4. The Analytic Framework

This chapter introduces the analytic framework of the GFS system and describes the relationships among its elements.

A. Introduction

4.1 A government and its public enterprises carry out a multitude of transactions. To manage the internal operations of government and assess the government's impact on the economy, these transactions must be organized into a framework within which they can be summarized and analyzed. For accountability purposes, transactions may be organized according to the government unit that carries them out. For detailed purchasing or planning purposes, transactions may be organized by the kind of item purchased or service provided. For billing or control purposes, transactions may be organized by the particular transactors with whom the government deals. The government finance statistics framework, on the other hand, is designed to facilitate macroeconomic analysis. While there is clearly a close link between accounting data and economic statistics, they do not serve the same objectives and may differ in the treatment of particular items.

4.2 Traditionally, governments have kept their accounts on a cash basis; this is reflected in the analytic framework of the *1986 GFS Manual*. Including only cash revenues and expenditures has the advantage of focusing the government's attention on its financing constraint, which has traditionally been viewed as its most binding priority. However, governments have become less liquidity constrained in carrying out fiscal policy and have become more adept at separating the time of a fiscal action from the time it is paid for, so that cash transactions do not adequately capture either the timing of the action or its impact on the economy. In consequence, there has been increasing dissatisfaction with cash transactions as the basis for assessing fiscal policy, and a worldwide shift is under way toward resource-based accounting.[1]

4.3 The analytic framework in this manual reflects these developments and is presented in the form of a set of interrelated statements derived from the *1993 SNA* that integrate flows and stocks. This framework differs considerably from the cash-based framework of the *1986 GFS Manual*, which focused on selected stocks and flows and did not integrate them. The new framework facilitates a more comprehensive assessment of the economic impact of government activity and the sustainability of fiscal policy. More specifically, the introduction of the accrual basis and the integration of balance sheets with flows for government are consistent with the need for government behavior to be determined in the context of its intertemporal budget constraint. For example, a government's policies will not be sustainable if they reduce its net worth too much. The framework also provides an improved basis for monitoring efficiency in the allocation and use of government resources.

B. Analytic objectives

4.4 The GFS system is a quantitative tool that supports fiscal analysis. To permit effective analysis of fiscal policy, the statistical output of the system must facilitate the identification, measurement, monitoring, and assessment of the impact on the economy of a government's economic policies and other activities, as well as the sustainability of those policies and activities.

4.5 To achieve the analytic objectives, the GFS statistical framework should generate data that (1)

[1] For example, see Part III of International Federation of Accountants, *Government Financial Reporting: Accounting Issues and Practices* (New York, 2000).

are closely linked to other macroeconomic statistical systems (national accounts, balance of payments, and monetary and financial statistics) and (2) enable the analyst to assess the financial soundness of the general government sector in ways commonly applied to other organizations in the economy.[2]

C. Construction of the framework: Relation to the previous GFS system

4.6 The analytic framework builds on the 1986 GFS system and extends it by incorporating additional elements that are useful in assessing fiscal policy. Three types of changes have been made:

- The definitions of individual statistical variables have been aligned more closely with economic concepts. An important example is the treatment of nonfinancial assets, where the sale of such assets is no longer included in revenue and their purchase is no longer included in expense.
- A number of conceptual modifications have been made to harmonize the GFS system with the 1993 SNA. Important changes include the shift from a functional-based definition of government to one built on institutional units (see Chapter 2), a switch from cash to accrual accounting (see Chapter 3), and the complete integration of flows and stocks.
- The previous GFS analytic framework has been extended to include nonmonetary transactions, flows other than transactions, and balance sheets.

4.7 The central coverage of the GFS system encompasses the general government sector. Once an institutional unit has been classified to a sector (as defined in Chapter 2), then all its stocks and flows are recorded in that sector.[3] Some types of analysis may be more effectively carried out if they are based on statistics that include the operations of public corporations. Thus, statistics for the public sector as well as for the general government sector should be compiled. The analytic framework described in this chapter can be applied to both sectors regardless of the coverage selected.

D. Components and concepts of the analytic framework

4.8 The core of the analytic framework is a set of four financial statements. Three of the statements can be combined to demonstrate that all changes in stocks result from flows (see Figure 4.1). These are (1) the Statement of Government Operations; (2) the Statement of Other Economic Flows; and (3) the Balance Sheet. In addition, the framework includes a Statement of Sources and Uses of Cash to provide key information on liquidity.

