INTERNATIONAL MONETARY FUND

# Government Finance Statistics:

## Compilation Guide for Developing Countries

September 2011

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## for Developing Countries

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## Preface

The *Government Finance Statistics: Compilation Guide for Developing Countries* represents a new approach by the IMF's Statistics Department (STA) to assist developing countries to compile government finance statistics (GFS) in accordance with the guidelines of the *Government Finance Statistics Manual 2001 (GFSM 2001)*. The Guide specifically addresses issues relevant to developing countries. The Guide is based on our experience over many years of technical assistance and training to member countries, addressing common problems they face, and answering questions that often arise. Examples, figures, and tables are used to facilitate the reader's understanding of the topics discussed.

The Guide was mainly funded by the United Kingdom's Department for International Development (DFID), under its Enhanced Data Dissemination Initiative (EDDI) for Africa. We express our gratitude to DFID for their support.

This publication is a collaborative product of the IMF's Government Finance Division. The primary author of the Guide was Alberto F. Jiménez de Lucio, Senior Economist. The design of the examples, figures and tables was mainly the work of Carlos Gutiérrez Mangas, Economist. General guidance was provided by Claudia Dziobek, Division Chief, and methodological guidance by Robert Dippelsman, Deputy Division Chief. Members of the division provided comments to different parts of the Guide, in particular Sagé de Clerck and Tobias Wickens. Roderico De Nitti, Staff Assistant, prepared the draft for publication. The IMF's Data Dissemination and Review Dissemination reviewed the chapter on data dissemination (Ethan Weismann, Louis Venter, and Zdravko Balyozov). Robert Heath, Senior Advisor STA, provided valuable advice.

The Guide was peer-reviewed by Betty Gruber, an international GFS expert, formerly from the Australian Bureau of Statistics. Members of the GFS Advisory Committee provided insightful suggestions, in particular Héctor Hernández (Chile) and Nelly Mireku (Ghana). Other colleagues from the IMF contributed useful ideas, including Adrienne Cheasty, Guilhem Blondy, Nikolay Gueorguiev, Tidiane Kinda, Olga Kroytor, Jimmy McHugh, Daban Sanchez, and Victor Thuronyi.

It is our expectation that this Guide will prove useful to all users interested in compiling GFS or gaining a better understanding of fiscal statistics. We welcome comments on the Guide at STAGOMail@imf.org, as we intend to update the document over time to reflect feedback from users and new developments in the field.

Adelheid Burgi-Schmelz
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# CHAPTER 1. INTRODUCTION

*This chapter describes the purpose of this guide, the characteristics of good quality statistics, and the approach followed in drafting the guide and its structure.*

1. Recent economic and financial crises have highlighted the need for more and better data to monitor and evaluate economic developments. In particular, the design, monitoring, and evaluation of fiscal policy, as well as fiscal transparency and accountability, require statistics of good quality. This statement begs the question, what are good quality statistics? In our view, good quality data have the following five attributes: (a) comprehensive, both in terms of the institutions and of the flows and stocks covered; (b) solid, as they are based on well-defined concepts and classifications; (c) useful, because they allow calculation of aggregates and balancing items that are analytically relevant, and in a timely manner for policy purposes; (d) consistent, internally, over time, and with other macroeconomic datasets; and (e) internationally comparable across countries.

2. How to compile good quality statistics? A key component of the answer is by using a sound methodology and a relevant analytic framework. We are convinced that the *Government Finance Statistics Manual 2001* (*GFSM 2001*) provides such methodology and framework. This manual replaces *A Manual on Government Finance Statistics 1986* (*GFSM 1986*). The *GFSM 2001* describes a specialized macroeconomic statistical system (the GFS system) designed to support fiscal analysis and transparency. The manual provides a comprehensive conceptual and accounting framework suitable to assess the performance of government of any country in the world. However, it does not explain how to actually compile fiscal statistics following the guidelines of the *GFSM 2001*.

3. The *Government Finance Statistics: Compilation Guide for Developing Countries* (the Guide) aims to provide government officials who are responsible for the compilation and dissemination of fiscal statistics,[1] with the basic information necessary to compile good quality fiscal statistics, based on the methodology of the *GFSM 2001*.[2] Compilers may have a variety of backgrounds in statistics, economics, accounting, or related fields, but the Guide does not presuppose any particular expertise. It is also expected that the Guide will serve as a more accessible and understandable reference than the manual for users interested in the topic of fiscal statistics.

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[1] These officials are referred to as "compilers" throughout the Guide.

[2] The *GFSM 2001* is harmonized with the *System of National Accounts 1993* (*1993 SNA*). The *1993 SNA* consists of an integrated set of macroeconomic accounts, balance sheets and tables based on internationally agreed concepts, classifications and accounting rules. Together, these principles provide a comprehensive accounting framework within which economic data can be compiled and presented in a format that is designed for purposes of economic analysis, decision-making and policy-making. It is published jointly by the United Nations, the Commission of the European Communities, the International Monetary Fund, the Organization for Economic Cooperation and Development (OECD), and the World Bank.

**Box 1. Test your Knowledge of Fiscal Statistics**

When is a 7.2 percent of GDP fiscal deficit in country A better than a 3.5 percent of GDP deficit in country B? When:

(a) the figure for country A refers to the general government, whereas the figure for country B refers to the budgetary central government, and the figure for the equivalent coverage for country B is 9.8 percent of GDP; or

(b) the figure for country B includes loan disbursements and privatization proceeds under revenue, equivalent to 8.1 percent of GDP; or

(c) the figure for country B excludes arrears, equivalent to 5.7 percent of GDP.

The correct answer is all of the above. This test illustrates a common problem when looking at fiscal statistics. Unless you know how the statistics are generated, it is not possible to understand what they mean or represent, and to determine whether they are credible. This Guide will provide the reader with the information needed to better understand fiscal statistics.

4. A project to enhance macroeconomic statistics in Africa, known as the Enhanced Data Dissemination Initiative (EDDI), supported by the United Kingdom's Department for International Development (DFID), made it possible for the IMF to write this Guide, which distills lessons from over 25 years of experience providing technical assistance and training to officials in member countries in all parts of the world. The Guide selects key issues, both in terms of the discussion of concepts, as well as in the compilation of statistics for government institutions, that are of particular relevance to developing countries. As appropriate, the Guide refers the reader to other sources that provide broader or more detailed information on particular subjects. Most significantly from a conceptual standpoint, the Guide is harmonized with the concepts and classifications of the *System of National Accounts 2008* (*2008 SNA*).[3]

5. The guidelines of the *GFSM 2001* are applicable to all countries, regardless of their level of statistical development and basis of recording.[4] The manual recommends that fiscal

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[3] The reliance on the *1993 SNA* and *2008 SNA* as the core methodology for the manuals and guides used to compile monetary and financial statistics, balance of payments, government finance statistics, and debt statistics, helps ensure consistency across the resulting macroeconomic datasets.

[4] The *GFSM 2001* is currently being updated to harmonize the manual with the *2008 SNA*. Several of the expected changes to be incorporated into the revised manual are already reflected in the Guide; however, other

(continued)

statistics be compiled on both a cash basis and on an accrual basis of recording, and countries are encouraged to develop a migration plan to achieve this goal over time. However, we recommend countries to first improve the compilation of cash based data, and then gradually to introduce the compilation of accrual based data too. Thus, the Guide focuses on a cash basis of recording, the time of recording currently used by a large majority of developing countries. The Guide does discuss the accrual recording of selected items of particular relevance to developing countries, and provides information on how to migrate to an accrual basis of recording and full adoption of the *GFSM 2001* methodology.

6. A majority of developing countries today follow the guidelines of the *GFSM 1986*, the predecessor to the *GFSM 2001*. Thus, comments on significant differences between the two manuals are included in the Guide as appropriate. One key difference is the data coverage of the two manuals. The *GFSM 1986* covers only cash flows and debt, traditionally defined as composed of two types of liabilities (loans and debt securities). The *GFSM 2001* covers both cash and non-cash flows, and all assets and liabilities associated with government institutions. As a result, its data coverage is significantly broader than the *GFSM 1986*. Other key differences are the integration of flows and stocks, and the use of multiple balancing items in the *GFSM 2001*.

7. The Guide incorporates materials developed specifically for the publication, as well as materials from various sources, including the *GFSM 2001* (and *GFSM 1986*), companion material prepared for the manual, course material developed to teach the guidelines of the manual, methodological notes drafted to address specific questions, reports from technical assistance missions, the *2008 SNA*, and the *Balance of Payments Manual Sixth Edition* (*BPM6*).[5]

8. In line with the Guide's objective to assist compilers in developing countries, the following chapters present and discuss the basics of compilation of fiscal statistics in accordance with the *GFSM 2001* methodology. The first four chapters after the Introduction discuss conceptual issues underlying the GFS system, while the next four chapters discuss compilation issues, and the last four chapters discuss other issues related to compilation and dissemination of fiscal statistics. Examples, figures, and tables are provided throughout the Guide to illustrate particular points. Extensive use of the double entry accounting system of recording is used to present examples, as this is a fundamental feature of the GFS system.

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changes to the manual will likely require an update of the Guide at a later date. The revised manual is expected to be available in mid-2012.

[5] The *GFSM 2001* and the companion material developed for the manual are available at http://www.imf.org/external/pubs/ft/gfs/manual/index.htm, while the *2008 SNA* is available at http://unstats.un.org/unsd/nationalaccount/sna2008.asp, and the *BPM6* is available at http://www.imf.org/external/pubs/ft/bop/2007/bopman6.htm .

9. Finally, a note to clarify the use of a few terms that are often used interchangeably and thereby give rise to confusion when discussing fiscal statistics. Budget execution data refers to the figures each country compiles, often following national concepts and classifications, for purposes of monitoring the implementation of the country's budget over a certain period. Fiscal statistics is a broad term, used to refer to any and all statistics related to public finance (budget execution data, external debt data, etc.), regardless of the methodology underlying their compilation. Government finance statistics (GFS) is a specific term, used to refer to fiscal statistics compiled in accordance with internationally accepted methodologies (such as the *GFSM 2001 or GFSM 1986*), which often use budget execution data as their main data source. This is the manner in which these three terms are used throughout the Guide.

# PART I. MAIN CONCEPTS AND FRAMEWORK

## CHAPTER 2. COVERAGE OF THE GFS SYSTEM

*This chapter describes how to delineate the general government sector and its subsectors, as well as the public sector, based on institutional units.*

### A. Introduction

10. Governments have two main functions, the provision of goods and services to the community on a nonmarket basis, and the redistribution of income and wealth. Most countries finance these activities by taxes or other compulsory transfers. In addition, governments may finance themselves through nontax revenues and by borrowing. Fiscal statistics should in principle include all entities undertaking these activities, and all resource flows and stocks associated with these entities. However, partial coverage of these entities is typical at the beginning, with the coverage of statistics gradually broadening over time to include all entities.

### B. Institutional Units and Sectors of the Economy

11. For which entities is it feasible and meaningful to compile statistics? The basic statistical unit in the GFS system is the institutional unit, the same unit that is the foundation of the *2008 SNA*. What constitutes an institutional unit? An institutional unit is defined as an economic entity capable in its own right, of owning assets, incurring liabilities, and engaging in economic activities and in transactions with other entities. Very importantly for statistical purposes, an institutional unit should have a complete set of accounts (including a balance sheet), or it must be possible and meaningful to compile such accounts. These sets of accounts, or the accounting records underlying the accounts, are the main source of data for compiling GFS. Entities that do not meet the criteria to be an institutional unit are always part of another entity that is an institutional unit.

12. The *2008 SNA* divides the economy of a country into five mutually exclusive institutional sectors. These five sectors are: the nonfinancial corporations sector, the financial corporations sector, the general government sector, the nonprofit institutions (NPIs) serving households sector, and the households sector. All resident institutional units of a country belong to one of these five sectors.[6] The general government sector consists of all institutional units that fulfill the functions of government as their primary activity. Government units are unique kinds of legal entities established by political processes that

[6] An institutional unit is resident in a country (domestic) if it has its center of predominant economic interest in the economic territory of that country. This definition is usually referred to as the residency criterion.

have legislative, judicial, or executive authority over other institutional units within a given area. [7]

13. A key characteristic of all general government units is that they are nonmarket producers. In other words, the goods and services they produce are provided free of charge or at prices that are not economically significant.[8] Although there is no prescriptive numerical relationship between the value of output and the production costs to determine whether an entity charges economically significant prices or not, one would normally expect the value of goods and services sold to average at least half of the production costs over a sustained multiyear period, for an entity to be considered a market producer. A public corporation that does not meet this test is classified as a general government unit, while an unincorporated government unit that meets the test and functions as a corporation, is considered to be a quasi-corporation[9], and is classified as a corporation (nonfinancial or financial).[10] A government entity that is not an institutional unit and sells most or all of its output at market prices[11] may be a market establishment[12] within a general government unit. For example, a municipal swimming pool that charges entrance fees or a government publishing office that sells its publications might be market establishments.

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[7] The term "government unit" or "general government unit" are used throughout the text for convenience to refer to general government institutional units.

[8] Economically significant prices are prices that have a significant effect on the amounts that producers are willing to supply and on the amounts purchasers wish to buy.

[9] Typical examples of entities that often are quasi-corporations are port authorities and post offices.

[10] A corporation is an entity capable of generating a profit or other financial gain for its owners, recognized by law as a separate legal entity from its owners, and set up for purposes of engaging in market production. A quasi-corporation is an unincorporated enterprise that functions in all (or almost all) respects as if they were incorporated.

[11] Market prices are freely agreed prices between the two parties to a transaction, and are always considered to be economically significant prices.

[12] An establishment is an enterprise, or part of an enterprise, that is situated in a single location and in which only a single productive activity is carried out, or in which the principal productive activity accounts for most of the value added.

## C. General Government Sector

14. The general government sector consists of all government units and all nonmarket NPIs[13] that are controlled by government units.[14] Depending on the legal or administrative arrangements of a particular country there may be more than one level of government within a country. These levels of government are based on the degree of autonomy of the various levels of government, and exercise their political authority over progressively smaller areas of a country. In practice, the degree of autonomy of a given level of government is measured by its ability to finance itself by imposing taxes or fees, decide how to use its resources, and to appoint its own officers.

15. In the *GFSM 2001* provision is made for up to four subsectors of general government: central government, state governments, local governments, and social security funds. There are two methods of sub-sectoring the general government sector, the first considers social security funds as a separate subsector, and the second includes them under each level of government. See Figure 1. All government units should be classified into one of the four subsectors, though countries may not have units in each subsector. For example, countries that have highly centralized governments usually have just a central government and local governments.

16. The central government, state governments, and local governments may in turn each be composed of up to three subsectors: budgetary government, extra-budgetary units/entities, and social security funds. The budgetary central government subsector is generally composed of the entities covered fully by a country's general budget, usually approved by the national legislative. These entities are frequently referred to as votes, or budget heads, or budget execution units. Typical entities include units of the executive, legislative, and judicial branches of government, such as offices of the president, ministries, congress, and courts. The budgetary central government subsector is composed of several entities, which often constitute a single institutional unit.

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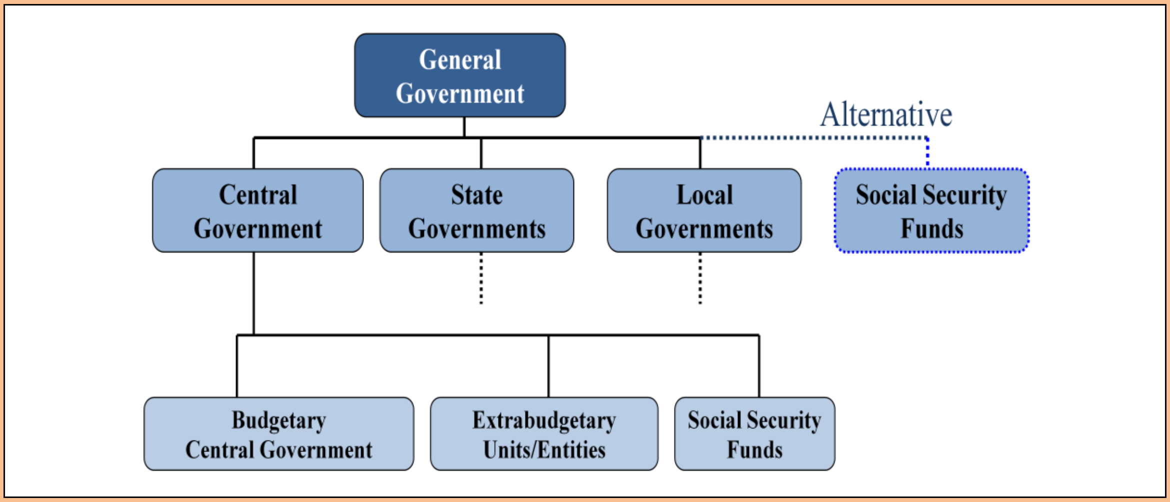
[13] An NPI is a legal or social entity created for the purpose of producing goods and services, but whose status doesn't permit it to be a source of income, profit or other financial gain for the unit that establishes, controls, or finances it. An NPI may be a market producer or a nonmarket producer, depending on whether or not it charges economically significant prices for its goods and services.

[14] Control of an NPI is defined as the ability to determine the general policy or program of the NPI. The indicators to determine whether a NPI is under control of government are: the appointment of officers, other provisions of the enabling instrument, contractual arrangements, degree of financing by government, and risk exposure.

**Figure 1. General Government Sector and its Subsectors**




17. The extra-budgetary units/entities subsector includes all nonmarket NPIs and other institutional units that are controlled by government but have separate budgets. These units often receive transfers from the budgetary central government, but also generate some of their own revenues, and have a fair degree of autonomy in the management and use of its resources. Typical entities include public universities and research institutes, government boards, funds (e.g., revolving funds, road fund), and regulatory bodies.[15]

18. The social security funds subsector is composed of institutional units controlled by government that manage social security schemes. These schemes cover the entire population or large segments of the population against social risks, are mandatory, and require contributions from participants to be entitled to receive benefits. The typical benefits provided are pensions, medical, unemployment, housing, etc. Social security funds may also be treated as a subsector of the general government sector instead of the central government, as is the case for EU countries.

19. A very effective and useful action that countries can take as a starting point to implement the *GFSM 2001* is to compile a list of all entities and institutional units that compose the general government sector (public sector) and its subsectors. A convenient starting point is to use the list underlying the national accounts for the general government sector. The best approach to preparing this list is to form a working group of all agencies

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[15] Bodies that regulate financial institutions and are separate institutional units belong in the financial corporations sector (included in the central bank subsector). If the bodies form part of government and are not separate institutional units, they are part of the general government sector.

involved in the production of macroeconomic statistics and, after careful consideration of each entity, reach agreement on the list. Once agreed upon, all data producing agencies should use the same list. The preparation and use of such a list noticeably improves the consistency of macroeconomic datasets, and facilitates reconciliation among them. This list should be the responsibility of one agency, reviewed periodically by the working group, and updated as necessary. See Annex to Chapter 6 for an example of a list of entities that compose the general government sector.

20. An important case to mention concerns international organizations. The members of an international organization are national states or other international organizations whose members are national states. These institutions are established by formal political agreements between their members, and their existence is recognized by law in member countries. International organizations are created for various purposes, such as conducting financial intermediation at an international level (e.g., IMF, World Bank Group, BIS, and regional development banks), or the provision of nonmarket goods and services of a collective nature for the benefit of its members. These institutions are treated as not resident in the country in which they are located. However, international organizations of a currency union or economic union are considered residents of the union as a whole, and may be presented as an institutional sector for certain statistical purposes.

## D. Public Sector

21. The public sector is not one of the five mutually exclusive sectors of the total economy in the *2008 SNA*. Although called a sector, the public sector is actually a combination of the general government sector, plus the public corporations that belong to the nonfinancial corporations sector and the financial corporations sector. See Figure 2A. In addition, the general government sector plus the nonfinancial public corporations is called the nonfinancial public sector.

22. The public sector consists of all general government units and all corporations owned or controlled by government units.[16] See Figure 2B. In practice, the corporations included in the definition of public sector are usually those in which the government has a majority holding. However, according to the definition, those corporations controlled by government units, even if they have a minority holding, should also be included in the institutional coverage of the public sector. Corporations in which government units have a minority holding and do not exert control are not a public sector unit, and should be treated as financial assets in the balance sheet of the government unit.

[16] The key factors to be considered to determine whether a corporation is owned or controlled by government are: ownership of the majority of the voting interest, control of the board or other governing body, control of the appointment and removal of key personnel, control of key committees, golden shares and options, regulation and control, control by a dominant customer, and control attached to borrowing from the government.

**Figure 2A. The Public Sector and the *2008 SNA* Institutional Sectors of the Total Economy**

| General Government Sector | Financial Corporations Sector | Nonfinancial Corporations Sector | Non-profit Institutions Serving Households Sector | Households Sector |
|---|---|---|---|---|
| **PUBLIC** | **PUBLIC** | **PUBLIC** | **PRIVATE** | **PRIVATE** |
| | **PRIVATE** | **PRIVATE** | | |

23. It is often useful for analytical purposes to disaggregate the financial public corporations into other subsectors, such as into monetary public corporations and nonmonetary public corporations. Monetary public corporations include the central bank and public depository corporations, while the nonmonetary public corporations include all other financial public corporations.[17]

24. Finally, it is important to note that although the institutional coverage of the *GFSM 1986* is defined on a functional basis, and the coverage of the *GFSM 2001* is defined on an institutional unit basis, in practice the government units covered under both manuals is similar. However, the data coverage of the *GFSM 2001* is significantly broader, as it covers all the flows and stocks of government units, whereas the *GFSM 1986* only covers the cash flows and two types of liabilities (loans and debt securities) of government units.

25. The *GFSM 2001* recommends that fiscal statistics be compiled and disseminated for both the general government sector and the public sector. Initially the coverage is likely to be limited to only a few of the units or subsectors under these two sectors, but over time the coverage should be expanded to include all general government and public institutional units.

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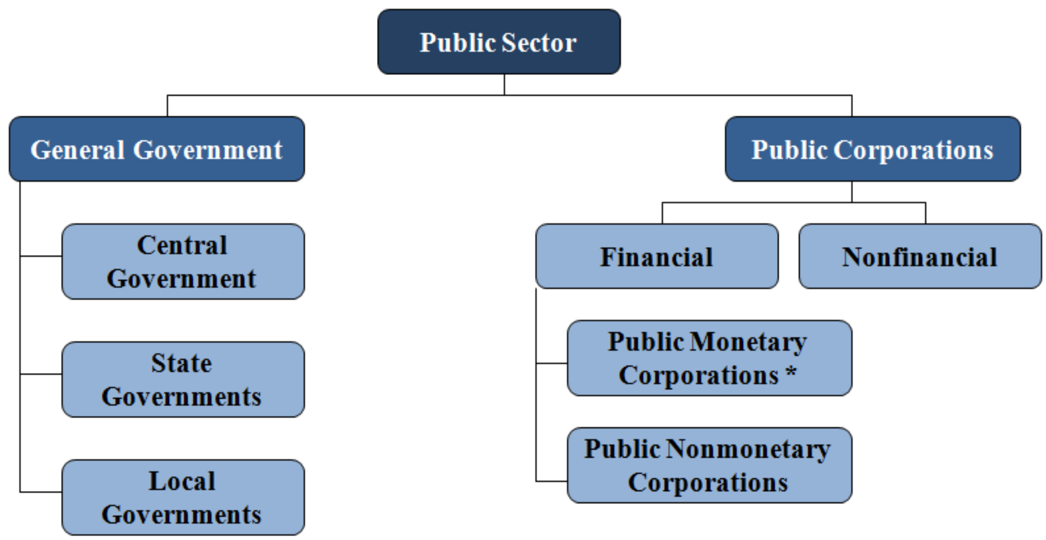
[17] Depository corporations are financial corporations, quasi-corporations, or market NPIs, whose principal activity is financial intermediation, and who have liabilities in the form of deposits or financial instruments that are close substitutes for deposits.

