of payments accounts, the insurance and freight components are recorded under services.

Unit of account

Since transactions may be settled in various currencies, an appropriate unit of account is required for recording balance of payments transactions. For the sake of comparison with other developments in the domestic economy, use of the national currency is clearly advantageous. However, the higher is the domestic rate of inflation, the less meaningful are year-to-year comparisons of values of foreign transactions measured in units of domestic currency. In such cases, one might consider deflating BOP items by a domestic price index, to obtain figures that approximate quantity changes. Against this procedure it may be argued that the foreign prices of items in the BOP accounts may change independently of the domestic price level, and in fact it is not clear what sense it makes to deflate financial flows by a price index. Perhaps for this reason, the unit of account most often used as an alternative to the domestic currency is the U.S. dollar or some other major currency. While recording a country's BOP in terms of dollars or marks instead of the national currency may yield an advantage from the point of view of interpreting period-to-period changes, it does not provide an ideal measure since the resulting data will be in value terms—price changes as well as quantity changes will influence the published figures. Besides that, any single currency, no matter how important in global transactions, is subject to fluctuations relative to other currencies; BOP accounts for a country measured in dollars will include the effects of fluctuations of the dollar as well as quantity and price changes in the recording country's external sector. The SDR would be a superior unit of account from this point of view since its value is based on a basket of major currencies. However, it is possibly less familiar to the residents of countries

who may be expected to read the official reports of BOP developments, and so the dollar and other major currencies are used more often than the SDR. The appropriate exchange rate (the market rate prevailing on the transaction date) is used to convert data from the currency of the reporting country into the accounting currency.⁴

(2) Changes in the *Balance of Payments Manual*

Changes in coverage

Between the publication of the fourth edition of the *BOP Manual* (1977) and the fifth edition (1993), there were many developments in the field of international trade and finance, including increased trade in services, widespread removal of capital controls, innovations in the nature of financial instruments, and new approaches to restructuring external debt. As a result, the methodology for recording transactions in the *BOP Manual* had to be adjusted to accommodate these changes. The fifth edition aims to improve the integration of external sector accounting with other macroeconomic accounts, particularly the SNA, and incorporate the changes that have taken place in international transactions (see Box 3.2). Unlike the previous edition, the 1993 *BOP Manual* provides a conceptual framework for presenting the external transactions and also the international financial position of an economy, through a comprehensive measure of external assets and liabilities.

This workshop volume is written in terms of the new, fifth edition of the *Manual*. However, while the revised BOP concepts rest on a broad consensus among official statisticians, it may take some time before the new terms have been adopted by most countries. Thus, there may well be some benefit in familiarity with both the old and new names—in keeping in mind that “nonfactor services” refers to services, “factor services” are incomes, and the “capital” account refers to the financial account.

⁴See Chapter VII of the *BOP Manual* for additional details. In the case of multiple exchange rates, the conversion unit can be either a unitary rate (a weighted average of all official market rates) or the principal rate (used for most economic transactions). When there is a *parallel market rate* for some transactions, this rate can be used for conversions, and the official rate for the remaining transactions. When multiple rates are in use, and this practice is reflected in compiling and reporting BOP data, problems of interpretation and analysis of data in domestic currency may be greatly magnified.

Box 3.2 Changes in the 1993 *Balance of Payments Manual*

Area of change	Manuals	
	Fourth edition (1977)	Fifth edition (1993)
Overall	A statement of balance of payments <i>flows</i> .	A set of accounts encompassing both <i>flows</i> (balance of payments) and <i>stocks</i> (net international investment position).
Services and income	Payment for labor, finance, capital called "factor services." Travel, transport, etc. referred to as "nonfactor services."	Payment for labor, finance, capital called "incomes." Travel, transport, etc. referred to as "services."
	Residual category "Other goods, services, and income."	Greater disaggregation of goods, services, income, and current transfers to facilitate compilation of SNA aggregates such as Gross National Disposable Income (GNDI).
Current account	Current and capital transfers not distinguished. Current account included all unrequited transfers.	Current and capital transfers shown separately. The current account excludes capital transfers.
Capital and financial account	Included only financial transactions, but known as the "capital account."	Redesignation to reflect: (i) "capital account" (mainly capital transfers); and (ii) "financial account" that broadly corresponds to "capital account" of the 4th edition.
Portfolio investment	Limited list of standard components.	Expanded list to include new money market instruments.
Valuation changes	Included all valuation changes, as well as monetization of gold and allocations of SDRs.	All valuation changes excluded from flow data; instead, they are recorded in stock data.
Exceptional financing	Limited coverage.	Expanded coverage.

The net international investment position

A country's international investment position is its stock of external financial assets minus its stock of external liabilities. The position at the end of a specific period (such as a year) reflects financial transactions during that period and valuation changes from movements in exchange rates as well as the country's position at the beginning of the period.

(3) Standard classification of the balance of payments

Main components

The *BOP Manual's* standard classification system has two accounts: the current account and the capital and financial account. Their major components are presented in Box 3.3.

In selecting the standard components, the following criteria have been given the greatest weight. Each item should:

- exhibit distinctive behavior; that is, its economic influences should be unique;
- be important in a number of countries;
- be measurable, such as through the regular collection of statistics; and
- integrate with other statistical systems (especially the SNA).

Current account. The current account is comprised of goods, services, income, and current transfers. Transactions classified under *goods* relate to the movement of merchandise and generally involve a change of ownership. *Services* refer mostly to the transportation and insurance of merchandise shipments, transport fares paid by travelers, tourist services (hotels, restaurants), royalties and license fees, communications, construction, house rentals, government purchases (in connection with embassies, for example), and other items.

Income may be derived from labor (wages paid to employees living in neighboring countries), and from financial assets or liabilities.

Financial income ("investment income, net") represents receipts and payments of interest on financial assets and liabilities and dividends on corporate stocks. For indebted countries, interest payments on foreign debt often constitute the largest income sub-item. The important credit items are interest earned on foreign exchange reserves and, for creditor countries, interest received on loans to foreigners.

Box 3.3. Classifications of the Balance of Payments

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1. **Current Account**
 - A. **Goods and Services**
 - Goods
 - Services
 - Transportation
 - Travel
 - Government services
 - Other services
 - B. **Income**
 - Compensation of employees
 - Investment income
 - Of which: Interest on external debt
 - C. **Current Transfers**
 2. **Capital and Financial Account**
 - A. **Capital Account**
 - Capital transfers
 - Acquisition/disposal of non-produced, nonfinancial assets
 - B. **Financial Account**
 - Direct investment, net
 - Portfolio investment, net
 - Other investment, net
 - Loans, trade credits
 - Use of IMF credit and loans from the Fund
 - Reserve assets
 - Monetary gold
 - SDRs
 - Reserve position in the IMF
 - Foreign exchange
 - Other claims
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Source: IMF, *Balance of Payments Manual*, 1993.

Changes in general government *current transfers* are largely dependent on decisions made by governments of countries that are foreign aid donors. The main component of private current transfers is usually workers' remittances, which reflect the number of workers living abroad and the incentives for transferring funds, particularly expectations concerning interest rates, the exchange rate, and the taxation of such income.³

³For balance of payments recording purposes, remittances from workers living abroad for more than 12 months (reported under "current transfers") are distinguished from labor income earned by workers living abroad for less than 12 months (reported under "compensation of employees").

Most countries report gross debits and credits for current-account items in their BOP tables, but entries in the capital and financial account are typically net (credits minus debits).

Capital and financial account. Box 3.3 shows the two categories of the capital and financial account. The so-called capital account portion (new definition) is in fact small or even negligible for many countries. It includes, for example, acquisition or disposal of “intangible nonfinancial assets and proprietary rights” such as trademarks, patents, copyrights, leasing agreements, and mineral rights, among other items. Debt forgiveness is included in this sub-account, as part of capital transfers.⁶ Because the capital account is typically small, the name for this part of the BOP is often abbreviated from “capital and financial account” to “financial account.”

The financial account has four functional categories:

- *direct investment*, which is further divided into equity capital and reinvested earnings;
- *portfolio investment*, which includes long-term debt and equity securities, money market instruments, and tradeable financial derivatives, including currency and interest rate swaps;
- *other investment*, such as trade credits and general borrowing, and IMF credit; and
- *reserve assets*, available to meet immediate needs to make foreign payments.

Despite the name, reserve assets in the standard balance of payments accounts are not stocks but changes in gross or net holdings of convertible, liquid external assets. These assets include foreign exchange (currency, deposits, and securities), monetary gold, SDRs, and the country’s reserve position in the IMF.⁷ Reserve assets are under the effective control of the monetary authorities and can be used either directly (to finance payment imbalances) or indirectly (to intervene in foreign exchange markets to support the value of the domestic currency). Transactions with the IMF affect both reserve assets and reserve liabilities (see Box 3.4).