4.9 The ***Statement of Government Operations*** is a summary of the transactions of the general government sector in a given accounting period. In essence, transactions represent changes to stocks that arise from mutually agreed interactions between institutional units, such as the sale of a good or service by one unit and its purchase by another. The framework also recognizes that a unit can act in two capacities of economic interest and includes as transactions some items that do not involve another institutional unit. For example, consumption of fixed capital recognizes that a unit is both the owner of a fixed asset and the consumer of the services provided by the asset. Taken together, transactions constitute the largest share of the implementation of fiscal policy. As described in the following section, the transactions are classified to demonstrate the effect of fiscal policy on the net worth of the general government sector, on its demand for credit, and on its holdings of assets and liabilities.

4.10 The ***Statement of Other Economic Flows*** tabulates changes to stocks of assets, liabilities, and net worth that come about from sources other than transactions. More specifically, *holding gains* represent changes to stocks that arise from price movements, including exchange rate movements.[4] *Other changes in the volume of assets* relate to changes to stocks arising from events such as the discovery of new assets (e.g., mineral deposits) and depletion or destruction of assets.

[2] Organizations in other sectors of the economy record their operations in the form of integrated accounting systems that include income statements, balance sheets, and cash flow statements.

[3] As described in Chapter 2, the central bank and other public financial and nonfinancial corporations belong to the public sector but not to the general government sector.

[4] "Holding gains" is used as a short form of the more general term, "holding gains and losses."