**Figure 2B. The Public Sector and its Subsectors**

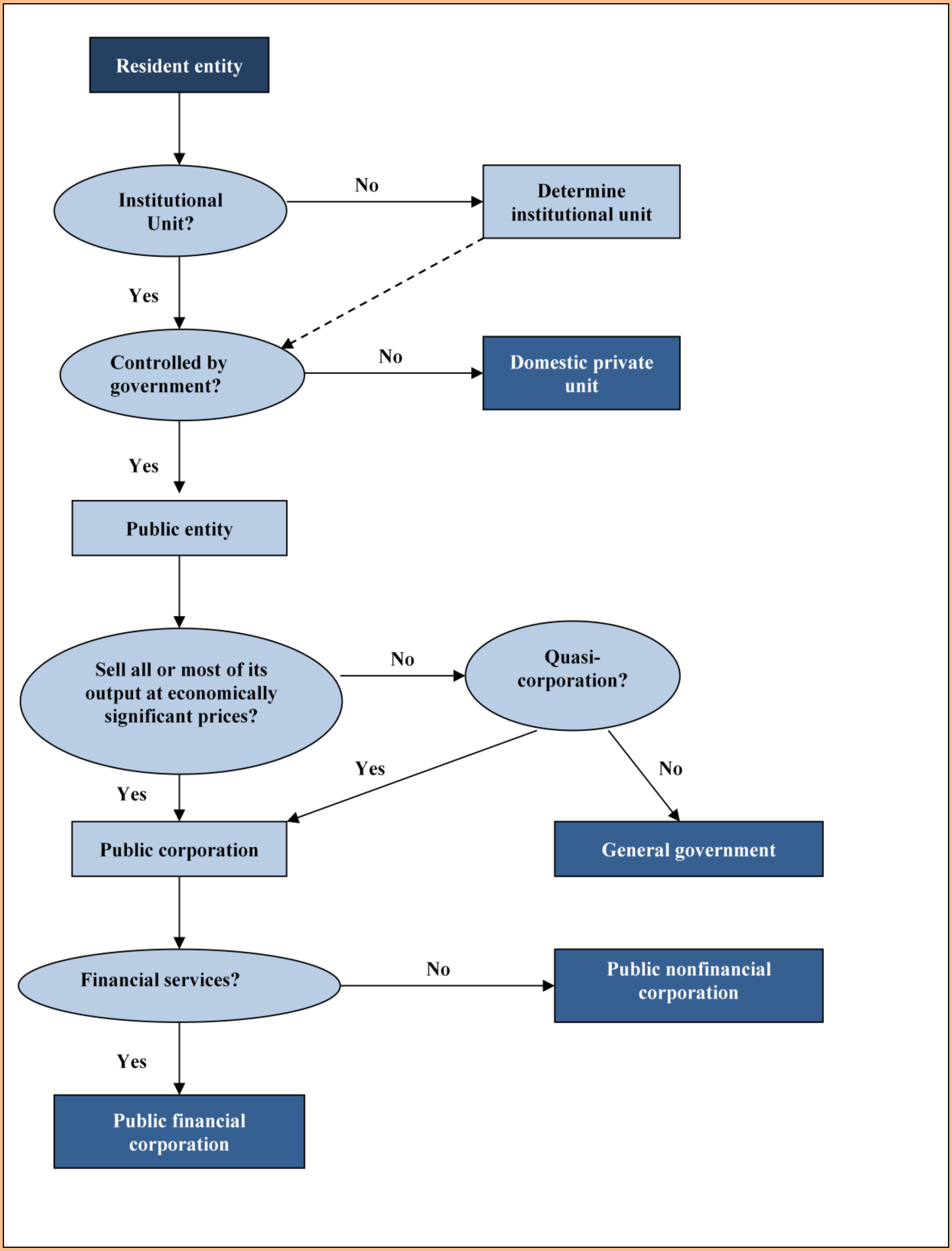



*** Includes the central bank.**

## E. Decision tree for Sectoring Public Entities

26. The decision tree presented in Figure 3 is intended to facilitate the sectoring of government and public entities. The first step is to determine whether the entity is domestic or not by using the residency criterion, since fiscal statistics are only compiled for resident units. The second step is to determine whether the entity meets the criteria to be an institutional unit, if it does not then the institutional unit it belongs to needs to be determined. The third step is to determine whether the institutional unit is a public entity or not. The fourth step is to determine whether the institutional unit sells all or most of its output at economically significant prices. Resident institutional units that are public and are nonmarket producers, belong to the general government sector. Resident institutional units that are public and are market producers, belong to the public nonfinancial or financial corporations subsectors.

**Figure 3. Decision Tree for Sectoring Public Entities**



27. Once the general government (public) units have been identified they should be further assigned to subsectors. For general government units, first they should be assigned to a level of government, central, state or local (or social security funds). Again, the notion of control is the determining factor. Then, they should be classified as part of the budgetary government subsector, extra-budgetary units subsector, or social security funds subsector (in case it is not classified as a separate subsector), using the criteria presented above. As previously indicated, each level of government may have these three subsectors, or the social security funds may be treated as a separate subsector of the general government sector. For public corporations, they must be assigned to the public nonfinancial corporations or the public financial corporations subsectors. See Chapter 6 for further discussion and illustration of the institutional structure of government.

28. Let us demonstrate the use of the decision tree by applying it to the classification of an entity called National Statistical Office. We have the following information about this entity. It was established by the 2004 Statistics Act as an autonomous agency, which has as its functions to compile, analyze, and publish for public purposes statistical information. Its reports and data cover all aspects of the national economy and social conditions of the country. The Chief Statistician is appointed by the President. The activities of the agency are mainly financed by appropriations from the government budget, though it also generates some revenue from the sale of its publications.

29. From the information provided we can infer that the entity is resident, an institutional unit, controlled by government, and a nonmarket producer. Therefore, it should be classified as a general government unit, and most likely as a budgetary central government unit. One could argue that more information is needed to ensure proper classification, and this is often the case when sectoring entities. In general, whenever there is doubt, additional information should be obtained if possible to classify properly all entities.

30. In practice there will always be some entities that are difficult to classify. Two complex issues that will make classification difficult in some cases are: (a) determining control of an entity, and (b) the borderline between market and nonmarket producers. Government control over entities can be exerted in a variety of ways as indicated in the footnotes above. A single factor may be sufficient to establish control in some cases, but in other cases it may be a combination of factors. Typical examples of entities that are difficult to classify because government control may not be evident in some cases are extra-budgetary entities and NPIs, and sometimes corporations.

31. Once an entity has been determined to be a public institutional unit, the next step is to establish whether it is a market producer or a nonmarket producer. As indicated above, if the entity sells most or all of its output at economically significant prices it is a market producer, and is classified as a public corporation or quasi-corporation. If the entity doesn't sell its output at economically significant prices it is a nonmarket producer, and is classified as a government unit. The difficulty arises when the entity sells part of its output at economically

significant prices. In this case, depending on the criteria used, the entity may be classified as a corporation or quasi-corporation, and included in the nonfinancial or the financial corporations sector; or it may be classified as a government unit.[18] See paragraph 13 above.

32. A third type of entities that may be difficult to classify relates to special purpose entities (also known as special purpose vehicles or simply SPVs). These entities are set up for financial convenience to carry out activities directly related to a specific purpose, and often with the intention of excluding these activities from the government accounts. Resident SPEs that function only in a passive manner relative to general government and that carry out fiscal activities are not regarded as separate institutional units, and are treated as part of general government regardless of their legal status. If SPEs act independently, acquire assets and incur liabilities on their own behalf, accepting the associated risk, they are treated as separate institutional units and are classified to sector and industry according to their principal activity. Nonresident SPEs are always classified as separate institutional units in the economy where they are established.

33. For additional information on the topic of institutional coverage and sectoring see:

- *2008 SNA*, Chapter 4, Institutional Units and Sectors, and Chapter 22, The General Government and Public Sectors.
- IMF, *GFSM 2001*, Chapter 2, Coverage of the GFS System.
- IMF, *GFSM 2001 Companion Material*, Coverage and Sectorization of the Public Sector.
- IMF, *BPM 6*, Chapter 4, Economic territory, Units, Institutional Sectors, and Residence, and Appendix 3, Regional Arrangements: Currency Unions, Economic Unions, and Other Regional Statements.
- IMF, *The System of Macroeconomic Accounts Statistics: An Overview*, Pamphlet Series No. 56.

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[18] The European Union (EU) uses a specific prescriptive numerical relationship between the value of output and the production costs to determine whether an entity charges economically significant prices or not. See Section I.2.4 of the ESA95 Manual on Government Deficit and Debt, available at: http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-RA-09-017/EN/KS-RA-09-017-EN.PDF.

# CHAPTER 3. FLOWS, STOCKS, AND ACCOUNTING RULES

*This chapter describes the flows and stocks recorded in the GFS system, and the accounting rules most relevant to compiling fiscal statistics.*

## A. Flows and Stocks

34. The GFS system records all flows and stocks associated with general government (public) units expressed in monetary terms.[19] Flows refer to economic actions engaged in by institutional units and other events affecting the economic status of units that occur within an accounting period, which create, transform, exchange, transfer, or extinguish economic value. Flows involve changes in the volume, value, or composition of an institutional unit's assets, liabilities, and net worth. All flows are classified as transactions or other economic flows. Stocks are the cumulative value, at a given point in time, of all flows affecting a certain asset or liability since it was first acquired.

### Transactions

35. Transactions are in most cases actions undertaken by mutual agreement or under law between institutional units.[20] Transactions always involve an exchange or a transfer of economic value. A transaction is an exchange when one unit provides a good, service, asset, or labor to a second unit and receives equal value in return. A transaction is a transfer if no value is received in return. In many cases, transactions are a combination of an exchange and a transfer; these should be separated into two transactions, one an exchange and the other a transfer.

36. All transactions can also be classified as either monetary or nonmonetary. A monetary transaction is one in which a unit makes a payment (receives a payment) or incurs a liability (receives an asset) with another unit, stated in units of currency. All other transactions are nonmonetary. Examples of nonmonetary transactions are barter, in-kind payments, and debt restructuring. All nonmonetary transactions need to be expressed in monetary terms to record them in the GFS system. Market value or the best estimate of market value should be used for this purpose.

37. Some transactions are not recorded in the GFS system in the form in which they appear to take place, but instead are modified to bring out the underlying economic events more clearly. Rerouting, partitioning, and reassignment are three such modifications. Rerouting is required when a unit that is a party to a transaction does not appear in the actual accounting records because of administrative arrangements. The most important case in the

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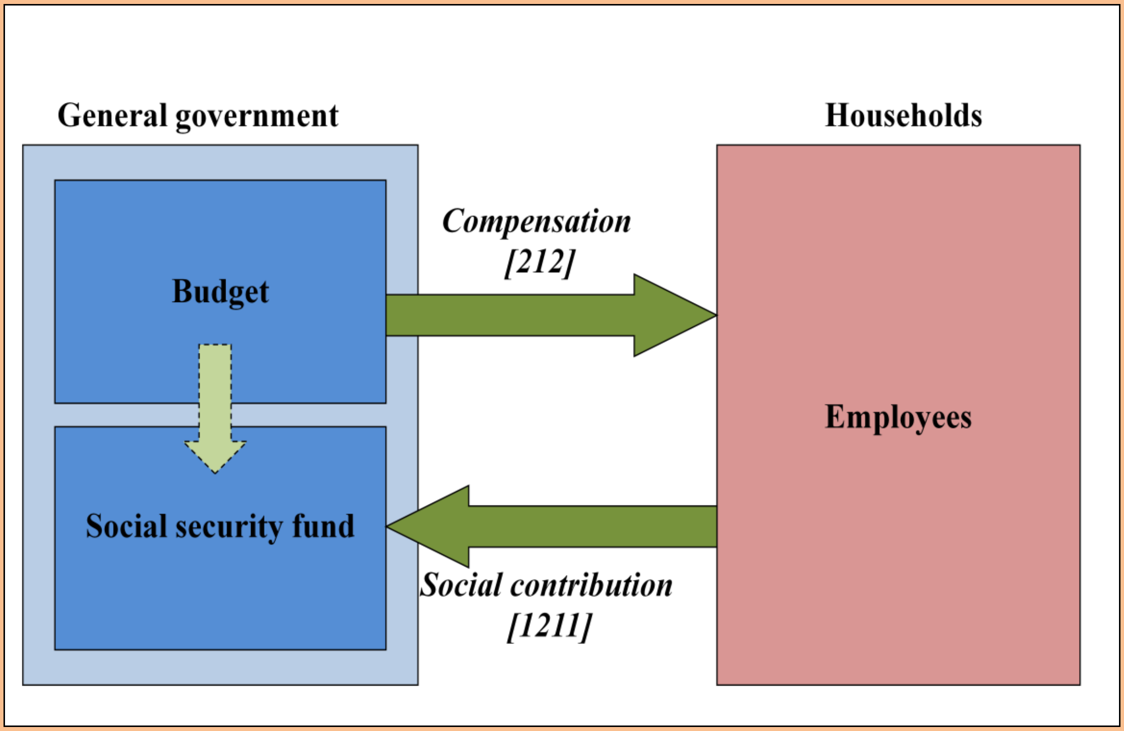
[19] The term "general government (public) unit" is used throughout the text for convenience to refer to general government sector or public sector institutional units, as applicable.

[20] In a few cases, actions that involve a single institutional unit are analytically useful to treat as transactions, such as the consumption of fixed capital.

GFS system concerns government contributions to social security on behalf of its employees, which are normally channeled directly by the government to the social security fund and may be so recorded. In this case, it is necessary to reroute the contributions, so that the government appears to pay its employees, who then are deemed to make the contributions directly to the social security fund. See Figure 4.

**Figure 4. Compensation of Employees – Rerouting of Social Contributions**




38. Partitioning is required when a transaction is actually a combination of two transactions, as mentioned above. A typical case is when transactions are not recorded at market value, such as the acquisition or disposal of assets and liabilities at below or above market prices. For example, governments may make loans at below market interest rates, or may acquire agricultural products at above market prices. In these cases, the combined transaction should be divided into its component transactions. The acquisition or disposal should be recorded at market prices, and any difference with the actual price treated as a transfer.

39. Reassignment is required when a unit acts as agent for another unit. The most important case in the GFS system concerns tax collections, where one unit collects taxes and transfers them to another unit. The tax collection should be assigned to the unit that exercises the authority to impose the tax, and has final discretion to set and vary the rate of the tax.

### Other economic flows

40. Other economic flows refer to changes in the value or volume of an institutional unit's assets and liabilities, which are not the result of transactions. Other economic flows always involve the creation, transformation, or extinction of economic value. Value changes are described as holding gains and losses, and are always the result of price changes. Examples of holding gains and losses are the changes in the value of assets and liabilities resulting from changes in exchange rates, share quotations, or interest rates. Volume changes are described as other changes in the volume of assets. These changes may result from the recognition and de-recognition of economic assets, changes in the quantity or quality of existing assets, changes in sector classification and structure, or changes in the classification of assets and liabilities. Examples of volume changes are the discovery of new mineral or oil deposits, the depletion of these deposits over time, loss of assets due to natural disasters or wars, or a unilateral debt write-off by a creditor. All other economic flows are nonmonetary.

### Stocks

41. Stocks refer to holdings of assets and liabilities at a point in time. The assets recorded in the GFS system are economic assets, defined as entities over which ownership rights can be enforced and from which economic benefits can be derived by holding or using them over time. The benefits that assets provide can take different forms: use in production, property income, or store of value. Assets are classified into two broad groups, nonfinancial assets and financial assets. Nonfinancial assets may be the result of a production process or not, if yes they are referred to as produced assets, if not they are referred to as nonproduced assets. Financial assets are in most cases financial claims of one institutional unit over another institutional unit, which is obligated to make payments for the use of the resources. Liabilities are the counterpart to a financial asset. The difference between the value of total assets and total liabilities is called net worth. The identity total assets equal to total liabilities plus net worth plays a key role in the overall framework of the GFS system, and is further discussed in Chapter 4.

42. In the past, fiscal statistics related to stocks were focused on public debt, usually defined to include only debt securities and loans. Therefore, this was the extent of the coverage of the stocks of assets and liabilities under the *GFSM 1986*. In recent years the importance of assets and other liabilities has been increasingly recognized, as reflected in the widespread use of a balance sheet approach to understanding economic developments. Thus, the *GFSM 2001* covers all assets and liabilities of general government (public) units.

## B. Accounting Rules

### Double entry accounting

43. Accounting rules for recording flows and stocks in the GFS system are designed to ensure that the data generated by the system conform to accepted standards for the compilation of economic statistics.[21] A fundamental characteristic of the GFS system is its use of a double entry accounting system. For every entry in the accounts there is an equal value counter entry. These entries are traditionally referred to as debit and credit. In a double entry system there is always a debit and a credit to record a flow. By convention, a debit is an increase in an asset, a decrease in a liability, or a decrease in net worth. A credit is a decrease in an asset, an increase in a liability, or an increase in net worth. See Figure 5.

**Figure 5. Debits and Credits**

| **Debit** | **Credit** |
|---|---|
| *Asset (+)* | *Asset (-)* |
| *Liability (-)* | *Liability (+)* |
| *Net worth (-)* | *Net worth (+)* |

44. Let us look at an example. A government unit acquires a helicopter and wants to record the acquisition. The recording entries of three options, representing different ways in which the helicopter may be acquired, are illustrated below using generic terms for the classification items.[22] In all cases we debit nonfinancial assets to record the increase in the assets, while the counter entry varies according to the way in which the asset is acquired. If the acquisition is paid in cash, then we credit cash (decrease in an asset); if the acquisition is financed by an external loan, then we credit external loans (increase in a liability); and if the acquisition is the result of a grant from a foreign country, then we credit grants from foreign countries (increase in net worth, revenue). See Example 3.01 below.

[21] The accounting rules of the GFS system are the same as those of the *2008 SNA*, except for consolidation.

[22] The precise GFS terms will be introduced in Chapter 5 and examples of their usage provided in Chapter 10.

**Example 3.01: A government unit acquires a helicopter for Z£3,500 and wants to record the acquisition.**

| Descriptor | Debit | Credit |
|---|---|---|
| **If the acquisition is paid in cash:** | | |
| Nonfinancial assets (machinery and equipment) | 3,500 | |
| Cash | | 3,500 |
| **If the acquisition is financed by a loan:** | | |
| Nonfinancial assets (machinery and equipment) | 3,500 | |
| External loans | | 3,500 |
| **If the acquisition is actually a grant from a foreign country:** | | |
| Nonfinancial assets (machinery and equipment) | 3,500 | |
| Grants from foreign governments | | 3,500 |

45. The use of a double entry accounting system ensures that the identity total assets equal to total liabilities plus net worth is correctly maintained. Countries that do not use double entry accounting have difficulty maintaining the identity. They also have difficulty reconciling revenues and expenses with financing, which results in statistical discrepancies. This point is illustrated in the Country Z example presented in Chapter 8. The recording of transactions, other economic flows, and stocks are illustrated with many examples in Chapters 10 and 11.

**Time of recording of flows**

46. When should flows be recorded? There are several options that can be used to determine the time of recording of a flow. On a cash basis a flow is recorded when the associated cash inflow or outflow takes place, and nonmonetary flows are usually not recorded. On an accrual basis a flow is recorded in principle when economic value is created, transformed, exchanged, transferred, or extinguished. In practice, a flow can only be recorded when information about the event taking place becomes available. Other bases, such as due for payment basis and commitment basis, would record flows at some point between the cash and the accrual basis. Both the cash and the accrual basis of recording provide useful information for fiscal analysis, and the *GFSM 2001* recommends that both be used.

47. The *GFSM 2001* uses both a cash basis and an accrual basis of recording, and therefore covers all monetary and nonmonetary flows; while the *GFSM 1986* uses only a cash basis of recording, and therefore only covers monetary transactions. Implementation of a full accrual based system is likely to be difficult, costly, and require considerable time. However, many of the benefits of using an accrual based system can be obtained by introducing relatively simple adjustments to a cash based system (see Chapter 13).

## Valuation

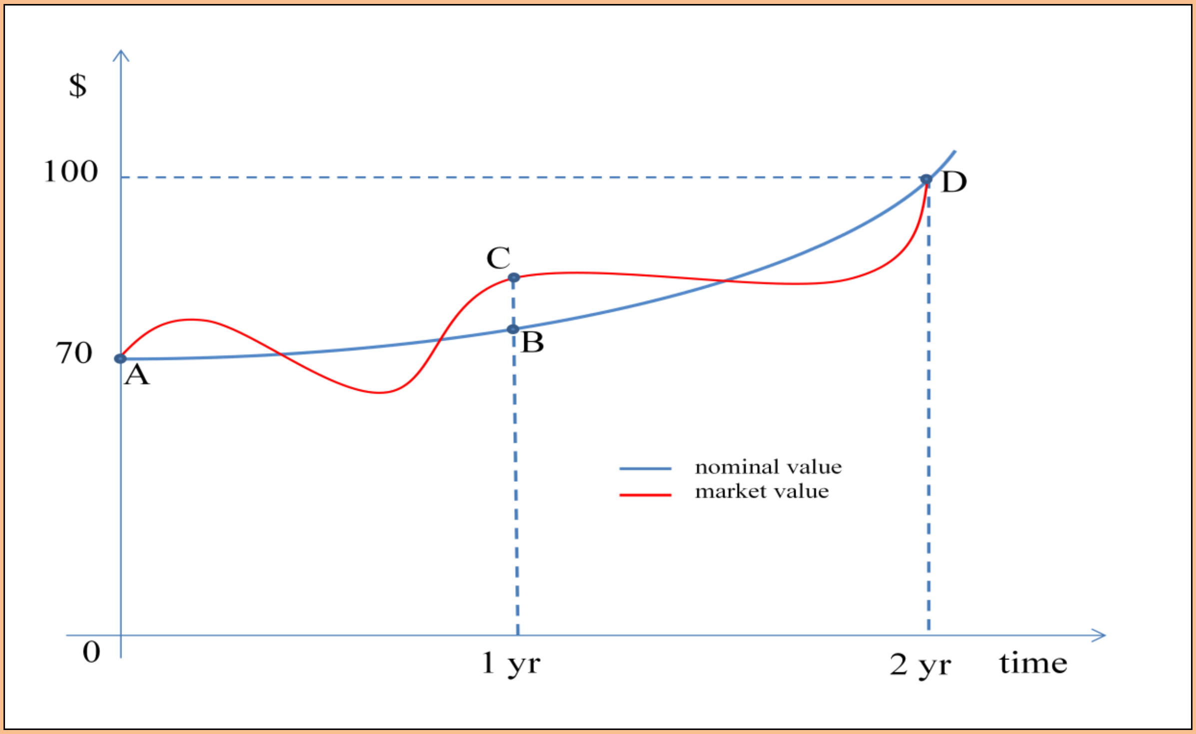
48. The GFS system recommends that all flows and stocks be valued at current market prices. Flows should be valued at the prices current on the dates recorded, and stocks should be valued at the prices current on the balance sheet date. As a practical matter, monetary flows can be recorded at their actual value, because that value is presumed to be the current market value. Current market values of stocks are available for assets and liabilities that are traded in active markets, most commonly certain commodities and financial assets (debt securities, equity and investment fund shares, and financial derivatives).

49. Current market values for many stocks and for nonmonetary transactions are not available and must be estimated. Some ways to obtain an approximation to a market value for an asset are to use: the market price of a similar item, or the market value of the item new adjusted for consumption of fixed capital, or the discounted value of expected future returns, or the cost of production, or the original acquisition cost adjusted for all relevant changes (e.g., price changes, consumption of fixed capital) since it was acquired. The best approximation for each asset should be used. Valuation is a complex issue in certain cases, particularly related to nonfinancial assets, and care must be taken to select the best valuation method for each type of asset. Valuation rules can be developed over time.

50. Financial assets and liabilities not traded in active markets are usually valued at nominal values, as a proxy for market values. The nominal value reflects the value of an asset (liability) at a given point in time, which can be calculated based on the terms of the asset (issue price, maturity, interest rate). It represents the amount the debtor owes the creditor at that moment, which comprises the outstanding principal and accrued interest. Governments also find it frequently useful to record the face value of financial assets and liabilities. The face value is the actual amount to be received or paid upon maturity, and is often printed on the instrument itself. The nominal and face value of financial assets and liabilities are known at any given point in time, while the market value is a reflection of market conditions at that time, and is unpredictable beforehand.

51. Let us look at an example to illustrate the relationship between these different values. Figure 6 shows the case of a 2-year government bond, with a face value of 100, issued at a discount of 30. At time 0 we see that the issue price is 70 (point A), which is both the market and nominal value at that time, and is the amount actually received by the government. The face value is 100 and remains unchanged throughout the life of the bond, and is the amount the government must repay when the bond matures. At time 1 we see that the market value (point C) and the nominal value (point B) differ; while at time 2 (point D), upon maturity of the bond, the market value, the nominal value, and the face value are all the same.