⁶For a discussion of capital transfers, see Chapter 1, Section b(1), in the discussion of GNDI.

⁷Note that *nonmonetary gold*, possibly including stocks held by the authorities for trading purposes, is treated like any other commodity in the balance of payments.

According to the accounting principles recommended in the fifth edition of the *BOP Manual*, reserve asset flows should exclude changes in value that are not attributable to transactions. Valuation changes resulting from fluctuations in the exchange rate, and the creation of new reserve assets (the monetization of gold or allocations of SDRs) are not included in the data for flows reported in the BOP. Instead, these items are reflected in the international investment position (the data for stocks).⁸

Box 3.4. How IMF Transactions Affect the Balance of Payments

Three types of transactions with the IMF can directly affect a country's balance of payments accounts:

1. *Use of IMF resources.* When a country purchases foreign currency from the IMF (for instance, through a standby arrangement), it increases the central bank's holdings of foreign financial assets (the foreign exchange received) but at the same time it incurs a financial liability (its obligation to repay the IMF). Thus, use of IMF credit is recorded with a positive sign in the financial account under "other investment, loans." The payment side of this transaction is shown with a minus sign as an increase in "reserve assets."
2. *Changes in Special Drawing Rights (SDRs).* SDRs are international reserve assets created and distributed by the IMF to supplement countries' existing assets. If SDRs are used to acquire foreign exchange, to settle financial imbalances, or to extend loans, the transactions are recorded in the balance of payments under reserve asset flows. According to the fifth edition of the *BOP Manual*, new allocations of SDRs are not included. They affect only stocks (the net international investment position of a country).
3. *Changes in a country's "reserve tranche position" in the IMF.* This arises from (i) the payment of part of a member's quota in reserve assets, (ii) the IMF's net use of the member's currency in a drawing by another member, or (iii) the drawing down of a member's reserve tranche to finance an external payments deficit. Changes in a country's reserve position in the IMF, which includes a member's creditor position under any arrangement to lend to the IMF, are changes in its holding of a reserve asset from the country's perspective. Changes in its reserve position are recorded as changes in reserve assets in the financial account.

⁸Many countries may still be following the Fourth edition of the *Manual*, which included valuation adjustments and SDR allocations in the data on flows, and hence in the balance of payments.

Exceptional financing

It is possible to regroup the standard BOP items or sub-items in order to focus on specific analytical questions. A major case in point is the regrouping of items so that an external balance can be calculated. (As mentioned above, the simple sum of all BOP items is necessarily zero.) External balance is discussed in the following section. A second example of analytical regrouping arises in the case of *exceptional financing*, which is not shown explicitly as part of the standard presentation of the BOP.

Transactions that are grouped under the heading of exceptional financing involve debt arrears and rescheduling—transactions that are not fully voluntary from the viewpoint of both parties, or at least are not the mode of debt service anticipated and preferred by the lender when the loans were originally agreed. In the standard presentation, these flows are included with investment income and financial flows. For example, suppose a country experiences arrears in a given period, either of interest or amortization payments. In principle there will be two entries in the BOP for each occurrence, one showing that the payment was made (even though it was not) and the other indicating the funds were re-borrowed.

The use of supplementary information, in this case, means that the net figures for capital inflows in the BOP can be separated into two parts, and exceptional and unexceptional flows can be grouped and presented separately. The imputed re-borrowing flows to finance arrears, reschedulings, swaps, forgiveness, and so on (if such operations have occurred during the reporting period) are deducted from the financial account lines where they are recorded in the standard presentation; they are added together and reported “below the line” as part of financing (see the next section).

To summarize, in the standard presentation no distinction is made between exceptional financing and ordinary financial flows, but supplementary information can be imposed on the accounts to show this type of analytical distinction. The same treatment can be used with other BOP items and for other analytical purposes. BOP tables that result from such strategic regroupings of items are usually referred to as *analytical* presentations. The guidelines given in the *BOP Manual* are not meant to limit the sorts of analysis that countries make in their publications. The *Manual* does suggest that common definitions be used in determining the composition of the standard building blocks of such presentations in order to facilitate correct interpretation and comparison across countries.

The main exceptional financing transactions are as follows:

- The *rescheduling of existing debt* involves replacing an existing contract with one that postpones debt service payments. The main balance of payments items affected by rescheduling are interest payments (shown in the current account) and amortization payments (shown in the financial account). The counterpart entry in each case will appear under exceptional financing. Debt restructuring may cover arrears on interest or principal as well as scheduled interest and principal payments.
- *Arrears on debt servicing* can be either interest or amortization payments that are past due. Both are treated as if they had been paid with a short term loan—that is, a scheduled interest payment is recorded as an income debit in the current account, and it is offset by a credit in the financial account under exceptional financing. If an item in arrears is not paid in the following year, a further capital inflow will be imputed in the subsequent annual BOP accounts, offset by further imputed repayments. In any accounting period, the exceptional financing of arrears will therefore equal the (recorded) outstanding stock of such items (as well as the change in the stock.)
- *Debt forgiveness* means the voluntary cancellation by an official creditor of all or part of a debt specified by a contractual arrangement. It is recorded as an official transfer under the capital account and under exceptional financing.⁹
- *Equity investment*, especially debt-equity swaps. This type of investment involves the exchange of bank claims on debtors, usually at a discount, for nonresident equity investment in a country. The value of the equity offered by the debtor country appears as a credit under exceptional financing. There is a debit of equal value in the financial account representing the debt that has been extinguished. This value is much smaller, typically, than the original value of the loan. The difference between the original and the swap value of the debt liability will, in principle, be reflected in the debt stock values reported for successive years in the international investment position of the country.

⁹If the debt forgiveness represents a write-off of debt by a private creditor, it is recorded not in the balance of payments but in the SNA under "revaluation account." See *Balance of Payments Manual*, 1993, Appendix IV.

b. Analyzing the external position

(1) Concepts and measures of balance

Under the double-entry accounting system, the sum of credit items equals the sum of debit items, so that the overall balance of the balance of payments is zero. How then is it possible to have imbalances—surpluses or deficits—in the external sector accounts? A surplus or a deficit arises when a given subgroup of external transactions (shown “above the line”) is distinguished from another subgroup of transactions (shown “below the line”). “The line” in this case is meant to separate normal income and spending from financing (that is, from borrowing or a drawdown of reserves to finance a BOP deficit). While it is not difficult to decide judgmentally which items go above or below the line in the case of a hypothetical household, or even an actual government, it often requires some judgment in the case of the balance of payments of an entire economy. The idea is to separate “autonomous” transactions from “financing” transactions. Wherever the line is drawn, if items above the line sum to a negative number, then the balance of payments is said to be in deficit, and a positive balance means a BOP surplus.

One of the primary purposes of the balance of payments accounts is to provide an indication of the need to adjust an external imbalance. The decision on where to draw the line for analytical purposes requires a judgment concerning the imbalance that best indicates the need for adjustment. There are a number of definitions of balance in common use for this and related analytical purposes.

The *trade balance* is the difference between exports and imports of goods. From an analytical point of view, it is arbitrary to distinguish goods from services. For example, a unit of foreign exchange earned by a freight company strengthens the balance of payments to the same extent as the foreign exchange earned by exporters. Nonetheless, the trade balance is useful in practice since it is often the most timely indicator of trends in the current account balance. The customs authorities are typically able to provide data on trade in goods long before data on trade in services are available.

The *current account balance*, one of the most analytically useful indicators of an external imbalance, is the difference between credits and debits of goods, services, income, and transfers.¹⁰ As explained below, the current account equals the change in the economy’s net foreign asset position (strictly speaking, the part of the change due to transactions—excluding capital gains and losses). The current

¹⁰The fifth edition of the *Manual* includes only current transfers in this definition (see Box 3.2).

account balance also measures the difference between output available domestically and output used up (“absorbed”). A current account deficit does not necessarily indicate a need for a policy adjustment since the economy may attract large net financial inflows for years or decades. A persistent current account deficit does, however, indicate an increasing level of repayable foreign liabilities, and a widening stream of debt service. The sustainability of a current account deficit in the medium- to long-term is discussed in Box 3.5.

The *overall balance* places changes in net international reserves below the line, and other financial items and the current account above the line. Reserves include, in the least, liquid convertible foreign assets of the central bank—“reserve assets,” defined above. Certain “reserve liabilities” may be netted against (subtracted from) the figures for gross foreign assets. They could include, for example, the liquid deposits of foreign central banks with the reporting country—these deposits are reserves to the depositing foreign central banks. Use of IMF credit may also be netted against gross assets. Exceptional financing will appear below the line (but the “Net errors and omissions” will be placed above the line) in computing the overall balance.