Figure 4.1. Structure of the GFS Analytic Framework

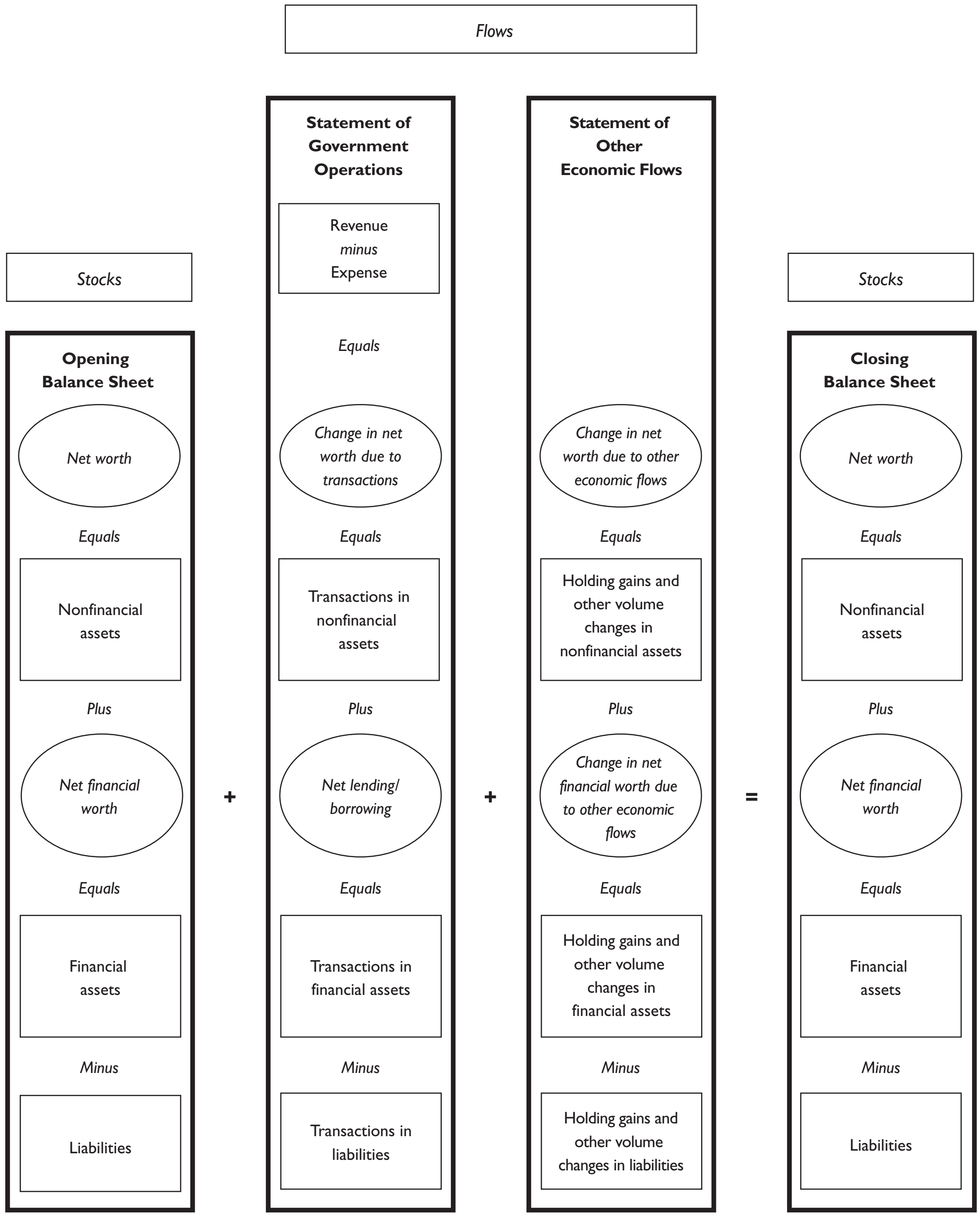

Table 4.1: Statement of Government Operations

TRANSACTIONS AFFECTING NET WORTH:
REVENUE
Taxes
Social contributions [GFS]
Grants
Other revenue
EXPENSE
Compensation of employees [GFS]
Use of goods and services
Consumption of fixed capital [GFS]
Interest [GFS]
Subsidies
Grants
Social benefits [GFS]
Other expense
NET/GROSS OPERATING BALANCE[1]
TRANSACTIONS IN NONFINANCIAL ASSETS:
NET ACQUISITION OF NONFINANCIAL ASSETS[2]
Fixed assets
Change in inventories
Valuables
Nonproduced assets
NET LENDING/BORROWING [GFS][3]
TRANSACTIONS IN FINANCIAL ASSETS AND LIABILITIES (FINANCING):
NET ACQUISITION OF FINANCIAL ASSETS
Domestic
Foreign
NET INCURRENCE OF LIABILITIES
Domestic
Foreign

[1]The net operating balance equals revenue minus expense. The gross operating balance equals revenue minus expense other than consumption of fixed capital.
[2]Acquisitions minus disposals and consumption of fixed capital.
[3]Net lending/borrowing equals the net operating balance minus the net acquisition of nonfinancial assets. It is also equal to the net acquisition of financial assets minus the net incurrence of liabilities.

4.11 The ***Balance Sheet*** records the stocks of assets, liabilities, and net worth of the general government sector at the end of each accounting period.

4.12 By breaking down the total assets and total liabilities into their constituents and establishing the sources of changes in them from one period to another in terms of transactions and other economic flows as defined above, the framework provides a strong statistical explanation of the factors causing the change in the net worth of government.

4.13 The ***Statement of Sources and Uses of Cash*** records cash inflows and outflows using a classification similar to that of the Statement of Government Operations.

E. The Statement of Government Operations

4.14 The Statement of Government Operations (Table 4.1) presents details of transactions in revenue, expense, the net acquisition of nonfinancial assets, the net acquisition of financial assets, and the net incurrence of liabilities.[5] Revenue is defined as the increase in net worth resulting from transactions, and expense as the decrease in net worth resulting from transactions. The net acquisition of nonfinancial assets equals gross fixed capital formation less consumption of fixed capital plus changes in inventories and transactions in other nonfinancial assets.

4.15 Two important analytic balances are derived in the Statement of Government Operations. Revenue less expense equals the ***net operating balance***. The subsequent deduction of the net acquisition of nonfinancial assets results in ***net lending (+)/borrowing (–)***, which is also equal to the net result of transactions in financial assets and liabilities. In addition, Box 4.1 describes a number of other important variables used in fiscal analysis.[6]

4.16 The net operating balance is a summary measure of the ongoing sustainability of government operations. It is comparable to the national accounting concept of saving plus net capital transfers receivable. It should be noted that the net operating balance (and the equivalent change in net worth due to transactions) as defined here excludes gains and

[5]As explained in Chapter 3, government finance statistics are intended to be compiled using the accrual basis of recording transactions. It is recognized, however, that many governments may be able to compile statistics only on a cash or partial accrual basis for some time. If only cash data are available, the classification of cash flows shown in Table 4.2 should be used. Otherwise, with accrual or partial accrual data, the classification of transactions shown in Table 4.1 should be used. With the exception of consumption of fixed capital and accounts receivable/payable, all of the line items in the table can be applied to both cash and accrual data. However, the benefits of the fully integrated system can only be derived from using accrual data.
[6]The European Central Bank (ECB) defines revenue in the same way as this manual and expenditure as the sum of expense and the net acquisition of nonfinancial assets. The ECB deficit/surplus is defined as revenue minus expenditure and is equivalent to net lending/borrowing. Expenditure is one of the fiscal variables included in Box 4.1.

losses resulting from changes in price levels and other changes in the volume of assets. The component of the change in net worth that is due to transactions can be attributed directly to government policies since governments have control over their transactions. The same cannot be said for the other components of the total change in net worth, as governments do not directly control them.

