

7. The Balance Sheet

This chapter defines assets, liabilities, and net worth and describes their classification and the various balance sheet memorandum items.

A. Introduction

7.1 This chapter and the following three chapters are concerned with the stocks and flows of assets and liabilities. A balance sheet, or compilation of stocks, is a statement of the values of the assets owned at a specific time and the financial claims, or liabilities, held by other units against the owner of those assets.¹ The total value of the assets owned less the total value of liabilities is defined as net worth and is an indicator of wealth. Net worth can also be viewed as a stock resulting from the transactions and other economic flows of all previous periods. A balance sheet is typically compiled at the end of each accounting period, which is also the beginning of the next accounting period. A highly abbreviated version of a balance sheet is shown in Table 7.1.

7.2 This chapter first defines assets and liabilities in general and the two major types of assets, financial and nonfinancial assets. The following section describes the principles used to value assets and liabilities. The chapter then describes the classification of assets and liabilities and the types of assets and liabilities included in each category of the classification. The final sections describe net worth, recommended memorandum items, and a supplemental cross-classification of financial assets or liabilities with the sectors of the other party to the financial instrument underlying the financial asset or liability.

¹A balance sheet can be compiled for an individual unit or any collection of units, such as the public sector, the general government sector, or a subsector of the general government sector. It is often convenient to describe a balance sheet in reference to a single institutional unit, but any such statement applies equally to the balance sheet of a sector or subsector.

B. Definitions of assets and liabilities

7.3 This section first defines an economic asset and the asset boundary used in the GFS system. It then describes the two major types of assets as financial and nonfinancial and defines a liability as the counterpart of a financial asset.

I. The asset boundary

7.4 All assets recorded in the GFS system are *economic assets*, which are entities

- Over which ownership rights are enforced by institutional units, individually or collectively, and
- From which economic benefits may be derived by their owners by holding them or using them over a period of time.

7.5 The value of an asset at any given time is its current market value, which is defined as the amount that would have to be paid to acquire the asset on the valuation date, taking into account its age, condition, and other relevant factors. This amount depends on the economic benefits that the owner of the asset can derive by holding or using it. The remaining benefits expected to be received from some assets diminish with the passage of time, which will reduce the value of the asset, and the value of the remaining benefits may increase or decrease because of changes in prices.

7.6 Every economic asset provides benefits by functioning as a store of value. In addition:

- Some benefits are derived by using assets, such as buildings or machinery, in the production of goods and services; and
- Some benefits consist of property incomes, such as interest, dividends, and rents received by the owners of financial assets, land, and certain other assets.

Table 7.1: The Balance Sheet

Assets	Opening Balance Sheet	Closing Balance Sheet	Liabilities and Net Worth	Opening Balance Sheet	Closing Balance Sheet
Nonfinancial assets			Liabilities		
Financial assets			Net worth		
Total assets			Total liabilities and net worth		
Memorandum items					

7.7 When ownership rights are established and enforced, the entity is an economic asset regardless of who receives the benefits. For example, a government may own land in a national park with the intention that its benefits accrue directly to the community at large.

7.8 To be an economic asset, an entity must also be able to supply economic benefits given the technology, scientific knowledge, economic infrastructure, available resources, and relative prices existing at a given time or expected in the foreseeable future. Thus, a known deposit of minerals is an economic asset only if it is already commercially exploitable or is expected to become commercially exploitable in the foreseeable future.

7.9 Some entities would be economic assets except that ownership rights over them have not been established or are not enforced. For example, it may not be feasible to establish ownership rights over the atmosphere and certain other naturally occurring assets. In other cases, ownership rights may be established, but it may not be feasible to enforce them, such as government-owned land that is so remote or inaccessible that the government cannot exercise effective control over it or the government does not choose to enforce its ownership rights. In such cases, it can be a matter of judgment as to whether the degree of control exercised by the government is sufficient for the land to be classified as an economic asset.

7.10 Governments use assets to produce goods and services much like corporations. For example, office buildings, together with the services of government employees, office equipment, and other goods and services, are used to produce collective or individual services such as general administrative services. In addition, however, governments often own assets whose services are consumed directly by the general public and assets that need to be preserved because of their historic or cultural importance. Thus, when

the asset boundary is applied to the general government sector, it often incorporates a wider range of assets than is normally owned by a private organization. That is, government units frequently own

- General-purpose assets, which are assets that other units would be likely to possess and use in similar ways, such as schools, road-building equipment, fire engines, office buildings, furniture, and computers.
- Infrastructure assets, which are immovable nonfinancial assets that generally do not have alternative uses and whose benefits accrue to the community at large. Examples are streets, highways, lighting systems, bridges, communication networks, canals, and dikes.
- Heritage assets, which are assets that a government intends to preserve indefinitely because they have unique historic, cultural, educational, artistic, or architectural significance.

7.11 In some cases, governments can create economic assets by exercising their sovereign powers or other powers delegated to them. For example, a government may have the authority to assert ownership rights over naturally occurring assets that otherwise would not be subject to ownership, such as the electromagnetic spectrum and natural resources in international waters subject to designation as an exclusive economic zone. These assets are economic assets only if the government uses its authority to establish and enforce ownership rights.

2. An overview of assets and liabilities

7.12 *Financial assets* consist of financial claims, monetary gold, and Special Drawing Rights (SDRs) allocated by the IMF. Financial claims are assets that entitle one unit, the owner of the asset (i.e., the creditor), to receive one or more payments from a second

unit, the debtor, according to the terms and conditions specified in a contract between the two units. A financial claim is an asset because it provides benefits to the creditor by acting as a store of value. The creditor may receive additional benefits in the form of interest or other property income payments and/or holding gains. Typical types of financial claims are cash, deposits, loans, bonds, financial derivatives, and accounts receivable.

7.13 Most contracts, also referred to as instruments or financial instruments, that underlie a financial claim are created when one unit provides funds to a second unit and the second unit agrees to repay the funds in the future.² In many cases, financial claims are explicitly identified by formal documents expressing the debtor-creditor relationship. In some cases, however, a financial claim is created by an implicit provision of funds by the creditor to the debtor. For example, a government unit may acquire a claim on another unit when the other unit does not make payments as obligations arise, such as transferring sales taxes immediately after a sale. In other cases, the GFS system creates claims to bring out the underlying economic reality of a transaction, such as the creation of a notional loan when an asset is acquired under a financial lease. Regardless of how a financial claim is created, it is extinguished when the debtor pays the sum agreed in the contract.³

7.14 When a financial claim is created, a *liability* of equal value is simultaneously incurred by the debtor as the counterpart of the financial asset. That is, the payment or payments that the creditor has a contractual right to receive are also the payment or payments that the debtor is contractually obligated to provide. Thus, liabilities are obligations to provide economic benefits to the units holding the corresponding financial claims.

7.15 Shares and other equities issued by corporations and similar legal forms of organization are treated as financial claims even though their holders do not have a fixed or predetermined monetary claim on the corporation. Shares and other equities do, however, entitle their owners to benefits in the form of any dividends and other ownership distributions, and they often are held with the expectation of receiving holding gains. In the event the issuing unit

is liquidated, shares and other equities become claims on the residual value of the unit after the claims of all creditors have been met.

7.16 Because of their treatment as financial claims, shares and other equities must also be treated as liabilities of the issuing units. If a public corporation has formally issued shares or another form of equity, then the shares are a liability of that unit and an asset of the government or other unit that owns them. If a public corporation has not issued any type of equity, then the implicit existence of shares is imputed. General government units are not owned by other units. Hence, the existence of shares or other equities is never imputed for them.

7.17 Contingent assets or liabilities are not treated as financial assets and liabilities. Also, sums set aside in business accounting as provisions to provide for a unit's future liabilities, either certain or contingent, or for a unit's future expenditures are not recognized in the GFS system. Only actual current liabilities to another party or parties are included.

7.18 Monetary gold and SDRs are not financial claims, which means that they are not the liability of any other unit. They do, however, provide economic benefits by serving as a store of value and they are used as a means of payment to settle financial claims and finance other types of transactions. As a result, they are, by convention, treated as financial assets.

7.19 *Nonfinancial assets* are all economic assets other than financial assets. By implication, nonfinancial assets do not represent claims on other units. As with financial assets, nonfinancial assets are stores of value. In addition, most nonfinancial assets provide benefits either through their use in the production of goods and services or in the form of property income.