Few observers, statisticians, or economists would dispute that changes in net central bank reserves belong below the line, that these flows constitute financing rather than BOP transactions. The question is whether this definition of financing items is too narrow. If the central bank uses monetary policy flexibly to nudge the structure of domestic interest rates up or down, to attract or repel foreign finance, then arguably part of short-term financial flows is attributable to financing even though these flows usually are included above the line.¹¹

(2) The importance of the current account

The central accounting relationship between the balance of payments and a country’s resource gap has been discussed in Chapter 1. In one version, the current account balance is identical *ex post* to the economy’s resource gap as measured by the difference between economy-wide saving and investment,

$$S - I = CAB = X - M + Y_f + Tr_f. \quad (3.1)$$

¹¹In the past, the concept of *basic balance* was devised because of this possibility; it counted all short-term flows below the line. But the distinction between short- and long-term financial flows has become increasingly blurred. Corporate stocks and bonds, although formally long-term assets, can in fact be promptly resold on secondary markets. The concept of basic balance is no longer in widespread use.

There is no question that central banks can in principle use changes in interest rates to influence foreign financial flows. If flows are highly mobile, however, the response to monetary tightening or loosening may have large, unwanted exchange rate implications, may impact the money supply, and may contribute to the conditions for a financial crisis.

Box 3.5. Current Account Sustainability

A current account surplus implies that the country is accumulating net claims on other countries. Conversely, a current account deficit implies that the country is running down its foreign assets or accumulating foreign liabilities. Thus, the current account must be equal to the change in the net international investment position of a country. When the difference between the stock of foreign assets and liabilities is negative, the country is a net debtor to the rest of the world. Countries, like individuals, are bound by an intertemporal budget constraint; if the country is a net debtor, then in principle the economy must run current account surpluses at some point in the future that have a present discounted value equal to its net debt. This ability to generate future current account surpluses sufficient to repay existing debt is known as *solvency*. Thus, a country is solvent if the present value of future current account surpluses is at least equal to its current external debt.

The notion of solvency, while useful, is not easy to assess in practice. If large future current account surpluses are assumed, any path of current account deficits can be consistent with intertemporal solvency. A more restricted notion of sustainability can be defined by assuming a continuation of present policies into the future with an unchanged macroeconomic environment. By this definition the current stance of policies is "sustainable" if its continuation in the future does not violate the solvency constraint.

In practice, the notion of current account sustainability is more complex because it reflects the interaction between saving and investment decisions of foreign investors. An alternative way of assessing current account sustainability is to ask whether the current account and the underlying behavior of the government and the private sector, if continued, would entail the need for a drastic shift in policies to avoid a crisis (an exchange rate collapse or an external debt default). If the answer is "yes," the current account deficit is unsustainable. The policy change or the crisis can be triggered by a domestic or external shock involving a shift in investor confidence in the country's ability or willingness to meet its external obligations.¹

¹ See Gian Maria Milesi-Ferretti and Assaf Razin, "Persistent Current Account Deficits: A Warning Signal?," in *International Journal of Finance and Economics*, Vol. 1, No. 3, July, 1996.

As seen from equation (3.1), a change in the current account position (such as an increase in the surplus or a decrease in the deficit) must be matched by an increase in national saving relative to investment. Thus, it is useful to

understand whether, and how, policy measures designed to alter the current account balance (through, for example, exchange rates, tariffs, quotas, or export incentives) also affect saving and investment behavior.

Alternatively, the current account reflects the gap between income and absorption in the economy,

$$GNDI - A = CAB. \quad (3.2)$$

As this relationship indicates, improving a country's current account balance requires that resources be released either through a decrease in domestic absorption relative to income or through an increase in national income relative to absorption. Equations (3.1) and (3.2) by themselves do not provide sufficient information for an analysis of the current account because they do not reflect the various interactions and behavior of agents in the economy. For example, changes in absorption are influenced by changes in disposable income, and changes in saving are affected by investment, at least in the longer run. The identities indicate a limit on the range of possible outcomes, which is useful, but cannot show the links between changes in policy instruments and changes in the achievement of policy objectives. The two equations constitute the basic macroeconomic framework in which the current account is embedded.

As already described, the current account balance is always matched by the change in a country's net financial claims on the rest of the world. These claims, the contents of the financial account plus the change in reserves,¹² were disaggregated in the preceding section according to type and maturity (direct investment, portfolio investment, and so forth). A slightly different disaggregation focusses on these flows as sources of finance, and is used in Chapter 5: foreign direct investment, *FDI*; net foreign borrowing of nonbanks (including portfolio investment and certain other flows), *NFB*; the change in banks' net foreign assets (the central bank and commercial banks), ΔNFA ;¹³ and possibly a residual term, Other foreign items net (*OIN*). In symbols,

¹²In the *standard* presentation, the change in reserves is part of the financial account balance. However, these workshops (and other analytical documents, including IMF staff country reports) typically utilize an analytical presentation of the BOP accounts in which the change in reserves is separated from other financial flows, as discussed in Section b(1). For an example, see Table 3.3 in this chapter.

¹³The change in international reserves is part of ΔNFA , which contains both central and commercial banks' liquid net foreign assets. Flows involving banks are sometimes called "monetary" flows as separate from "nonmonetary" or "foreign investment" flows.

$$CAB = - (FDI + NFB + \Delta NFA + OIN). \quad (3.3)$$

Equation (3.3) shows that the net provision of resources to or from the rest of the world—as measured by the current account balance¹⁴—is matched by a corresponding change in net claims on the rest of the world. For example, a current account surplus is reflected either in an increase in net official or private claims on nonresidents or in the acquisition of reserve assets by the monetary authorities. But a current account deficit implies that the net acquisition of resources from the rest of the world must be paid for either by liquidating the country's foreign assets or by increasing its liabilities to non-residents. Thus, the balance of payments identity shown in equation (3.3) can be viewed as the budget constraint for the entire economy.

As discussed in Chapter 1, the current account can be viewed as equal to the sum of the resource gaps of the government and nongovernment ("private") sectors. A given current account balance may be consistent with a number of combinations of private and public sector deficits and surpluses. A deficit in the current account could stem from a private consumption boom or a sharp rise in investment, or it could be brought about by a sharp deterioration in the fiscal position with or without an improvement in private sector saving.

(3) The role of trade policy

Trade flows are affected in an important way by trade policies, including tariffs, import or export quotas, and import or export subsidies. Trade policy strategies are broadly divided into two groups, *outward-oriented* and *inward-oriented*. An outward-oriented strategy is one based on trade policies that do not discriminate between production for the domestic market and exports, or between purchases of domestic goods and foreign goods. An outward oriented trade strategy is not export-promoting, but it is neutral and nondiscriminatory. A method for estimating whether a trade regime is, in principle, export- or import-biased is given in Box 3.6. There is an ongoing debate about whether most successful exporting economies (such as those in East Asia) followed broadly neutral trade policies.¹⁵ As an historical pattern, a number of highly successful exporting countries followed an inward orientation in their early years of exporting manufactures, and then changed their trade policy to that of outward orientation.¹⁶

¹⁴Given the definition of the current account balance (*CAB*) in equation (3.1), it follows that a negative balance is a current account deficit and a positive one is a surplus for the compiling country.

¹⁵For a comprehensive discussion of the issues in assessing a country's trade policies and a synthesis of the literature on the empirical evidence on trade policy regimes, see Vinod Thomas and John Nash, *Best Practices in Trade Policy Reform* (New York: Oxford University Press, 1991).

¹⁶This debate is described in T.N. Srinivasan, "Trade Orientation, Trade Liberalization, and Economic Growth, Chapter 6 of Gary Saxonhouse and T.N. Srinivasan, eds. *Development, Duality, and the International Economic Regime* (Ann Arbor: University of Michigan, 1999).

Box 3.6. Measuring the Bias or Neutrality of Trade Regimes¹

A widely used measure of the bias in trade regimes is based on the notion of effective protection. Trade bias is defined as

$$\frac{\text{average effective rate of protection for importables}}{\text{average effective rate of protection for exportables}} \quad (1)$$

where the effective rate of protection (ERP) for a good captures the rate of protection accorded to value added in its production (not to the finished product). It is given by,

$$ERP = \frac{v' - v}{v}, \quad (2)$$

where

v' = value added at domestic prices, including tariffs or subsidies; and
 v = value added at world prices.²

- A trade bias ratio of 1 implies neutrality while a ratio greater than one implies that importables have on average higher protection (nominal or effective, as the case may be) than exportables. This implies a bias in favor of import substitution. A ratio of less than one implies a bias in favor of export promotion.
- The use of any aggregate measure of protection for the economy as a whole can be misleading since the effective rate of protection averaged across different industries can be zero (implying no protection) while in fact the rates of protection vary widely across industries. Full neutrality of a trade regime must therefore require not only that trade bias = 1 but also that there be no significant variation in this ratio across tradable goods industries.