4.17 Net lending (+)/borrowing (–) is a summary measure indicating the extent to which government is either putting financial resources at the disposal of other sectors in the economy or utilizing the financial resources generated by other sectors. It may therefore be viewed as an indicator of the financial impact of government activity on the rest of the economy. It differs from the *1993 SNA* concept of net lending/borrowing to the extent that a government maintains an unfunded retirement scheme for its employees. In the GFS system, the present value of the obligations to pay retirement benefits is recognized as a liability, while in *1993 SNA* it is not recognized.[7]

4.18 In addition, the ***gross operating balance*** is presented in Table 4.1. It differs from the net operating balance in that it does not include consumption of fixed capital as an expense. Consumption of fixed capital can be difficult to measure in practice and a satisfactory estimate may not be possible. If so, the gross operating balance may be more practical for analysis than the net operating balance. The net operating balance is, however, preferred because it captures all current costs of government operations.

4.19 Table 4.1 is divided into three sections: (1) revenue and expense transactions, (2) transactions in nonfinancial assets, and (3) transactions in financial assets and liabilities. The following paragraphs follow that structure in summarizing the various categories of transaction. These definitions and descriptions are not intended to be comprehensive. In each section, reference is made to the chapter that contains more detailed information.

1. Revenue

4.20 All transactions that increase the net worth of the general government sector are classified as revenue.[8] Governments receive three major types of revenue from their fiscal operations: taxes, social contributions, and other revenue. For many governments, the revenue from these sources is supplemented by grants. It should be noted that the sale of a nonfinancial asset is not revenue because it has no effect on net worth. Rather, it changes the composition of the balance sheet by exchanging one asset (the nonfinancial asset) for another (the proceeds of the sale). (The detailed classification of revenue is described in Chapter 5.)

4.21 ***Taxes*** are compulsory transfers received by the general government sector. They include fees that are clearly out of all proportion to the costs of providing services, but exclude compulsory social contributions, fines, and penalties.

4.22 ***Social contributions [GFS]***[9] include receipts of social security schemes and employer social insurance schemes that provide benefits other than retirement benefits. Social security contributions may be compulsory or voluntary and may be made by employees, employers on behalf of employees, self-employed persons, or nonemployed persons. Compulsory social security contributions differ from taxes in that the payments entitle the contributors and other beneficiaries to certain social benefits if specified events should take place, such as sickness and old age. Compulsory payments assessed on a basis other than pay, payroll, or the number of employees but earmarked for social security schemes are taxes. Also, contributions to employer retirement schemes are not treated as social contributions in the GFS system.

4.23 ***Grants*** are noncompulsory transfers received from other governments or from international organizations. They supplement the revenue from a government's own resources. They may be received in cash or in kind.[10]

[7] Net lending/borrowing in the GFS system also differs from the comparable concept in *1993 SNA* because of a different treatment of reinvested earnings on direct foreign investment, as described in Chapter 5.

[8] In general, transactions that increase net worth result from current operations. Capital transfers receivable is a possible exception. As defined in the *1993 SNA*, a capital transfer is a transfer of a noncash asset, the cancellation of a liability by a creditor, the transfer of cash that was raised by disposing of an asset, or the transfer of cash that the recipient is expected or required to use for the acquisition of an asset. (In each case inventories are excluded.) In the GFS system, capital transfers receivable are classified as revenue because they increase government's net worth and they are often indistinguishable from current transfers in their effect on government operations.

[9] [GFS] indicates that this item has the same name in *1993 SNA* but different coverage.

[10] In the *1986 GFS Manual*, grants were treated as an inflow separately from revenue. They have been included as part of revenue in this manual because they meet the criterion of increasing net worth.

4.24 ***Other revenue*** includes all revenue transactions not classified as taxes, social contributions, or grants. The major items are sales of goods and services,[11] interest and other types of property income, voluntary transfers in cash or in kind other than grants, and fines and penalties.

2. Expense

4.25 All transactions that decrease the net worth of the general government sector are classified as expense.[12] The purchase of a nonfinancial asset is not an expense because it has no effect on net worth. Rather, it changes the composition of the balance sheet by exchanging one asset (the nonfinancial asset) for another or a liability (the payment for the asset). The major types of expense are compensation of employees, use of goods and services, consumption of fixed capital, interest, subsidies, grants, social benefits, and other expense. In addition, expense can be classified according to functional purpose, such as health or social protection. (Both classifications of expense are described in Chapter 6.)

4.26 ***Compensation of employees [GFS]*** is the remuneration, in cash or in kind, payable to an employee in return for work done. In addition to wages and salaries, compensation of employees includes social insurance contributions made by a general government unit on behalf of its employees. Excluded is any compensation of employees related to own-account capital formation.[13] As a result, total compensation of employees in *1993 SNA* is larger by this amount than compensation of employees shown in Table 4.1.