7.20 Nonfinancial assets may come into existence as outputs from a production process, be naturally occurring, or be constructs of society. As described later in this chapter, produced assets are classified as fixed assets, inventories, or valuables:

- Fixed assets are produced assets that are used repeatedly or continuously in processes of production for more than one year.
- Inventories are goods and services held by producers for sale, use in production, or other use at a later date.

²The contracts underlying certain types of financial derivatives do not involve one unit providing funds to a second unit.

³A liability can be extinguished in other ways, such as cancellation by the creditor.

- Valuables are produced goods of considerable value that are acquired and held primarily as stores of value over time and are not used primarily for purposes of production or consumption.

7.21 Naturally occurring assets and constructs of society are both referred to as nonproduced assets. Naturally occurring assets include land, subsoil mineral deposits, fish in open but territorial waters, and the electromagnetic spectrum when ownership rights are enforced. Constructs of society that are assets include patents and leases.⁴

C. Valuation of assets and liabilities

7.22 As stated in paragraph 7.5, all assets and liabilities should be valued at their current market value, which is defined as the amount that would have to be paid to acquire the asset on the valuation date. This value includes all transport and installation charges and all costs of ownership transfer for nonfinancial assets but not for financial assets. Costs of ownership transfer include fees paid to surveyors, engineers, architects, lawyers, and estate agents and taxes payable on the transfer. The costs of ownership transfer are excluded from the current market value of financial assets in part because counterpart financial assets and liabilities refer to the same financial instrument and should have the same value.

7.23 The ideal source of price observations on which to base a valuation is a market in which the identical assets are traded in considerable volume and their market prices are listed at regular intervals. Such prices are often available for financial claims, transportation equipment, crops, livestock, and inventories.

7.24 If there are no observable prices because the assets in question are not currently traded on a market or traded only infrequently, then a price or value has to be estimated. The following paragraphs provide general descriptions of possible methods of estimating current market prices. Additional guidance on the valuation of specific types of assets and liabilities is included in the relevant parts of the section that describes the classification of assets and liabilities. Because the valuation of liabilities is the

⁴In the 1993 SNA, naturally occurring assets are referred to as tangible nonproduced assets. With the inclusion of the electromagnetic spectrum in this category, naturally occurring assets is a more accurate title. Constructs of society are referred to as intangible nonproduced assets in the 1993 SNA and elsewhere in this manual.

same as the valuation of the corresponding financial assets, in most cases the remainder of this chapter will refer only to financial assets, but such references should be read as including liabilities equally.

7.25 If assets of the same kind are still being produced and sold on the market, an existing asset may be valued at the current market price of a newly produced asset adjusted for consumption of fixed capital in the case of fixed assets, and any other differences between the existing asset and a newly produced asset. The allowance for consumption of fixed capital should be calculated on the basis of the prices prevailing at the time the balance sheet is drawn up rather than the actual amounts previously recorded as an expense.

7.26 Information from markets may also be used to price assets that are not being traded currently but are similar to assets that are traded. For example:

- It may be possible to use information on securities that are traded on a stock exchange to value similar securities by analogy, making an allowance for the inferior marketability of the nontraded securities.
- Appraisals of tangible assets for insurance or other purposes generally are based on observed prices for items that are close substitutes. These appraisals may be usable for balance sheet valuations.
- If an existing fixed asset is no longer being produced but has been replaced by an asset whose characteristics are significantly different in some specific aspects but otherwise are broadly similar (for example, new models of vehicles or aircraft), then it may be reasonable to assume that the price of the existing asset would have moved in the same way as the price of the asset currently being sold.

7.27 It may be possible to value assets at their initial acquisition costs plus an appropriate revaluation for subsequent price changes and minus an allowance for consumption of fixed capital, amortization, or depletion.

- Most fixed assets are recorded in the balance sheet at their “written-down replacement cost.” This value is the original acquisition value of the asset adjusted by an allowance for price changes and then written down for the accumulated consumption of fixed capital.
- Nonproduced intangible assets, such as patented entities, are typically valued at their initial acquisition costs (appropriately revalued) less an allowance

for amortization. For this method, a pattern of decline must be chosen, which may be based on tax laws and accounting conventions.

- It may be possible to value subsoil assets at their initial acquisition costs (appropriately revalued) less an allowance for depletion.

7.28 The perpetual inventory method is commonly used to estimate the written-down replacement cost of a category of assets, especially tangible fixed assets. With this method, the value of the stock is based on estimates of acquisitions and disposals that have been accumulated (after deduction of the accumulated consumption of fixed capital, amortization, or depletion) and revalued over a long enough period to cover the acquisition of all assets in the category.

7.29 In other cases, market prices may be approximated by the present value of the future economic benefits expected from a given asset. This method may be feasible for a number of financial assets, naturally occurring assets, and intangible assets. For example, timber and subsoil assets are assets whose benefits are normally received well in the future and/or spread over several years. Current prices can be used to estimate the gross return from the disposition of these assets and the costs of bringing them to market. These returns and costs can then be discounted to estimate the present value of the expected benefits.

7.30 The value of assets and liabilities denominated in foreign currencies should be converted into the national currency at the market exchange rate prevailing on the date to which the balance sheet relates. The rate used should be the midpoint between the buying and selling spot rates for currency transactions. When a multiple exchange rate system is in operation, the valuation should be based on the rate applicable to the type of asset in question.

D. Classification of assets and liabilities

I. Nonfinancial assets (61)⁵

7.31 Nonfinancial assets were defined in paragraph 7.19 as all economic assets other than financial assets. At the first level of classification, there are four categories of nonfinancial assets. The first three categories

⁵The numbers in parentheses after each classification category are the GFS classification codes. Appendix 4 provides all classification codes used in the GFS system.

Table 7.2: Classification of Nonfinancial Assets

61	Nonfinancial assets
611	Fixed assets
6111	Buildings and structures
61111	Dwellings
61112	Nonresidential buildings
61113	Other structures
6112	Machinery and equipment
61121	Transport equipment
61122	Other machinery and equipment
6113	Other fixed assets
61131	Cultivated assets
61132	Intangible fixed assets
612	Inventories
6121	Strategic stocks
6122	Other inventories
61221	Materials and supplies
61222	Work in progress
61223	Finished goods
61224	Goods for resale [GFS]
613	Valuables
614	Nonproduced assets
6141	Land
6142	Subsoil assets
6143	Other naturally occurring assets
6144	Intangible nonproduced assets

are produced assets—*fixed assets (611)*, *inventories (612)*, and *valuables (613)*—and the fourth consists of all *nonproduced assets (614)*. The complete classification of nonfinancial assets is shown in Table 7.2.

a. Fixed assets (611)

7.32 Fixed assets are produced assets that are used repeatedly or continuously in production processes for more than one year. The distinguishing feature of a fixed asset is not that it is durable in some physical sense, but that it may be used repeatedly or continuously in production over a long period of time. Some goods, such as coal used as fuel, may be highly durable physically but cannot be fixed assets because they can be used only once. Fixed assets are further classified as *buildings and structures (6111)*, *machinery and equipment (6112)*, and *other fixed assets (6113)*.

7.33 In general, fixed assets are most effectively valued when the current written-down replacement cost is used as a proxy for the current market value. In the remainder of this section, it is noted when a particular type of fixed asset is likely to be more accurately valued by another method.

7.34 The production of some fixed assets, primarily buildings and structures, may span two or more

accounting periods. Uncompleted structures that are being acquired through progress payments required under a contract of sale are classified as fixed assets on the purchaser's balance sheet rather than as a financial asset for any progress payments made. Similarly, fixed assets being constructed on own account are treated as fixed assets rather than work-in-progress inventories.

7.35 Fixed assets acquired under a financial lease, most likely machinery and equipment, are treated as if purchased and owned by the user or lessee rather than the legal owner, the lessor. The acquisition is treated as being financed by a financial claim, classified as a loan. For example, if a bank purchases a railway car and then leases it to the national railroad, then the railway car is recorded as an asset of the railroad and a loan is recorded as a liability of the railroad and an asset of the bank.