**Figure 6. Market Value, Nominal Value, and Face Value**




52. We can see that each type of value provides useful information. The market value tells you the value at which you can buy or sell the asset (liability) at a given point in time. The nominal value tells you the value according to the original terms (interest maturity) of the instrument at that point in time, and the face value tells you the value to be received (paid) upon maturity.

53. Flows expressed in a foreign currency should be converted to domestic currency using the rate prevailing when the flow takes place or at the point in time to which the balance sheet applies. The midpoint between the buying and selling rate should preferably be used. In many cases, the central bank publishes daily exchange rates that are to be used by government (public) units to record transactions.

**Netting of flows and stocks**

54. Many categories of flows and stocks can be presented on a gross or net basis. The choice depends on the category of flows or stocks, the nature of the items that might be subtracted to obtain the net value, and the analytic utility of the gross and net values. Revenue categories are presented gross of expense categories for the same or related category, and likewise for expense categories. In particular, interest revenue and interest expense are both presented gross. Revenue categories are presented net of refunds of the relevant revenue, and expense categories are presented net of inflows of the same expense arising from erroneous or unauthorized transactions.

55. Acquisitions and disposals of nonfinancial assets other than inventories are presented gross, while changes in each type of inventory are presented net. Transactions in financial assets and liabilities are presented net for each instrument, but the holdings of assets and liabilities of the same instrument are presented gross (no netting across assets and liabilities). For example, the disbursements and repayments of loans held as assets should be netted, and the disbursements and repayments of loans held as liabilities should also be netted. However, loans can be an asset or a liability of an institutional unit, and units often hold this instrument in their balance sheets as both debtors and creditors. The holding of loans as assets and as liabilities should be recorded and shown separately. Other economic flows are presented net.

### Contingencies

56. Contingencies are potential events that may affect the financial position or performance of government, if and when they occur. Contingencies are not considered to be financial assets or liabilities until the event takes place, and therefore are not recorded in the GFS system until that time.[23] However, it is important to collect information on potentially significant contingencies (e.g., government debt guarantees) and present them as a memorandum item in the relevant tables. Recent crises have illustrated the large impact contingencies can have on a country's fiscal position, thereby highlighting the relevance of good information on contingencies for assessing macroeconomic conditions.

### Consolidation

57. Consolidation is a method of presenting statistics for a set of units as if they constituted a single unit. In the GFS system, the data for all sectors (central government sector, general government sector, nonfinancial public sector, public sector) should be presented on a consolidated basis. Consolidation involves the elimination of all significant transactions and debtor-creditor relationships that occur among the units being consolidated (units within a given subsector or sector). This is the only significant accounting rule that differs between the *GFSM 2001* and the *2008 SNA*, where statistics are presented on an unconsolidated manner. Consolidation is discussed in detail in Chapter 9.

### Common sense rules

58. The compilation of fiscal statistics in accordance with the guidelines of the *GFSM 2001* relies in practice to a significant extent on two common sense rules: consistency and cost/benefit. The consistency rule states that in cases where more than one option exists and the information necessary to clearly select one option over other options is not available, agreement should be reached on one option and thereafter such option should always be selected. For example, if it is not clear whether a given institutional unit is a quasi-

[23] The *2008 SNA* establishes that for standardized guarantees a debt liability be recorded, based on the default rate of a pool of similar guarantees. The value of the liability recorded is the expected level of claims under current guarantees minus any expected recoveries.

corporation or not, agreement should be reached to treat it as one (or not) and all relevant parties should treat that unit in the same manner. Another example is the determination of whether a given fee is actually a tax. Again, if the correct option is unclear, agreement should be reached to always treat it a certain way by all parties. Of course, if the information necessary to clearly select one option over other options eventually becomes available it should be used, and any resulting changes reflected in historical series to the extent possible.

59. The cost/benefit rule states that in cases where the cost of obtaining certain information exceeds the resulting benefits, the compiler should not incur the cost. Resources are limited and therefore must be used in the most effective manner possible. For example, if the cost of collecting revenue, expense, and financing data from all local governments on a frequent basis is particularly high, then information could only be collected from the larger local governments, which are likely to account for a high proportion of the total. Another example is the valuation of nonfinancial assets at market prices. It may be costly to value existing infrastructure assets at market prices. Historical or nominal prices may be the best option for now. Establishing priorities and setting timetables facilitates the application of this rule. Nevertheless, application of the cost/benefit rule ultimately involves, of course, the use of judgment by the compiler and his or her supervisors to determine whether the benefits are worth the cost in specific situations.

60. The application of these rules should be undertaken in a transparent manner. The decisions taken should be documented, and the users of the data should be informed, for example through footnotes or metadata posted on websites.

61. For additional information on the topic of flows, stocks, and accounting rules see:

- *2008 SNA*, Chapter 3, Flows and Accounting Rules.
- IMF, *GFSM 2001*, Chapter 3, Flows, Stocks, and Accounting Rules.
- IMF, *BPM 6*, Chapter 3, Accounting Principles.

## CHAPTER 4. OVERVIEW OF THE GFS FRAMEWORK AND CLASSIFICATION SYSTEM

*This chapter describes the financial statements underlying the overall framework of the GFSM 2001, presents an overview of the GFS classification and coding system, and identifies the main differences between the GFSM 1986 and the GFSM 2001 classification systems.*

### A. Overall Framework

62. The overall framework of the *GFSM 2001* consists of a set of four interrelated financial statements that integrate flows and stocks, and that use net worth as a key concept to assess the impact of economic actions that involve general government (public) units, and the sustainability of fiscal policy. See Figure 7. Three of the statements can be combined to demonstrate that all changes in stocks result from flows. These are the: Statement of Government Operations, Statement of Other Economic Flows, and Balance Sheet. The fourth statement is the Statement of Sources and Uses of Cash, used to provide key information on liquidity. Net worth is defined as total nonfinancial and financial assets less total liabilities.

63. The GFS system uses aggregates and derived measures called balancing items to highlight information of particular relevance for fiscal analysis. Aggregates are composite values that summarize a particular category or group of categories used in the GFS classification system. For example, taxes, revenues, compensation of employees, expenses, fixed assets, transactions in nonfinancial assets, loans, domestic financial assets, etc. Balancing items are accounting constructs obtained by addition and/or subtraction of aggregates. For example, revenue minus expense gives you the net operating balance. We will identify the key balancing items used in the GFS system when discussing each financial statement below.

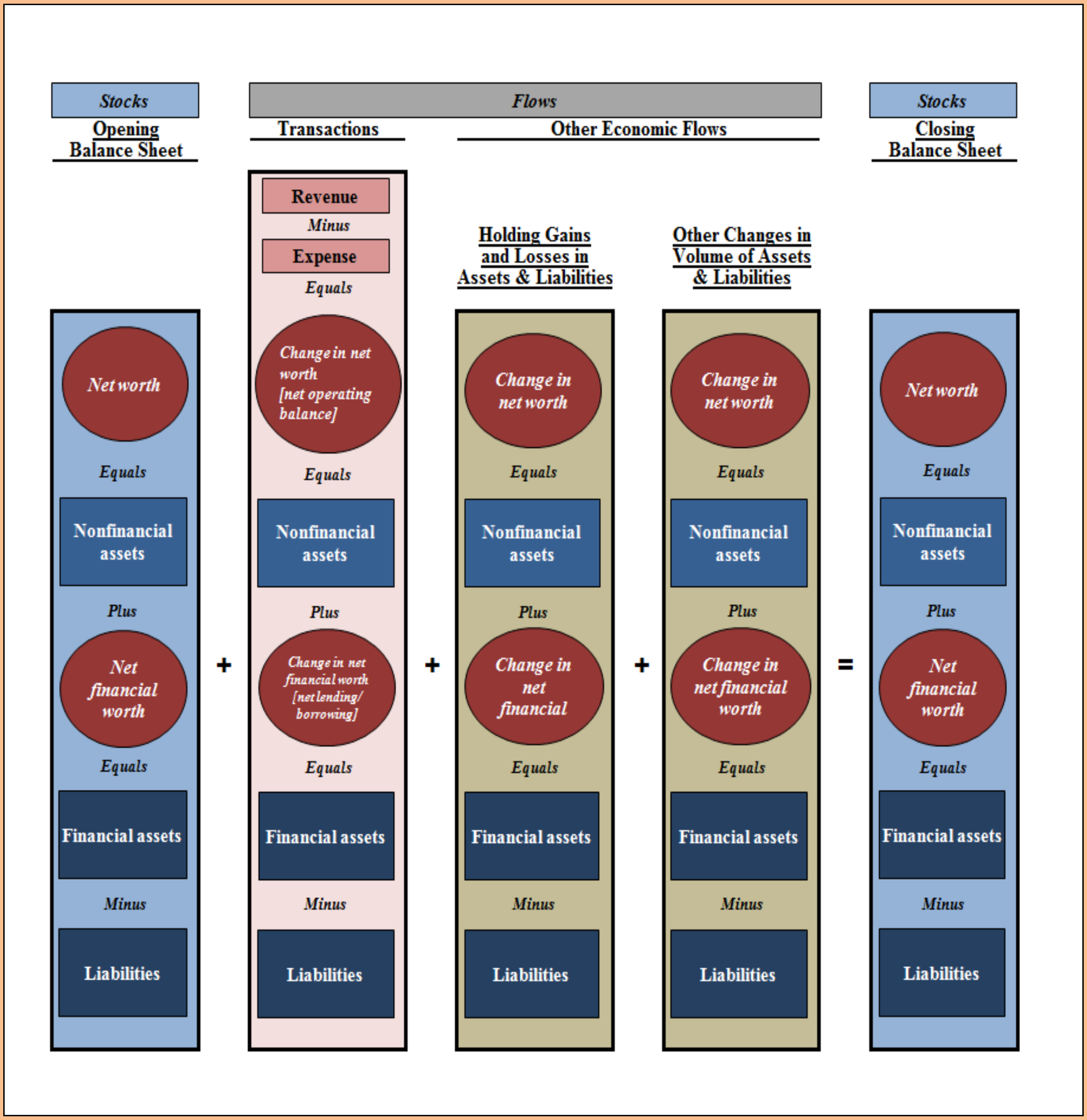
#### Statement of sources and uses of cash

64. The Statement of Sources and Uses of Cash (akin to a cash flow statement) is a summary of all cash transactions involving general government (public) units during an accounting period. This is the summary statement of transactions that should be used by developing countries that compile fiscal statistics on a cash basis.

65. The Statement of Sources and Uses of Cash is shown in Table 1. It presents the main categories of revenue, expense, purchase and sale of nonfinancial assets by main types of asset, and net acquisition of financial assets and liabilities by residency. It presents the same categories as the statement of government operations, except that the net acquisition of financial assets excludes cash. The two main balancing items derived in this statement are the *cash surplus/deficit* and the *net change in the stock of cash*. The cash surplus/deficit is a summary measure of the cash generated by the government's operating activities and investment in nonfinancial assets, while the net change in the stock of cash shows the change in the cash balances of the government during a given period. The cash surplus/deficit is also equal to the net result of transactions in financial assets and liabilities. Both balancing items are useful indicators for assessing the liquidity of the government. The cash surplus/deficit is

similar to the overall deficit/surplus of the *GFSM 1986*, if adjusted to account for lending for policy purposes.

**Figure 7. The *GFSM 2001* Overall Framework**



## Statement of government operations

66. The Statement of Government Operations (akin to an income statement) is a summary of all cash and noncash transactions involving general government (public) units during an accounting period. The GFS system separates these transactions by whether they change the level or just the composition of net worth. It defines all transactions that increase net worth as revenue, and all transactions that decrease net worth as expense. Transactions that change the composition of net worth are transactions in nonfinancial assets or transactions in financial assets and liabilities, depending on the type of asset involved in the transaction. This statement should be used by developing countries once they begin to include nonmonetary transactions in their fiscal statistics, and is the statement used by countries that compile statistics on an accrual basis.

67. The Statement of Government Operations is shown in Table 2. It presents the main categories of revenue, expense, net acquisition of nonfinancial assets by main types of asset, and net acquisition of financial assets and liabilities by residency. Two important analytic balances are derived. First, revenue less expense equals the *net operating balance*, or more relevant operationally, revenue less expense (excluding consumption of fixed capital) equals the *gross operating balance*.[24] The net operating balance is a summary measure of the ongoing sustainability of government operations. Second, the net operating balance less the net acquisition of nonfinancial assets equals *net lending/borrowing*. Net lending/borrowing is also equal to the net result of transactions in financial assets and liabilities (i.e., financing). Thus, net lending/borrowing can be calculated from “above” or “below” the line. Net lending/borrowing is a summary measure of the financial resources the government puts at the disposal of other sectors (or utilizes from other sectors).

68. Two comments on net lending/borrowing. First, this balancing item appears to be similar to the overall deficit/surplus of the *GFSM 1986*. However, there are two major differences: (a) net lending/borrowing does not include any financing transactions, whereas the overall deficit/surplus includes lending for policy purposes; and (b) net lending/borrowing is an accrual concept, while the overall deficit/surplus is a cash concept. Second, the value of net lending/borrowing is unaffected by the consumption of fixed capital, as this item is treated both as an expense and as a deduction from nonfinancial assets.

[24] Consumption of fixed capital is an expense that compilers of national accounts calculate for the general government sector, usually only once a quarter or year. Data for this category are seldom available for subsectors of the general government sector.

## Table 1. Statement of Sources and Uses of Cash

**CASH FLOWS FROM OPERATING ACTIVITIES:**

**A. CASH RECEIPTS FROM OPERATING ACTIVITIES**
- Taxes
- Social contributions
- Grants
- Other receipts

**B. 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 (A-B)***

**C. CASH FLOWS FROM INVESTMENTS IN NONFINANCIAL ASSETS:**

**PURCHASES OF NONFINANCIAL ASSETS**
- Fixed assets
- Inventories
- Valuables
- Non-produced assets

**SALES OF NONFINANCIAL ASSETS**
- Fixed assets
- Inventories
- Valuables
- Non-produced assets

***Net cash outflow from investments in nonfinancial assets***
***CASH SURPLUS/DEFICIT (A-B-C)***[1]

**CASH FLOWS FROM FINANCING ACTIVITIES:**

**D. NET ACQUISITION OF FINANCIAL ASSETS OTHER THAN CASH**
- Domestic
- External

**E. NET INCURRENCE OF LIABILITIES**
- Domestic
- External

***Net cash inflow from financing activities (E-D)***

***NET CHANGE IN THE STOCK OF CASH (A-B-C-D+E)***[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.

## Table 2. Statement of Government Operations

**TRANSACTIONS AFFECTING NET WORTH:**

**A. REVENUE**
- Taxes
- Social contributions [GFS]
- Grants
- Other revenue

**B. 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 (A-B)***[1]

**TRANSACTIONS IN NONFINANCIAL ASSETS:**

**C. NET ACQUISITION OF NONFINANCIAL ASSETS**[2]
- Fixed assets
- Change in inventories
- Valuables
- Non-produced assets

***NET LENDING/BORROWING* [GFS] *(A-B-C=D-E)***[3]

**TRANSACTIONS IN FINANCIAL ASSETS AND LIABILITIES (FINANCING):**

**D. NET ACQUISITION OF FINANCIAL ASSETS**
- Domestic
- External

**E. NET INCURRENCE OF LIABILITIES**
- Domestic
- External

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.

**Statement of other economic flows**

69. The Statement of Other Economic Flows is a summary of all flows that are not transactions that affect the net worth of general government (public) units during an accounting period. These flows are of two types, as indicated in Chapter 3, one related to price changes called holding gains and losses, and the other related to volume changes called other changes in the volume of assets. Holding gains and losses affect nonfinancial and financial assets, while other changes in the volume of assets are generally associated with nonfinancial assets.

70. The Statement of Other Economic Flows is shown in Table 3. In line with the structure of the balance sheet, it presents the holding gains and losses, and other changes in the volume of assets and liabilities, for nonfinancial assets, financial assets, and liabilities. The main balancing item derived in this statement is the *change in net worth resulting from other economic flows*. It is a summary of the impact on the balance sheet of flows other than transactions during an accounting period.

**Table 3. Statement of Other Economic Flows**

**CHANGE IN NET WORTH RESULTING FROM OTHER ECONOMIC FLOWS (A+B+C)**

**A. NONFINANCIAL ASSETS**
- A.1. Holding gains
- A.2 Other volume changes

**B. FINANCIAL ASSETS**
- B.1. Holding gains
- B.2. Other volume changes

**C. LIABILITIES**
- C.1. Holding gains
- C.2.Other volume changes

**Balance sheet**

71. The Balance Sheet records the stock of nonfinancial assets, financial assets, and liabilities of the general government (public) sector at the end of an accounting period. The changes in the balance sheets from the beginning to the end of an accounting period are explained by the flows (transactions and other economic flows) presented in the previous statements. Since all other economic flows are nonmonetary, it is only possible to integrate flows and stocks in the GFS system when fiscal statistics are compiled on an accrual basis.

72. The Balance Sheet is shown in Table 4. It presents the main categories of nonfinancial assets, financial assets and liabilities, by type of asset and instrument. The two main balancing items derived in this statement are *net financial worth* and *net worth*. Net financial worth reflects the difference between financial assets and liabilities, while net worth reflects the difference between total assets and total liabilities. Both balancing items are a measure of the long-term sustainability of government fiscal policy. This statement should be developed over time by developing countries regardless of the basis of recording used, starting with the financial balance sheet, and then gradually adding the information on nonfinancial assets.

73. In the discussion of the Statement of Sources and Uses of Cash and the Statement of Government Operations we stated that two key balancing items, the cash surplus/deficit and the net lending/borrowing, can be calculated using either data for revenues, expenses, and net acquisition of nonfinancial assets (above the line), or using data for financial assets and liabilities (below the line). In practice, however, the result of using one approach or the other is seldom the same. Frequently the data for financial assets and liabilities comes from the monetary accounts compiled by the central bank, and does not match the data for revenues, expenses, and net acquisition of nonfinancial assets compiled by the ministry of finance. Reconciliation of these two sets of data is a common task for GFS technical assistance missions from STA. The main sources of the discrepancy are usually differences in coverage, differences in timing, and errors compiling the data. In Part II we discuss some ways to facilitate consistency between fiscal and monetary statistics.

74. The four financial statements discussed above constitute the core of the *GFSM 2001* overall framework. These statements are complemented by a set of nine detail tables, which provide a breakdown of the major aggregates, and are presented and discussed in Chapter 8. Let us turn now to an overview of the classification and coding system of the *GFSM 2001*.

## Table 4. Balance Sheet

| | Opening balance sheet | Closing balance sheet |
|---|---|---|
| ***NET WORTH (A+B-C)*** | | |
| **A. NONFINANCIAL ASSETS** | | |
| Fixed assets | | |
| Inventories | | |
| Valuables | | |
| Nonproduced assets | | |
| **B. FINANCIAL ASSETS** | | |
| **B.1Domestic** | | |
| Currency and deposits | | |
| Debt securities | | |
| Loans | | |
| Equity and investment fund shares | | |
| Insurance, pension and standardized guarantee schemes | | |
| Financial derivatives and employee stock options | | |
| Other accounts receivable | | |
| **B.2 External** | | |
| Monetary gold and SDRs | | |
| Currency and deposits | | |
| Debt securities | | |
| Loans | | |
| Equity and investment fund shares | | |
| Insurance, pension and standardized guarantee schemes | | |
| Financial derivatives and employee stock options | | |
| Other accounts receivable | | |
| **C. LIABILITIES** | | |
| **C.1 Domestic** | | |
| Currency and deposits | | |
| Debt securities | | |
| Loans | | |
| Equity and investment fund shares (public corporations only) | | |
| Insurance, pension and standardized guarantee schemes | | |
| Financial derivatives and employee stock options | | |
| Other accounts payable | | |
| **C.2 External** | | |
| Special Drawing Rights (SDRs) | | |
| Currency and deposits | | |
| Debt securities | | |
| Loans | | |
| Equity and investment fund shares (public corporations only) | | |
| Insurance, pension and standardized guarantee schemes | | |
| Financial derivatives and employee stock options | | |
| Other accounts payable | | |

## B. Overview of the GFS Classification and Coding System

75. There is a need to systematically record all flows and stocks associated with general government (public) units, and to present this information in an organized and analytically useful manner. As was explained above, flows can be transactions or other economic flows. Transactions can affect the level of net worth (increase it or decrease it) or just change its composition. Other economic flows can be due to price changes or volume changes. Stocks can be nonfinancial assets, financial assets, or liabilities. Financial assets and liabilities can be domestic or foreign, and can be recorded by type of instrument or holder of the instrument. Therefore, we need a classification and coding system that allows us to record and group all these types of flows and stocks. Figure 8 shows the various types of flows and stocks that we need to record and classify in the GFS system, and the first digit(s) of the numeric codes assigned to them.

76. From the figure we can see that at an aggregate level we need the following classifications: (a) revenue, (b) expense by economic classification, (c) transactions in assets and liabilities, (d) holding gains, (e) other volume changes, (f) stocks of assets and liabilities, (g) expense and acquisition of nonfinancial assets by function, (h) financial assets and liabilities by sector, and (i) other economic flows in general. The detailed classifications associated with each of these major aggregate classifications are presented and discussed in the next chapter, while the tables used to present the resulting data are presented and discussed in Chapter 8.

77. To record the individual flows and stocks under each of the major classifications in a systematic manner a coding system is needed. The GFS coding system is organized as follows:

- transactions that increase net worth are called revenue, and have the number 1 as the first digit of their code;

- transactions that decrease net worth are called expense, and have the number 2 as the first digit of their code;

- transactions that change the composition of net worth have the number 3 as the first digit of their code, while the second digit depends on the type of asset or liability; nonfinancial assets begin with 31, financial assets with 32, and liabilities with 33;

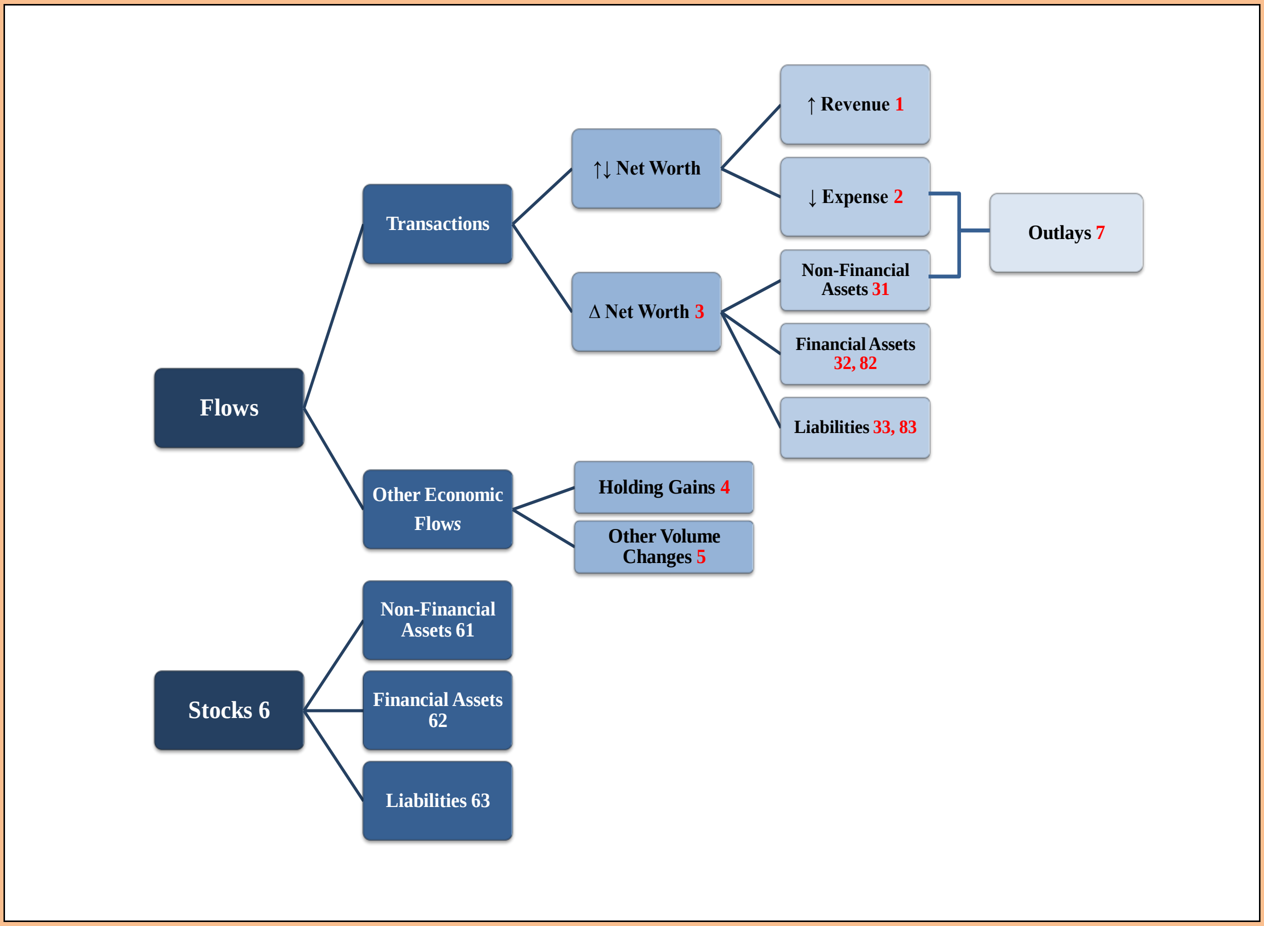
- other economic flows can increase or decrease net worth, if due to price changes have the number 4 as the first digit of their code, and if due to volume changes have the number 5 as the first digit of their code. When it is not possible to differentiate the cause of the other economic flow, the number 9 is used as the first digit of their code;

- stocks have the number 6 as the first digit of their code, while the second digit depends again on the type of asset or liability; nonfinancial assets begin with 61, financial assets with 62, and liabilities with 63;

- expenses and the net acquisition of nonfinancial assets can also be classified by function of government, and then have the number 7 as the first digit of their code;

- financial assets and liabilities can also be classified by holder, and then have the number 8 as the first digit of their code.