¹This box draws on the discussion of the neutrality of trade regimes in World Bank, *World Development Report 1987* (New York: Oxford University Press, 1987).

²If v' and v stand for the domestic and world prices of a good, then the formula in equation (2) yields the *nominal rate of protection*, and a simpler indicator of trade orientation can be constructed using nominal rather than effective rates of protection of importable and exportables as shown in equation (1).

c. Foreign liabilities

(1) Debt stocks and debt-creating flows

The stock of *gross external debt* can be defined as the amount of outstanding contractual liabilities to nonresidents. “Outstanding” debt covers only that part of a loan that has actually been disbursed. Any undisbursed loan commitments are not part of gross debt and are not recorded in balance of payments data until disbursement takes place. The term “contractual” refers to the obligations specified in debt instruments to pay interest (either at a fixed or variable rate) and to repay principal.

Within the capital and financial account, most flows are *debt creating*. There is therefore a link between the stock of gross debt and these flows, which is captured in the following equation:

$$D_t = D_{t-1} + B_t - A_t, \quad (3.4)$$

where

- D_t : stock of outstanding disbursed debt at the end of period t ,
- B_t : disbursements of new loans during period t , and
- A_t : amortization of debt during period t .

This equation states that debt at the end of a given year is equal to debt at the end of the previous year, plus net debt-creating flows—that is, new disbursements minus amortization (repayments of principal).

In practice, equation (3.4) is true only as an approximation. First, debt stocks are subject to valuation adjustments because debt is contracted in various currencies. The stock of debt measured (for example) in U.S. dollars may change because the value of the debt is denominated in another currency (such as the deutsche mark), and changes in dollar terms when the dollar depreciates or appreciates against that currency. Second, interest is sometimes capitalized, adding to the stock of debt the unpaid interest obligations. Third, outstanding debt is sometimes canceled or written off.

Within the capital and financial account, flows of direct investment are not debt-creating, nor are transactions involving purchase of corporate stocks (“equity capital”), which are recorded under the category of portfolio investment. If the lender (the investor, in the popular sense of the term) wishes to reduce the funds he has provided to a borrowing enterprise, he must sell the stock certificate to someone else—he disinvests—while at the same time a second investor increases his commitment by purchasing the stock. Equity capital, by its nature, does not

become due for repayment as time passes. Flows such as capital transfers, included in the capital portion of the capital and financial account, are similarly not debt creating. Because flows in the capital account may be close to zero for many countries, and the use of the concepts from the fifth edition of the *BOP Manual* are in any case not yet widespread, capital flows (in the new sense) may be of little practical importance in computing debt-creating flows. In general, however, direct investment and investment in corporate stocks must be deducted from the financial account balance to obtain a reasonably accurate value for the increase in a country's debt from BOP statistics. (This may be difficult unless the BOP data indicate stocks and bonds separately under portfolio investment.)

A concept of net debt can be derived by subtracting the stock of external assets from the gross liabilities. Although such a notion might be useful, there are a number of practical difficulties in defining net debt. Currently, there is no internationally accepted definition largely because (i) it is unclear which assets should offset liabilities—for example, whether only official assets should be used, or bank and nonbank assets should also be included; (ii) a net-debt total would mask important differences in the maturity structure, currency composition, and risk features of liabilities and assets; and (iii) linking debt servicing to net debt may disguise the seriousness of a country's debt problem if assets broadly offset liabilities. For these reasons, in this chapter "debt" refers to gross debt.

(2) Indicators of external debt

When a country borrows abroad, it must "service" the loan by paying interest at a rate specified in the loan contract and by repaying principal (amortization) over an agreed time period. The interest component is found in the current account (under "income, debits"), while amortization is recorded in the financial account. In general, countries that have borrowed abroad heavily in the past must devote a sizeable portion of their export earnings and other foreign exchange receipts to servicing foreign debt. This limits the amount of foreign exchange available for paying for imports and other expenditures.

In assessing the cost of debt service, it is customary to relate debt service payments to exports of goods and services (excluding incomes). In practice, four ratios are used to analyze the debt burden:

- the ratio of scheduled debt service payments to exports of goods and services, which measures debt servicing obligations relative to earnings of foreign exchange from output sold abroad;
- the ratio of scheduled interest payments to exports of goods and services, which measures the cost of "carrying" the debt stock;

- the ratio of outstanding debt to GDP, which is arguably related to the long-term ability of the economy to repay debt; and
- the ratio of outstanding debt to exports of goods and services, a narrower measure of capacity to repay foreign debt.

Several rules of thumb have been suggested for managing the level of external indebtedness, such as limiting debt service to no more than 20 percent of exports of goods and services. However, it should be borne in mind that a country's ability to sustain any particular debt service ratio depends on a number of factors, including the outlook for the country's exports, import requirements, the level of international reserves, future terms of trade, global interest rate developments, and the flexibility of the country in adjusting its policies and economic structure.

The World Bank's debt reporting system uses critical values of two debt indicators to classify countries according to the severity of their indebtedness: the ratio of the present value (*PV*) of debt service to GNP, and the ratio of the present value of debt service to exports of goods and services.¹⁷ The indicators are based on the present value concept (an order of magnitude similar to the stock of debt) rather than the value of scheduled debt service in a single period in order to account for differences in the terms of the loans. A country is regarded as severely indebted if the present value of debt service to GNP exceeds 80 percent or if the present value of debt service to exports exceeds 220 percent. Although these judgmental ratios may be helpful in signaling possible debt problems, the economic circumstances of countries with similar ratios may differ. These ratios should therefore be used with caution and only as a starting point for a country-specific analysis of debt sustainability.

(3) Direct foreign investment and other financial flows¹⁸

When foreign investors acquire equity in a domestic enterprise, there are no contractual obligations to repay. Because direct foreign investment does not add to external debt, it is termed "non-debt-creating" (see Box 3.7). In this sense, it contrasts with all other liabilities of the financial account, which either add to gross debt (in the case of inflows) or subtract from it (in the case of repayments such as amortization).

¹⁷See World Bank, *World Debt Tables, 1994–95*, Vol. 1, (Washington: IBRD, 1994).

¹⁸Financial flows would be called "capital" flows in the terminology that preceded the Fifth edition of the *BOP Manual* (still in widespread use).

Within the category of debt-creating flows, it is useful to isolate *portfolio investment*, which includes debt securities and equity securities.¹⁹ These are increasingly important to countries seeking to obtain foreign funds, especially to enterprises within these countries. Credit flows under portfolio investment indicate that foreign investors have confidence in the firms and institutions that are issuing the debt; such flows show access to international capital markets.

Box 3.7. Direct Foreign Investment¹

Foreign direct investment takes place when a firm in one country creates or expands a subsidiary in another. The distinctive feature of this type of capital inflow is that it involves not only a transfer of resources, but also the acquisition of partial or full control. Foreign direct investment is valued by countries not only because it does not create a debt obligation for the receiving country, but also because it is an important vehicle for the transfer of technical and managerial skills from abroad. The benefits of such technology transfers may be seen as outweighing the capital flow itself.

This thinking explains why it is not only developing and transition economies that are keen to implement policies that attract foreign investment flows, but also industrial countries. It should be noted that such investment inflows do give rise to outward resource transfers when the profits and dividends on the investment are repatriated. However, these flows depend on the profitability of the investment and on the potential reinvestment of profits. Multinational firms are the main vehicles through which the bulk of foreign direct investment takes place.

¹For an analysis of the role of foreign direct investment in international capital flows, see Edward M. Graham, "Foreign Direct Investment in the World Economy," *IMF Working Paper WP/95/59* (Washington: International Monetary Fund, June, 1995).

¹⁹An investor acquiring equity securities as portfolio investment will in general have an insignificant degree of influence over the operation of an enterprise. This is the presumed basis of the distinction between portfolio investment and direct investment.