7.36 Weapons (for example, missiles, rockets, and bombs) are not treated as fixed assets because they are single-use goods rather than goods used repeatedly or continuously in production. By extension, vehicles, other equipment, and structures whose function is to release such weapons (for example, warships, submarines, military aircraft, tanks, and missile carriers and silos) also are not treated as fixed assets. On the other hand, structures and equipment possessed by the military that are used in much the same way as similar items are used by civilian producers, such as military airfields, docks, colleges, hospitals, and office machinery, are treated as fixed assets. All light weapons and armored vehicles used by nonmilitary organizations engaged in internal security or policing activities are classified as fixed assets notwithstanding the fact that such items are not assets when owned by the armed forces.

(i) *Buildings and structures (6111)*

7.37 Buildings and structures consist of *dwelling*s (61111), *nonresidential buildings* (61112), and *other structures* (61113). The value of buildings and structures includes the costs of site clearance and preparation and the value of all fixtures, facilities, and equipment that are integral parts of the structures.

7.38 Some structures are major improvements to land, such as dikes, ditches, and sea walls constructed for flood control, drainage, or land reclamation. These assets are constructed to obtain more or better land and are not used directly to produce other goods and services. Their value is included with the value of the land.

7.39 Buildings and structures that are also historic monuments are included within the appropriate category of buildings and structures. Historic monuments are structures or sites of special archaeological, historic, or cultural significance. They are usually accessible to the general public, and visitors are often charged for admission to the monuments or their vicinity. General government units typically use historic monuments to produce cultural or entertainment-type services. They can be valued directly, however, only when their significance has been recognized by someone other than the owner, typically by a sale or a formal appraisal. Historic monuments should be valued at the most recent sale price, updated, if need be, by a general price index. If no sale price is available, then an alternative valuation, such as an insurance appraisal, should be used.

Dwellings (61111)

7.40 Dwellings are buildings that are used entirely or primarily as residences, including garages and other associated structures. Houseboats, barges, mobile homes, and caravans that are used as principal residences are also included. Dwellings acquired for military personnel are included because they are used in the same way as dwellings acquired by civilians. Because dwellings are traded in the normal course of events, prices observed in the real estate market may supplement or replace the valuation at written-down replacement cost.

Nonresidential buildings (61112)

7.41 Nonresidential buildings are all buildings other than dwellings. Examples of types of buildings included in this category are office buildings, schools, hospitals, buildings for public entertainment, warehouse and industrial buildings, commercial buildings, hotels, and restaurants. Buildings and structures acquired for military purposes are included to the extent that they are similar to civilian buildings acquired for purposes of production and can be used in the same way.

Other structures (61113)

7.42 This category consists of all structures other than buildings. Included are the following:

- Highways, streets, roads, bridges, elevated highways, tunnels, railways, subways, and airfield runways.

- Sewers, waterways, harbors, dams, and other waterworks.
- Shafts, tunnels, and other structures associated with mining subsoil assets.
- Communication lines, power lines, and pipelines.
- Outdoor sport and recreation facilities.

7.43 Structures acquired for military purposes are included to the extent that they resemble civilian structures and can be used in the same way.

(ii) *Machinery and equipment (6112)*

7.44 Machinery and equipment is divided into **transport equipment (61121)** and **other machinery and equipment (61122)**. Machinery and equipment forming an integral part of a building or structure is included in the value of the building or structure rather than in machinery and equipment. Tools that are inexpensive and purchased at a relatively steady rate, such as hand tools, are not considered fixed assets unless they form a large share of the stock of machinery and equipment.

Transport equipment (61121)

7.45 Transport equipment consists of equipment for moving people and objects, including motor vehicles, trailers and semitrailers, ships, railway locomotives and rolling stock, aircraft, motorcycles, and bicycles. Markets for existing automobiles, aircraft, and some other types of transportation equipment may be sufficiently representative to yield price observations that are superior to valuations at written-down replacement cost.

Other machinery and equipment (61122)

7.46 This category consists of all machinery and equipment other than transport equipment. Types of assets that would be included are general- and special-purpose machinery; office, accounting, and computing equipment; electrical machinery; radio, television, and communication equipment; medical appliances; precision and optical instruments; furniture; watches, and clocks; musical instruments; and sports goods. It also includes paintings, sculptures, other works of art or antiques, and other collections of considerable value that are owned and displayed by government museums and similar organizations for the purpose of producing nonmarket services, mostly collective ser-

vices. Items of this nature not intended for use in production would be classified as valuables.

(iii) *Other fixed assets (6113)*

7.47 Other fixed assets consist of **cultivated assets (61131)** and **intangible fixed assets (61132)**.

Cultivated assets (61131)

7.48 Cultivated assets consist of animals and plants that are used repeatedly or continuously for more than one year to produce other goods or services. The types of animals included in this category include breeding stocks (including fish and poultry), dairy cattle, draft animals, sheep or other animals used for wool production, and animals used for transportation, racing, or entertainment. The types of plants in this category include trees, vines, and shrubs cultivated for fruits, nuts, sap, resin, bark, and leaf products. Animals and plants for one-time use, such as cattle raised for slaughter and trees grown for timber, are classified as inventories rather than fixed assets.

7.49 Only animals and plants cultivated under the direct control, responsibility, and management of general government units are cultivated assets or inventories. All other animals and plants either are classified as nonproduced assets or are not economic assets.

7.50 Animals in this category usually can be valued on the basis of the current market prices for similar animals of a given age. Such information is less likely to be available for plants; more likely they will have to be valued at the written-down replacement cost.

Intangible fixed assets (61132)

7.51 Intangible fixed assets consist of mineral exploration; computer software; entertainment, literary, and artistic originals; and miscellaneous other intangible fixed assets. To qualify as a fixed asset, the item must be intended for use in production for more than one year and its use must be restricted to the units that have established ownership rights over it or to units licensed by the owner. Outlays on research and development, staff training, market research, and similar activities are not treated as intangible fixed assets even though some of them may bring future benefits. These outlays are treated as expense.

7.52 Mineral exploration is undertaken to discover new deposits of petroleum, natural gas, and other

subsoil assets that may be exploited commercially. The information obtained from exploration influences the production activities of those who obtain it over a number of years.

7.53 The value of the resulting asset is measured by the value of the resources allocated to exploration because it is not possible to value the information obtained. In addition to the costs of actual test drilling and boring, mineral exploration includes any prelicense, license, acquisition, and appraisal costs, the costs of aerial and other surveys, and transportation and other costs incurred to make the exploration possible. Exploration undertaken in the past whose value has not yet been fully written off should be revalued at the prices and costs of the current period.

7.54 Computer software includes computer programs, program descriptions, and supporting materials for both systems and applications software that are expected to be used for more than one year. The software may be purchased from other units or developed on own account. Large expenditures on the purchase, development, or extension of computer databases that are expected to be used in production for more than one year are also included.

7.55 The value of computer software should be based on the amount paid for the software if acquired from another unit or on the costs of production when produced on own account. Software acquired in previous years and not yet fully written off should be revalued at current prices or costs.

7.56 Entertainment, literary, and artistic originals are original films, sound recordings, manuscripts, tapes, and models in which drama performances, radio and television programming, musical performances, sporting events, and literary and artistic output are recorded or embodied. They should be valued at their current market price when they are actually traded. Otherwise, they should be valued either on the basis of their acquisition price or costs of production, appropriately revalued at the prices of the current period and written down; or on the basis of the net present value of the expected future receipts.

7.57 Other intangible fixed assets consist of new information and specialized knowledge not elsewhere classified, the use of which is restricted to the units that have established ownership rights over the information or to other units licensed by the owners. The assets should be valued at their current written-

down cost of production or the present value of expected future receipts.

b. Inventories (612)

7.58 Inventories are goods and services held by producers for sale, use in production, or other use at a later date. Inventories are classified as *strategic stocks (6121)* and *other inventories (6122)*. Inventories should be valued at their current market prices on the balance sheet date rather than their acquisition prices. In principle, current market prices should be available for most types of inventories, but in practice the values of inventories frequently are estimated by adjusting book or acquisition values of inventories with the aid of price indexes.

(i) Strategic stocks (6121)

7.59 Strategic stocks include goods held for strategic and emergency purposes, goods held by market regulatory organizations, and commodities of special importance to the nation, such as grain and petroleum. This category is not in the 1993 SNA, which treats strategic stocks as goods for resale (61224). Such stocks may be quite large for some governments and represent important components of government policies.

(ii) Other inventories (6122)

7.60 Other inventories consist of *materials and supplies (61221)*, *work in progress (61222)*, *finished goods (61223)*, and *goods for resale (61224)*.