**Figure 8. The GFS Coding System for Flows and Stocks**




78. All transactions in assets and liabilities, other economic flows, and stocks of assets and liabilities refer to types of assets. Therefore, for ease of reference, each type of asset and liability has been assigned a unique code. The first digit of its code varies depending on the type of flow or stock being recorded. For nonfinancial assets the other three digits are always the same; while for financial assets (liabilities) the second digit varies depending on whether the instrument is held as an asset or as a liability, the third digit of the code varies depending on the residency of the holder (issuer), and the fourth digit identifies the type of instrument. Let us consider an example for a nonfinancial asset and a financial asset. See Example 4.01 below.

79. The first row refers to a nonfinancial asset, land. If the flow is a transaction the first digit will be 3, followed by the asset's unique code (141); therefore the code for transactions involving land is 3141. If the flow is another economic flow the first digit will be 4 or 5 depending on the cause, followed by the asset's unique code; therefore the codes for land will be 4141 or 5141, respectively. Finally, in the case of stocks the first digit will be 6, followed by the asset's unique code; therefore the code for stocks of land is 6141.

80. The second thru fifth rows refer to a financial asset, a bond. The first digit is assigned the same way as for a nonfinancial asset. The second digit will vary depending on whether the instrument is held as an asset or a liability, as illustrated in rows 2 and 3. The third digit will vary depending on whether the instrument is held by a resident or a nonresident, as illustrated in rows four and five. The fourth digit identifies the type of financial instrument (3 for a debt security, such as the bond in the example). Appendix 1 presents all classification codes used in the GFS system.

**Example 4.01: Codes for Assets and Liabilities**

| Descriptor | | | | |
|---|---|---|---|---|
| Non-produced assets (land) | 3141 | 4141 | 5141 | 6141 |
| Debt securities<br>(bond held as domestic asset) | 3213 | 4213 | 5213 | 6213 |
| Debt securities<br>(bond held as domestic liability) | 3313 | 4313 | 5313 | 6313 |
| Debt securities<br>(bond held as external asset) | 3223 | 4223 | 5223 | 6223 |
| Debt securities<br>(bond held as external liability) | 3323 | 4323 | 5323 | 6323 |

81. The coding system previously described applies to all subsectors and sectors, and is the same regardless of the basis of recording (cash or accrual). In practice, it may often be convenient to use more detailed classifications to record data, both to differentiate between different bases of recording, and to record information at a more disaggregated level. The GFS system is designed to allow compilers to easily expand the codes to accommodate this need. See example for rent in the discussion on revenues from natural resources in para. 305.

## C. Main Differences Between the *GFSM 1986* and the *GFSM 2001* Classification Systems

82. The *GFSM 1986* classification system, currently in use by many countries, only records cash transactions and in most cases just two types of debt liabilities (debt securities and loans). The relationship between the *GFSM 2001* and the *GFSM 1986* classification systems of transactions, at an aggregate level, is illustrated in Table 5. As can be seen, there is a direct and fairly straight forward relation between the two.[25] The main differences in terms of the major categories are that:

(a) sales and acquisitions of nonfinancial assets are regarded as revenue and expenditure, respectively, by the *GFSM 1986* system; whereas in the *GFSM 2001* system they compose a separate category, transactions in nonfinancial assets.

(b) lending minus repayments, regarded as a component of the economic classification of expenditure by the *GFSM 1986* system, is included under net acquisition of financial assets in the *GFSM 2001* system.

(c) borrowing in the *GFSM 1986* system becomes net incurrence of liabilities in the *GFSM 2001* system, and changes in cash balances in the *GFSM 1986* system becomes net acquisition of financial assets in the *GFSM 2001* system.

(d) in the *GFSM 1986* system, an increase in financial assets classified as financing is shown with a negative sign and a decrease with a positive sign. In the *GFSM 2001* presentation, an increase in both financial assets and liabilities is shown with a positive sign and a decrease with a negative sign.

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[25] See *Classification of the GFSM 1986 Data to the GFSM 2001 Framework* in Companion Material for a discussion of the relationship between every single item in the *GFSM 1986* classification system and the *GFSM 2001* classification system.

**Table 5. Main Classification Differences between the *GFSM 1986* and the *GFSM 2001***

| From *GFSM 1986* | | | To *GFSM 2001* |
|---|---|---|---|
| Total revenue & grants<br>o/w: Sales of fixed assets | 62.6<br>0.3 | 62.3 | Revenue |
| Total expenditure and lending minus repayments | 78.5 | 77.5 | Expenditure |
| Current expenditure | 68.8 | 72.7 | Expense |
| Capital expenditure | 9.0 | 4.8 | Net acquisition of nonfinancial assets |
| Capital transfers | 3.9 | | |
| Purchases of fixed assets | 5.1 | | |
| Lending minus repayments | 0.7 | -10.4 | Operating balance |
| Overall balance | -15.9 | -15.2 | Net lending/borrowing |
| Financing | +15.9 | -7.2 | Net acquisition of financial assets |
| Domestic (net) | | -7.2 | Domestic |
| Δ in cash and deposits | 4.4 | 0 | Foreign |
| Domestic borrowing (net) | 2.4 | 8.0 | Net incurrence of liabilities |
| Foreign (net) | 5.6 | 2.4 | Domestic |
| Sale of equity | 3.5 | 5.6 | Foreign |

83. For additional information on the topic of financial statements and GFS classification system see:

- IMF, *GFSM 2001*, Chapter 4, The Analytic Framework, and Appendix 4, Classifications.

- IMF, *GFSM 2001 Companion Material*, Classification of the *GFSM 1986* Data to the *GFSM 2001* Framework.

## CHAPTER 5. CLASSIFICATION OF REVENUE, EXPENSE, ASSETS AND LIABILITIES, AND OTHER ECONOMIC FLOWS

*This chapter describes the classifications used by the GFSM 2001, and discusses difficult issues that arise applying the classifications.*

84. The *GFSM 2001* methodology uses specific definitions of several terms that are commonly used in a more general way. Examples of these terms include taxes, grants, subsidies, loans, financing, and debt. The specific meaning of these and other similar terms is given whenever needed in the guide to ensure proper classification or understanding.

85. Let us turn now to the detailed classifications of the major aggregate classifications listed in the previous chapter. In each case, all the categories and their corresponding GFS codes will be presented, but only the categories that present compilation difficulties will be discussed in detail. The discussion of the classifications covers all flows and stocks, whether they involve cash flows or not.[26] Examples of the recording of typical cash transactions for all major classification categories are presented in Chapter 10, and the GFS classification codes for all items are presented together in Appendix 1.

### A. Revenue

86. Revenue is an increase in net worth resulting from a transaction. The GFS classifies revenue in four major categories: taxes, social contributions, grants, and other revenue. Each of the major categories is further sub-divided into other categories. Taxes are defined as compulsory transfers to government, in cash or in-kind, made by institutional units to government units. Taxes also include any collections of fees out of all proportion to the cost or distribution of a government service provided to the payer.[27] Social contributions can be either compulsory or voluntary payments to government units made by employees, employers on behalf of their employees, self-employed, or non-employed persons on their own behalf, which secure entitlement to social benefits for the contributors, their dependents, or their survivors. Grants are defined as voluntary transfers received by a government unit from either another government unit (domestic or foreign) or from an international organization. Other revenue includes, among other, property income, sales of goods and services, and miscellaneous revenues (other transactions that increase net worth). Table 6 presents all the revenue categories, together with their GFS codes.

[26] Users should consult the *GFSM 2001* for additional information on all GFS classifications.

[27] See discussion in paragraph 108 on this issue.

## Table 6. Classification of Revenue

| | | | |
|---|---|---|---|
| **1** | **Revenue** | **12** | **Social contributions** |
| **1** | **Taxes** | 121 | Social security contributions |
| 111 | Taxes on income, profits, and capital gains | 1211 | Employee contributions |
| 1111 | Payable by individuals | 1212 | Employer contributions |
| 1112 | Payable by corporations and other enterprises | 1213 | Self-employed or nonemployed contributions |
| 1113 | Unallocable | 1214 | Unallocable contributions |
| 112 | Taxes on payroll and workforce | 122 | Other social contributions |
| 113 | Taxes on property | 1221 | Employee contributions |
| 1131 | Recurrent taxes on immovable property | 1222 | Employer contributions |
| 1132 | Recurrent taxes on net wealth | 1223 | Imputed contributions |
| 1133 | Estate, inheritance, and gift taxes | **13** | **Grants** |
| 1134 | Taxes on financial and capital transactions | 131 | From foreign governments |
| 1135 | Other nonrecurrent taxes on property | 1311 | Current |
| 1136 | Other recurrent taxes on property | 1312 | Capital |
| 114 | Taxes on goods and services | 132 | From international organizations |
| 1141 | General taxes on goods and services | 1321 | Current |
| 11411 | Value-added taxes | 1322 | Capital |
| 11412 | Sales taxes | 133 | From other general government units |
| 11413 | Turnover and other general taxes on goods and services | 1331 | Current |
| 1142 | Excises | 1332 | Capital |
| 1143 | Profits of fiscal monopolies | **14** | **Other revenue** |
| 1144 | Taxes on specific services | 141 | Property income |
| 1145 | Taxes on use of goods and on permission to use goods or perform activities | 1411 | Interest |
| 11451 | Motor vehicle taxes | 1412 | Dividends |
| 11452 | Other taxes on use of goods and on permission to use goods or perform activities | 1413 | Withdrawals from income of quasi-corporations |
| 1146 | Other taxes on goods and services | 1414 | Property income attributed to insurance policyholders |
| 115 | Taxes on international trade and transactions | 1415 | Rent |
| 1151 | Customs and other import duties | 142 | Sales of goods and services |
| 1152 | Taxes on exports | 1421 | Sales by market establishments |
| 1153 | Profits of export or import monopolies | 1422 | Administrative fees |
| 1154 | Exchange profits | 1423 | Incidental sales by nonmarket establishments |
| 1155 | Exchange taxes | 1424 | Imputed sales of goods and services |
| 1156 | Other taxes on international trade and transactions | 143 | Fines, penalties, and forfeits |
| 116 | Other taxes | 144 | Voluntary transfers other than grants |
| 1161 | Payable solely by business | 1441 | Current |
| 1162 | Payable by other than business or unidentifiable | 1442 | Capital |
| | | 145 | Miscellaneous and unidentified revenue |

**Taxes**

87. Taxes are classified principally by the base on which the tax is levied, and are grouped into six main categories: (a) taxes on income, profits, and capital gains; (b) taxes on payroll and workforce; (c) taxes on property; (d) taxes on goods and services; (e) taxes on international trade and transactions; and (f) other taxes. Each of these main categories is further sub-divided into other categories.

88. Taxes on income, profits, and capital gains may be levied on actual or estimated income and profits, and on realized or unrealized gains. These taxes are attributed to individuals, or to corporations and other enterprises; or otherwise to unallocable. Income taxes on estates or trusts (other than business trusts) are treated as taxes on individuals, while income taxes on nonprofit organizations and business trusts are treated as taxes on corporations. Taxes on payroll and workforce are collected from employers or the self employed either as a proportion of payroll size or as a fixed amount per person, and are not earmarked for social security schemes.

89. Taxes on property include taxes on the use, ownership, or transfer of wealth. Taxes on property are divided into recurrent taxes on immovable property; recurrent taxes on net wealth; estate, inheritance, and gift taxes; taxes on financial and capital transactions; other non-recurrent taxes on property; and other recurrent taxes on property.

90. Taxes on goods and services include taxes on the production, extraction, sale, transfer, leasing, or delivery of goods and rendering of services. Taxes on goods and services are divided into general taxes on goods and services (value-added taxes, general sales taxes, turnover and other general taxes on goods and services), excises, profits of fiscal monopolies, taxes on specific services, taxes on use of goods and on permission to use goods or perform activities, and other taxes on goods and services.

91. Excises are taxes levied on particular products or a limited range of products, such as alcoholic beverages, tobacco goods, oil and oil derivatives, automobiles and tires, matches, chocolates, etc. Profits of fiscal monopolies cover the part of the profits of fiscal monopolies transferred to the government, except for state lotteries, the profits of which are treated as dividends. The profits transferred are regarded as taxes because they are generated by using the taxing power of government. Taxes on specific services are the counterpart of excises, only applied to services instead of goods. The typical services subject to this type of tax include transport charges, insurance premiums, banking services, entertainment, restaurants, hotels, and advertising charges. Also included are taxes levied on gambling and on lotteries.

92. Taxes on use of goods and on permission to use goods or perform activities include government fees: (a) out of all proportion to the cost of providing the service, (b) where the payer of the levy is not the receiver of the benefit, (c) where no service is provided in return, or (d) where the benefits received by the payer are not in proportion to the payment. This category is divided into motor vehicle taxes and other taxes. Motor vehicle taxes include taxes on the use or permission to use motor vehicles, but not taxes on the ownership of motor

vehicles, which are treated as taxes on property, or tolls for use of infrastructure (roads, bridges, tunnels), which are treated as the sale of a service. Other taxes on goods and services include taxes on the extraction of minerals, fossil fuels, and other exhaustible resources from deposits owned privately or by another government. It also includes any other taxes on goods and services not included in the previous categories.

93. Taxes on international trade and transactions are divided into customs and other import duties, taxes on exports, profits of export or import monopolies, exchange profits, exchange taxes, and other taxes on international trade and transactions. Customs and other import duties, and taxes on exports, cover all levies collected on goods because they are entering (exiting) the country, and on services because they are delivered by nonresidents to residents (residents to nonresidents). They do not include taxes on imports imposed as part of a VAT or other general tax on goods and services, or an excise.

94. Profits of export or import monopolies cover the part of the profits of these monopolies transferred to the government, and are considered taxes for the same reason as the case of fiscal monopolies above. Exchange profits transferred to government are exclusively the result of imposing a margin between buying and selling foreign exchange, in excess of administrative costs. Exchange taxes cover taxes levied on the purchase or sale of foreign exchange. Other taxes on international trade and transactions include taxes on travel abroad, insurance or investment abroad, remittances abroad, and other taxes not included in the previous categories.

95. Other taxes covers revenue from taxes levied predominantly on bases different from those described under the previous headings. Also included is revenue from unidentified taxes, and interest and penalties related to tax payments not identifiable by tax category. This category includes taxes on persons referred to as poll taxes, head taxes, or capitation taxes. It also includes stamp taxes that do not fall exclusively or predominantly on a single class of transactions or activities.

96. An interesting case arises in connection with the classification of Zakat, applied in several Muslim countries. Depending on the specific characteristics of the tax in each country (the base or bases on which it is levied), it may be classified as a recurrent tax on property, or as a tax on income, profits, and capital gains, or even as some other category. The nature of the tax and how the tax is applied are critical elements to determine its proper classification in the GFS system.

97. Let us now discuss two general issues that arise in the recording of taxes. First, only those taxes that are evidenced by tax assessments and declarations are recorded as taxes. If there is no documentation that a tax is payable to government it should not be recorded. Refunds of taxes are recorded as negative taxes in the respective tax category, or under other taxes if the corresponding category can't be identified. Tax credits that are refundable, i.e., which result in a government making a net payment to the taxpayer if the credit exceeds the tax liability are recorded as expenses.

98. Second, in general, a tax is attributed to the government unit that: (a) exercises the authority to impose the tax, and (b) has final discretion to set and vary the rate of the tax. Which level of government actually collects the tax is not relevant. If the collecting government does not meet the above criteria, the tax should be reassigned to the government that does. A collection charge, if applicable, is treated as an expense.

99. Tax collections distributed as a result of a revenue sharing arrangement are treated as a current grant from the government unit that meets the assignment criteria to the other government unit. For example, suppose local governments collect a sales tax imposed by the budgetary central government, and keep 20 percent of the amount collected as per a revenue sharing arrangement. The entire amount collected should be recorded by the budgetary central government as tax revenues, and then a current grant equal to 20 percent of the amount collected should be recorded as a current grant to local governments; which should in turn record the amount received as a current grant from the budgetary central government and not as tax revenues.

**Social contributions**

100. Social contributions are classified as social security contributions or other social contributions. Social security contributions are in turn classified by the source of the contribution (employer, employee, self-employed or non-employed, and unallocable) to the social security scheme. Other social contributions are also classified by the source of the contribution if they are actual contributions, and simply as imputed otherwise. Other social contributions include actual or imputed contributions to social insurance schemes operated by governments as employers on behalf of their employees that do not provide pension benefits.[28] Imputed contributions arise when government units as employers provide social benefits directly to their employees, former employees, or dependents out of their own general resources. In this situation, social contributions equal in value to the amount of social contributions that would be needed to secure the de facto entitlements should be imputed.

101. Social contributions are levied as a function of earnings, payroll, or the number of employees. When income is used as a proxy for gross wages, the receipts are also considered to be social contributions. Compulsory payments assessed on a different base but earmarked for social insurance schemes are treated as taxes.

102. In general the recording of transactions involving social protection schemes, and in particular employer social insurance schemes, can be complex, and is discussed in detail in Chapter 11.

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[28] Contributions to social insurance schemes operated by governments that provide pension benefits are treated as incurrence of liabilities.

### Grants

103. Grants are classified first by the type of unit making the grant, and then by whether the grant is current or capital. Only voluntary transfers received by a government unit from either another government unit (domestic or foreign), or from an international organization, are classified as grants in the GFS system. Similar transfers from other institutional units are classified as voluntary transfers other than grants. Current grants are those made for purposes of current expenditure, while capital grants involve the acquisition of assets. It should be noted that budget support grants tend to be current grants, while project grants tend to be capital grants. If doubt exists regarding the character of a grant, it should be classified as current. Grants are recorded when all requirements and conditions for receiving them are satisfied and the receiving unit has an unconditional claim. Grants in kind are discussed in Chapter 11.

### Other revenue

104. Other revenue is classified as property income, sales of goods and services, fines, penalties, and forfeits, voluntary transfers other than grants, and miscellaneous and unidentified revenue. Property income is earned by government units when they place nonfinancial assets and financial assets they own at the disposal of other units.

105. Property income is classified in turn as interest, dividends, withdrawals of income from quasi-corporations, property income attributed to insurance policyholders, and rent. Interest is the revenue earned by the owner of a financial asset for allowing a debtor to use its funds. Dividends are the revenue earned by placing equity funds at the disposal of a corporation. Dividends are payable out of current income, derived from ongoing productive activities. Distributions by corporations of proceeds from privatization receipts and other sales of assets, and large and exceptional one-off payments based on accumulated reserves or holding gains, are treated as withdrawals of equity rather than dividends (though they may be called so). Withdrawals of income of quasi-corporations are similar to dividends. Property income attributed to insurance policyholders is described in Chapter 11.

106. Rent is the revenue generated from nonproduced assets, such as sub-soil assets (mineral or oil deposits), when a government unit places these assets at the disposal of other units. These payments are often called “royalties”. Payments for exploration rights are also treated as rent. Rent should not be confused with other payments a government may receive related to the exploitation of subsoil and similar assets, such as severance taxes, business licenses, or other taxes (e.g., value added taxes, excises, taxes on exports, etc.).[29] Rent should also not be confused with the rental of produced assets (such as buildings and equipment), which is treated as sales of goods and services.

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[29] The typical revenues associated with natural resources are discussed in Chapter 11.

107. Sales of goods and services are classified as sales by market establishments, administrative fees, incidental sales by nonmarket establishments, and imputed sales of goods and services. Sales by market establishments include the sales of market establishments within general government units, as well as the sales of quasi-corporations and corporations. Rentals of produced assets are also included in this category. Administrative fees include fees for compulsory licenses and other administrative fees that are sales of services, and are usually associated with a regulatory function of government. Incidental sales by nonmarket establishments covers sales of goods and services by nonmarket establishments of general government units, other than administrative fees, such as the sale of seeds from experimental farms, sale of art reproductions by museums, fees at government hospitals, tuition fees at government schools, admission fees to museums and parks. Imputed sales of goods and services relate to the production of goods and services by a government unit for the purpose of using them as compensation of employees in-kind. The amount paid in-kind is treated as though paid in cash, which was then used by the employees to purchase the goods and services (imputed sales).

108. A difficult issue arises in practice regarding the borderline between taxes and payment of fees. As indicated above, fees out of all proportion to the cost or distribution of a government service provided to the payer are treated as taxes. This issue is particularly relevant when classifying revenues of local governments, as often these governments raise revenues through a variety of “fees”. The common sense rules discussed earlier are particularly helpful in these situations, but judgment should still be used in these cases to decide whether the fee being charged is proportionate to the service provided or not. An effort should be made to obtain information to assist in the classification of revenues as taxes or fees, but the cost of gathering this information should not exceed the benefit it provides, and once agreement is reached on the proper classification it should be consistently applied over time. For example, a fee to sell produce in the local market may be reasonable in relation to the service provided if a stall is offered in exchange for the payment and the amount charged is small, or it may not be reasonable if no facilities are provided and the amount charged is large. In the first case the fee should be treated as such, but in the second case it should be treated as a tax.

109. Fines and penalties are compulsory transfers imposed on units by courts of law or quasi-judicial bodies for violations of laws or administrative rules. Forfeits are amounts deposited with a general government unit pending a legal or administrative proceeding, and that have been transferred to the unit upon resolution. Fines and penalties assessed for infringement of tax regulations are recorded together with the respective tax.

110. Voluntary transfers other than grants include voluntary transfers from sources other than governments and international organizations. They are classified as current or capital depending on their intended use. Finally, miscellaneous and unidentified revenue includes all revenues (transactions that increase net worth) that do not fit into any other category. Large amounts in this category (e.g., higher than 2 percent of total revenues) frequently indicates that revenues that belong in other categories have been incorrectly classified in this category.

An effort should be made to classify all revenues to the correct category, and only include under miscellaneous and unidentified revenue those that truly belong in that category.

## B. Economic Classification of Expense

111. Expense is a decrease in net worth resulting from a transaction. Expense transactions are classified in two ways in the GFS system, one based on an economic classification and the other on a functional classification. When supplying nonmarket goods and services to the community, a government unit may produce the goods and services itself and distribute them, purchase them from a third party and distribute them, or transfer cash to households so they can purchase the goods and services directly. The economic classification identifies the type of expense incurred for these activities, while the functional classification provides information on the purpose for which an expense was incurred. Table 7 shows all the categories for the former, while Table 8 shows all the categories for the latter, in both cases together with their GFS codes.

112. The GFS classifies expense in eight major economic categories: compensation of employees, use of goods and services, consumption of fixed capital, interest, subsidies, grants, social benefits, and other expense. Each of these major categories is further sub-divided into other categories.

### Compensation of employees

113. Compensation of employees is the total remuneration, in cash or in-kind, payable to a government employee in exchange for work done during an accounting period, except for work connected with own-account capital formation.[30] Compensation of employees is classified as wages and salaries or social contributions. Wages and salaries consist of all compensation of government employees, except for contributions made by employers on behalf of employees to social insurance schemes; which are recorded under social contributions. However, social contributions paid by deduction from employees’ wages and salaries are included under wages and salaries.