4.27 ***Use of goods and services*** is the total value of goods and services purchased by the general government sector for use in a production process or acquired for resale less the net change in inventories of those goods and services.[14] Goods and services acquired for use as in-kind transfers to households or as grants without being used in a production process are excluded. Parallel to compensation of employees, any goods and services used in own-account capital formation are treated as acquisitions of nonfinancial assets.

4.28 ***Consumption of fixed capital [GFS]*** is the decline in the value of the stock of fixed assets during the accounting period as a result of physical deterioration, normal obsolescence, and normal accidental damage.[15] It is always a noncash expense. Because of the difficulty in estimating this expense, the gross operating balance, as shown in Table 4.1, is sometimes computed in place of, or in addition to, the net operating balance.

4.29 ***Interest [GFS]*** is an expense incurred by a debtor for the use of another unit's funds. An interest-bearing financial instrument can be classified as deposits, securities other than shares, loans, or accounts receivable/payable.

4.30 ***Subsidies*** are current transfers that government units pay to enterprises either on the basis of the levels of their production activities or on the basis of the quantities or values of the goods or services that they produce, sell, or import. Included are transfers to public corporations and other enterprises that are intended to compensate for operating losses.

4.31 ***Grants*** are noncompulsory transfers, in cash or in kind, paid to another general government unit or an international organization.

4.32 ***Social benefits [GFS]*** are current transfers to households to provide for needs arising from events such as sickness, unemployment, retirement, housing, or family circumstances. The benefits may be paid in cash or in kind. The costs of social benefits in kind produced by a general government unit are recorded against the relevant expenses that were incurred to produce the goods and services rather than included in this category.[16]

4.33 ***Other expense*** includes all expense transactions not elsewhere classified. Transactions recorded here include property expense other than interest; taxes, fines, and penalties imposed by one government on another; current transfers to nonprofit institutions serving households; capital transfers other than capital grants, and non-life insurance premiums and claims.

[11]In the *1986 GFS Manual*, the net value of sales of market establishments less their operating costs is shown as revenue (or as expense if the operating costs exceed revenue). In this manual, the gross amount of sales is to be shown as revenue and the various operating costs are to be distributed among each category of expense as appropriate.

[12]As with revenue, capital transfers paid or otherwise obligated are classified as expense. See footnote 8.

[13]These transactions are classified as acquisitions of nonfinancial assets.

[14]For example, goods purchased but not used in the same period would be shown as an increase in inventories and not as use of goods and services, while goods withdrawn from inventories would be shown as a reduction in inventories and an addition to use of goods and services.

[15]Consumption of fixed capital related to fixed assets used in own-account capital formation is excluded from this category and included as part of the value of the asset produced.

[16]Pensions and other retirement benefits are also classified as social benefits in *1993 SNA*, but in the GFS system they are classified as reductions in liabilities.

3. Treatment of social security and unfunded government employer retirement schemes

4.34 In the GFS system, social security contributions are treated as revenue (and therefore as an increase in net worth), and social security benefits as expense (a decrease in net worth). This treatment is in line with conventional fiscal analysis. Some analysts argue that, in a full intertemporal framework, social security contributions may be seen more appropriately as a buildup of assets associated with future liabilities. Likewise, many social security benefits may be seen as the extinction of previously incurred government liabilities. This approach is not taken in this manual because it is considered that social security schemes do not result in a contractual liability for the government, i.e., there is no direct link between the contributions made and the benefits eventually paid. Indeed, it is not uncommon for governments to change unilaterally the structure of benefits (e.g., by changing the circumstances under which the benefits become payable or the amount of the benefit). Nonetheless, it is important for a government to be aware of the contingent liability that arises from its social security program. As a result, a memorandum item is included in Chapter 7 to recognize the net present value of future benefits that have already been earned according to the existing laws and regulations.

4.35 Contrary to the *1993 SNA*, transactions in unfunded government employer retirement schemes are considered in this manual to involve a contractual liability for a government to its employees. As a result, the receipt of contributions to such schemes is considered to be an incurrence of a liability, and the payment of retirement benefits is considered to be a reduction of the same liability.

4. Transactions in nonfinancial assets[17]

4.36 The second section of Table 4.1 records transactions that change a government's holdings of nonfinancial assets. These assets are classified as fixed assets, inventories, valuables, and nonproduced assets. (Transactions in nonfinancial assets are described further in Chapter 8.)

[17] This section deals only with direct acquisitions and disposals of nonfinancial assets (including consumption of fixed capital). Government units may facilitate public capital formation by transferring funds to other governments or to public corporations with a requirement that the funds be used to acquire nonfinancial assets. These transactions are included in capital grants or other expense as relevant.

4.37 ***Fixed assets*** are produced assets that are used repeatedly or continuously in processes of production for more than one year. Transactions in fixed assets can refer to acquisitions of new assets, construction of new assets on own account, acquisitions and disposals of existing assets, and major improvements to fixed assets and nonproduced assets. Assets can be acquired or disposed of by purchase, sale, barter, or transfer.