Materials and supplies (61221)

7.61 Materials and supplies consist of all goods held with the intention of using them as inputs to a production process. General government units may hold a variety of goods as materials and supplies, including office supplies, fuels, and foodstuffs. Every general government unit may be expected to hold some materials and supplies, if only office supplies. Materials and supplies often can be valued on the basis of the current market prices for the same goods.

Work in progress (61222)

7.62 Work in progress consists of goods and services that have been partially processed, fabricated, or assembled by the producer but that are not usually sold, shipped, or turned over to others without further processing and whose production will be continued in

a subsequent period by the same producer.⁶ General government units that primarily produce nonmarket services are likely to have little or no work in progress as the production of most such services is completed in a short time span or continuously.

7.63 Work-in-progress inventories are valued on the basis of the current price of the production costs incurred as of the balance sheet date. The value of standing timber and other cultivated crops may be estimated by discounting the future proceeds of selling the final product at current prices and the expenses of bringing the product to maturity.

Finished goods (61223)

7.64 Finished goods consist of goods that are the output of a production process, are still held by their producer, and are not expected to be processed further by the producer before being supplied to other units. General government units will have finished goods only if they produce goods for sale or transfer to other units. Inventories of finished goods are valued at their current sales value.

Goods for resale [GFS]⁷ (61224)

7.65 Goods for resale are goods acquired for the purpose of reselling or transferring to other units without being further processed.⁸ Goods for resale may be transported, stored, graded, sorted, washed, or packaged by their owners to present them for resale in ways that are attractive to their customers, but they are not otherwise transformed. Any general government unit that sells goods for economically significant prices, such as a museum gift shop, is likely to possess an inventory of goods for resale. This category also includes goods purchased by general government units for provision free of charge or at prices that are not economically significant to other units. Inventories of goods intended for resale are valued at their current replacement prices.

⁶As noted in paragraphs 7.34 and 7.48, uncompleted fixed assets, including immature animals and plants that will be used repeatedly or continuously for more than one year to produce other goods and services, that are being produced on own account are treated as fixed assets rather than work in progress. Immature animals and plants being raised for one-time use, such as livestock raised for slaughter and trees grown for timber, are work in progress.

⁷[GFS] indicates that this item has the same name but different coverage in the 1993 SNA.

⁸Strategic stocks are included in this category in the 1993 SNA but are separately classified in the GFS system.

c. Valuables (613)

7.66 Valuables are produced goods of considerable value acquired and held primarily as stores of value and not used primarily for purposes of production or consumption. They are expected to appreciate, or at least not to decline, in real value, and they do not deteriorate over time under normal conditions.

7.67 Valuables consist of

- Precious stones and metals such as diamonds, non-monetary gold, platinum, and silver that are not intended to be used as intermediate inputs into processes of production.
- Paintings, sculptures, and other objects recognized as works of art or antiques.
- Jewelry of significant value fashioned out of precious stones and metals, collections, and miscellaneous other valuables.

Most items fitting the description of a valuable that are owned by general government units will be classified as other machinery and equipment (61122) because they are used primarily in museums to produce services for the public rather than held as stores of value.

7.68 To the extent that there are well-organized markets for valuables, they can be valued at current market prices, including any agents' fees or commissions. Otherwise the amounts for which they are insured against fire, theft, and other risks may be appropriate.

d. Nonproduced assets (614)

7.69 Nonproduced assets consist of tangible, naturally occurring assets over which ownership rights are enforced, and *intangible nonproduced assets (6144)* that are constructs of society. Naturally occurring assets include *land (6141)*, *subsoil assets (6142)*, *other naturally occurring assets (6143)*. If ownership rights have not or cannot be enforced over naturally occurring entities, then they are not economic assets.

(i) Land (6141)

7.70 Land is the ground itself, including the soil covering, associated surface water, and major improvements that cannot be physically separated from the land, but excluding the following:

- Buildings and other structures constructed on the land or through it, such as roads, office buildings, and tunnels.
- Cultivated vineyards, orchards, and other plantations of trees, animals, and crops.
- Subsoil assets.
- Noncultivated biological resources.
- Water resources below the ground.

The associated surface water includes any reservoirs, lakes, rivers, and other inland waters over which ownership rights can be exercised and which can, therefore, be the subject of transactions between units.

7.71 The value of major improvements that cannot be physically separated from the land is included in the value of the land. Such improvements either increase the quantity, quality, or productivity of land or prevent its deterioration. Examples of major improvements are land reclaimed from the sea by the construction of dikes, sea walls, or dams; forests cleared to enable land to be used in production for the first time; drained marshes; and breakwaters, sea walls, or other barriers constructed to prevent floods. The value of major improvements is normally determined by their written-down replacement costs.

7.72 The value of land can vary enormously depending on its location and the uses for which it is suitable or sanctioned. As a result, these factors must be taken into account when the current market price for the land is determined. In a number of instances, it may be difficult or impractical to separate the value of land from the value of structures erected on the land. One valuation method is to calculate general ratios of the value of land to the value of structures from appraisals. A second method is to deduct the current written-down replacement cost of a structure from the combined market value of the land and structure.

(ii) Subsoil assets (6142)

7.73 Subsoil assets are proven reserves of oil, natural gas, coal (including anthracite, bituminous, and brown coal), metallic mineral reserves (including ferrous, nonferrous, and precious metal ores), and nonmetallic mineral reserves (including stone quarries, clay and sand pits, chemical and fertilizer mineral deposits, and deposits of salt, quartz, gypsum, natural gem stones, asphalt, bitumen, and peat).

Mine shafts, wells, and other subsoil extraction facilities are fixed assets (611) rather than subsoil assets.

7.74 The deposits may be located on or below the earth's surface, including deposits under the sea, but they must be economically exploitable. The value of the reserves is usually estimated as the present value of the expected net returns resulting from their commercial exploitation, but if the ownership of subsoil assets changes frequently on markets, then it may be possible to obtain appropriate prices.

(iii) Other naturally occurring assets (6143)

7.75 Other naturally occurring assets include noncultivated biological resources, water resources, and the electromagnetic spectrum. Noncultivated biological resources are animals and plants that are subject to ownership rights that are enforced but whose natural growth and/or regeneration is not under the direct control, responsibility, and management of any unit. Examples are virgin forests and fisheries that are commercially exploitable. Only those resources that have economic value that is not included in the value of the associated land are included. As observed prices are not likely to be available, such assets are usually valued at the net present value of expected future returns.

7.76 Water resources are aquifers and other groundwater resources that are sufficiently scarce to warrant enforcement of ownership and/or use rights, that are exploitable for economic purposes or are likely to be exploitable soon, and that have economic value that is not included in the value of the associated land. As observed prices are not likely to be available, such assets are usually valued at the net present value of expected future returns.

7.77 The electromagnetic spectrum consists of the range of radio frequencies used in the transmission of sound, data, and television. The value of the spectrum is usually determined as the net present value of expected future returns. If a long-term contract to use the spectrum has been let, it can be used as a basis for estimating the total value of the asset.⁹

(iv) Intangible nonproduced assets (6144)

7.78 Intangible nonproduced assets are constructs of society evidenced by legal or accounting actions. Some entitle their owners to engage in certain specific

⁹The treatment and valuation of the electromagnetic spectrum when a long-term contract for its use has been let was a topic still under discussion at the time of publication of this manual.

Table 7.3: Classification of Financial Assets and Liabilities

62	Financial assets	63	Liabilities
621	Domestic	631	Domestic
6212	Currency and deposits	6312	Currency and deposits
6213	Securities other than shares	6313	Securities other than shares
6214	Loans	6314	Loans
6215	Shares and other equity	6315	Shares and other equity (public corporations only)
6216	Insurance technical reserves	6316	Insurance technical reserves [GFS]
6217	Financial derivatives	6317	Financial derivatives
6218	Other accounts receivable	6318	Other accounts payable
622	Foreign	632	Foreign
6222	Currency and deposits	6322	Currency and deposits
6223	Securities other than shares	6323	Securities other than shares
6224	Loans	6324	Loans
6225	Shares and other equity	6325	Shares and other equity (public corporations only)
6226	Insurance technical reserves	6326	Insurance technical reserves [GFS]
6227	Financial derivatives	6327	Financial derivatives
6228	Other accounts receivable	6328	Other accounts payable
623	Monetary gold and SDRs		

activities or to produce certain specific goods or services and to exclude other units from doing so except with the permission of the owner. The owners of the assets may be able to earn monopoly profits by restricting the use of the assets to themselves. Intangible non-produced assets include patented entities, leases and other contracts, and purchased goodwill. Whenever possible, intangible assets should be valued at current prices when they are actually traded on markets. Otherwise, it may be necessary to use estimates of the net present value of expected future returns.