[30] Fixed assets produced by an establishment which are retained within the same unit for use in future production.

## Table 7. Economic Classification of Expense

| | | | |
|---|---|---|---|
| **2** | **Expense** | | |
| **21** | **Compensation of employees** | **26** | **Grants (continued)** |
| 211 | Wages and salaries | 262 | To international organizations |
| 2111 | Wages and salaries in cash | 2621 | Current |
| 2112 | Wages and salaries in-kind | 2622 | Capital |
| **212** | **Social contributions** | 263 | To other general government units |
| 2121 | Actual social contributions | 2631 | Current |
| 2122 | Imputed social contributions | 2632 | Capital |
| **22** | **Use of goods and services** | **27** | **Social benefits** |
| **23** | **Consumption of fixed capital** | 271 | Social security benefits |
| **24** | **Interest** | 2711 | Social security benefits in cash |
| 241 | To nonresidents | 2712 | Social security benefits in-kind |
| 242 | To residents other than general government | 272 | Social assistance benefits |
| 243 | To other general government units | 2721 | Social assistance benefits in cash |
| **25** | **Subsidies** | 2722 | Social assistance benefits in-kind |
| 251 | To public corporations | 273 | Employer social benefits |
| 2511 | To nonfinancial public corporations | 2731 | Employer social benefits in cash |
| 2512 | To financial public corporations | 2732 | Employer social benefits in-kind |
| 252 | To private enterprises | **28** | **Other expense** |
| 2521 | To nonfinancial private enterprises | 281 | Property expense other than interest |
| 2522 | To financial private enterprises | 2811 | Dividends (public corporations only) |
| **26** | **Grants** | 2812 | Withdrawals from income of quasi-corporations (public corporations only) |
| 261 | To foreign governments | 2813 | Property expense attributed to insurance policyholders |
| 2611 | Current | 2814 | Rent |
| 2612 | Capital | 282 | Miscellaneous other expense |
| | | 2821 | Current |
| | | 2822 | Capital |

114. Only wages and salaries paid to government employees in return for labor services are included in compensation of employees, payments to employees for other reasons are classified in other expense categories (e.g., payments for reimbursement of travel for official purposes, costs incurred on behalf of the employer, employer social benefits, etc. are excluded from wages and salaries). Social contributions are payments, actual or imputed, made by general government units to social insurance schemes on behalf of their employees (See discussion in Chapter 11). Although social contributions in practice are usually paid directly by the general government unit to a social insurance scheme, they are not eliminated in consolidation because they are rerouted, i.e., considered to have been paid to the employees, who then made a payment to the social insurance scheme.

115. In some cases it is not evident whether an employer-employee relationship exists between an individual and an entity. If such a relationship exists then the remuneration payable to the individual is treated as compensation of employees, and if it does not exist then the remuneration is treated as use of goods and services. In cases where the relationship is not explicit, i.e., not specified in a contract, it may be difficult to determine whether it

exists or not. Provision of several types of services may pose such problem, and various factors may have to be considered to determine whether an employer-employee relationship exists. An important factor is control, the right to determine what is to be done and how it is to be done is indicative of such a relationship. However, other factors may also need to be considered to define clearly the relationship between an individual and an entity. If the individual is solely responsible for social contributions, or is not entitled to the same benefits generally provided to employees, or has to pay taxes on the provision of services (such as sales tax or value added tax), an employer-employee relationship most likely does not exist.

**Use of goods and services**

116. Use of goods and services consists of the goods and services used by government units for the production of market and nonmarket goods and services, except for own-account capital formation, plus goods purchased for resale less the net change in inventories of work in progress, finished goods, and goods held for resale. In the GFS system, the value of goods and services used in production is recorded when the goods or services are actually used rather than when they were acquired. This treatment of outlays on goods and services under the *GFSM 2001* is significantly different than the treatment under the *GFSM 1986*, where purchases of goods and services are recorded when paid. An estimate of the use of goods and services can be derived by subtracting from the purchases of goods the change in inventories of materials and supplies during the period.

117. The adjustment for changes in inventories affects only goods in practice, because inventories of services are not kept, as the time of acquisition and use coincide. Moreover, it only affects the goods for which inventories are kept. In these cases, the purchases of goods to be used in production in a given accounting period must be adjusted by the change in inventories and the acquisition of goods for resale during that same period. For example, if a government acquires oil for a value of 250 in a given period and its inventories during that period only increased by 70, then the actual use during the period is 250 – 70 = 180. Until reliable data are available for inventories for the various subsectors of general government, the figures recorded under use of goods and services will remain equal to the purchase of goods and services.

118. Goods and services consumed for the maintenance and repair of fixed assets constitute use of goods and services, but major renovations, reconstructions, or enlargements of existing fixed assets are treated as acquisition of nonfinancial assets. The key criterion to decide the proper classification of an outlay in these cases is whether the outlay aims to ensure the asset reaches its expected service life and maintains its original performance level, or aims to expand its expected life or level of performance. The rental of produced assets is classified as use of goods and services, whereas payments for the use of nonproduced assets are classified as rent.

119. Depending on the purpose for which they are used, goods and services purchased by government units and consumed by their employees may be classified as use of goods and services or compensation of employees in-kind. The key criterion here is whether employees

must use the goods and services to carry out their work, or they can use them in their own time and at their own discretion to satisfy their own needs. The former constitutes use of goods and services, while the latter is compensation of employees in-kind.

120. The *2008 SNA* introduced a new classification of assets and liabilities. The treatment of two items has changed significantly from the old to the new classification, weapons systems and associated military inventories, and research and development. Outlays on both these items are treated as expenses (use of goods and services) in the *GFSM 2001*, whereas the *2008 SNA* treats them as acquisitions of fixed assets.

### Consumption of fixed capital

121. Consumption of fixed capital is the decrease in the current value of fixed assets owned and used by government units during an accounting period, due to physical deterioration, normal obsolescence, or normal accidental damage. Consumption of fixed capital may deviate significantly from depreciation as recorded in financial accounts. The calculation of consumption of fixed capital uses average prices of the period and the projected benefits to be derived from using an asset; while the calculation of depreciation is usually based on historical costs, allocated over time using a depreciation method (e.g., straight line, double digit) based on the type of asset. As a result, the amounts calculated as depreciation and as consumption of fixed capital are likely to be significantly different given the large stock of fixed assets held by governments.

122. In practice, consumption of fixed capital is calculated only quarterly and annually for the general government sector and for purposes of the national accounts. GFS compilers are very unlikely to ever have to calculate consumption of fixed capital, and need not be concerned about calculating this cost of production. If available, the information can be obtained from the compilers of national accounts.

### Interest

123. Interest is the expense incurred by government units for using funds owned by another institutional unit. Under a cash basis of recording, interest is recorded when paid, but under an accrual basis of recording interest accrues continuously. This topic is discussed in detail in Chapter 11. Interest is classified according to the type of unit receiving the payment as: to nonresidents, to residents other than general government, and to other general government units. The debtor approach is used in the *GFSM 2001* to determine interest expense. In other words, the terms of the contract agreed between the creditor and the debtor at the time when the liability is incurred determine the amount of interest to be paid during the life of the financial instrument. Interest paid by one unit on behalf of another unit is not treated as interest.[31]

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[31] The actual treatment depends on the characteristics of the specific transaction. See Chapter 11.

### Subsidies

124. Subsidies are current unrequited transfers that government units make to enterprises on the basis of the levels of their production activities or the quantities or values of the goods and services they produce, sell, export or import. Subsidies are usually designed to influence the levels of production, the prices at which outputs are sold, or the remuneration of the corporations. Subsidies are classified first by whether the enterprise is public or private, and then by whether it is nonfinancial or financial. Subsidies also include transfers to public corporations or quasi-corporations to compensate for losses they incur in their productive activities during the current accounting period, as a result of charging prices that are lower than their average costs of production as a matter of deliberate government economic and social policy. Transfers to compensate for losses in previous periods are classified as miscellaneous other capital expense.

125. Transfers that government units make directly to households as consumers and most transfers to nonprofit institutions serving households are treated as either social benefits or miscellaneous other expense, depending on the reason for the payment. Most transfers made to general government units are included in grants.

### Grants

126. Grants, as indicated before, are voluntary transfers made by a government unit to either another government unit or an international organization. Grants are classified first by the type of unit making the grant, and then by whether the grant is current or capital. Current grants are those made for purposes of current expenditure, while capital grants involve the acquisition of assets. If doubt exists regarding the character of a grant, it should be classified as current. Grants are recorded when all requirements and conditions for receiving them are satisfied and the receiving unit has an unconditional claim.

### Social benefits

127. Social benefits are current transfers, in cash or in-kind, to protect the entire population or large segments of it against social risks. A social risk is an event or circumstance that may adversely affect the welfare of the households concerned, either by imposing additional demands on their resources or by reducing their incomes. Social benefits are classified according to the type of arrangement governing their payment into social assistance benefits, social security benefits, and employer social benefits.

128. Social assistance benefits are provided from the general resources of the government, and do not require contributions from the beneficiaries. Social insurance benefits (social security benefits or employer social benefits) require contributions to ensure entitlement to the benefits, even though both cover the same risks. In general the recording of transactions involving social protection, and in particular employer social insurance schemes, can be complex, and is discussed in detail in Chapter 11.

**Other expense**

129. Other expense is classified as property expense other than interest, and miscellaneous other expense. Property expense other than interest is in turn classified as dividends, withdrawals of income of quasi-corporations, property expense attributed to insurance policyholders, and rent. Miscellaneous other expense is classified depending on the purpose for which they are made as current or capital.

130. Dividends and withdrawals of income from quasi-corporations apply only to public corporations and quasi-corporations, as general government units do not make these types of payments. Dividends include all distributions of profits by public corporations to their shareholders or owners, except for distributions by fiscal, export, or import monopolies, which are treated as taxes.[32] Withdrawals of income of quasi-corporations are similar to dividends.

131. Property expense attributed to insurance policyholders applies only to public insurance enterprises, which may hold reserves against outstanding risks in respect of life insurance policies, prepayments of premiums, and reserves against outstanding claims, that are considered to be the property of the policyholders. Property income from the investment of these reserves is also property of the policyholders and therefore a property expense is reflected to record the increase in liabilities. Rent, as discussed previously, is an expense incurred in connection with nonproduced assets.

132. Miscellaneous other expense includes a number of transfers serving different purposes and any other expense not elsewhere classified. These transfers include: current transfers to nonprofit institutions serving households, capital transfers to market enterprises and nonprofit institutions serving households, current and capital taxes paid by one level of government to another, net tax credits, fines and penalties imposed by courts of law, scholarships and other educational benefits, capital transfers to market enterprises NPI serving households, purchases of goods and services from market producers that are distributed directly to households for final consumption other than social benefits, and payments of compensation for injuries or damages caused by natural disasters.

133. Large amounts reported in this category should be reviewed to ensure that no misclassification has occurred. Under normal circumstances a large amount (e.g., higher than 10% of total expenses) reported in this category usually indicates that expenses that belong in other categories have been incorrectly classified in this category. However, in cases where exceptional events occur, such as natural disasters, this amount may correctly be very large for the period while the government deals with the event.

[32] Corporations granted a monopoly by governments to conduct certain activities are considered to be using the taxing power of government, and therefore their profits are classified as taxes and not dividends.

134. Let us now discuss two general issues that arise in the classification of expense. First, refunds of expenses due to overpayments and erroneous payments are recorded as negative expenses in the respective category, or under current miscellaneous other expense if the corresponding category can't be identified. Second, all expenses incurred in connection to own-account capital formation are recorded as acquisition of nonfinancial assets instead of expenses. Own-account capital formation, as discussed previously, occurs when construction of an asset is carried out for own use, and the producer and the eventual user of the asset are one and the same general government (public) unit.

135. The Annex to this chapter presents a list of the typical names used by countries for the revenue and expense categories in the GFS system. This list is intended to help compilers identify the proper revenue or expense category for any given item. However, the fact that a country has a revenue or expense item with the same or similar name to one classified under a given category should not lead to an automatic classification of the item in that same category. Compilers should confirm that the item meets the criteria for such classification category.

## C. Functional Classification of Expense

136. The functional classification of expense that appears in the *GFSM 2001* is the Classification of Functions of Government (COFOG) produced by the Organization for Economic Cooperation and Development (OECD) and published by the United Nations. For purposes of homogenizing this classification with the GFS coding system, the digit 7 has been added as a prefix to the UN codes. The *GFSM 2001* applies this classification to both expense and the net acquisition of nonfinancial assets, which are jointly called outlays. All outlays for a particular function are collected in one category of COFOG regardless of their type. COFOG permits trends in government outlays on particular functions to be examined over time and compared across countries.

137. In principle, individual transactions should be classified, but this is normally not possible or too costly. Instead, all transactions of agencies, offices, program units, bureaus, and similar units within government departments or ministries are assigned the same code. The more detailed the level at which the functional classification can be undertaken the more useful the resulting statistics.

138. The *GFSM 1986* includes an earlier version of COFOG. The main changes from the *GFSM 1986* version to the *GFSM 2001* version are: (a) the grouping of several categories under the category Economic affairs, (b) the creation of a new category for Environmental protection, and (c) the inclusion of applied research and development under the category most closely associated with its purpose.

139. A cross classification of functional and economic classification of expense can be analytically useful, and is recommended if the available information allows its compilation.

## Table 8. Classification of Expense by Function of Government

| | | | |
|---|---|---|---|
| **7** | **Total outlays** | **706** | **Housing and community amenities** |
| **701** | **General public services** | | |
| 7011 | Executive and legislative organs, financial and fiscal affairs, external affairs | 7061 | Housing development |
| 7012 | Foreign economic aid | 7062 | Community development |
| 7013 | General services | 7063 | Water supply |
| 7014 | Basic research | 7064 | Street lighting |
| 7015 | R&D General public services | 7065 | R&D Housing and community amenities |
| 7016 | General public services n.e.c. | 7066 | Housing and community amenities n.e.c. |
| 7017 | Public debt transactions | **707** | **Health** |
| 7018 | Transfers of a general character between different levels of government | 7071 | Medical products, appliances, and equipment |
| **702** | **Defense** | 7072 | Outpatient services |
| 7021 | Military defense | 7073 | Hospital services |
| 7022 | Civil defense | 7074 | Public health services |
| 7023 | Foreign military aid | 7075 | R&D Health |
| 7024 | R&D Defense | 7076 | Health n.e.c. |
| 7025 | Defense n.e.c. | **708** | **Recreation, culture, and religion** |
| **703** | **Public order and safety** | 7081 | Recreational and sporting services |
| 7031 | Police services | 7082 | Cultural services |
| 7032 | Fire protection services | 7083 | Broadcasting and publishing services |
| 7033 | Law courts | 7084 | Religious and other community services |
| 7034 | Prisons | 7085 | R&D Recreation, culture, and religion |
| 7035 | R&D Public order and safety | 7086 | Recreation, culture, and religion n.e.c. |
| 7036 | Public order and safety n.e.c. | **709** | **Education** |
| **704** | **Economic affairs** | 7091 | Pre-primary and primary education |
| 7041 | General economic, commercial, and labor affairs | 7092 | Secondary education |
| 7042 | Agriculture, forestry, fishing, and hunting | 7093 | Postsecondary nontertiary education |
| 7043 | Fuel and energy | 7094 | Tertiary education |
| 7044 | Mining, manufacturing, and construction | 7095 | Education not definable by level |
| 7045 | Transport | 7096 | Subsidiary services to education |
| 7046 | Communication | 7097 | R&D Education |
| 7047 | Other industries | 7098 | Education n.e.c. |
| 7048 | R&D Economic affairs | | |
| 7049 | Economic affairs n.e.c. | | |
| **7050** | **Environmental protection** | **710** | **Social protection** |
| 7051 | Waste management | 7101 | Sickness and disability |
| 7052 | Waste water management | 7102 | Old age |
| 7053 | Pollution abatement | 7103 | Survivors |
| 7054 | Protection of biodiversity and landscape | 7104 | Family and children |
| 7055 | R&D Environmental protection | 7105 | Unemployment |
| 7056 | Environmental protection n.e.c. | 7106 | Housing |
| | | 7107 | Social exclusion n.e.c. |
| | | 7108 | R&D Social protection |
| | | 7109 | Social protection n.e.c. |

### D. Assets and Liabilities

140. An asset is a store of value representing a benefit or series of benefits accruing to the economic owner by holding or using the entity over a period of time.[33] It is a means of carrying forward value from one accounting period to another. These assets may be non-financial or financial. All assets in the GFS system are economic assets.

141. The *2008 SNA* introduced a new classification of assets and liabilities. It is generally more detailed that the one in the *1993 SNA* and in the *GFSM 2001*, particularly concerning nonfinancial assets. The updated *GFSM 2001* will reflect and be fully aligned with this new classification. As indicated previously, the treatment of two items has changed significantly, weapons systems and associated military inventories, and research and development. Outlays on both these items are treated as expenses in the *GFSM 2001*, whereas the *2008 SNA* treats them as acquisitions of fixed assets. The discussion below and Tables 9A and 9B are based on the *2008 SNA* classification of assets and liabilities.

#### Nonfinancial assets

142. Nonfinancial assets are economic assets other than financial assets. See Table 9A. There are two major groupings of nonfinancial assets: (a) produced assets, which are the result of a production process, and (b) nonproduced assets, which are not the result of a production process.[34] There are three main types of produced assets: fixed assets, inventories, and valuables. Fixed assets are produced assets used repeatedly or continuously in production processes for more than one year. Inventories are produced assets that consist of goods and services, which came into existence in the current period or in an earlier period, and that are held for sale, use in production or other use at a later date. Valuables are produced assets of considerable value, held primarily as stores of value over time. A more detailed discussion of produced assets is presented further below in this section.

143. There are two main types of nonproduced assets: natural resources, and intangible nonproduced assets. Natural resources consist of naturally occurring resources that have an economic value. Intangible nonproduced assets include contracts, leases and licenses, and goodwill and marketing assets. Contracts, leases and licenses are treated as assets if the terms of the document specify a price for the use of an asset or provision of a service different than would prevail otherwise, and if one party can effectively realize the price difference. Goodwill and marketing assets are the part of the net worth of an institutional unit not accounted for by other assets. A more detailed discussion of nonproduced assets is presented further below in this section.

[33] The *2008 SNA* distinguishes between legal ownership and economic ownership. In many cases the legal owner and the economic owner are the same. When they are not, the legal owner has passed the risk and benefits of using the entity to an economic owner.

[34] More precisely, the criterion is whether the assets are or not an output from production processes that fall within the production boundary of the SNA.

144. Acquisitions of nonfinancial assets other than inventories are valued at their exchange price plus all costs of ownership transfer, which include professional charges or commissions incurred, transport costs, taxes payable on the transfer of ownership or on the disposal of the asset, delivery and installation costs, and any terminal costs incurred at the end of an asset's life. Assets produced on own-account are valued at their cost of production. Sales and other disposals of nonfinancial assets are valued at their exchange value less the costs of ownership transfer. Additions to and withdrawals from inventories are valued at the prices applicable at the time of the addition or withdrawal.

145. Stocks of nonfinancial assets are valued at current market prices if available. If there are no observable prices then a price has to be estimated. As indicated in Chapter 3, the current price of a similar item or the same item new may be used if available. In practice, tangible fixed assets are commonly valued at their "written-down replacement cost", estimated using the perpetual inventory method. With this method the value of a given 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 period. Intangible nonproduced assets are typically valued at their initial acquisition costs (appropriately revalued) less an allowance for amortization. Other nonfinancial assets are sometimes valued using the present value method, which discounts the expected future economic benefits from an asset to a current value.

146. Assets produced on own-account or acquired from another unit, which are constructed over more than one accounting period, should be recorded in the balance sheet as work proceeds. If the contract does not specify the time of the ownership transfer, then the percentage completion or progress payments may be used. General government units may acquire or dispose of nonfinancial assets on a nonmarket basis for policy reasons. In other words, they may acquire an asset for more than its market value or dispose of an asset for less than its market value. In these cases, if possible, the transaction should be valued at market price, and the transfer component should be recorded separately.

**Table 9A. Classification of Flows and Stocks for Nonfinancial Assets**

| | Transactions | Holding gains/losses | Other volume changes | Total other economic flows | Stocks |
|---|---|---|---|---|---|
| **Nonfinancial assets** | **31** | **41** | **51** | **91** | **61** |
| **Produced assets** | **310** | **410** | **510** | **910** | **610** |
| **Fixed assets** | **311** | **411** | **511** | **911** | **611** |
| Buildings and structures | 3111 | 4111 | 5111 | 9111 | 6111 |
| Dwellings | 31111 | 41111 | 51111 | 91111 | 61111 |
| Buildings other than dwellings | 31112 | 41112 | 51112 | 91112 | 61112 |
| Other structures | 31113 | 41113 | 51113 | 91113 | 61113 |
| Land improvements | 31114 | 41114 | 51114 | 91114 | 61114 |
| Machinery and equipment | 3112 | 4112 | 5112 | 9112 | 6112 |
| Transport equipment | 31121 | 41121 | 51121 | 91121 | 61121 |
| Other machinery and equipment | 31122 | 41122 | 51122 | 91122 | 61122 |
| Information, communication and telecommunication (ICT) equipment | 311221 | 411221 | 511221 | 911221 | 611221 |
| Other machinery and equipment | 311222 | 411222 | 511222 | 911222 | 611222 |
| Other fixed assets | 3113 | 4113 | 5113 | 9113 | 6113 |
| Cultivated biological resources | 31131 | 41131 | 51131 | 91131 | 61131 |
| Intellectual property products | 31132 | 41132 | 51132 | 91132 | 61132 |
| Costs of ownership transfer of nonproduced assets (other than land) | 31133 | 41133 | 51133 | 91133 | 61133 |
| Weapons systems | 31134 | 41134 | 51134 | 91134 | 61134 |
| **Inventories** | **312** | **412** | **512** | **912** | **612** |
| Materials and supplies | 31221 | 41221 | 51221 | 91221 | 61221 |
| Work-in-progress | 31222 | 41222 | 51222 | 91222 | 61222 |
| Finished goods | 31223 | 41223 | 51223 | 91223 | 61223 |
| Goods for resale | 31224 | 41224 | 51224 | 91224 | 61224 |
| Military inventories | 31225 | 41225 | 51225 | 91225 | 61225 |
| **Valuables** | **313** | **413** | **513** | **913** | **613** |
| **Nonproduced assets** | **314** | **414** | **514** | **914** | **614** |
| Natural resources | 3140 | 4140 | 5140 | 9140 | 6140 |
| Land | 3141 | 4141 | 5141 | 9141 | 6141 |
| Mineral and energy resources | 3142 | 4142 | 5142 | 9142 | 6142 |
| Other naturally occurring assets | 3143 | 4143 | 5143 | 9143 | 6143 |
| Intangible nonproduced assets | 3144 | 4144 | 5144 | 9144 | 6144 |

Note: the classification codes of all assets and liabilities can be expanded to record acquisitions, disposals, and consumption of fixed capital (as relevant) by adding to the end of each category an extension of the code (.1, or .2, or .3, respectively).

**Nonfinancial assets–produced assets**

**a. Fixed assets**

147. Government fixed assets include assets normally owned by a private unit, but also two unique types of assets: infrastructure assets and heritage assets. Infrastructure assets are immovable assets that generally have no alternative use, and whose benefits accrue to the community at large. Examples are streets, roads, bridges, dams, lighting systems, communication networks, etc. Heritage assets are assets that governments intend to preserve indefinitely because they have unique historic, cultural, educational, artistic, or architectural significance. Valuation of these two types of assets presents particular challenges.

148. Fixed assets are classified as: buildings and structures, machinery and equipment, and other fixed assets. Buildings and structures are further classified into: dwellings, buildings other than dwellings, other structures, and land improvements. Dwellings are buildings used primarily as residences. Buildings other than dwellings covers buildings not designated as dwellings. Other structures cover structures other than buildings, including infrastructure assets. Land improvements are the result of actions that lead to major improvements in the quantity, quality, or productivity of land, or prevent its deterioration.

149. Machinery and equipment are further classified into: transport equipment; information, computer and telecommunications (ICT) equipment; and other machinery and equipment. Transport equipment consists of equipment for moving people and objects. ICT equipment consists of devices using electronic controls and also the electronic components forming part of these devices. Other machinery and equipment consists of machinery and equipment not elsewhere classified. This latter category includes works of art or antiques displayed in museums.