4.38 ***Inventories*** are stocks of goods held by general government units that are intended for sale, use in production, or other use at a later date. They can be strategic stocks, materials and supplies, work in progress, finished goods, or goods held for resale. Withdrawals from inventories are valued at current market prices rather than their acquisition prices. Any change in the value of inventories between the time of acquisition and withdrawal should be shown as a holding gain in the Statement of Other Economic Flows and not as revenue (gain) or expense (loss).

4.39 ***Valuables*** are produced assets that are not used primarily for purposes of production or consumption but are held as stores of value over time.

4.40 ***Nonproduced assets*** are assets needed for production that have not themselves been produced, such as land, subsoil assets, and certain intangible assets.

5. Transactions in financial assets and liabilities

4.41 The third section of Table 4.1 records financial transactions, which are transactions that change a government's holdings of financial assets and liabilities. Financial assets are mainly claims on other institutional units and therefore have counterpart liabilities.[18] (Transactions in financial assets and liabilities are described in Chapter 9.)

4.42 Transactions in financial assets can be classified in multiple ways; for ease of presentation, Table 4.1 indicates only a classification of financial assets according to whether the counterpart liability was incurred by a resident (indicated by "domestic" in the table) or a nonresident (foreign) and vice versa for the classification of liabilities.

4.43 There are two other classifications of financial transactions in the GFS system. The first classification is based on the type of financial instruments involved

[18] Monetary gold and SDRs are exceptions in that they are financial assets that are not claims on other units.

in the transactions. The categories are monetary gold and SDRs, currency and deposits, loans, securities other than shares, shares and other equity, insurance technical reserves, financial derivatives, and other accounts receivable/payable (see Table 9.1 in Chapter 9). The second classification is based on the sector of the counterparty of the financial instrument. That is, liabilities are classified according to whether the current holder of the counterpart financial asset is a financial corporation, nonfinancial corporation, household, and so forth (see Table 9.2 in Chapter 9).

4.44 In general, transactions in liabilities can be classified in the same way as transactions in financial assets. One additional classification that could be employed is whether a liability has become past due for payment and is in arrears. By showing a reduction in a liability when it is due for payment and a corresponding increase in a separate liability, the accumulation of debt amortization arrears can be indicated as a source of financing. Such treatment is explained in more detail in Appendix 2.

4.45 An additional possible classification of a financial asset is whether it was acquired or disposed of for the purpose of public policy or liquidity management. This distinction is not included in the Statement of Government Operations, but is used to define the ***overall balance*** in Box 4.1. Policy-related assets may be acquired for a variety of reasons, such as fostering new industries, assisting ailing government corporations, or helping particular businesses suffering economic adversity. Such transactions can take a variety of forms, including loans, equity securities, and debt securities. Given that there is often a subsidy component of such transactions, it is useful to identify them in a separate category so that for some analyses they can be treated as flows with characteristics similar to revenue and expense.[19] All other transactions in financial assets are assumed to be for liquidity management purposes. That is, the assets are acquired to earn a market rate of return while keeping sufficient funds on hand to finance day-to-day operations.

Table 4.2: Statement of Sources and Uses of Cash

CASH FLOWS FROM OPERATING ACTIVITIES:
CASH RECEIPTS FROM OPERATING ACTIVITIES
Taxes
Social contributions
Grants
Other receipts
CASH PAYMENTS FOR OPERATING ACTIVITIES
Compensation of employees
Purchases of goods and services
Interest
Subsidies
Grants
Social benefits
Other payments
Net cash inflow from operating activities
CASH FLOWS FROM INVESTMENTS IN NONFINANCIAL ASSETS:
PURCHASES OF NONFINANCIAL ASSETS
Fixed assets
Strategic stocks
Valuables
Nonproduced assets
SALES OF NONFINANCIAL ASSETS
Fixed assets
Strategic stocks
Valuables
Nonproduced assets
Net cash outflow from investments in nonfinancial assets
CASH SURPLUS/DEFICIT[1]
CASH FLOWS FROM FINANCING ACTIVITIES:
NET ACQUISITION OF FINANCIAL ASSETS OTHER THAN CASH
Domestic
Foreign
NET INCURRENCE OF LIABILITIES
Domestic
Foreign
Net cash inflow from financing activities
NET CHANGE IN THE STOCK OF CASH[2]

[1] Net cash inflow from operating activities minus the net cash outflow from investments in nonfinancial assets.
[2] Cash surplus/deficit plus the net cash inflow from financing activities.