7.79 Patents provide protection, by law or by judicial decision, for inventions. Examples of inventions that can be protected include constitutions of matter, processes, mechanisms, electrical and electronic circuits and devices, pharmaceutical formulations, and new varieties of living things produced by artifice.

7.80 Leases and other contracts that might be classified as economic assets include leases of land, buildings, and other structures; concessions or exclusive rights to exploit mineral deposits or the electromagnetic spectrum; contracts with athletes and authors; and options to buy tangible assets not yet produced. The criteria for determining which leases or other contracts are economic assets was a topic still under discussion at the time of publication of this manual.

7.81 Purchased goodwill is the difference between the value paid for an enterprise as a going concern and the sum of its assets less the sum of its liabilities. The value of goodwill, therefore, includes anything of long-term benefit to the business that has not been

separately identified as an asset, as well as the value of the fact that the group of assets is used jointly and is not simply a collection of separable assets. Purchased goodwill should be valued at its acquisition cost less accumulated amortization, appropriately revalued.

2. Financial assets (62) and liabilities (63)

7.82 Financial assets and liabilities were defined in paragraphs 7.12 and 7.14. The classifications of financial assets and liabilities are based primarily on the liquidity and legal characteristics of the instruments that describe the underlying creditor-debtor relationships.¹⁰ The liquidity of a financial instrument embraces characteristics such as negotiability, transferability, marketability, and convertibility.

7.83 In addition to classifying financial assets and liabilities by the characteristics of the financial instrument, they are also classified according to the residence of the other party to the instrument (the debtors for financial assets and the creditors for liabilities). Residency is defined in paragraph 2.71 of Chapter 2. The classifications of financial assets and liabilities are shown in Table 7.3.

7.84 Because a given financial instrument is common to a financial asset and a liability, the same descriptions of instruments can be used for both. For simplicity, the descriptions will refer only to financial assets unless there is a specific need to refer to liabilities.

¹⁰There is no underlying creditor-debtor relationship for monetary gold and SDRs.

7.85 In principle, all financial claims should be valued at their current market price. That value, however, may differ from a claim's nominal value.¹¹ Because the debtor can extinguish the claim on the date of the balance sheet by buying back the security at its current market price, it is that price that is relevant for the balance sheet. The current market price excludes any service charges, fees, commissions, and similar payments for services that would be necessary to acquire the asset or incur the liability.

7.86 Some financial assets and liabilities, most typically deposits, securities other than shares, loans, and accounts payable/receivable, require the debtor to pay interest. The interest accrues continuously and increases the total amount that the debtor will be required to pay. This manual recommends that accrued but unpaid interest be added to the principal of the underlying instrument. That is, as interest accrues on a government bond, the principal of the bond would increase. It is recognized, however, that interest accruing on deposits and loans may have to follow national practices and be classified under accounts payable.

7.87 The definition of the overall balance in Box 4.1 of Chapter 4 includes a provision for treating financial assets acquired by government units in support of their fiscal policies differently than financial assets acquired for liquidity management. The distinction between these two types of financial assets would be required to compute the overall balance but is not included in the classification of financial assets because it rests on the judgment of the analyst and the particular purpose for employing the overall balance.

7.88 Some fiscal policies that may lead to the ownership of financial claims include fostering new industries, assisting ailing government corporations, or helping particular businesses that are suffering economic adversity. For example, a government unit may provide loans at subsidized rates to a particular economic sector, acquire shares in a corporation active in an area that the government wishes to promote, or sell shares in a public corporation for less than their market value.

7.89 Liquidity management, on the other hand, refers to actions taken to ensure the availability of financial assets to fulfill requirements for short-term funds and to ensure that such funds earn the best

available rate of return. Prudent financial management requires that government units acquire and dispose of financial assets in the process of financing government operations. The motive underlying these transactions is the effective management of finances.

7.90 Some factors that should be considered when identifying policy-related financial assets are as follows:

- Nonnegotiable financial assets usually are policy related.¹²
- A government statement about the acquisition of a financial asset may indicate the purpose.
- Noncommercial terms favoring the borrower generally indicate a policy-motivated purpose, such as concessional interest rates on loans or arrangements for repayment that do not meet normal commercial standards.
- Financial assets acquired for a policy purpose typically involve shares and other equity, securities other than shares, or loans, especially when the issuer of the instrument is a public corporation. In addition, negotiable financial claims issued by a lower level of government and held by a higher level of government are often acquired for a policy purpose.
- Assets acquired as a result of government units acting as guarantors are likely to be policy related.
- Assets acquired through nationalization are policy related.
- Holdings of monetary gold, SDRs, currency, and insurance technical reserves are always liquidity related. Deposits may be acquired for policy or liquidity purposes.

7.91 In addition to identifying financial assets issued by public corporations in order to compute the overall balance, a classification of financial assets and liabilities according to whether the other party to the instrument is a public corporation would be necessary to compile consolidated statistics for the public sector. This distinction is also not a part of the GFS classification system, but it should be part of the underlying accounting records.

¹¹Nominal value is defined in footnote 8 of Chapter 3.

¹²A negotiable financial instrument is one whose legal ownership is capable of being transferred from one unit to another unit by delivery or endorsement.

a. Monetary gold and SDRs (623)

7.92 Monetary gold consists of gold coins, ingots, and bars with a purity of at least 995/1000 that are

- Owned by units that undertake monetary authority functions and
- A component of the nation's official reserve assets. The monetary authority will normally be the central bank, but it is possible for a unit of the general government sector to undertake some functions of the monetary authority.¹³

7.93 Monetary gold is a financial asset for which there is no corresponding liability on the part of another unit. It is valued at the current price established in organized markets or in bilateral arrangements between monetary authorities.

7.94 Any gold held by a government unit that does not satisfy the definition of monetary gold is treated as a nonfinancial asset, either a type of *inventory* (612) or a *valuable* (613). Deposits, loans, and securities denominated in gold are treated as deposits, loans, and securities and not as monetary gold. A gold swap is treated as a loan.

7.95 SDRs are international reserve assets created by the IMF and allocated to its members to supplement existing reserve assets. SDRs are held only by the monetary authorities of IMF member countries and a limited number of authorized international financial institutions. An SDR is a financial asset for which there is no corresponding liability, and the members to whom they have been allocated do not have an unconditional liability to repay their SDR allocations. A general government unit will hold SDRs only when it acts as the monetary authority.

7.96 An SDR represents an unconditional right to obtain foreign exchange or other reserve assets from other IMF members. They can be sold, loaned, or used to settle financial obligations. The value of the SDR is determined by the IMF as a weighted average of selected major currencies. Both the currencies and the weights are revised from time to time.

¹³Gold held by other units that is subject to the effective control of the central bank or the general government sector acting as the monetary authority is also treated as monetary gold.

b. Currency and deposits (6212, 6222, 6312, 6322)

7.97 Currency consists of the notes and coins in circulation that are commonly used to make payments. They are issued either by the central bank or government units and are a liability of the units that issue them. Domestic currency has a fixed nominal value. Any currency that is an asset and a liability of the same unit or sector should be eliminated in accordance with the principle of consolidation described in Chapter 3. Unissued currency held by a government unit is not treated as an asset. Gold and commemorative coins that are not in circulation as legal tender are classified as nonfinancial assets rather than currency.

7.98 The value of foreign-denominated currency is converted to the domestic currency at the exchange rate valid on the date to which the balance sheet relates. Depending on the amount of foreign currency owned, it may be useful to subclassify the total amount of currency held according to whether it is denominated in the domestic currency or a foreign currency.

7.99 Deposits also are financial assets that have fixed nominal values and are used to make payments. They are stores of value and, depending on the type of deposit, may be a direct medium of exchange and may earn interest or entitle the deposit holder to specific services. The value of a domestic deposit is its nominal value, which is the amount that the debtor is contractually obliged to repay to the creditor when the deposit is liquidated.