150. Other fixed assets are further classified into: cultivated biological resources, intellectual property products, costs of ownership transfer of nonproduced assets, and weapons systems.[35] Cultivated biological resources include animal resources and tree, crop, and plant resources, which yield repeat products. If the cultivated biological resources do not yield repeat products, such as animals raised for slaughter, trees grown for timber, and single crop vegetables, they are not treated as fixed assets but as inventories (work in progress). Intellectual property products are the result of research, development, investigation or innovation leading to knowledge that the developers can market or use to their own benefit in production, because use of the knowledge is restricted by means of legal or other protection. Intellectual property products include mineral exploration and evaluation, computer software, databases, and entertainment, literary and artistic originals.

[35] In the *GFSM 2001* weapons systems were not considered to be a nonfinancial asset, instead their acquisition was directly recorded as an expense.

151. The costs of ownership transfer of nonproduced assets represent produced assets but their value cannot be integrated with the value of another produced asset. The treatment of costs of ownership is peculiar. The flows are recorded as a separate category, under costs of ownership transfer of nonproduced assets; however, the value of the stocks of these assets includes the costs of ownership transfer. An exception is made in the case of land, where the flows associated with costs of ownership transfer are treated by convention as land improvements, and the value of the stocks of land exclude land improvements.[36] Weapons systems include vehicles and other equipment such as warships, submarines, military aircraft, tanks, missile carriers and launchers, etc. Most single-use weapons they deliver are treated as military inventories.

### b. Inventories

152. Inventories are classified as: materials and supplies, work-in-progress, finished goods, goods for resale, and military inventories. Materials and supplies consist of all products that an enterprise holds in inventory with the intention of using them as intermediate inputs into production. Work-in-progress consists of output produced by an enterprise that is not yet sufficiently processed to be in a state in which it is normally supplied to other institutional units. Finished goods consist of goods produced as outputs that their producer does not intend to process further before supplying them to other institutional units. Military inventories consist of single-use items delivered by weapons or weapons systems. Goods for resale are goods acquired by enterprises for purposes of reselling them to their customers. By convention, goods acquired by government for distribution as social transfers in kind are also included in goods for resale. Of particular interest in the GFS system is the change in inventories from one period to another, as it is this change that is recorded as an adjustment to the use of goods and services under expense.

### c. Valuables

153. Valuables may be classified as: precious metals and stones, antiques and other art objects, and other valuables. The common characteristic of items classified as valuables is that they are held exclusively because they are expected to maintain or increase their value over time, i.e. are held as a form of investment.

## Nonfinancial assets–nonproduced assets

### a. Natural resources

154. Natural resources are classified as: land, mineral and energy resources, and other naturally occurring assets (noncultivated biological resources, water resources, radio spectra,

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[36] This anomalous treatment of costs of ownership follows the *2008 SNA* guidelines; see paragraphs 10.97, 10.159, 10.160, and A1.38.

and other). Land consists of the ground, including the soil covering and any associated surface waters.[37] The value of land excludes any buildings or other structures situated on it or running through it. If it is not possible to separate the value of the land from the buildings or other structures, an attempt should be made to determine which item has the highest value, and assign the whole value to that item. Land improvements and the costs of ownership transfer on land are treated as fixed assets and shown separately. Mineral and energy resources consist of mineral and energy reserves located on or below the Earth's surface that are economically exploitable given current technology and relative prices. Depletion of these resources is recorded as another change in the volume of assets.

### b. Intangible nonproduced assets

155. It is recommended that contracts, leases, and licenses only be recorded when the holder actually obtains an economic benefit from holding these assets. For example, when a tenant subleases a building, a taxi driver sells his operating license, or a publisher sells the rights to the works of an author. Goodwill is the excess value of an enterprise above the net value of its individually identified and valued assets. Goodwill can't be separately identified and sold to another party, as it is the result of using in combination the other assets. Marketing items consist of items such as brand names, mastheads, trademarks, logos, and domain names.

156. **Issues in the classification of nonfinancial assets.** The treatment of certain transactions involving nonfinancial assets can pose classification difficulties to compilers. We discuss three such cases: (a) major improvements, (b) leases, and (c) public-private partnerships.

157. **Major improvements.** Major improvements to existing assets lead to an increase in the value of the asset that has been improved, and is treated as the acquisition of an asset. Major improvements are usually a deliberate investment decision, that aims to increase the performance, productive capacity, or expected life of an existing asset. Maintenance and repair aims to ensure the asset reaches its expected service life and maintains its original performance level, and is treated as an expense.

158. **Leases.** Three types of leases involving nonfinancial assets are recognized in the SNA: operating leases, financial leases, and resource leases. Fundamental to the distinction between leases is the difference between legal and economic ownership. The legal owner of an asset is the institutional unit entitled by law to claim the benefits associated with the asset. By contrast, the economic owner of an asset is entitled to claim the benefits associated with the use of the asset in an economic activity by virtue of accepting the associated risks. The

[37] Water bodies from which water is regularly extracted for use in production, against payment, are included in water resources.

legal owner is often the economic owner also. When they are different, the legal owner has divested itself of the risks in return for agreed payments from the economic owner.[38]

159. An operating lease is one where the legal owner is also the economic owner and accepts the operating risks and rewards from ownership of the asset. One indicator of an operating lease is that the legal owner has the responsibility to provide any necessary repair and maintenance of the asset. Under an operating lease the asset remains on the balance sheet of the lessor. Payments made under an operating lease are called “rentals” and are recorded as payments for a service (expense, use of goods and services). See Example 5.01 below.

**Example 5.01: The government made a payment of Z£660 on a lease of 10 generators for its buildings. The lessor is responsible for all maintenance and repairs to the generators.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 22 | Use of goods and services | 660 | |
| 3212 | Domestic currency and deposits | | 660 |

160. A financial lease is one where the lessor as legal owner of an asset passes to the lessee the operating risks and rewards of ownership of the asset, i.e., the lessee becomes the economic owner of the asset. One commonly used indicator of a financial lease is that the economic owner has the responsibility to provide any necessary repair and maintenance of the asset. Under a financial lease the legal owner is shown as issuing a loan to the lessee whom the lessee uses to acquire the asset. Thereafter the asset is shown on the balance sheet of the lessee and not the lessor, while the corresponding loan is shown as an asset of the lessor and a liability of the lessee. Payments under the financial lease are treated not as rentals but as the payment of interest and repayment of principal. Example 5.02 illustrates the recording entries for a government unit that enters a financial lease to acquire equipment.

[38] Chapter 17 of the *2008 SNA* discusses the treatment of leases, and serves as the basis for the discussion presented here.

**Example 5.02: The government leased an airplane from a foreign manufacturer to transport senior government officials valued at Z£7,500, and made a payment of Z£525 for the first year of the lease. The lessor has no responsibility for maintenance or repair of the airplane.**

| **At the time the airplane is leased:** | | | |
|---|---|---|---|
| GFS Code | Descriptor | Debit | Credit |
| 31121 | Fixed assets, transport equipment | 7,500 | |
| 3314 | External loans | | 7,500 |
| **At the time the lease payment is made:** | | | |
| 3314 | External loans | 450 | |
| 3212 | Domestic currency and deposits | | 450 |
| 241 | Interest to nonresidents | 75 | |
| 3212 | Domestic currency and deposits | | 75 |

Comment: the lease payment has to be split into its two components, loan repayment and payment of interest, based on the terms of the lease.

161. A resource lease is an agreement whereby the legal owner of a natural resource makes it available to a lessee in return for a regular payment recorded as property income and described as rent. The resource continues to be recorded on the balance sheet of the lessor even though it is used by the lessee. The classic case of an asset subject to a resource lease is land, but natural resources (mineral and energy deposits, fishing rights, etc.) are also generally treated in this way.

162. **Public-private partnerships.** Public-private partnerships (PPPs) are long-term contracts between two units, whereby one unit acquires or builds an asset or set of assets, operates it for a period and then hands the assets over to a second unit. Such arrangements are usually between a private enterprise and government. These schemes are also known as Private Finance Initiatives (PFIs), or Build, Own, Operate, Transfer schemes (BOOTs).[39]

163. PPPs vary greatly. In general terms, these schemes can be described as follows. A private enterprise builds or acquires fixed assets, and uses them together with other production inputs to provide services to the government or the public. The private enterprise expects to recover its costs and earn an adequate rate of return on its investment from the payments made by the government or the public. At the end of the contract period, the government usually gains legal and economic ownership of the assets, possibly without payment. The assets typically have service lives much longer than the contract period so the government will control the assets, bear the risks and receive the rewards for a major portion

[39] Chapter 22 of the *2008 SNA* discusses the treatment of public-private partnerships, and serves as the basis for the discussion presented here.

of the assets' service lives. Thus, it frequently is not obvious whether the private enterprise or the government is the economic owner of the assets.

164. The statistical treatment of PPPs depends on the economic ownership of the assets. An assessment of the unit that bears the majority of the risks and receives the majority of the rewards is required. Factors to consider in the assessment include construction risk, supply risk, demand risk, residual value and obsolescence risk, and availability risk. The relative importance of each risk is likely to vary with each PPP, and therefore it is not possible to state prescriptive rules applicable to all cases. Likewise, the complexity and variety of PPP contracts also precludes the enumeration of detailed governing the transactions to be recorded concerning the control and use of the assets.

165. In general, if the private enterprise is assessed as being the legal and economic owner of the assets during the contract period and if, as usual, the government becomes the legal and economic owner at the end of the contract without an explicit payment, a transaction must be recorded for the government's acquisition of the assets at the end of the contract. One approach is for the government to gradually build up a financial claim and the private unit gradually to accrue a corresponding liability, such that the value of both is expected to be equal to the residual value of the assets at the end of the contract period. An alternative approach is to record the change of legal and economic ownership as being funded by a capital transfer. This approach does not reflect the underlying economic reality as well, but data limitations, uncertainty about the expected residual value of the assets and other considerations could make recording a capital transfer acceptable on pragmatic grounds. See Example 5.03 below on how to record such a capital transfer.

**Example 5.03: The government has become legal and economic owner of a road built by a private enterprise under a BOOT scheme. The current value of the road is estimated at Z£13,530.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 31113 | Fixed assets, other structures | 13,530 | |
| 1442 | Voluntary transfers other than grants, capital | | 13,530 |

166. In general, if the government is assessed as being the legal owner during the contract period, but does not make any explicit payment at the beginning of the contract, a transaction must be imputed to cover the acquisition. The recommended option is to impute a financial lease, because of the similarity with actual financial leases. The recording of this transaction would be similar to Example 5.02 above for the lease of an airplane.

### Financial assets and liabilities

167. Financial assets are financial claims that entitle the holder of the asset (creditor) to receive one or more payments from a second party (debtor), according to the terms of the

contract between them. Financial assets and liabilities are classified by type of instrument and by sector of the counterpart, as well as by residence of the other party to the instrument (debtors for financial assets, and creditors for liabilities). Table 9B below presents the classification by type of instrument.

168. The classification of an asset or liability as domestic or external is based on the concept of residence of the counterpart, not currency. For example, if the government issues a Treasury bill and it is bought by a resident bank, then the government has a domestic liability, but if the same Treasury bill is bought by an individual resident in another country, then the government has an external liability. Likewise, currency and deposits held at the central bank or any resident bank are domestic assets, while currency and deposits held at a bank resident in another country, regardless of whether the deposits are in local or foreign currencies, are external assets.

169. Financial assets and liabilities are classified by type of instrument into eight major categories: monetary gold and Special Drawing Rights (SDRs), currency and deposits, debt securities, loans, equity and investment fund shares, insurance, pension, and standardized guarantee schemes, financial derivatives and employee stock options (ESOs), and other accounts receivable/payable.

170. The *GFSM 2001* defines total debt as all liabilities that are debt instruments. These instruments are: SDRs, currency and deposits, debt securities, loans, insurance, pension, and standardized guarantee schemes, and other accounts payable. The usual coverage of debt many countries currently use includes only two debt instruments: debt securities and loans. The *GFSM 2001* definition of debt corresponds to the total gross debt concept. The net debt concept, gross debt minus financial assets corresponding to debt instruments, is not discussed in the manual or this guide. For a detailed discussion of these concepts, as well as other topics related to debt, see the *Public Sector Debt Statistics: Guide for Compilers and Users*.[40]

171. In principle, flows of all financial assets and liabilities should be valued at their exchange prices, excluding any other costs associated with the transaction. Any charges or commissions associated with the transactions in financial assets and liabilities should be treated as use of goods and services. This guideline helps ensure the amounts recorded in the creditor and debtor books match.

172. Stocks of financial assets should also be valued at current market prices if available. In practice, only debt securities, equity and investment fund shares, and financial derivatives and employee stock options (ESOs), are valued at market prices. Given the general lack of market values for debt liabilities, debt instruments and the corresponding assets (other than debt securities), should be valued using the nominal value on the reference date as a proxy for their current market prices. In addition, many countries also find it useful to record the face value of debt instruments, i.e., the amount to be repaid (received) at maturity.

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[40] The guide is available at www.tffs.org/PSDStoc.htm.

**Table 9B. Classification of Flows and Stocks for Financial Assets and Liabilities**

| | Transactions | Holding gains /losses | Other volume changes | Total other economic flows | Stocks |
|---|---|---|---|---|---|
| **Financial assets** | **32** | **42** | **52** | **92** | **62** |
| **Total by instrument** | | | | | |
| Monetary gold and SDRs | 3201 | 4201 | 5201 | 9201 | 6201 |
| Currency and deposits | 3202 | 4202 | 5202 | 9202 | 6202 |
| Debt securities | 3203 | 4203 | 5203 | 9203 | 6203 |
| Loans | 3204 | 4204 | 5204 | 9204 | 6204 |
| Equity and investment fund shares | 3205 | 4205 | 5205 | 9205 | 6205 |
| Insurance, pension, and standardized guarantee schemes | 3206 | 4206 | 5206 | 9206 | 6206 |
| Financial derivatives and employee stock options | 3207 | 4207 | 5207 | 9207 | 6207 |
| Other accounts receivable | 3208 | 4208 | 5208 | 9208 | 6208 |
| **Domestic** | **321** | **421** | **521** | **921** | **621** |
| Currency and deposits | 3212 | 4212 | 5212 | 9212 | 6212 |
| Debt securities | 3213 | 4213 | 5213 | 9213 | 6213 |
| Loans | 3214 | 4214 | 5214 | 9214 | 6214 |
| Equity and investment fund shares | 3215 | 4215 | 5215 | 9215 | 6215 |
| Insurance, pension, and standardized guarantee schemes | 3216 | 4216 | 5216 | 9216 | 6216 |
| Financial derivatives and employee stock options | 3217 | 4217 | 5217 | 9217 | 6217 |
| Other accounts receivable | 3218 | 4218 | 5218 | 9218 | 6218 |
| **External** | **322** | **422** | **522** | **922** | **622** |
| Monetary gold and SDRs | 3221 | 4221 | 5221 | 9221 | 6221 |
| Currency and deposits | 3222 | 4222 | 5222 | 9222 | 6222 |
| Debt securities | 3223 | 4223 | 5223 | 9223 | 6223 |
| Loans | 3224 | 4224 | 5224 | 9224 | 6224 |
| Equity and investment fund shares | 3225 | 4225 | 5225 | 9225 | 6225 |
| Insurance, pension, and standardized guarantee schemes | 3226 | 4226 | 5226 | 9226 | 6226 |
| Financial derivatives and employee stock options | 3227 | 4227 | 5227 | 9227 | 6227 |
| Other accounts receivable | 3228 | 4228 | 5228 | 9228 | 6228 |

**Table 9B. Classification of Flows and Stocks for Financial Assets and Liabilities *(continued)***

| **Liabilities** | **Transactions 33** | **Holding gains /losses 43** | **Other volume changes 53** | **Total other economic flows 93** | **Stocks 63** |
|---|---|---|---|---|---|
| **Total by instrument** | | | | | |
| Special Drawing Rights (SDRs) | 3301 | 4301 | 5301 | 9301 | 6301 |
| Currency and deposits | 3302 | 4302 | 5302 | 9302 | 6302 |
| Debt securities | 3303 | 4303 | 5303 | 9303 | 6303 |
| Loans | 3304 | 4304 | 5304 | 9304 | 6304 |
| Equity and investment fund shares | 3305 | 4305 | 5305 | 9305 | 6305 |
| Insurance, pension, and standardized | | | | | |
| guarantee schemes | 3306 | 4306 | 5306 | 9306 | 6306 |
| Financial derivatives and employee stock options | 3307 | 4307 | 5307 | 9307 | 6307 |
| Other accounts payable | 3308 | 4308 | 5308 | 9308 | 6308 |
| **Domestic** | **331** | **431** | **531** | **931** | **631** |
| Currency and deposits | 3312 | 4312 | 5312 | 9312 | 6312 |
| Debt securities | 3313 | 4313 | 5313 | 9313 | 6313 |
| Loans | 3314 | 4314 | 5314 | 9314 | 6314 |
| Equity and investment fund shares | 3315 | 4315 | 5315 | 9315 | 6315 |
| Insurance, pension, and standardized | | | | | |
| guarantee schemes | 3316 | 4316 | 5316 | 9316 | 6316 |
| Financial derivatives and employee stock options | 3317 | 4317 | 5317 | 9317 | 6317 |
| Other accounts payable | 3318 | 4318 | 5318 | 9318 | 6318 |
| **External** | **332** | **432** | **532** | **932** | **632** |
| Special Drawing Rights (SDRs) | 3321 | 4321 | 5321 | 9321 | 6321 |
| Currency and deposits | 3322 | 4322 | 5322 | 9322 | 6322 |
| Debt securities | 3323 | 4323 | 5323 | 9323 | 6323 |
| Loans | 3324 | 4324 | 5324 | 9324 | 6324 |
| Equity and investment fund shares | 3325 | 4325 | 5325 | 9325 | 6325 |
| Insurance, pension, and standardized | | | | | |
| guarantee schemes | 3326 | 4326 | 5326 | 9326 | 6326 |
| Financial derivatives and employee stock options | 3327 | 4327 | 5327 | 9327 | 6327 |
| Other accounts payable | 3328 | 4328 | 5328 | 9328 | 6328 |

### a. Monetary gold and special drawing rights

173. Monetary gold is gold to which the monetary authorities have title and is held as a reserve asset. It comprises gold bullion (including gold held in allocated gold accounts) and unallocated gold accounts with nonresidents that give title to claim the delivery of gold. Gold bullion (coins, ingots, or bars with a minimum purity of 995/1000) held as a reserve asset is the only financial asset with no corresponding liability.[41] Any gold held by a government unit that does not meet the definition of monetary gold is treated as a nonfinancial asset, either a type of inventory or a valuable. Deposits, loans, and securities denominated in gold are treated as financial assets (not gold) and are classified along with similar assets denominated in foreign currencies in the appropriate category.

174. It is possible to hold accounts for both "allocated gold" and "unallocated gold". An allocated gold account provides ownership of a specific piece of gold, and is equivalent to a custody record of title. When held as a reserve asset, allocated gold accounts are classified as monetary gold; when not held as a reserve asset, allocated gold accounts are treated as a nonfinancial asset, and classified under valuable or inventory. An unallocated gold account represents a claim against the account operator to deliver gold. When held as a reserve asset, unallocated gold accounts are classified in monetary gold; when not held as a reserve asset, unallocated gold accounts are treated as a financial asset (or liability), and classified as deposits.

175. SDRs are international reserve assets created by the IMF and allocated to its member countries, usually held by the monetary authorities. The SDRs are an asset of the country holding the SDRs and a claim on the participants in the scheme collectively.[42] The value of the SDR is determined based on a basket of currencies, which currently consists of the euro, Japanese yen, pound sterling, and U.S. dollar. The allocation and cancellation of SDRs are treated as transactions. See section on Transactions with the IMF in Chapter 11.

### b. Currency and deposits

176. Currency consists of notes and coins in circulation issued by the central bank or another government unit. Domestic currency has a fixed nominal value, while foreign-denominated currency is converted to the domestic currency at the exchange rate on the date the transaction takes place or the point in time to which the balance sheet applies. The cost of producing the physical notes and coins is treated as use of goods and services.

177. Deposits are financial assets that have fixed nominal values and are used to make payments**.** Deposits can be transferable or nontransferable. Transferable deposits comprise all

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[41] In the *GFSM 2001* the distinction between gold bullion and gold accounts is not made, and monetary gold as a whole was considered not to have a corresponding liability.

[42] In the *GFSM 2001* the SDRs were considered as assets without corresponding liabilities.

deposits that are exchangeable for notes and coins on demand at par, and are directly usable for making payments. Transferable deposits are further classified as interbank positions, or other transferable deposits. Nontransferable deposits include all deposits of limited transferability not included in transferable deposits, such as savings deposits, fixed-term deposits, and nonnegotiable certificates of deposit.

178. An important point to highlight about this instrument, currency and deposits, is that it constitutes the specific definition of cash used in the *GFSM 2001*. This means, for example, that the changes in currency and deposits for a given period are equal to the balancing item Net changes in the stock of cash that appears in the Statement of Sources and Uses of Cash for the same period. It also means that whenever a cash transaction is recorded, the counterpart entry is to currency and deposits.

**c. Debt securities**[43]

179. Debt securities are negotiable instruments serving as evidence of debt. They include bills, bonds, negotiable certificates of deposit, commercial paper, debentures, asset-backed securities, and similar instruments traded in financial markets. Loans that become negotiable should be reclassified from loans to debt securities.

**d. Loans**

180. Loans are financial assets created when a creditor lends funds directly to a debtor and receives a nonnegotiable document as evidence. Loans include overdrafts, installment loans, hire-purchase credit, loans to finance trade credit, repurchase agreements, gold swaps, and financing by means of a financial lease.

**e. Equity and investment fund shares**[44]

181. Equity and investment fund shares are instruments that entitle their holders to a residual claim on the assets of the institutional unit (corporation or quasi-corporation) that issued the instruments, after the claims of all creditors have been met. Ownership of equity is usually evidenced by shares, stocks, depository receipts, participations, or similar documents. Investment funds are collective investment undertakings through which a group of investors pool funds for investment in financial or nonfinancial assets. Investment funds include mutual funds and unit trusts.

182. This category includes equity holdings in public corporations and corporations in which government units have minority holdings and do not exert control. This category also

[43] In the *GFSM 2001* these instruments are called Securities other than shares.

[44] In the *GFSM 2001* these instruments are called Shares and other equity.

includes membership contributions or subscriptions to regional or international organizations that are reimbursable upon leaving the organizations (for example, World Bank, IMF).[45]

### f. Insurance, pension, and standardized guarantee schemes[46]

183. These instruments function as a form of redistribution of income or wealth mediated by financial institutions. Units participating in the scheme contribute to them and may receive benefits (or have claims settled) in the same or later periods. While they hold the funds, insurance corporations invest them on behalf of the participants. The part of the investment income that is distributed to participants as property income is returned as extra contributions. To meet future payment of benefits accrued or outstanding claims insurance operators hold reserves, which are assets of the beneficiaries. There are five sorts of reserves: nonlife insurance technical reserves, life insurance and annuities entitlements, pension entitlements, claims of pension funds on the pension manager, and provisions for calls under standardized guarantees.

### g. Financial derivatives and employee stock options[47]

184. Financial derivatives are financial instruments that are linked to a specific financial instrument or indicator or commodity, 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 reference price may relate to a commodity, a financial asset, an interest rate, an exchange rate, another derivative, a spread between two prices, and index, or a basket of prices.

185. There are two broad classes of financial derivatives: option contracts (options) and forward-type contracts (forwards). 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 (the “strike” price) within a given time span (American option) or on a given date (European option)**.** Forwards are contracts that represent an unconditional obligation to exchange a specified quantity of an underlying item, which may be real or financial, at an agreed price on a specified date. Common types of forwards are interest rate swaps, forward rate agreements, foreign exchange swaps, forward foreign exchange contracts and cross-currency interest rate swaps.

186. Employee stock options are agreements made on a given date (the “grant” date) under which an employee may purchase a given number of shares of the employers’ stock at a

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[45] Membership contributions or subscriptions not reimbursable upon leaving the organizations are treated as use of goods and services, except if they are made to NPIs serving households, when they are treated as miscellaneous other expense (current).

[46] In the *GFSM 2001* these instruments are called Insurance technical reserves.

[47] In the *GFSM 2001* these instruments are called Financial derivatives.

stated price (the “strike” price) either at a stated time (the “vesting” date) or within a period of time (the “exercise” period) immediately following the vesting date.