In addition to examining liabilities by type and maturity of debt instruments, it is also helpful to analyze trends in stocks and flows by institutional sector.²⁰ In particular, the general government sector and the nongovernment sector (made up of banks and enterprises) are analyzed separately, since flows to these sectors have separate determinants. Government flows are determined mainly by budgetary needs. The net financial flows of the government, as recorded in the balance of payments, should be identical to the external financing flows of the budget (except for valuation adjustments resulting from exchange rate movements, since a country's budget is presented in local currency terms).²¹

Flows of private finance respond to yields on assets held domestically and abroad. With the growing integration of world financial markets, and as more economies develop domestic financial market instruments, a growing volume of private capital flows is to be expected. Given a healthy macroeconomic and financial environment, such flows may be seen as normal and desirable. However, in some economies domestic financial market instruments are underdeveloped and under-supervised, and non-economic considerations dominate lending decisions. If macroeconomic policies are inconsistent, banking practices are unsound, or countries with similar macroeconomic and investment patterns are experiencing problems of confidence, then an economy will become vulnerable to speculative outflows of private capital. These outflows may be larger if the economy had formerly been a major recipient of foreign investment funds since foreign savings as well as domestic savings participate in the outflows. Sudden outflows may have disastrous consequences for the availability of credit in the affected economy in the short run, especially if weak or unhealthy firms have sustained themselves over a period by borrowing.

Even healthy firms may be jeopardized by a sudden, unannounced disappearance of credit. There are also consequences for the exchange rate. An appreciation or depreciation may be dominated not by the medium-term macroeconomic outlook, but by expectations of further short-run exchange-rate fluctuations. The phenomenon of capital flows—to industrializing, transition, and developing countries—that are much larger than occurred in earlier decades is not necessarily a blessing. Access to foreign savings carries significant advantages for the borrowing country, and also certain risks. But an economy cannot easily choose not to participate. The increased global mobility of finance

²⁰The definition of debt does not mention the loan maturity, or loan repayment periods. Some liabilities such as bridging loans have very short repayment periods and can exhibit volatile behavior, but flows of long-term liabilities are more predictable. For this reason, stocks and flows of short-term liabilities (which are defined as maturing in less than one year), are usually distinguished from medium- and long-term liabilities with repayment periods of more than one year.

²¹Funds borrowed by central governments in many countries may be on-lent to public enterprises.

reflects developments in many areas of human activity that tend to reduce barriers to economic transactions among countries, whether that lowering is preferred or not.

d. Reserves and financing

The stock of liquid foreign assets controlled by the central bank has traditionally been the main source of finance for balance of payments deficits and support for an exchange rate peg. In today's world of floating exchange rates and mobile capital, however, many countries find other means of financing imbalances, including borrowing from abroad, depreciating the exchange rate, or changing the stance of domestic monetary policy. Thus, as they are acquired and used, gross reserve assets do not necessarily reflect the size of a payments imbalance. The monetary authorities may also have other motives for holding reserves—for instance, to maintain confidence in the domestic currency and economy, to satisfy domestic legal requirements, or to serve as a basis for foreign borrowing.

Although conventionally the level of reserves has been assessed in relation to projected total imports of goods and services, more recent indicators of reserve adequacy have focused on financial vulnerability, such as the stock of short-term liabilities. Whichever indicator of foreign exchange adequacy is used, the nature of the exchange rate regime plays a part in determining the adequacy of the reserve level. Traditionally, the presumption has been that a country with a fixed rate needs larger reserves than a country with a floating rate regime since, with a fixed rate, reserves are the only cushion for absorbing shocks. However, if confidence in the authorities' ability to maintain supporting policies is high, a country with a fixed exchange rate may not require large reserves to defend its currency. Even with a managed float, a lack of credible economic policies can quickly lead to capital flight that depletes reserves. At a fundamental level, the credibility of the authorities' economic policies and the confidence that market participants place in them are the most important factors in assessing the adequacy of reserves. Indeed, it is credible policies that allow the authorities to augment reserves by borrowing abroad at favorable terms; borrowed reserves can provide a major supplement to the country's own reserves for countries with access to international financial markets.

The conventional indicator of reserve adequacy compares a country's international reserves to its monthly import bill:

$$\frac{\text{mean of reserves at end of present and preceding periods}}{\text{average monthly payment for imports of goods and services}}$$

A general rule of thumb—without a firm analytical basis however—has been that reserves should be equal to at least three months of imports. Countries with six months of import coverage enjoy a relatively comfortable reserve position. This rule of thumb evolved during a period when exchange rates were fixed, but controls on international capital flows were much more extensive than they are today. The movement toward more flexible exchange rate regimes suggests that fewer reserves are needed, while a relaxation of capital controls would argue for increased reserve holdings. Among factors that influence reserve adequacy at the present time are the following: (i) the openness of the financial account; (ii) the stock of highly liquid liabilities owed to foreigners by banks and enterprises; (iii) the country's access to short-term foreign borrowing facilities; and (iv) the seasonality of imports and exports of the country. The average level of import coverage, based on actual data for a sample of IMF members (excluding those whose external position is considered difficult), was 4.5 months of imports in 1994, appreciably above the three-month rule of thumb.

e. Shuttle trade in Turkey's balance of payments²²

When travelers cross national borders, it is a common customs provision to let them bring with them some amount of new purchases without paying import duty if the items are for the travelers' own use. For some countries, the limit is not well enforced. More generally, if foreign goods are highly taxed, either as exports or imports, or foreign goods are relatively inexpensive (for example, because the home currency is strong), or there are quantitative foreign exchange or import restrictions, then the inbound traveler may find that he or she can re-sell the foreign goods for a profit in the country being entered. If the profits are high enough, this trade can even pay for the air fare and other costs of the traveler, so that there is an economic incentive to make repeated trips bringing back merchandise for resale as a commercial undertaking. This phenomenon is called "shuttle trade." If customs officials do not have effective arrangements to document the value of goods exported or imported in this way, it will tend to be omitted from merchandise trade in the balance of payments accounts and will show up elsewhere—as tourist expenditure or receipts or as other current-account credits or debits, or as a component in the line for net errors and omissions.

²²Baydar Gürgen, former staff member in the IMF Statistics Department, who was involved in preparing estimates of the value of Turkey's shuttle trade, provided assistance with this section. See also IMF Statistics Department, "Recording 'Shuttle' Trade—The Cases of Germany and Russia," *Balance of Payments Statistics: A Newsletter from the Balance of Payments and External Debt Divisions* (Washington: International Monetary Fund, 1997).

In the case of exports from Turkey to neighboring states, especially members of the former Soviet Union, shuttle trade has reached surprising proportions. More and more suitcases accompanied traders as the practice developed, and eventually busses with trailers and refitted cruise ships and aircraft without passenger seats made the journey from Turkey to FSU countries full of merchandise stated to be personal luggage. In the case of Turkey-Russia trade in particular, no customs documents were required, either by the exporting country or the importing country. It is estimated that, in 1994, one quarter of all purchases of foreign consumer goods by Russians on the domestic market were shuttle-trade imports.²³

The lone traveler accompanying these shipments for the sake of the pretense of claiming the goods as luggage became a paid courier. The shipments were arranged between FSU distributors and Turkish manufacturers. Canned fruits and vegetables and household items were popular components of this trade, but the dominant part has been clothing. A Moscow importer might arrange for the production and shipment of, for example, several thousand leather jackets, and engage an agent to travel to the manufacturing site in Turkey and return to Moscow with the shipment as personal baggage.

Estimates of the size of Turkey's shuttle exports have been prepared for 1996 although they vary depending on the assumptions made. The Central Bank of Turkey surveyed Russian traders directly on three occasions and produced an estimate of US\$8.8 billion. The offsetting error has been largely attributed to "other exports of services" based on foreign exchange transactions through the banking system;²⁴ the Central Bank estimates some two thirds of shuttle trade is reflected in an overstatement of service receipts, with the remaining one third in errors and omissions.

The value of the flow of shuttle trade from Turkey to FSU countries could not have been very substantial in the early 1990s. If one assumes that it doubled in the years preceding 1996, it would have amounted, working backwards, to US\$4.4 billion in 1995 and \$1.1 billion in 1993. However, the flow of Turkey's shuttle exports seems to have leveled off around 1996. Several factors may account for this slow-down. The initial shortage of inexpensive manufactured

²³IMF Statistics Department, 1997, p. 22.