7.100 Most government units can be expected to hold a variety of deposits as assets, including deposits in foreign currencies. It is also possible for a government unit to incur liabilities in the form of deposits. For example, a court or tax authority may hold a security deposit pending resolution of a dispute. It may be useful to subclassify deposits according to whether they are denominated in the domestic currency or a foreign currency.

7.101 Deposits can be transferable or nontransferable. Transferable deposits comprise all deposits that are (a) exchangeable, without penalty or restriction, on demand at par and (b) directly usable for making third-party payments by check, draft, giro order, direct debit/credit, or other direct payment facility. Included are shares of money market mutual funds that offer unrestricted check-writing privileges.

7.102 Some types of deposit accounts embody limited features of transferability. For example, some deposits have restrictions on the number of third-party payments that can be made per period and/or the minimum size of individual third-party payments. Judgment must be applied in deciding whether deposits with less-than-full transferability features should be classified as transferable or nontransferable deposits.¹⁴

7.103 Nontransferable deposits include all other financial claims represented by evidence of deposit, including the following:

- Sight deposits that permit immediate cash withdrawals but not direct third-party transfers.
- Savings and fixed-term deposits, including non-negotiable certificates of deposit. Negotiable certificates of deposit are classified as securities other than shares.
- Financial corporations' liabilities in the form of shares or similar evidence of deposit that are, legally or in practice, redeemable immediately or at relatively short notice.
- Shares of money market mutual funds whose restrictions on transferability, such as the number of checks that may be written per period or the minimum amount per check, prevent them from being classified as transferable deposits.
- Repurchase agreements that are included in the national measures of broad money.¹⁵
- Deposits that are required of importers in advance of importation.
- Transferable deposits that have been posted to depositors' accounts but cannot be drawn upon until the deposited items, such as checks or drafts, have been collected by the depository corporations that accepted them.
- Compulsory savings deposits arising from an official requirement that a share of a worker's earnings be placed in a deposit account that can be accessed only after a specified period or from which withdrawals may be made only for specified purposes.

¹⁴The decisions made for the GFS system should be coordinated with the decisions made for the national accounts and for monetary and financial statistics.

¹⁵Other repurchase agreements are classified as loans.

- Foreign currency deposits that are blocked because of the rationing of foreign exchange as a matter of national policy.
- Deposits in financial corporations that are closed pending liquidation or reorganization.
- Claims on the IMF that are components of international reserves and are not evidenced by loans.

c. Securities other than shares (6213, 6223, 6313, 6323)

7.104 Securities other than shares are negotiable financial instruments serving as evidence that units have obligations to settle by means of providing cash, a financial instrument, or some other item of economic value. The security normally specifies a schedule for interest payments and principal repayments. Examples of securities other than shares are

- Bills.
- Bonds and debentures, including bonds that are convertible into shares.
- Commercial paper.
- Negotiable certificates of deposit.
- Tradable depository receipts.
- Notes issued through revolving underwriting facilities and note-issuance facilities.
- Securitized mortgage loans and credit card receivables.
- Loans that have become marketable de facto.
- Preferred stocks or shares that pay a fixed income but do not provide for participation in the distribution of the residual value of a corporation on dissolution.
- Bankers' acceptances.

7.105 Bills, negotiable certificates of deposit, banker's acceptances, and commercial paper are short-term securities that give the holder the unconditional right to receive a stated fixed sum on a specified date. They are issued and traded at discounts relative to the stated fixed sum by amounts that depend on the rate of interest and the time to maturity. If market values of these securities are not available, then they should be valued

at the issue price plus accrued interest, where the amount of interest is determined by the interest rate implicit in the original issue price.

7.106 Bonds and debentures are long-term securities that give owners the unconditional right to fixed money incomes or contractually determined variable money incomes, normally referred to as interest. Most bonds and debentures also give owners the unconditional right to a fixed sum or sums as repayment of principal on a specified date or dates. Perpetual bonds, however, have no maturity date.

7.107 Zero-coupon bonds are long-term securities that do not involve periodic payments during the life of the bond. Similar to short-term securities, the bonds are sold at a discount and a single payment that includes accrued interest is made at maturity. Deep-discount bonds are long-term securities that require periodic payments during the life of the instrument, but the amount is substantially below the market rate of interest.

7.108 If market values of long-term securities are not available, they should be valued at the issue price plus accrued but unpaid interest. It is important that deep-discount and zero-coupon bonds should not be valued at their face value.

7.109 Some corporate bonds are convertible into shares of the same corporation at the option of the bondholder. If the conversion option is traded separately, then it is treated as a separate asset, classified as a financial derivative (6217).

d. Loans (6214, 6224, 6314, 6324)

7.110 A loan is a financial instrument that is created when a creditor lends funds directly to a debtor and receives a nonnegotiable document as evidence of the asset.¹⁶ This category includes mortgage loans, installment loans, hire-purchase credit, loans to finance trade credit and advances, repurchase agreements, financial assets and liabilities implicitly created by financial leases, and claims on or liabilities to the IMF in the form of loans. Ordinary trade credit and similar accounts receivable/payable are not loans.

7.111 Normally it will be necessary to value loans at nominal prices because they are not traded regularly on markets. Loans that have become marketable in

¹⁶A loan is distinguished from a deposit (6212) on the basis of the representation in the documents that evidence them.

secondary markets should be reclassified under securities other than shares and should be valued on the basis of market prices or fair values in the same manner as other types of securities other than shares.

7.112 When goods are acquired under a financial lease, a change of ownership from the lessor to the lessee is deemed to take place, even though legally the leased good remains the property of the lessor, because all the risks and rewards of ownership have been, de facto, transferred to the lessee. This change in ownership is deemed to have been financed by a loan, which is an asset of the lessor and a liability of the lessee.

7.113 A securities repurchase agreement (repo) is an arrangement involving the sale for cash of securities at a specified price with a commitment to repurchase the same or similar securities at a fixed price either on a specified future date (often one or a few days hence) or with an open maturity.¹⁷ The economic nature of the transaction is that of a collateralized loan (or a deposit¹⁸) because the risks and rewards of ownership remain with the original owner. Thus, the funds advanced by the apparent purchaser to the apparent seller are treated as a loan and the underlying securities remain on the balance sheet of the borrower, despite the legal change in ownership.¹⁹

7.114 Securities lending is an arrangement whereby a security holder transfers securities to a borrower subject to the stipulation that the same or similar securities be returned on a specified date or on demand. As with a securities repurchase agreement, the risks and rewards of ownership remain with the original owner. If the borrower provides cash as collateral, then the arrangement is treated in the same way as a repo. If the borrower provides noncash collateral, then no transaction is recorded. In either case, the securities involved remain on the balance sheet of their original owners.

7.115 A gold swap is a repo in which monetary gold is exchanged for other reserve assets, usually foreign exchange deposits. Gold loans occur in the same form as securities lending and should be treated in the same way.

¹⁷An open maturity exists when both parties agree daily to renew or terminate the agreement.

¹⁸Repurchase agreements that are included in the national definition of broad money should be classified as nontransferable deposits. All other securities repurchase agreements should be classified under loans.

¹⁹See pp. 29–33 of the *Monetary and Financial Statistics Manual* for additional details and an alternative treatment of repos. In all cases, the treatment used in the GFS system should be consistent with the treatment used in the national accounts and in monetary and financial statistics.

7.116 When securities that have been obtained in repos or securities lending are sold to third parties, a short sale results. In this case, a negative asset equal to the current market value of the security that was sold should be included on the balance sheet of the seller.

e. Shares and other equity (6215, 6225, 6315, 6325)

7.117 Shares and other equity comprise all instruments and records acknowledging, after the claims of all creditors have been met, claims on the residual value of a corporation. Most equity securities do not provide the right to a predetermined income or to a fixed sum on dissolution of the corporation.²⁰ Ownership of equity is usually evidenced by shares, stocks, participations, or similar documents. Shares and other equity cannot be a liability of general government units, but they can be held by these units as assets.

7.118 In addition to common shares of corporations, the following types of securities are classified as shares or other equity:

- The value of a government unit's ownership interest in a quasi-corporation.
- Partnerships and limited partnership interests.
- Preferred stocks or shares that provide for participation in the distribution of the residual value on dissolution of an incorporated enterprise.
- Mutual fund shares.