### h. Other accounts receivable/payable

187. This category comprises trade credit for goods and services, advances for work that is in progress (but only if classified as such under inventories), and other. This last category plays a fundamental role when recording of transactions and other economic flows is done on an accrual basis, because it is used to bridge the time difference between the moment an event takes place and an associated cash flow takes place. Whenever there is a time gap between an event and an associated cash flow, an account receivable or payable is created. The resulting account receivable or payable is then extinguished when the cash flow occurs.

188. **Issues in the classification of financial assets and liabilities.** The treatment of privatization receipts can pose difficulties to compilers. Given that these receipts can be substantial at times, their proper classification and recording in the GFS system is important. Privatization is usually understood to consist of the sale of shares or other equity held by government in a public corporation to other units. Often these units are outside the public sector but they need not be. Under the *GFSM 2001* such sales are purely financial transactions, and should be classified as such. See Example 5.04 below.

**Example 5.04: The government sold shares in a public corporation to a private buyer for Z£8,750.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3212 | Domestic currency and deposits | 8,750 | |
| 3215 | Domestic equity and investment fund shares | | 8,750 |

189. Privatization may be organized in more complicated ways. For instance, some or all of the nonfinancial assets of a public corporation may be sold. In such cases, the public corporation will record the disposal of nonfinancial assets in its accounts, while the payment to government of the proceeds from the sale is recorded as a withdrawal of equity. Example 5.05 below illustrates the recording entries for a public corporation. The entries for the government are the same as in the example above.

**Example 5.05: The public oil company sold nonfinancial assets (buildings) for Z£1,400, and transferred the proceeds to government (Recording entries for the corporation).**

| **At the time the nonfinancial assets (buildings) are sold:** | | | |
|---|---|---|---|
| GFS Code | Descriptor | Debit | Credit |
| 3212 | Domestic currency and deposits | 1,400 | |
| 31112 | Fixed assets, buildings other than dwellings | | 1,400 |
| **At the time the proceeds of the sale are transferred to government:** | | | |
| 3315 | Domestic equity and investment fund shares | 1,400 | |
| 3212 | Domestic currency and deposits | | 1,400 |

190. The *GFSM 1986* treats privatization receipts in a significantly different manner than described above. It recommends treating them as a negative expense under Lending minus repayments, i.e. above the line. If this treatment is followed, privatization receipts improve the overall deficit/surplus. However, several years ago the IMF's Statistics Department decided to modify this recommendation, and treat privatization receipts as a financing transaction (other domestic financing).[48] For consistency purposes, in case a public corporation is privatized, the recording of equity contributions made in the past should in principle be modified; they should be treated as a financial transaction and not an expense. This modification is unlikely to be actually undertaken, as it would entail changing accounts from years past, which have very probably already been audited and are final by now.

## E. Other economic flows

191. As previously indicated, there are two types of other economic flows, holding gains and losses, and other changes in the volume of assets. Holding gains and losses are the result of price changes and affect nonfinancial and financial assets, while other changes in the volume of assets are the result of volume changes and affect mainly nonfinancial assets. Examples of price changes are changes in exchange rates, interest rates, prices of traded assets, etc.; while examples of volume changes are the discovery of new oil or mineral deposits, depletion of deposits, loss of assets due to natural disasters or war, etc. Most other economic flows have as counterpart entry a direct increase or decrease in net worth.[49]

192. The other economic flows are always associated with a specific asset and classified according to the asset whose value is being increased or decreased. Thus, if a devaluation of the national currency increases the value of a loan contracted in a foreign currency (code

[48] This modification does not appear in any official document, but is nevertheless applied in practice.

[49] The exception is the reclassification of assets from one category to another category, and of institutional units from one sector to another sector.

6334) in terms of the national currency, the code for the holding loss is 4334. Likewise, if the discovery of a copper deposit increases the value of subsoil assets (code 6142), the code for the volume change is 5142.

193. The other economic flows complement the information on acquisitions and disposals of assets during a given period, to fully explain the changes in the value of assets and liabilities from one period to another. These flows are noncash flows, and therefore are not recorded in systems that follow a cash basis of recording. As a result, it is not possible to fully reconcile the value of assets at the beginning and at the end of a period under cash based systems.

194. A final point to note on classifications is that statistical discrepancies are not an item under any classification, although they are normally present whenever compiling GFS. In practice, the statistical discrepancy is shown on a separate line in the Statement of Sources and Uses of Cash or the Statement of Government Operations. See Chapter 8 for an illustration.

195. For additional information on the topic of the GFS classification system see:

- *2008 SNA*, Chapter 10, The Capital Account, Chapter 11, The Financial Account, Chapter 12, The Other Changes in Assets Accounts, Chapter 13, Balance Sheet, Chapter 17, Cross-cutting and Other Special Issues, and Chapter 22, The General Government and Public Sectors.

- IMF, *GFSM 2001*, Chapters 5, Revenue, Chapter 6, Expense, Chapter 7, The Balance Sheet, Chapter 8, Transactions in Nonfinancial Assets, Chapter 9, Transactions in Financial Assets and Liabilities, and Chapter 10, Other Economic Flows.

- IMF, *BPM 6*, Chapter 5, Classifications of Financial Assets and Liabilities.

- IMF, *MFSM 2000*, Chapter 4, Classification of Financial Assets.

- IMF, *Public Sector Debt Statistics-Guide for Compilers and Users*, Chapter 3, Identification of Debt Instruments and Institutional Sectors, Chapter 4, Selected Issues in Public Sector Debt, and Chapter 5, Presentation of Public Sector Debt Statistics.

- United Nations, *Classifications of Expenditure According to Purpose*. United Nations, Department of Economic and Social Affairs, Statistics Division, Statistical Papers, series M, No. 84, New York, 2000.

## Annex 5.1

### List of Typical Names for Revenue and Expense Categories Used by Countries

**<u>1 REVENUE</u>**

**11 Taxes**

111 Taxes on income, profits, and capital gains

1111 Payable by individuals

taxes on salaries, taxes on wages, taxes on pensions, taxes on earnings, taxes on capital gains, taxes on individuals, withholding tax, income tax, PAYE tax, taxes on household income, taxes on winnings from lotteries or gambling, penalties on taxes, refunds of taxes

1112 Payable by corporations and other enterprises

taxes on profits, income tax, taxes on capital gains, taxes on companies, taxes on holding gains, taxes on interest, dividends, and royalties income, penalties on taxes, refunds of taxes.

1113 Unallocable

any tax on income, profits, and capital gains that cannot be allocated between individuals and corporations

112 Taxes on payroll and workforce

wages and salaries tax, payroll tax, employment tax

113 Taxes on property

1131 Recurrent taxes on immovable property

land and building tax, tax on land and house, land tax, forest tax, real estate tax

1132 Recurrent taxes on net wealth

1133 Estate, inheritance, and gift taxes

gift and inheritance tax, death and donation duties, estate taxes, succession taxes, gift taxes, bequest taxes

1134 Taxes on financial and capital transactions

financial transactions tax, ownership transfer tax, mortgage tax, capital registration fees, duty on checks, duty on documents, investment registration scheme fees, tax on sale of property, stamp tax on wealth and rights transfer

1135 Other nonrecurrent taxes on property

motor vehicle purchase tax, land revaluation tax, betterment tax, improvement tax, special assessment

1136 Other recurrent taxes on property

livestock tax, general property tax, personal property tax

114 Taxes on goods and services

1141 General taxes on goods and services

11411 Value-add taxes

VAT on local goods, VAT on imported goods, VAT on oil products, VAT on services, refunds of VAT

11412 Sales taxes

sales tax on products and services

11413 Turnover and other general taxes on goods and services

1142 Excises

taxes on gasoline, petrol, electricity, gas, energy, motor fuels, hydrocarbon oils, tobacco, cement, sugar, paint, spirits, wine, beer, soft drinks, electricity, autos, matches, chocolates, luxury products

**List of Typical Names for Revenue and Expense Categories Used by Countries (continued)**

**1 REVENUE *(continued)***

**11 Taxes *(continued)***

114 Taxes on goods and services *(continued)*

1143 Profits of fiscal monopolies

profits on sales of alcoholic beverages, tobacco and tobacco products, petroleum products, salt, matches

1144 Taxes on specific services

taxes on transportation, insurance premiums, banking services, entertainment, restaurants, taxes on betting, casino, gaming, gambling, advertising, tourism tax, telephone tax

1145 Taxes on use of goods and on permission to use goods or perform activities

licenses for motor vehicles, motor vehicle registration, truck registration, car registration, licenses for business, hospitality services, games of chance, hotels and restaurants, livestock traders, liquors, electricians; professional licenses, bus licenses, limousine licenses, industrial registry, gun licenses, building permits, radio and TV licenses, trading licenses, fees for use of hunting reserves, firewood, and natural plants; dog-owners' tax, company registration fee, partnership registration fee, foreign business trade fee, diving school registration fee

1146 Other taxes on goods and services

severance taxes

115 Taxes on international trade and transactions

1151 Customs and other import duties

import duties, custom feeds, ad valorem-import duties, custom fines, import fees, surtaxes based on tariff schedule, refunds of import duties

1152 Taxes on exports

export duties, export tax on unprocessed agricultural products, export tax on timber and rubber, refunds of export duties

1153 Profits of export or import monopolies

gum Arabic monopoly profit

1154 Exchange profits

exchange control fees

1155 Exchange taxes

taxes on sale or purchase of foreign exchange

1156 Other taxes on international trade and transactions

taxes on remittances abroad, taxes on travel abroad

116 Other taxes

1161 Payable solely by business

free zone fees, stamp tax; revenue from unidentified taxes

1162 Payable by other than business or unidentifiable

highway toll, sports tax, security tax, education tax, development tax, revenue from unidentified taxes

**List of Typical Names for Revenue and Expense Categories Used by Countries (continued)**

**1 REVENUE *(continued)***

**12 Social contributions**

**121 Social security contributions**

**pension contributions, health contributions, unemployment contributions, disability contributions, refunds of contributions**

**122 Other social contributions**

**health contributions, unemployment contributions, disability contributions, refunds of contributions**

**13 Grants**

From foreign governments, international organizations, and other general government units

current and capital transfers/grants from foreign governments (and their agencies) and international organizations, current and capital transfers/grants between subsectors of general government (eliminated in consolidation), transfers from local governments, transfers from extra-budgetary funds , transfers from social security funds

**14 Other revenue**

141 Property income

1411 Interest

interest receipts from domestic and foreign borrowers, interest income on loans, interest income from securities (other than shares), interest from deposits in commercial banks and other financial institutions

1412 Dividends

dividends from central bank, listed public companies, listed private companies, state lotteries, revenues from state-owned enterprises' income sharing

1413 Withdrawals from income of quasi-corporations

profits from public entities (other than corporations)

1414 Property income attributed to insurance policyholders

1415 Rent

income from royalties on oil and oil products, mineral deposits (gold, silver, copper, etc.), natural gas, timber, fuel wood, natural resources, forestry, fishery, water; resort leases, income from concessions of land, and for exploration or geological prospection

142 Sales of goods and services

1421 Sales by market establishments

all sales of market establishments, such as rental of buildings, rental of machinery and equipment, air passenger service charge, wildlife park fees, coffee shops and restaurants, publications, landing charges, all sales of public corporations

1422 Administrative fees

fees from driving licenses, passports, registering taxpayers; aviation fees, quality approval fees, patent fees, trademark fees, audit fees, examination fees, training fees, school fees, consulate fees, abattoir fees, quarantine fees, weighers fees, court fees, admission fees, public registry fees, marriage registry fees, fees for national identity cards, inspection fees, mobile telephone licenses, expatriate visa charges, work permit fees, telecommunications license fees

**List of Typical Names for Revenue and Expense Categories Used by Countries (continued)**

## 1 REVENUE *(continued)*

### 14 Other revenue *(continued)*

142 Sales of goods and services *(continued)*

1423 Incidental sales by nonmarket establishments

revenues from hospital fees, medical certificates, agricultural services, archive services, transportation services, sale of maps, sale of books, prosthetics and orthotics fees, sale of vegetables, sale of livestock, sale of fruit trees, sale of forms, admission fees, tuition fees

1424 Imputed sales of goods and services

143 Fines, penalties, and forfeits

fines and forfeitures, traffic fines, individual and legal fines, criminals and prisoners fines, court fines, fines and seized money from corruption, financial penalties for economic crimes

144 Voluntary transfers other than grants

donations from private companies, donations from physical persons, donations from individuals, current and capital transfers from nongovernment sources

145 Miscellaneous and unidentified revenue

miscellaneous receipts, refunds of unidentified nontax revenues, reimbursement of damage to government property, nonlife insurance premiums and claims

## 2 EXPENSE

### 21 Compensation of employees

211 Wages and salaries

2111 Wages and salaries in cash

basic salaries, overtime salaries, salaries for night shift, salaries for tours of duty, basic wages, salaries during holidays, primary salaries, overtime, bonuses, food allowance, vacation allowance, on-site allowance, separation allowance, on call-duty allowance, housing allowance, transfer allowance, cost of living allowance, sabbatical vacations, uniform allowance, remunerations, honoraria, allowances, personal emoluments, performance bonus

2112 Wages and salaries in-kind

medical treatment, vacation tickets, food for employees, housing for employees, transport services, parking, day care

212 Social contributions

2121 Actual social contributions

basic contributions for pension and disability insurance, basic health contributions, basic contributions, for occupational diseases, other contributions for pension and disability insurance, other health contributions

2122 Imputed social contributions

**List of Typical Names for Revenue and Expense Categories Used by Countries (continued)**

**2 EXPENSE *(continued)***

**22 Use of goods and services**

travel in the country, travel abroad, utilities, electricity, water supply and sewerage, garbage collection fee, wood, coal, petrol, post, telephone and facsimile, fuels, registration of motor vehicles, transport of goods, transport of people, office supplies, clothing, IT supplies, food products and beverages, repair and maintenance of vehicles, repair and maintenance of buildings, repair and maintenance of other structures, rental of space and equipment, bank fees, court and legal fees, contractual services, training expenses, official entertainment, advertising, Internet services, cleaning supplies, conference facilities, publications, medicines, consultant services, board of directors fees, security services, feasibility studies, tools and materials, membership fees, borrowing related charges, spare parts, repair and upkeep, transport, studies, legal services

**23 Consumption of fixed capital**

**24 Interest**

241 To nonresidents

interest payments to international organizations, interest payments to Paris Club and London Club creditors, foreign interest, short term interest, long term interest, external interest, discount on government securities foreign

242 To residents other than general government units

interest on treasury bills, interest on loans, interest on bonds, domestic interest, interest on notes, discount on government securities domestic

243 To other general government units

interest on treasury bills, interest on loans, interest on bonds, domestic interest, interest on notes, discount on government securities domestic

**25 Subsidies**

251 To public corporations and private enterprises

subsidies to nonfinancial institutions, subsidies to financial institutions, subsidies to public corporations, subsidies to private enterprises, grants to state corporations for operating expenses, subsidies on products, transfers to public corporations, transfers to private enterprises

**26 Grants**

current and capital transfers/grants to foreign governments (and their agencies) and international organizations; current and capital transfers/grants between subsectors of general government (eliminated in consolidation); transfers to local governments, transfers to extra-budgetary funds (e.g., road fund), transfers to social security funds.

**27 Social benefits**

Social benefits in cash

payments to pensioners, payments to disable persons, unemployment benefits, sickness and maternity payments, invalidity pensions, widow pensions, retirement pensions, old age pensions, disability allowances, civil service pensions, military pensions, disability pensions, payments on family deaths

**List of Typical Names for Revenue and Expense Categories Used by Countries (continued)**

**2 EXPENSE *(continued)***

**27 Social benefits *(continued)***

Social benefits in cash *(continued)*

support for the disabled, food allowances for students, subsidies to low income families, old age pension, social assistance, medical assistance, supplementary assistance

Social benefits in kind

food security distribution, medical treatment, training for the handicapped, children's education subsidy, employee health care, education benefits

Note: The three schemes (social security, social assistance, and employer social insurance) provide essentially the same benefits. The payments are classified according to the scheme providing the benefits.

**28 Other expense**

281 Property expense other than interest

2811 Dividends (public corporations only)

2812 Withdrawals from income of quasi-corporations (public corporations only)

2813 Property expense attributed to insurance policyholders

2814 Rent: rent of private land, rent of government natural property, rent of mineral deposits, rent of oil and gas deposits

282 Miscellaneous other expense

2821 Current

transfers to nongovernmental organizations serving households, transfers in kind to charities serving households, transfers to citizen associations, transfer to humanitarian organizations, membership fees in domestic organizations, scholarships to students, nonlife insurance premiums, gratuities, awards, prizes, taxes paid to others level of government, fines and penalties paid by government, payments of compensation for or damages caused by natural disasters

2822 Capital

transfer/grants to public/state corporations for capital expenditures, transfers/grants to private enterprises for capital expenditures, capital subsidies to public institutions, capital subsidies to private enterprises

## PART II. DATA COMPILATION

196. In Part I we presented the main concepts and framework of the *GFSM 2001* that underpin the compilation of government finance statistics. More specifically, we discussed the coverage, flows and stocks, accounting rules, overall framework, and classifications that underlie the compilation of fiscal statistics under the GFS system. We now turn in Part II to the presentation and discussion of actual data compilation issues.[50]

197. A very important point concerning data compilation is the legal and institutional environment in which the data producing agency operates. Concerning the legal environment, a clear legal mandate to compile and disseminate statistics, technical independence, and an adequate budget are essential for any agency to be able to produce quality statistics. Assigning by law the responsibility for collecting, processing, and disseminating statistics to a given agency helps ensure access to data sources and timely processing of information. Technical independence helps ensure statistics are produced on an impartial basis. Finally, an adequate budget helps ensure the necessary human, physical, and financial resources are available to produce quality statistics.

198. Concerning the institutional environment, a standard recommendation of GFS technical assistance missions is to have a dedicated unit, or at least dedicated staff, responsible for the compilation of GFS; preferably at the ministry of finance, because this entity generates and controls a significant part of the source data. This arrangement allows the Ministry to better focus its efforts to improve the quality of fiscal statistics, such as by providing specialized training to compilers, and providing continuity in the production of statistics.

199. The above and other related matters relevant to the production of quality statistics are assessed under the Report on the Observance of Standards and Codes (ROSC) Data Module, using a Data Quality Assessment Framework (DQAF) developed by the IMF's Statistics Department for several macroeconomic datasets, including government finance statistics. The DQAFs are a very useful tool to identify a country's strengths and weaknesses in the compilation and dissemination of macroeconomic statistics. It is recommended that countries conduct a self-assessment using the DQAF for GFS.[51]

200. The compilation process under the GFS system requires compilers to: (a) define the institutional scope of the general government sector and its subsectors (or the public sector and its subsectors); (b) select data sources for all the entities and units to be covered by the

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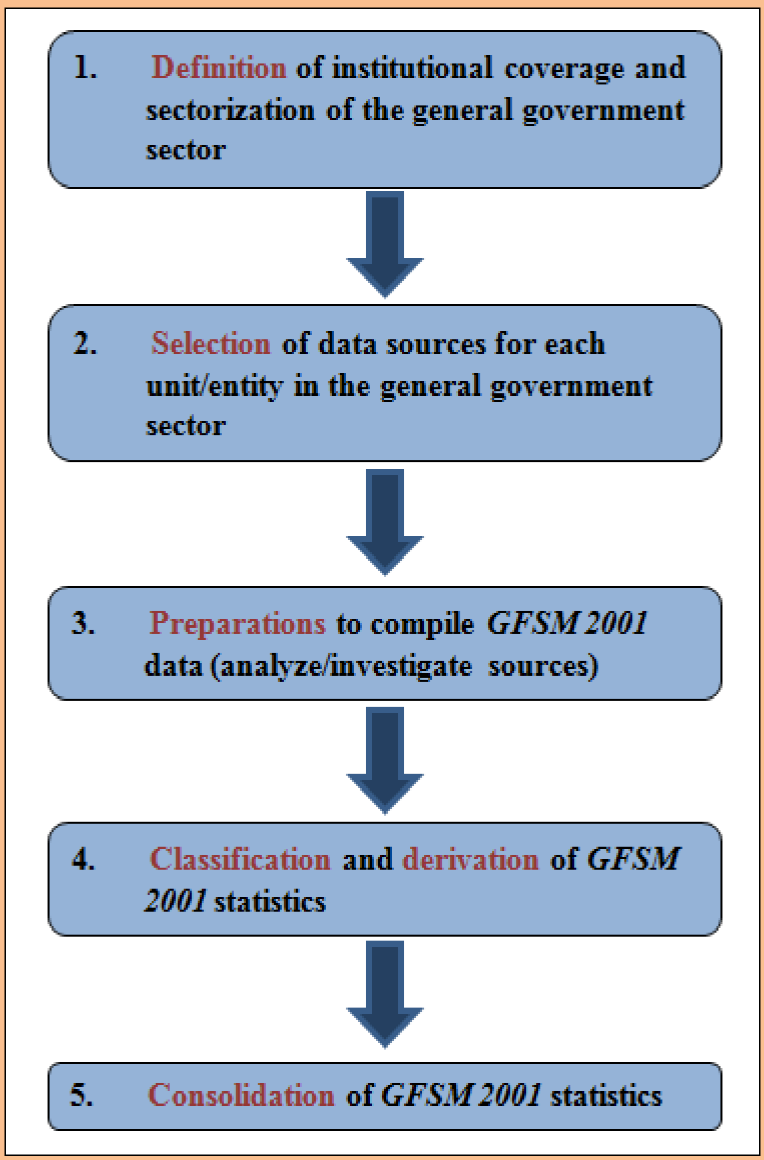
[50] The *GFSM 1986* is both a manual and a compilation guide. It is worthwhile to consult this manual when compiling statistics, especially on a cash basis, as it provides detailed explanations of a number of relevant compilation issues.

[51] The DQAFs are available at http://dsbb.imf.org/pages/dqrs/DQAF.aspx.

statistics, (c) identify and make any adjustments to data sources that may be required to meet the requirements of the *GFSM 2001* methodology; (d) reclassify the source data to the *GFSM 2001* classifications and compile unconsolidated GFS; and, (e) consolidate the data to compile GFS for the central government sector, and general government sector (or public sector). See Figure 9. The next four chapters address these issues. It is important to keep in mind while reading these chapters the distinction made in Chapter 1 between three terms frequently used when discussing fiscal sector statistics: budget execution data, fiscal statistics, and government finance statistics.

**Figure 9. Steps in *GFSM 2001* Data Compilation Process**



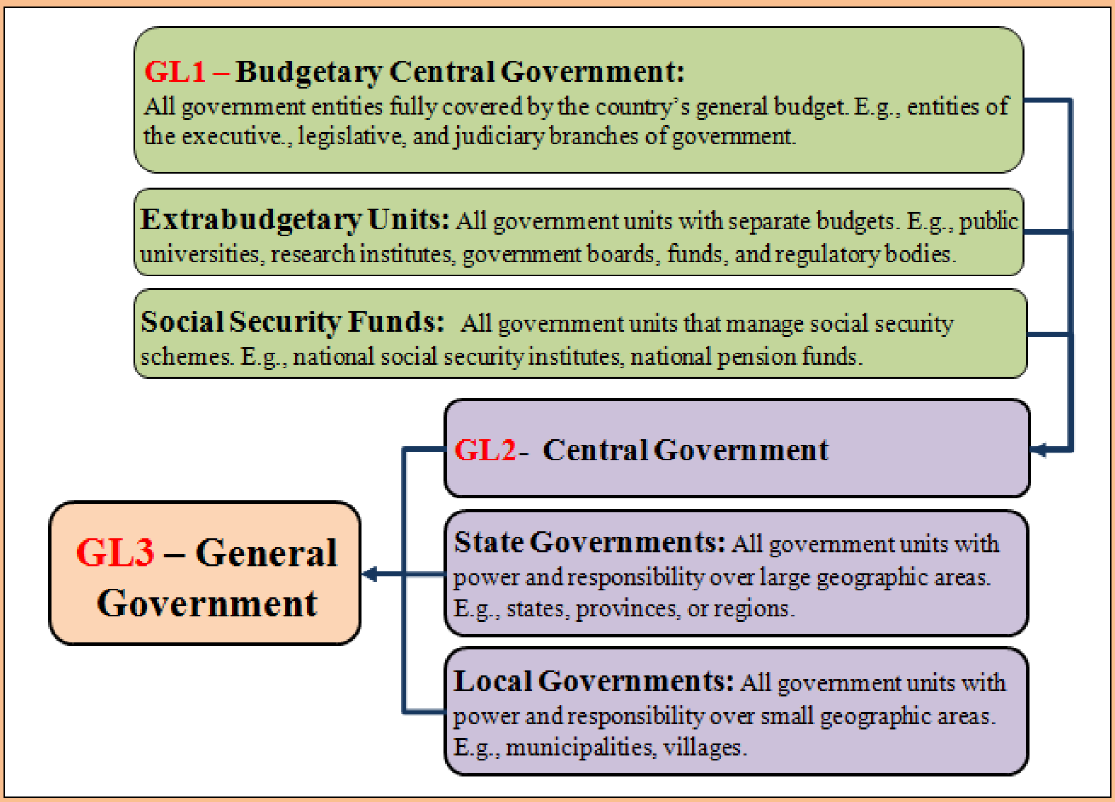
## CHAPTER 6. INSTITUTIONAL STRUCTURE OF GOVERNMENT

*This chapter describes the institutional structure of government and the coverage of the statistics compiled and disseminated.*

### A. List of Entities and Units of the General Government (Public) Sector

201. The first step in the compilation of GFS under the *GFSM 2001* methodology is to define the institutional scope of the general government sector (public sector) in a given country. As stated in Chapter 1, a very effective and useful action that countries can take is to compile a list of all entities and institutional units that compose the general government sector and its subsectors. See Figures 10A and 10B for an overview of all the units that should be included in the list.