²⁴Turkish nationals living abroad (for example, guest workers in Germany) are residents of the country where they live. Nevertheless, when they return to Turkey to visit they are not recognized as foreign tourists if they travel on Turkish passports, the usual case. There is scope here for the misrecording of capital flows and emigrants' remittances as well as shuttle traders' receipts. Since 1995, the Turkish authorities have introduced special sample questionnaires in an effort to achieve a more accurate attribution of foreign-currency and traveler-check transactions. Nevertheless, accuracy rests ultimately on travelers' willingness to tell what they are doing.

consumer goods that existed in FSU countries when trade barriers were removed in 1992 may have been satisfied by the volume of trade attained by 1996, so that one would expect subsequent growth to be slower, in line with the growth of real household income in the importing markets. Alternatively, it may be due to the gradual replacement of Turkey by more competitive sources of supply, especially China, and/or the governments involved are making stronger efforts to collect their missing VAT and customs duties.

f. Exercises and issues for discussion

- (1) On the basis of the hypothetical data in Table 3.1 below on international transactions, compile the balance of payments in the format of Table 3.2 and according to the fifth edition of the *Balance of Payments Manual*.
- (2) How should the hypothetical balance of payments be revised if it is discovered that, during 1994, a) an estimated \$1 billion in exports was not reported? b) there was an estimated unreported short-term financial outflow of \$1 billion?
- (3) Using Table 3.6, compute total external debt as a percentage of exports of goods and services, and of GDP, for the years 1991–95. Comment on the fluctuations in the ratio and on the sustainability of external debt. What policies can be taken to reduce debt and debt service?
- (4) Indicate the debit and credit entries that should be made in the accounts of the compiling country to allow for the following transactions:
 - (i) Export proceeds that are deposited with commercial banks and that commercial banks in turn deposit with i) their correspondent banks abroad and ii) the central bank.
 - (ii) Imports financed through short-term credit.
 - (iii) A gift of food to the compiling country from a foreign country.
 - (iv) Earnings of subsidiaries of foreign companies operating in the compiling country that are reinvested there.
 - (v) Direct investment by nonresidents in the compiling country financed by local currency drawn from nonresidents' holdings of deposits in the compiling country's commercial banks.
 - (vi) Interest and principal arrears on external debt.

- (vii) Purchases from the Fund.
 - (viii) Borrowing from the World Bank.
- (5) Consider the effect of tariffs on the shoe industry in a country. Suppose that shoes sell for \$10 per pair in the world market (and for the same price domestically in the absence of any import restrictions) and that the material input—leather—costs \$6 in the world market. Labor and profit together amount to \$4 per pair. Assume leather is imported. Compute the nominal and effective rates of protection if a 20 percent tariff is levied on the import of shoes and no tariff is levied on leather. What would happen if a 10 percent tariff is now levied on leather; how about a 50 percent tariff on leather? As a producer of shoes, would you support the increase in tariff on leather? Would you, as a consumer of shoes? Would it make sense as a matter of policy for the government to increase the tariff on shoes to 50 percent?
- (6) A Turkish exporter of toys initially faces production costs of 1,000 Turkish liras per unit of output and an exchange rate of 100 Turkish liras per U.S. dollar but is able to export at a profit. Assuming domestic cost inflation of 50 percent and zero foreign inflation, calculate the following:
- (i) The effect of the pegged exchange rate of TL100 per U.S. dollars on exports;
 - (ii) the level of the exchange rate that would restore the real exchange rate; and
 - (iii) given an exchange rate depreciation of 25 percent, the magnitude of the change in productivity the Turkish exporter needs to restore the profitability of his exporting activity.
- (7) (i) Comment on the developments of the current account balance during the five years shown in Table 3.3. To help in this analysis calculate the ratio to GDP of the current account balance. To what extent would your assessment of balance change if shuttle trade were taken into account?
- (ii) How was the current account financed in 1994? What were the main changes in the financial account in 1994 compared with 1993?

- (iii) Calculate the average level of official reserves of the central bank, in months of imports of goods and services, for the years 1992–95 using Tables 3.3 and 4.5. (Following the practice of the Turkish Central Bank, reserves are defined as holdings of convertible foreign assets net of short-term foreign liabilities.) Do you consider these reserve levels to be appropriate? Why or why not?
- (8) Although the balance of payments account is a useful framework for capturing an economy's transactions with the rest of the world, it is desirable to supplement it with other information, such as data on external debt and arrears and the cyclical position of the economy. Discuss why it is essential to use such supplementary information for Turkey in order to obtain a full picture of the country's external position. What specific supplementary information would you use?
- (9) It is sometimes said that a current account surplus is always desirable and a deficit undesirable. Do you agree with this statement? If not, why? Explain your answer with examples from various countries.
- (10) In view of the liberalization of the capital account in many countries, are the conventional criteria for measuring reserve adequacy still relevant? Why do some countries seem to encounter no difficulties even while holding rather low levels of reserves in relation to their imports?
- (11) Are the various external debt indicators presented in this chapter sufficient to assess a country's debt situation? Why do countries such as Italy and Ireland, which have rather high debt ratios, seem not to suffer from a "debt problem," while others countries with relatively low ratios have debt servicing difficulties?

Figure 3.1.
Turkey
Current Account and Trade Balances, 1985-1995
(In percent of GDP)

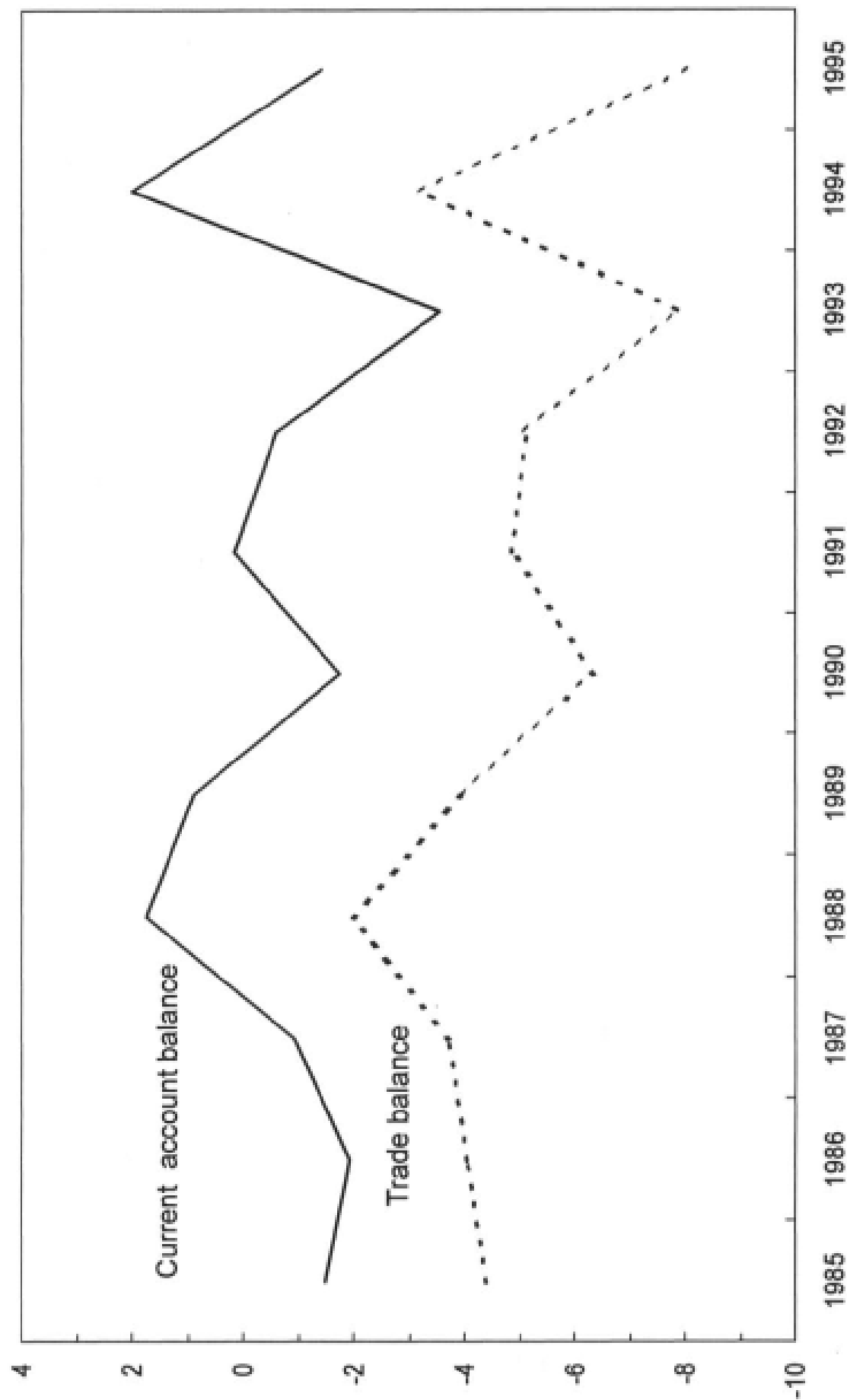
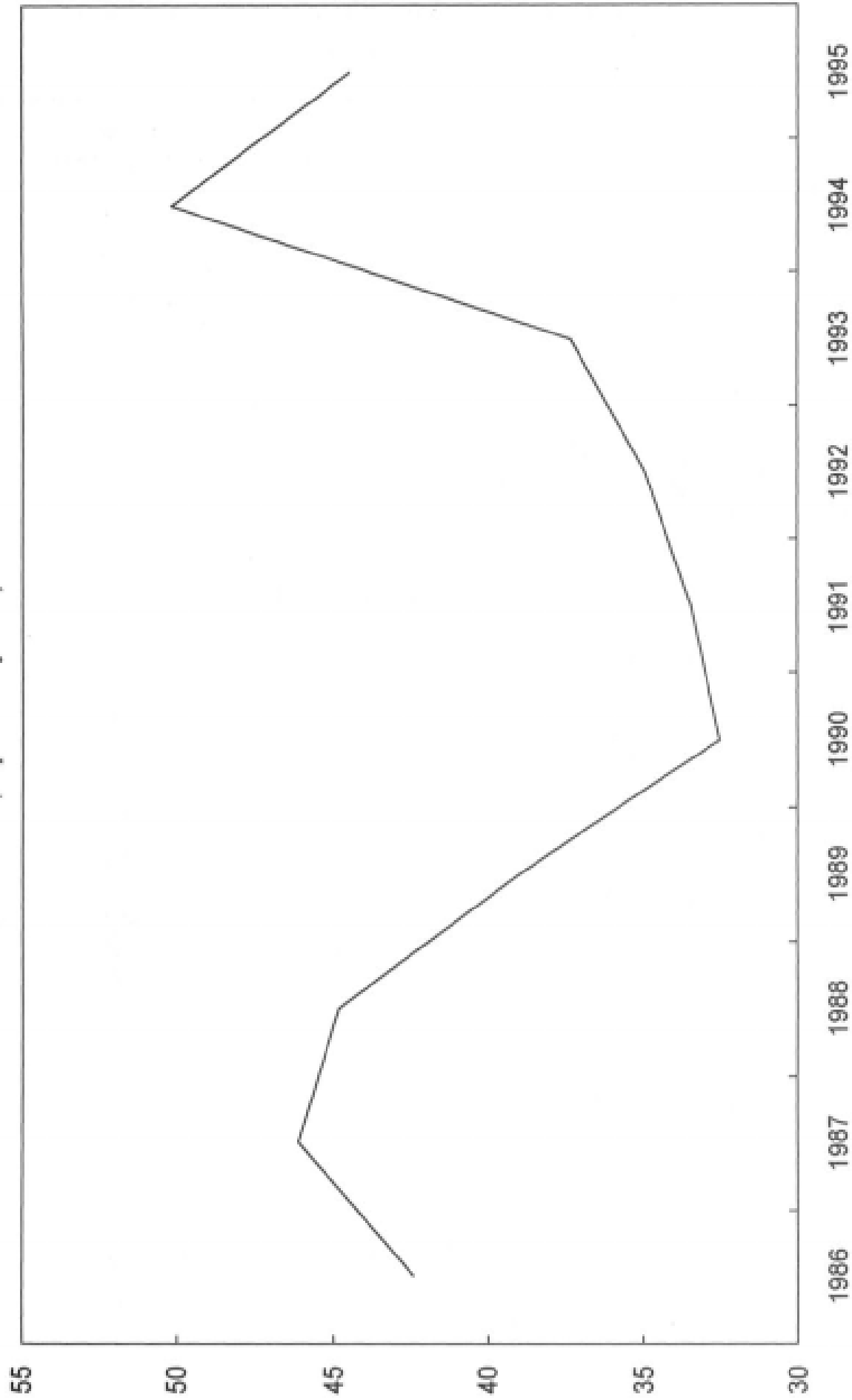