7.119 If possible, shares and other equities should be valued at their current prices on stock exchanges or other organized financial markets, including the shares of public corporations that are actively traded. The equity held by government units in public corporations with untraded shares and all quasi-corporations is equal to the total value of the corporation's or quasi-corporation's assets less the total value of its other liabilities.²¹ The value of shares in private corporations that are not traded regularly are estimated using the prices of quoted shares that are comparable in earnings, dividend history, and prospects. The prices may be adjusted downward to allow for the inferior marketability or liquidity of unquoted shares.

²⁰Some preferred shares provide for a predetermined property income in the form of dividends and for participation in the distribution of the residual value of the corporation when it is liquidated.

²¹If the government unit does not own all of the equity of the public corporation, then only its proportional share would be an asset.

f. Insurance technical reserves [GFS] (6216, 6226, 6316, 6326)

7.120 Insurance technical reserves consist of the net equity of households in pension funds and life insurance reserves, prepaid premiums, and reserves against outstanding claims. General government units may incur liabilities for insurance technical reserves as operators of non-life insurance schemes and nonautonomous or unfunded pension schemes, and they may hold assets as non-life insurance policyholders. It is unlikely that a general government unit would incur liabilities or hold assets with respect to life insurance. Public financial corporations, including autonomous pension funds, can engage in all types of insurance schemes, including life insurance.

7.121 The individuals covered by a retirement scheme have claims against the unit operating the scheme that are liquidated by the payment of benefits when the individuals satisfy specified criteria, usually by attaining a certain age and/or number of years of service. The nature of those claims, and the corresponding liabilities of the units operating the pension funds, depends on the type of benefits promised.

7.122 The two main types of pension schemes are defined-benefit schemes and defined-contribution schemes.²² In a defined-benefit scheme, the level of pension benefits promised by the employer to participating employees is guaranteed and usually is determined by a formula based on participants' length of service and salary. The liability of a defined-benefit pension scheme is the present value of the promised benefits. In a defined-contribution scheme, the level of contributions to the fund by the employer is guaranteed, but the benefits that will be paid depend on the assets of the fund. The liability of a defined-contribution pension fund is the current market value of the fund's assets.

7.123 A pension fund for government employees can be managed on behalf of the government by a public or private insurance corporation or it can be organized and managed by the government as an autonomous or nonautonomous pension fund. By its nature, an unfunded scheme must be organized and managed by the employer, which may be a general government unit or a public corporation.

²²Defined-contribution schemes are also referred to as money-purchase schemes.

7.124 A pension scheme operated by an insurance corporation or as an autonomous pension fund can have a net worth, positive or negative, if the assets of the fund exceed or fall short of the fund's liability for the retirement benefits. As with other public corporations, this net worth is owned by the employer or employers that established the fund. A nonautonomous pension fund is not a separate unit and the assets of the fund belong to the employer. The employees, however, have a claim against the employer, and the employer has a liability equal to the present value of the promised benefits.

7.125 If a public financial corporation is a life insurance enterprise, then it must retain reserves against its outstanding life insurance and annuity policies. Households have claims against the enterprise equal to the present value of the expected payments of policy benefits. Hence, the life insurance enterprise has a liability equal to the same amount.

7.126 With respect to social security schemes, no liability is recognized in the GFS system for government promises to pay retirement pensions and other benefits in the future, regardless of the level of assets in a social security fund or other segregated accounts. Liabilities for the payment of benefits that were due to be paid but have not yet been paid are classified as other accounts payable.

7.127 Prepayments of non-life insurance premiums result from the fact that most insurance premiums are paid at the start of the period covered by the insurance. Therefore, at any given time part of the insurance premiums already paid have not yet been earned by the insurance enterprise because they cover risks in the future. The value of the prepaid premiums is determined on the basis of the ratio of the risks involved in the time remaining on the contract to the risks involved for the entire contract period.²³

7.128 Prepaid insurance premiums are assets of the policyholders and liabilities of the insurance enterprises. General government units may purchase insurance, usually non-life insurance, to manage its risks. General government units may also operate insurance schemes, such as flood insurance or deposit insurance. Thus, it is possible for a government unit to have both an asset and a liability for prepaid premiums.

²³In the 1993 SNA, insurance premiums are divided into two parts: a payment for services produced by the insurance enterprise and a transfer. In this manual, the entire payment is treated as a transfer.

7.129 Reserves against outstanding claims are reserves that operators of non-life insurance schemes hold in order to cover the amounts they expect to pay for claims that are not yet settled or claims that may be disputed. Claims accepted by insurance operators are accrued when the eventuality or accident that gives rise to the claim occurs. These reserves are assets of the beneficiaries who will eventually receive them as compensation for their claims and liabilities of insurance operators. The value of reserves against outstanding claims is the present value of the amounts expected to be paid out in settlement of claims, including disputed claims.

g. Financial derivatives (6217, 6227, 6317, 6327)

7.130 Financial derivatives are financial instruments that are linked to a specific financial instrument, indicator, or commodity, and through which specific financial risks can be traded in financial markets in their own right. The value of a financial derivative derives from the price of the underlying item: the reference price. The term "underlying item" may refer to indices as well as commodities and other financial variables, and the term "reference price" may relate to a commodity, a financial asset, an interest rate, an exchange rate, another derivative, a spread between two prices, an index, or a basket of prices. An observable market price or an index for the underlying item is essential for calculating the value of any financial derivative. If a financial derivative cannot be valued because a prevailing market price or index for the underlying item is not available, it cannot be regarded as a financial asset. Unlike many other financial claims, no principal amount is advanced that has to be repaid and no investment income accrues.

7.131 There are two broad classes of financial derivatives: forward-type contracts, including swaps, and option contracts. Under a forward contract, the two counterparties agree to exchange a specified quantity of an underlying item, which may be real or financial, at an agreed price on a specified date. At the inception of the contract, risk exposures of equal market value are exchanged and the contract has zero value. Some time must elapse for the market value of each party's risk to differ so that an asset is created for one party and a liability for the other. The debtor-creditor relationship may change both in magnitude and direction during the life of the forward contract.

7.132 Common forward-type contracts include interest rate swaps, forward rate agreements, foreign

exchange swaps, forward foreign exchange contracts, and cross-currency interest rate swaps:

- An interest rate swap is an exchange of cash flows related to interest payments or receipts on a notional amount of principal on one currency over a period of time. The principal, however, is never exchanged.
- Forward rate agreements are arrangements in which two parties agree on an interest rate to be paid at a specified settlement date on a notional amount of principal that is never exchanged. The buyer of the forward rate agreement receives payment from the seller if the prevailing rate exceeds the agreed rate and the seller receives payment from the buyer if the prevailing rate is lower than the agreed rate.
- A foreign exchange swap is a spot sale/purchase of currencies and a simultaneous forward purchase/sale of the same currencies.
- Forward foreign exchange contracts involve two counterparties who agree to transact in foreign currencies at an agreed exchange rate in a specified amount at some agreed future date.
- Cross-currency interest rate swaps, sometimes known as currency swaps, involve an exchange of cash flows related to interest payments and an exchange of principal amounts at an agreed exchange rate at the end of the contract. There might also be an exchange of principal at the beginning of the contract.

7.133 Options are contracts that give the purchaser of the option the right, but not the obligation, to buy (a “call” option) or to sell (a “put” option) a particular financial instrument or commodity at a predetermined price within a given time span or on a given date. Options are sold or “written” on many types of underlying bases such as equities, interest rates, foreign currencies, commodities, and specified indexes. The buyer of the option pays a premium to the seller for the latter’s commitment to sell or purchase the specified amount of the underlying instrument or commodity on demand of the buyer.

7.134 Warrants are a form of options. They are tradable instruments giving the holder the right to buy, under specified terms for a specified period of time, from the issuer of the warrant (usually a corporation) a certain number of shares or bonds. There are also currency warrants based on the amount of one currency required to buy another and cross-currency warrants tied to third currencies.

7.135 Margins are payments of cash or collateral that cover actual or potential obligations under financial derivative contracts. Repayable margins consist of cash or other collateral deposited to protect a counterparty against default risk, but which remain under the ownership of the unit that made the deposit. Repayable margins paid in cash are deposits rather than financial derivatives. Repayable margins made in securities or other noncash assets retain their character as securities or other assets. Nonrepayable margins reduce a liability created under a financial derivative contract.