F. Government cash operations

4.46 While it is desirable to record flows on an accrual basis, information on the sources and uses of cash is important for assessing the liquidity of the general government sector. The ***Statement of Sources and Uses of Cash*** (Table 4.2) shows the total amount of cash generated or absorbed by (1) current operations, (2) transactions in nonfinancial assets, and (3) transactions involving financial assets and liabilities other than cash itself. The net change

[19] The net acquisition of financial assets for policy purposes was called "lending minus repayments" in the *1986 GFS Manual* and was often referred to as "net lending." These terms should not be confused with the term "net lending/borrowing" used in this manual.

in the government's cash position is the sum of the net cash received from these three sources.

4.47 Cash refers to cash on hand and cash equivalents. Cash on hand refers to notes and coins held and deposits held on demand with a bank or other financial institution. Cash equivalents are highly liquid investments that are readily convertible to cash on hand at the government's option and overdrafts considered integral to the cash management function.

4.48 Unlike the accrual-based Statement of Government Operations (Table 4.1), the Statement of Sources and Uses of Cash (Table 4.2) reflects a cash basis of recording. This in effect means that transactions are captured when cash is received or when cash payments are made. Additional useful information is obtained from an analysis of the differences between Tables 4.1 and 4.2. There are two broad categories of transactions that are recorded in Table 4.1 but not in Table 4.2:

- ***Transactions that will be settled in cash in the future.*** With accrual recording, a purchase of goods and services is recognized when the ownership of goods changes hands or services are provided. The associated cash payment may not take place until a subsequent accounting period, in which case it would not be included in Table 4.2 in the same period as it appears in Table 4.1. Similarly, revenue can be received in cash before it is earned by the delivery of goods or provision of services to the purchaser. There may also be transactions in assets and liabilities that will be settled in cash in future periods, such as the interest accruing from the amortization of the discount on a zero-coupon or other discounted bond.

- ***Transactions that are not in cash by their nature***. Consumption of fixed capital, imputed transactions, barter, and other transactions in kind can only be noncash transactions.

G. The Statement of Other Economic Flows

4.49 Table 4.3, the Statement of Other Economic Flows, presents influences on the government's net worth that are not the result of government transactions. They are classified as changes either in the value or volume of assets, liabilities, and net worth. The balancing item of this statement is the ***change in net worth resulting from other economic flows***. (Other economic flows are described in Chapter 10.)

Table 4.3: Statement of Other Economic Flows

CHANGE IN NET WORTH RESULTING FROM OTHER ECONOMIC FLOWS
NONFINANCIAL ASSETS
Holding gains
Other volume changes
FINANCIAL ASSETS
Holding gains
Other volume changes
LIABILITIES
Holding gains
Other volume changes

4.50 Changes in the value of assets, liabilities, and net worth due solely to price effects are called holding gains. They can result from changes in the general price level or in relative prices. Changes in the exchange rate will also cause holding gains of financial assets and liabilities denominated in a foreign currency.

4.51 Changes in the volume of assets and liabilities other than from transactions may arise for a variety of reasons. They can be described as resulting from exceptional or unexpected events, from normal events, or from reclassifications.

- ***Exceptional or unexpected events*** include losses from earthquakes, floods, fires, wind, wars, and other catastrophes. They also include bad debts written off by creditors, uncompensated seizures, abandonment of production facilities before construction is completed, unforeseen obsolescence of assets, unforeseen degradation of fixed assets from pollution, and exceptional losses of inventories.

- ***Normal events*** include the discovery of a subsoil asset, the depletion of subsoil assets through extraction, the registration of a patent, a change in the liability of a defined benefit pension plan resulting from a change in the benefits covered, the designation of a structure as a historic monument, and the natural growth of noncultivated biological resources.

- ***Reclassifications*** occur when a part of a general government unit begins to operate with sufficient independence that it is classified as a quasi-corporation, when a general government unit is converted to a public corporation or vice versa because of a change in its operations or the prices that it charges for its services, and when there is a restructuring or merger of general government units and public corporations. In these cases, assets and liabilities may be added to or removed from the balance sheet of the general government sector.

H. The Balance Sheet

4.52 The ***Balance Sheet*** is shown in Table 4.4. It presents the stocks of assets and liabilities at the end of the accounting period. Also included is ***net worth***, defined as total assets less total liabilities. The change in net worth is the preferred measure for assessing the sustainability of fiscal activities.

4.53 It may be difficult to attach market values to some government nonfinancial assets, and certain analyses are focused only on the financial assets of the general government sector rather than its total assets. As a result, ***net financial worth,*** also shown in Table 4.4, is defined as total financial assets less total liabilities.

1. Government assets

4.54 The assets included in the Balance Sheet of the general government sector are assets over which general government units enforce ownership rights and from which they may derive economic benefits by holding or using them over a period of time. Assets not owned and controlled by a general government unit and assets that have no economic value are excluded.