Figure 3.2.
Turkey
External Debt, 1986-1995
(In percent of GDP)



Source: OECD, *OECD Economic Survey – Turkey*.

Table 3.1. Hypothetical Data on International Transactions Classified by Source, 1993-94¹

(In millions of currency units)

Description	1993	1994
Data provided by the customs administration		
Exports of goods, f.o.b.	35,538	45,382
Imports of goods, f.o.b.	32,543	36,684
Data provided by carriers		
Import freight payments to nonresident companies	3,320	3,340
Receipt by resident companies		
Export freight	190	200
Foreign tourist transport	575	560
Data provided by the port authorities		
Receipts for port services provided to nonresidents	530	515
Data derived from the foreign exchange record		
Purchase of foreign exchange from foreign tourists	1,300	1,350
Sale of foreign exchange to residents for travel abroad	2,815	2,880
Purchase of foreign exchange from foreign embassies	250	300
Receipts from abroad, other services	128	127
Payments abroad, other services	1,970	3,431
Remittances received from family members living abroad	80	50
Remittances abroad by foreign nationals working in the reporting country (for more than one year)	262	256
Other data provided by commercial banks		
Interest accrued on deposits abroad	40	30
Interest paid to correspondent banks	27	60
Change in foreign assets	1,000	1,500
Change in foreign liabilities	1,991	1,000
Data provided by the central bank of the reporting country		
Interest received on foreign exchange assets	730	650
IMF charges	140	160
Total change in reserves	-1,796	1,103
Of which: Valuation changes	-198	0
Use of IMF credit	1,369	0
Data provided by the central government		
Interest paid on loans received from abroad	2,210	3,870
Operating expenditures of diplomatic missions abroad	350	400
Grants received from foreign governments	27	28
Drawings on loans received from abroad	5,182	4,800
Repayments on these loans	2,100	1,303
Refinanced debts	0	586
Data provided by nonfinancial public enterprises		
Interest paid on loans received from abroad	300	820
Drawings on long-term loans from abroad	2,223	1,613
Repayments on these loans	400	300
Data provided by nonfinancial private enterprises		
Interest accrued on deposits abroad	700	600
Dividends distributed to direct investors	1,200	1,400
Interest paid to nonresidents	2,400	1,700
Drawings on long-term loans from abroad	2,390	1,849
Repayments on these loans	285	250
Net change in short-term loans received from abroad	-765	-400
Change in deposits held in foreign banks	1,323	-1,217

¹Exercise taken from the IMF's Statistics Department training material.

Table 3.2. Hypothetical Balance of Payments Statement¹

(In millions of currency units)

Description	1993	1994
Current account	-7,449	
Balance of trade	2,995	
Exports of goods, f.o.b.	35,538	
Imports of goods, f.o.b.	-32,543	
Services (net)	-5,482	
Freight on exports	190	
Passenger services: credit	575	
Port services: credit	530	
Travel expenditure: credit	1,300	
Government services, not included elsewhere: credit	250	
Other services: credit	128	
Freight on imports	-3,320	
Travel expenditure: debit	-2,815	
Government services, not included elsewhere: debit	-350	
Other services: debit	-1,970	
Investment income (net)	-4,807	
Interest received by the Central Bank	730	
Interest received by commercial banks	40	
Interest received by nonfinancial private enterprises	700	
Dividends distributed to direct investors	-1,200	
IMF charges	-140	
Interest paid to correspondent banks	-27	
Interest paid on loans received by the central government	-2,210	
Interest paid on loans received by public enterprises	-300	
Interest paid by private enterprises	-2,400	
Current transfers (net)	-155	
Remittances received from family members living abroad	80	
Grants received from foreign governments	27	
Remittances abroad by foreign nationals working in Transita	-262	
Capital account (capital transfers)	0	
Financial account (excluding financing items)	5,913	
Direct investment	0	
Portfolio investment	0	
Other investment	5,913	
General government	3,082	
Drawings on loans from abroad	5,182	
Loan repayments	-2,100	
Banks	991	
Foreign assets	-1,000	
Foreign liabilities	1,991	
Other sectors	1,840	
Public enterprises	1,823	
Drawings on long-term loans from abroad	2,223	
Loan repayments	-400	
Private enterprises	17	
Short-term assets: deposits in banks abroad	-1,323	
Short-term liabilities: loans received	-765	
Long-term liabilities	2,105	
Drawings on loans received	2,390	
Loan repayments	-285	
Net errors and omissions	-1,431	
Overall balance	-2,967	
Financing	2,967	
Reserve assets	1,598	
Use of IMF credit	1,369	
Exceptional financing	0	
Debt rescheduling	0	

¹Exercise taken from the IMF's Statistics Department training material.