7.136 Market prices are available for many financial derivatives because they are traded on active markets. If market values are unavailable, then other fair value methods, such as options models or discounted present values, may be used. If the current market value of an option is not available, then it may be valued at the amount of the premium paid or payable.

h. Other accounts receivable/payable (6218, 6228, 6318, 6328)

7.137 Other accounts receivable/payable consist of trade credits and advances and miscellaneous other items due to be received or paid. All such assets and liabilities should be valued at the amount the debtor is contractually obliged to pay the creditor to extinguish the obligation.

7.138 Trade credits and advances include (1) trade credit extended directly to purchasers of goods and services and (2) advances for work that is in progress or to be undertaken, such as progress payments made during construction, or for prepayments of goods and services. Such credit arises both from normal delays in receiving payment and from deliberate extensions of vendor credit to finance sales. Trade credit does not include loans, securities other than shares, or other liabilities that are issued to finance trade. If a government unit issues a promissory note or other security to consolidate the payment due on several trade credits, then the note or security is classified as a security other than shares. The value of an advance for work in progress refers only to work that is classified as inventories.²⁴

7.139 Miscellaneous other accounts receivable/payable includes accrued but unpaid taxes, dividends, purchases and sales of securities, rent, wages and

²⁴As described in paragraph 7.34, the value of work carried out on uncompleted structures being acquired through progress payments required under a contract of sale is classified as fixed assets on the purchaser’s balance sheet.

salaries, social contributions, social benefits, and similar items. In principle, accrued but unpaid interest should be added to the principal of the underlying asset rather than included in this category. It is recognized, however, that interest accruing on deposits and loans may have to follow national practices and be classified under accounts payable. Taxes receivable and/or wages payable should be separately indicated if the amounts are substantial.

E. Net worth

7.140 Net worth is the difference between the total value of all assets and the total value of all liabilities. As noted in paragraph 7.15, shares and other equities are treated as liabilities of public corporations in the GFS system. If they are traded in the market or can otherwise be valued independently, the net worth of a public corporation is determined by including the value of its shares and other equities in the total value of its liabilities. Thus, even though a corporation is wholly owned by a government unit, it may have a net worth, which could be positive or negative. For other public corporations and for all quasi-corporations, the value of the corporation's or quasi-corporation's liability for shares and other equity is assumed to be equal to the total value of its assets less the total value of its other liabilities. As a result, the net worth of these units is zero. Net financial worth, equal to the total value of all financial assets less the total value of all liabilities, is an important component of total net worth.

F. Memorandum Items

7.141 It may be desirable to record memorandum items to provide supplemental information about items related to, but not included on, the balance sheet.

I. Debt

7.142 Debt consists of all liabilities that require payment or payments of interest and/or principal by the debtor to the creditor at a date or dates in the future. Thus, all liabilities in the GFS system are debt except for shares and other equity and financial derivatives.

7.143 In some cases, the current market value of a debt may differ significantly from its nominal value, which is defined in footnote 8 of Chapter 3. For some analytic purposes, nominal values of debt may be preferable to current market values, and, in general, it is useful to be able to compare nominal values with

current market values. It is recommended, therefore, that estimates of total debt and the most important categories of debt be presented in both values.

2. Arrears

7.144 A debt is in arrears when it has not been liquidated by its due-for-payment date. Information on debt in arrears can be useful for various types of policy analysis and solvency assessments. The total amount of debt in arrears should be indicated as a memorandum item and the classification of liabilities should be expanded to show how much of each category is in arrears whenever the amounts are significant. For example, a government unit's liability for securities other than shares owed to domestic units (item 6313 in Table 7.3) should be divided into the amount not in arrears and the amount in arrears.

3. Obligations for social security benefits

7.145 No liability is recognized in the GFS system for government promises to pay social security benefits in the future, such as retirement pensions and health care. All contributions to social security schemes are treated as transfers (revenue) and all payments of benefits are also treated as transfers (expense). The present value of social security benefits that have already been earned according to the existing laws and regulations but are payable in the future should be calculated in a manner similar to the liabilities of an employer retirement scheme and be shown as a memorandum item.

4. Contingent contracts

7.146 Contingent contracts are contracts that create a conditional financial claim on a unit. In this context, conditional means that the claim only becomes effective if a stipulated condition or conditions arise. By conferring rights or obligations that may affect future decisions, contingent arrangements produce an economic impact on the parties involved. Collectively, such contingencies may be important for financial policy and analysis. Accordingly, important contingent contracts should be recorded as a memorandum item.

7.147 Contingent contracts can represent either potential assets or liabilities. A common type of contingent liability of a general government unit is a guarantee of payment by a third party, such as when the general government unit guarantees the repayment of a loan by another borrower. Such arrangements are contingent because the guarantor is required to repay the loan only if the borrower defaults. Other examples of contingent

liabilities include letters of credit, lines of credit, indemnities against unforeseen tax liabilities arising in government contracts with other units, and damages and other legal claims against the government in pending court cases. An example of a contingent asset is a pending legal case in which the government has claimed damages against another party.

7.148 Not all contingent assets or liabilities are easily quantifiable in terms of the net value of economic benefits expected to be received or paid. For example, the original nominal value of all loans guaranteed should be known, but the present value of the future payments by the government as guarantor depends on the likelihood and timing of default of each loan. Although precise recommendations cannot be specified for contingencies, a description of the nature of the various contingencies should be provided together with some indication of their possible value.

7.149 In a number of financial arrangements, such as many financial derivatives, the contract is conditional on the part of one or both parties, but the arrangement itself has value because it is tradable. Any such contracts should be recognized as financial assets and liabilities.

5. International reserves and foreign currency liquidity

7.150 A country's international reserves refer to those external assets that are readily available to and controlled by the monetary authorities for direct financing of payments imbalances, for indirectly regulating the magnitudes of such imbalances through intervention in exchange markets to affect the currency exchange rate, and/or for other purposes. Reserve assets consist of currency, deposits, and securities denominated in foreign currencies, monetary gold, SDRs, and the nation's reserve position in the IMF. In many countries, reserve assets will be held by the central bank, but it is possible for a government unit to hold reserve assets, especially when it acts as the monetary authority. If so, the amount and type of reserve assets held by the units covered by the balance sheet should be indicated as a memorandum item.

7.151 The usability of international reserves is affected by both actual and potential demands on them resulting from short-term foreign currency liabilities and off-balance-sheet activities of the mone-

tary authorities. For the purpose of assessing liquidity, foreign currency assets other than international reserves may be taken into consideration. In addition, relevant assets and liabilities of all public-sector entities responsible for, or involved in, responding to currency crises should be taken into account. In practice, this coverage includes the central government except for social security funds.²⁵

6. Uncapitalized military weapons and weapon-delivery systems

7.152 As described in paragraph 7.36, destructive weapons and vehicles, other equipment, and structures whose function is to release such weapons are not treated as fixed assets. Nevertheless, these items generally are held and, in some cases, used repeatedly or continuously for several years. For some analytic purposes, therefore, it may be useful to know the current market value of these items as if they had been treated as fixed assets and to report that value as a memorandum item.

G. Supplemental cross-classification of financial claims by sector of the other party to the instrument

7.153 The classifications of financial assets and liabilities in Table 7.3 focus on the type of instrument underlying the claim. For a full understanding of financial assets and liabilities of the general government sector or the public sector, it is often important to identify more detailed financial relationships. For example, it is often important to know not just what types of liabilities the general government sector has used to obtain financing but also which sectors have provided the financing. Within the general government sector, it is often necessary to analyze debtor-creditor relationships between subsectors.

7.154 Two parties are associated with all financial claims. As a result, it is possible to cross-classify the financial instruments of financial claims with the second party. This supplemental classification is presented in Table 7.4, which should be compiled separately for financial assets and liabilities. The definitions of sectors are given in Chapter 2.

²⁵Guidelines for assessing a nation's foreign currency liquidity position are described in International Monetary Fund, *International Reserves and Foreign Currency Liquidity: Guidelines for a Data Template* (Washington 2001).

Table 7.4: Cross-Classification of Financial Claims and Sectors

	Currency and deposits	Securities other than shares	Loans	Shares and other equity	Insurance technical reserves	Financial derivatives	Other accounts receivable/payable
Domestic							
Other general government units							
Central bank							
Other depository corporations							
Financial corporations not elsewhere classified							
Nonfinancial corporations							
Households and nonprofit institutions serving households							
Foreign							
International organizations							
General government							
Financial corporations other than international organizations							
Other nonresidents							