4.55 As shown in Table 4.4, assets are classified in the same way that transactions in assets are classified. Assets are either nonfinancial or financial. Nonfinancial assets are further classified as fixed assets, inventories, valuables, or nonproduced assets. Financial assets are classified by residency of the counterparty and by type of instrument. Financial assets can also be classified by sector of the counterparty. (The classification of assets is described in Chapter 7.)

2. Government liabilities

4.56 Liabilities are obligations to provide economic value to another institutional unit. Most classifications that apply to financial assets also apply to liabilities. Table 4.4 shows a classification first by the residency and then by type of instrument. (The classification of liabilities is described in Chapter 7.)

I. Additional summary measures for fiscal policy

4.57 Depending on the objectives of the analysis being undertaken, it is likely that variables and balances other than those included in the main tables of the GFS framework will be useful. Some of the most important indicators that are likely to be employed are described in Box 4.1.

Table 4.4: Balance Sheet

	Opening balance sheet	Closing balance sheet
NET WORTH		
NONFINANCIAL ASSETS		
Fixed assets		
Inventories		
Valuables		
Nonproduced assets		
FINANCIAL ASSETS		
Domestic		
Currency and deposits		
Securities other than shares		
Loans		
Shares and other equity		
Insurance technical reserves		
Financial derivatives		
Other accounts receivable		
Foreign		
Currency and deposits		
Securities other than shares		
Loans		
Shares and other equity		
Insurance technical reserves		
Financial derivatives		
Other accounts receivable		
Monetary gold and SDRs		
LIABILITIES		
Domestic		
Currency and deposits		
Securities other than shares		
Loans		
Shares and other equity (public corporations only)		
Insurance technical reserves [GFS]		
Financial derivatives		
Other accounts payable		
Foreign		
Currency and deposits		
Securities other than shares		
Loans		
Shares and other equity (public corporations only)		
Insurance technical reserves [GFS]		
Financial derivatives		
Other accounts payable		

Box 4.1: Analytical Measures for Fiscal Policy

For macroeconomic analysis, fiscal policy measures include the three core balances in the GFS system, other balances used by various institutions (including the IMF), and other important macroeconomic measures of flows and stocks. These variables could apply to the different levels of government, the general government sector or to the public sector.

Core GFS balances	
Net/gross operating balance	the net operating balance equals revenue minus expense. The gross operating balance equals revenue minus expense other than consumption of fixed capital
Net lending/borrowing	net operating balance minus the net acquisition of nonfinancial assets (or the gross operating balance minus the net acquisition of nonfinancial assets that also excludes consumption of fixed capital). Net lending/borrowing is also equal to the net acquisition of financial assets minus the net incurrence of liabilities
Cash surplus/deficit	net cash inflow from operating activities minus the net cash outflow from investments in nonfinancial assets
Other balances	
Overall fiscal balance	net lending/borrowing adjusted through the rearrangement of transactions in assets and liabilities that are deemed to be for public policy purposes. Notably, all proceeds under privatization (including fixed asset sales) would be included as financial items; and subsidies given in the form of loans would be recognized as an expense[1]
Adjusted overall fiscal balance	overall fiscal balance (or net lending/borrowing) adjusted to exclude some or all revenue grants, certain enclave activities such as the oil sector, and/or large and infrequent transactions that could distort the fiscal analysis[1]
Overall primary balance	overall fiscal balance plus net interest expense
Primary operating balance	net operating balance plus net interest expense
Gross saving	gross operating balance minus net capital transfers receivable, including net capital grants and capital taxes (GFS codes 1133 and 1135)
Other macroeconomic variables	
Fiscal burden	tax revenue plus compulsory social security contributions (as a percent of GDP)
Total expenditure	expense plus the net acquisition of nonfinancial assets (excluding valuables, if possible)
Total expenditure composition	disaggregation of total expenditure through the functional classification (COFOG, see Chapter 6)
Government final consumption expenditure	approximated by compensation of employees, plus the use of goods and services, plus consumption of fixed capital, minus the sales of goods and services, plus purchases for direct transfer to households (mainly social benefits in kind)
Gross investment	acquisition less disposal of nonfinancial assets (excluding valuables, if possible)
Wealth and Debt	
Net wealth position	net worth, which equals the total stock of assets minus liabilities
Net financial wealth position	total stock of financial assets minus liabilities
Gross debt position	stock of all liabilities except shares and other equity and financial derivatives
Contingent liabilities	stock of explicit government (public sector) guarantees plus the net present value of the obligations of social security schemes

[1] The net operating balance, the cash surplus/deficit, and other balances could be adjusted similarly.