Table 3.3 Turkey: Balance of Payments, 1991-96

(In millions of U.S. dollars)

	1991	1992	1993	1994	1995
Trade balance	-7,340	-8,190	-14,160	-4,216	-13,212
Exports, f.o.b.	13,667	14,891	15,611	18,390	21,975
Imports, f.o.b.	-21,007	-23,081	-29,771	-22,606	-35,187
Services, net 1/	5,154	5,782	6,704	7,019	9,582
Credits	8,372	9,407	10,652	10,801	14,606
Debits	-3,218	-3,625	-3,948	-3,782	-5,024
Net investment income	-2,663	-2,625	-2,745	-3,264	-3,205
Transfers, net	5,099	4,059	3,768	3,092	4,496
Private	2,854	3,147	3,035	2,709	3,425
Official	2,245	912	733	383	1,071
Current Account Balance	250	-974	-6,433	2,631	-2,339
Financial Account, net 2/	-2,397	3,648	8,963	-4,194	4,722
Long-term finance	623	2,252	5,909	933	2,417
Direct investment	783	779	622	559	772
Portfolio investment	623	2,411	3,917	1,158	1,724
of which:					
Equity	56	300	431	994	120
Other investment	-783	-938	1,370	-784	-79
Short-term finance	-3,020	1,396	3,054	-5,127	2,305
Net Errors and Omissions	1,118	-1,190	-2,222	1,769	2,275
Overall balance	-1,029	1,484	308	206	4,658
Total change in reserves	1,029	-1,484	-308	-206	-4,658
IMF purchases	0	0	0	340	347
Official reserves 3/	1,029	-1,484	-308	-546	-5,005
Foreign exchange assets	1,054	-1,484	-314	-625	-5,032
Monetary gold	-25	0	6	79	27
Memorandum items					
Liras per U.S. dollar, end-of-period	5,080	8,564	14,473	38,726	59,650
Liras per U.S. dollar, average period	4,172	6,872	10,985	29,609	45,845

Source: IMF, *Turkey—Recent Economic Developments*, 1996.

1/ Formerly called "nonfactor services."

2/ In Turkey's BOP accounts, capital account items (new definition) are zero or not shown separately.

3/ A negative sign signifies an increase (inflow).

Table 3.4. Turkey: Trade in Services and Income, 1991-95

(In millions of U.S. dollars)

	1991	1992	1993	1994	1995
Service credits	8,372	9,407	10,652	10,801	14,606
Travel	2,654	3,639	3,959	4,321	4,957
Other credits	5,718	5,768	6,693	6,480	9,649
Of which transport	1,098	1,136	1,241	1,221	1,712
Investment income credits 1/	935	1,012	1,135	890	1,488
Transfer credits	5,131	4,075	3,800	3,113	4,512
Official	2,252	928	765	404	1,087
Private	2,879	3,147	3,035	2,709	3,425
Of which workers' remittances	2,819	3,008	2,919	2,627	3,327
Service debits	-3,218	-3,628	-3,948	-3,782	-5,024
Travel	-592	-776	-934	-866	-911
Other debits	-2,626	-2,852	-3,014	-2,916	-4,113
Of which transport					
Investment income debits 1/	-3,598	-3,637	-3,880	-4,154	-4,693
Transfer debits	-32	-16	-32	-21	-16
Official	-7	-16	-32	-21	-16
Private	-25	...	...	...	...
Of which workers' remittances	...	...	...	...	...

Source: *Balance of Payments Statistics Yearbook*, 1996.

1/ Excluding reinvested earnings, for which data are not available.

Table 3.5. Turkey: Foreign Merchandise Trade: Value and Volume, 1991-95

(Percentage change from previous year, in U.S. dollars)

	1991	1992	1993	1994	1995
Exports 1/					
Value, customs basis	4.9	8.3	4.3	18.0	19.5
Price 2/	-3.8	4.5	2.8	-12.8	19.2
Volume	9.1	3.5	1.5	35.3	0.3
Imports 3/					
Value, customs basis	-5.6	8.7	28.7	-20.9	53.5
Price 2/	-3.0	0.1	-7.6	8.2	15.1
Volume	-2.7	8.6	39.2	-26.9	33.4
Oil and oil products imports					
Value	-20.9	2.3	3.7	-5.3	25.0
Price	-20.6	-1.6	-14.8	-2.1	7.6
Volume	-0.4	4.0	21.7	-3.3	16.2
Terms of trade	-0.8	4.5	11.2	-19.4	3.6

Source: IMF, *International Financial Statistics*.

1/ Excluding transit trade.

2/ The trade-price indices are Fischer-type, equal to the geometric mean of Laspeyres and Paasche indices.

3/ Excluding transit trade and nonmonetary gold.

Table 3.6. Turkey: External Debt, 1991-95

(In millions of U.S. dollars; end of period)

	1991	1992	1993	1994	1995
<i>By maturity</i>					
Total outstanding	50,489	55,592	67,356	65,601	73,278
Medium- and long-term	41,372	42,932	48,823	54,291	57,577
Short-term	9,117	12,660	18,533	11,310	15,701
<i>By borrower</i>					
Medium- and long-term	41,372	42,932	48,823	54,291	57,577
Government	32,590	33,598	36,237	39,550	39,175
Central bank	6,530	6,150	6,618	8,597	10,486
Private sector	2,252	3,184	5,968	6,144	7,916
Short-term	9,117	12,660	18,533	11,310	15,701
Central bank	557	572	667	828	993
Deposit money banks	5,216	7,157	11,127	4,684	6,659
Other sectors	3,344	4,931	6,739	5,798	8,049
<i>By creditor</i>					
Multilateral agencies	10,069	9,160	8,674	9,183	9,081
Of which: IMF	—	—	—	344	573
Bilateral lenders (countries)	14,587	15,035	18,153	20,678	21,558
Deposit money banks, other private	25,833	31,397	40,529	35,740	42,639
<i>By type of credit</i>					
Medium- and long-term	41,372	42,932	48,823	54,291	57,577
Of which: Project, program credits	22,815	21,819	21,760	25,219	27,298
Bond issues	6,683	9,316	12,623	13,788	10,486
Private credits	7,554	8,147	11,349	12,950	17,438
Short-term	9,117	12,660	18,533	11,310	15,701
Of which: Deposits	2,983	2,595	3,097	3,266	4,471
Foreign exchange deposits	2,429	2,025	2,431	2,443	3,498
Dresdner scheme	553	569	666	823	973
Convertible deposits	1	1	—	—	—
Total debt service	7,561	8,733	8,227	9,993	11,897
Interest	3,440	3,439	3,574	3,923	4,303
Medium-, long-term repayments	4,121	5,294	4,653	6,070	7,594
Debt service ratio 1/	29.2	30.7	27.0	30.5	28.7
Memorandum items:					
Average interest rate, medium- and long-term debt	8.3	8.0	7.3	7.2	7.5
Average maturity of medium- and long-term debt (years)	14.6	14.0	12.5	12.5	12.7
Currency composition of debt (in % of total)					
U.S. dollar	35.0	38.0	38.3	33.0	34.0
Deutsche mark	34.3	31.2	29.9	33.9	34.8
Japanese yen	15.6	17.1	19.8	20.5	19.2

Source: IMF, *Turkey—Recent Economic Developments*, 1996.

1/ Interest plus medium- and long-term debt repayments as percent of current account receipts excluding official transfers.

Table 3.7. Turkey: Financial Flows, 1991-95

(In millions of U.S. dollars)

	1991	1992	1993	1994	1995
Long-term finance	623	2,252	5,909	933	2,417
Direct investment	783	779	622	559	772
Portfolio investment	648	2,411	3,917	1,158	1,724
Other	-808	-938	1,370	-784	-79
Official sector (incl. central bank)	-964	-1,093	-930	-1,461	-537
Drawings	1,862	1,092	525	365	723
Dresdner deposits	-497	410	925	1,315	1,462
Amortization	-2,329	-2,595	-2,380	-3,141	-2,722
Deposit money banks	536	7	193	-282	273
Other sectors (incl. private)	-380	148	2,107	959	185
Short-term finance	-3,020	1,396	3,054	-5,127	2,305
Assets	-2,563	-2,438	-3,291	2,423	-1,791
Of which:					
Loans extended	-811	-327	-289	-38	293
Deposit money banks	-1,760	-2,142	-2,894	2,451	-2,030
Liabilities	-457	3,834	6,345	-7,550	4,096
Central bank	-351	100	193	168	279
Of which:					
Dresdner deposits	-132	55	144	115	101
Bankers' credits	-51	...	...	...	...
Deposit money banks	-140	2,093	4,302	-6,771	1,700
Foreign exchange deposits	-803	-311	520	-170	899
Foreign exchange credits	663	2,404	3,782	-6,601	801
Other sectors	34	1,641	1,850	-947	2,117
Of which:					
Trade credits	433	1,645	2,244	-816	1,671
Foreign exchange credits	-359	-4	-394	-131	446

Source: IMF, *Turkey—Recent Economic Developments*, 1996.