**Figure 10A. General Government Sector and its Subsectors**

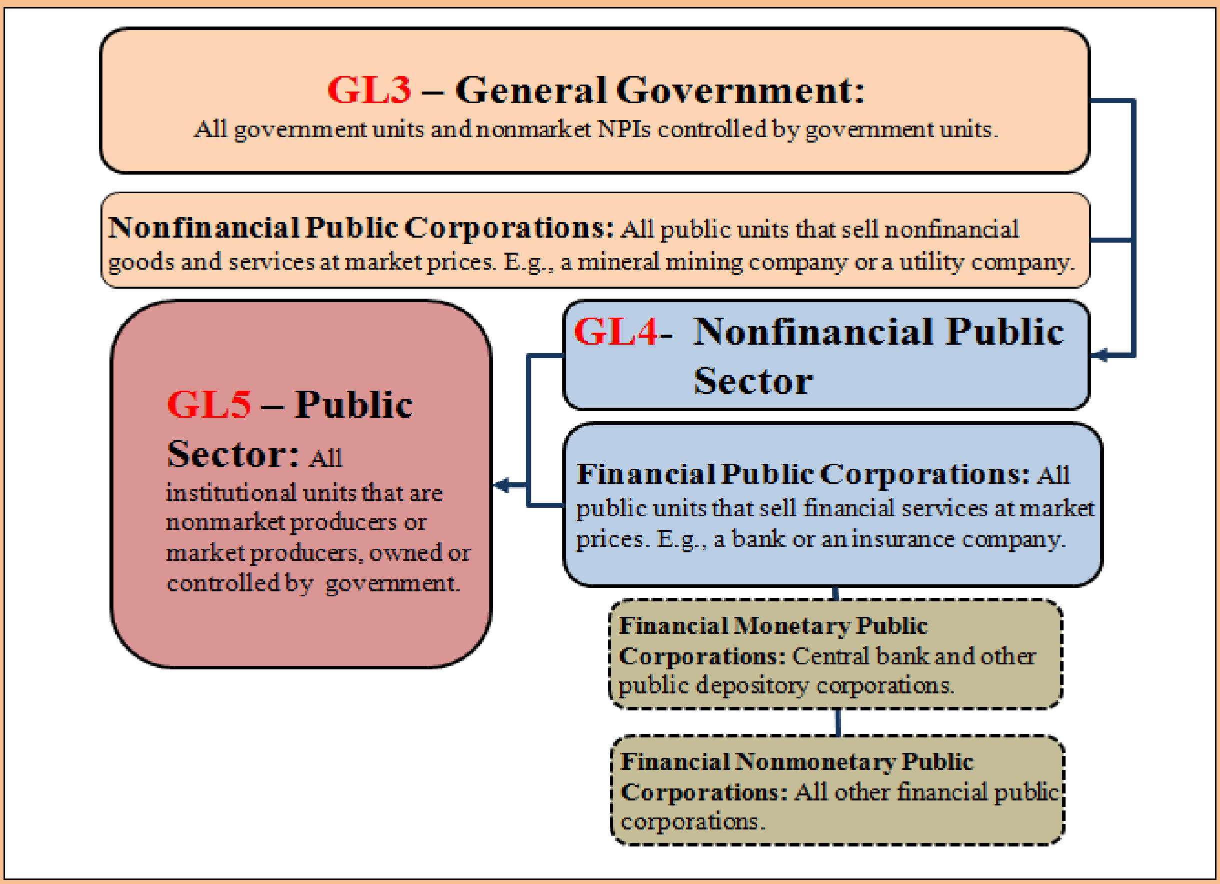



202. It is highly recommended that a working group of the data producing agencies jointly prepare the list and agree to its use for compiling all macroeconomic datasets. The list should be maintained by one agency, and be periodically updated by the working group. Use of such

a list will enhance the consistency of the resulting statistics, by addressing a frequent reason for inconsistency across macroeconomic datasets, different institutional coverage.

203. A convenient starting point is to use the list underlying the national accounts for the general government sector. Based on this list, the working group can make modifications, if necessary. Afterwards all the entities and units in the list should be assigned to subsectors and sectors. As stated earlier, there may be a few cases where the proper sectoring of a unit is uncertain. In these cases, agreement should be reached on the unit's sectoring and all parties should consistently follow the agreed classification. The list of general government sector units should be periodically reviewed and updated to reflect changes in the institutional structure of government. The list can then be extended to include public nonfinancial and financial corporations, as to define the institutional scope of the public sector. An example of such a list of units that compose the general government sector and the public sector for a country is provided in the Annex to Chapter 6.

**Figure 10B. Public Sector**




204. Next, the institutional and transactional coverage of the fiscal statistics currently compiled should be identified. Initially for many developing countries the institutional

coverage may only be the budgetary central government, and the transaction coverage for this subsector may not be complete. For example, many countries have transaction gaps concerning donor funded projects. The institutional coverage of the fiscal statistics currently compiled may of course be broader than just the budgetary central government. By determining the transaction and institutional coverage of current fiscal statistics a program to address over time the gaps identified can be prepared.

205. The determination of the current institutional coverage will in most cases be based on the coverage of existing budget execution data. It should be highlighted that the subsectors included in these data often reflect national legal and administrative arrangements, which may differ from the *GFSM 2001* definition of general government (public) sector and its subsectors. It is important that the relationship between both be clearly established, and that the current institutional coverage of fiscal statistics is expressed in terms of the *GFSM 2001* sectors and subsectors.

206. The priority to expand the institutional coverage of statistics beyond budgetary central government should be first the larger units of the extra-budgetary units and social security funds subsectors. Typically there are just a few major units in each subsector that account for a significant majority of the activity in the subsector, and these entities are more likely to have the human and financial resources to prepare financial statements. Next would come the larger state governments (if applicable) and local governments, followed later by the larger nonfinancial public corporations and then financial corporations. Eventually all general government (public) units should be included in the coverage of fiscal statistics. The institutional table should be updated as the institutional coverage of statistics expands, and breaks in the time series identified.

207. The transactional coverage of budgetary central government is usually fairly complete for revenues and expenses, with one major exception, data on foreign grants. Information on the cash component of foreign grants tends to be available as the funds are often deposited in a central bank account or a Treasury account. Although in cases where foreign grants in cash are provided directly to an entity other than the central bank or the MOF, information on these grants may not be readily available to compilers.[52] The problem lies in the noncash component of foreign grants, which may take the form of direct payments to contractors or other suppliers, technical assistance, or grants in kind. Information on these items may be available at the institution that compiles the balance of payments statistics. However, usually the best and only way to collect information on the noncash components of grants is through quarterly surveys.

[52] A government directive to deposit foreign grants in cash into a designated account is a common and effective practice to ensure control of these funds.

## B. Typical Institutional Table

208. A convenient way to summarize the information about the institutional structure of government and the coverage of fiscal statistics is to use a table called an institutional table. Such a table is frequently prepared and used by IMF staff and experts when conducting technical assistance missions, and is also included in the *Government Finance Statistics Yearbook* (*GFS Yearbook*) and in STA's database for fiscal statistics. The table also includes information about accounting practices and plans to adopt the *GFSM 2001* methodology.

209. A typical institutional table for an imaginary country called Country Z is shown below in Table 10. This table follows the actual template used by the IMF's Statistics Department in its technical assistance reports and publications. Based on the list of entities and units prepared by a working group from the ministry of finance, central bank, and national statistics institute of Country Z (presented as an Annex to Chapter 6), and other information regarding the compilation of fiscal statistics in the country, the institutional table presents an overview of the country's institutional structure of government, data coverage, selected accounting practices, and plans for adoption of the *GFSM 2001* guidelines, as of 2010.

210. The budgetary central government entities of Country Z are presented in alphabetical order and they constitute a single institutional unit. The subsector could of course include additional institutional units. Typically, budgetary central government entities are fully included in a country's general budget, and each often constitutes a budget head. In other words, the budget covers all their revenues, outlays, and financing. The extra-budgetary units/entities subsector includes a variety of units that belong to the central government, but have their own separate budgets. Most usually these units receive transfers from the budgetary central government, but also generate some of their own revenues (grants from international organizations, sale of products and services, etc.). Examples of these units include universities and technical institutes, research centers, regulatory bodies, councils, commissions, special funds (e.g., road fund, development fund, housing fund, etc.), nonprofit institutions, hospitals, and other government agencies. The social security funds subsector should include all the institutional units operating social security schemes. In the model institutional table only one unit is reported, but for other countries it could include more institutional units. These three subsectors, budgetary central government, extra-budgetary units, and social security funds, compose the central government subsector of Country Z.

211. The state governments subsector of Country Z is composed of six state governments, each of which receives transfers from the budgetary central government, but also generates part of its revenues by imposing and collecting taxes in its territory, and has significant discretion on the use of its funds. The local governments subsector is composed of 13 towns and 25 villages. These units receive a substantial part of their revenue from the central and state governments, but also collect fees for services provided to their citizens.

## Table 10. Institutional Table for Country Z

# Country Z

### Units of General Government

**Central Government**

Subsector 1. Budgetary central government

1.1 Court of accounts, economic and social council, electoral commission, judiciary, ministries (15), office of the auditor general, office of the attorney general, office of the president, parliament, supreme court, and other entities

Subsector 2. Extrabudgetary units/entities

2.1 Corn Research Institute
2.2 Cotton Export Board
2.3 Education Trust Fund
2.4 Institute for Agricultural Education
2.5 National Electricity Authority
2.6 Road Fund
2.7 University of Country Z
2.8 Wildlife Management Agency
2.9 Tourism Authority of Country Z

Subsector 3. Social security funds

3.1 National Social Security Fund

**State Governments**

Subsector 4. State governments

4.1 Dessert land
4.2 Forest land
4.3 Mountain land
4.4 Ocean land
4.5 River land
4.6 Savanna land

**Local Governments**

Subsector 5. Local governments

5.1 13 towns
5.2 25 villages

### Data Coverage

Data in central government tables cover operations of subsectors 1 and 3.
+ Data for budgetary central government include revolving funds (except the Road Fund) from 2003 onwards.

**Table 10. Institutional Table for Country Z *(continued)***

## Country Z

**Accounting Practices**

1. Basis of recording*:* Data for budgetary central government are reported on a cash basis.
2. Liquidation or complementary period*:* Data for two months after the end of the fiscal year are included in the previous year's data.
3. Valuation of assets and liabilities: Debt liabilities are recorded at face value.

***GFSM 2001* Implementation Plan**

The ministry of finance intends to: adopt the *GFSM 2001* presentation (statements and tables) in 2011; collect information on the main extra-budgetary units and state governments in 2012; compile a financial balance sheet in 2013; and implement accrual accounting in 2015.

This institutional table is based on information reported in 2010.

212. The current data coverage of Country Z's central government statistics is the budgetary central government and the social security fund. There are no data available for extra-budgetary units or state governments and local governments. The government intends to collect information from the main extra-budgetary units next year, and to include them in the coverage of central government. A break symbol will need to be introduced for central government data beginning in 2011, because their institutional coverage will be different than in earlier years, and the time series will no longer be consistent over time.

213. On the accounting practices, data are reported on a cash basis, there is a complementary period of two months, and debt liabilities are recorded at face value. The government intends to gradually adopt the *GFSM 2001* methodology and has established goals and a timetable to this effect. The institutional table is valid for 2010. The institutional table should be updated regularly, at least once a year or when warranted.

214. For additional information on the topic of the institutional table see:

- IMF, *GFSM 2001*, Chapter 2, Coverage of the GFS System.
- IMF, *GFSM 2001 Companion Material*, Coverage and Sectorization of the Public Sector.
- IMF, *GFSM 2001 Questionnaires*, Annual GFS: the Institutional Table.
- IMF, *GFS Yearbook*, Institutional tables.

**Annex 6.1**

**List of Entities and Institutional Units of the General Government and Public Sectors**

## Country Z

**GENERAL GOVERNMENT AND PUBLIC SECTOR**

**Central Government**

| | |
|---|---|
| **Subsector 1. Budgetary central government** | |
| 1 | Office of the President |
| 2 | Parliament |
| 3 | Supreme Court |
| 4 | Economic and Social Council |
| 5 | Judiciary |
| 6 | Office of the Attorney General |
| 7 | Office of the Auditor General |
| 8 | Court of Accounts |
| 9 | Electoral Commission |
| 10 | Ministry of Home Affairs |
| 11 | Ministry of Foreign Affairs |
| 12 | Ministry of Finance and National Planning |
| 13 | Ministry of Energy and Mines |
| 14 | Ministry of Works |
| 15 | Ministry of Justice |
| 16 | Ministry of Commerce, Trade and Industry |
| 17 | Ministry of Labour and Social Security |
| 18 | Ministry of Health |
| 19 | Ministry of Communications and Transport |
| 20 | Ministry of Education |
| 21 | Ministry of Defense |
| 22 | Ministry of Tourism, Environment and Natural Resources |
| 23 | Ministry of Agriculture and Fisheries |
| 24 | Ministry of Sport, Youth and Child Development |
| 25 | Other Entities |
| | |

## List of Entities and Institutional Units of the General Government and Public Sectors *(continued)*

# Country Z

**GENERAL GOVERNMENT AND PUBLIC SECTOR**
**(List of entities and institutional units)**

**Central Government *(continued)***

| | |
|---|---|
| **Subsector 2. Extrabudgetary units/entities** | |
| 1 | Corn Research Institute |
| 2 | Cotton Export Board |
| 3 | Education Trust Fund |
| 4 | Institute for Agricultural Education |
| 5 | National Electricity Authority |
| 6 | Road Fund |
| 7 | University of Country Z |
| 8 | Wildlife Management Agency |
| 9 | Tourism Authority of Country Z |
| | |
| **Subsector 3. Social security funds** | |
| 1 | National Social Security Fund |
| | |
| **Subsector 4. State governments** | |
| 1 | Dessert land |
| 2 | Forest land |
| 3 | Mountain land |
| 4 | Ocean land |
| 5 | River land |
| 6 | Savanna land |
| | |
| **Subsector 5. Local governments** | |
| Local governments | |
| Towns | |
| 1 | Alizo |
| 2 | Boloko |
| 3 | Dumango |
| 4 | Fresia |
| 5 | Kwenta |
| 6 | Lisongo |
| 7 | Mwaka |
| 8 | Ndoko |
| 9 | Pakuri |
| 10 | Solima |

**List of Entities and Institutional Units of the General Government and Public Sectors *(continued)***

## Country Z

**GENERAL GOVERNMENT AND PUBLIC SECTOR**
**(List of entities and institutional units)**

**Central Government *(continued)***

| | |
|---|---|
| **Subsector 5. Local governments *(continued)*** | |
| Towns *(continued)* | |
| 11 | Tureme |
| 12 | Yazmin |
| 13 | Zatinga |
| Villages | |
| 1 | Amoko |
| 2 | Bokara |
| 3 | Chosika |
| 4 | Colongwe |
| 5 | Dikombo |
| 6 | Elongo |
| 7 | Fakundo |
| 8 | Hokamba |
| 9 | Ikonga |
| 10 | Jakana |
| 11 | Kabildo |
| 12 | Kilombo |
| 13 | Kuterbo |
| 14 | Kwakudu |
| 15 | Kwanto |
| 16 | Moringa |
| 17 | Mukura |
| 18 | Mwazha |
| 19 | Nilamba |
| 20 | Opako |
| 21 | Pokara |
| 22 | Rikanto |
| 23 | Sumamba |
| 24 | Tinka |
| 25 | Zamburu |

**List of Entities and Institutional Units of the General Government and Public Sectors *(continued)***

## Country Z

**GENERAL GOVERNMENT AND PUBLIC SECTOR**
**(List of entities and institutional units)**

**Public Corporations**

| | |
|---|---|
| **Nonfinancial public corporations** | |
| 1 | Engineering Services Limited |
| 2 | Happy Cow Farms |
| 3 | National Airports Corporation |
| 4 | National Harbours Corporation |
| 5 | National Housing Company |
| 6 | National Minerals Corporation |
| 7 | National Petroleum Corporation |
| 8 | Shipping Corporation of Z |
| 9 | Z Daily Times |
| 10 | Z Postal Service |
| 11 | Z Printing Company |
| 12 | Z Railways Corporation |
| 13 | Z State Lotteries |
| 14 | Z Stores Limited |
| **Financial public corporations** | |
| 1 | Central Bank of Z |
| 2 | Development Bank of Z |
| 3 | National Mortgage Bank |
| 4 | National Savings and Credit Bank |
| 5 | Z Capital Investments Limited |
| 6 | Z Insurance Company |
| 7 | Z Commercial Bank |
| 8 | Z Re-Insurance Limited |

# CHAPTER 7. DATA SOURCES

*This chapter describes the selection of and adjustments to the data sources used to compile government finance statistics.*

## A. Accounting Records, Budget Execution Reports, and Financial Statements

215. Once an institutional table has been prepared, the next step is to identify data sources for the subsectors for which government finance statistics are to be compiled. Initially, many countries just compile fiscal statistics for budgetary central government. Over time this institutional coverage should be broadened. The priority of the units to gradually include in the coverage of GFS should be based on their relative significance to understanding fiscal developments in a given country. In practice, the priority is often as follows: the social security fund(s), the main extra-budgetary units, the main local government units, the main nonfinancial public corporations. The usual data sources for these and all other general government (public) sector units are discussed below.

216. Ideally, compilers should use detailed government accounting records and financial statements as the main data sources for compiling *GFSM 2001* statistics on government stocks and flows. In addition, or alternatively—depending on circumstances—budget execution reports may serve the purpose. Compilers may need surveys and other means of obtaining data where suitable accounting records, financial statements, or budget execution records are not readily available, for example, for data on local governments. The chosen data sources should provide sufficient detail on both flows and stocks to enable compilers to complete each of the statements and tables of the GFS system (see Chapters 4 and 8), for each subsector and for each periodicity.

217. Factors to consider when selecting source data are the transaction and institutional coverage of economic flows and stocks, the basis of recording and valuation, the degree of detail available, the periodicity and timeliness of the reports, and the accuracy and reliability of the information presented in the documents. It is important to note that there may be tradeoffs between these factors. For example, more detailed data may be less timely. The medium in which the records can be made available might also be a consideration. For example, records available in electronic form may be preferred if the data can be transferred electronically into computer systems used to compile *GFSM 2001* statistics. Also, the source data for preliminary statistics and final statistics are often different.

218. In principle, information needs to be collected for all institutional units within a given subsector. However, for some subsectors such as the extra-budgetary units subsector and the local governments subsector, information may be collected initially only for the more significant units. This partial institutional coverage should be noted in the institutional table. In principle, information should be collected for all flows and stocks associated with the units included in a given subsector. Efforts should be made from the start to collect comprehensive data for transactions, which may require identifying data sources for information not readily

available, such as externally funded transactions. It is most likely that information on assets and liabilities may initially be limited. A plan should be set up to collect these data over time. However, source data are normally available for domestic and external debt liabilities, and should be collected and used from the start.

219. Source data availability will set limits on the periodicity of the statistics. Compiling monthly GFS requires the availability of sufficiently detailed monthly source data, while compiling quarterly statistics requires the availability of monthly and/or quarterly source data. Compiling annual GFS statistics could be carried out using monthly, quarterly, or annual source data.[53] Most developing countries currently compile monthly fiscal statistics based on budget execution data for budgetary central government. Many countries also compile annual fiscal statistics for the consolidated central government, and a few do so for the general government sector. As detailed in Chapter 12, the best practice is to compile and disseminate monthly GFS for the central government subsector and quarterly GFS for the general government sector, within one month and three months, respectively, after the end of the reference period. Countries should aim to eventually meet these periodicity and timeliness goals.

220. The accounting records of government units are often the best data sources for compiling GFS following the *GFSM 2001* guidelines. These records may be available on a timely basis, but certain factors may prevent compilers from using them, such as the accounting records being too detailed and disaggregated, rendering the compilation task too large and costly. However, countries compile and disseminate monthly, quarterly, and/or annual budget execution reports, which are based on the underlying accounting records. These reports are usually more aggregated than the detailed accounting data, and are available in more timely fashion than the detailed annual financial statements. Thus, in practice, budget reports (for each subsector of government in a country or for each government unit/entity) are frequently the principal source for compiling GFS following the *GFSM 2001* guidelines.

221. Some entities may not be covered by the budget documents, typically extra-budgetary units and social security funds. Compilers may use the financial statements for these units as the main data sources to compile annual GFS (See Appendix 2 for examples of how to compile GFS from financial statements). These statements are more aggregated than the more detailed accounting records, thus rendering more manageable the compilation task. Government units prepare financial statements using a variety of accounting presentations. Different accounting standards may apply to budgetary units and units outside the budgetary framework. Often, government units use cash accounting standards for budgetary reporting

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[53] Monthly and quarterly data may only be useful to a limited extent when compiling annual data because such data: (i) may exclude end-of-year operations and/or adjustments normally included in annual data, and (ii) may not be sufficiently detailed to allow for the full compilation of all the *GFSM 2001* statements and tables.

and accrual (noncash) accounting standards for extra-budgetary units and social security funds. If no cash data are available for these units, the noncash data should be used to compile GFS for the subsectors. The resulting statistics should then be summarized in the Statement of Government Operations instead of the Statement of Sources and Uses of Cash.

222. State and local government units may be numerous and follow different accounting practices, therefore particular data collection procedures may be necessary. In some countries, information is available through budgetary central government entities exercising a supervisory or review function over these units. State and local government legislative bodies or other entities can also sometimes be a source of information for these units. In the absence of any of these or other sources, it may be necessary to design specific report forms and/or undertake surveys to collect the information. In practice, collection efforts should be focused on the larger state and local government units. Ideally, this should be complemented with a survey of a sample of the smaller units at less frequent intervals, perhaps every three to five years. Estimates of missing data may be necessary to ensure complete coverage.

223. The financial statements (income statement, balance sheet, cash flow statement) of public corporations are often the best data sources for compiling GFS for these entities. An example of how to compile GFS for a public corporation is presented in Appendix 2.

224. For revenue and expense transactions, the principal source document is the generic statement of financial performance, usually called the income statement or operating statement. It provides information on revenue by type, such as sales, contributions to specific funds, tax revenue, and interest receivable, as well as on expense by economic type, such as goods and services, wages and salaries, administrative expenses, interest payable, and other expenses. For details on the acquisition and disposal of nonfinancial assets, and on financial activity of government, separate statements/notes usually provide information on changes in the balance sheet positions during the period. These statements identify changes in the holding of nonfinancial assets separately from activity in financial assets, including debt. In addition to the main statements, notes to the accounts usually provide additional useful information on the government unit's economic activities during the period. Compilers should also refer to these notes when analyzing the unit's activities. Cash flow statements often also have useful information on revenue and expense transactions, as well as on transactions in nonfinancial and financial assets.

225. The principal source for obtaining data on government stocks of assets and liabilities is a balance sheet, usually prepared at the end of each accounting period. If a full balance sheet is not published, sufficient information usually exists on the government's holding of financial assets and incurrence of liabilities to construct a financial balance sheet (or "partial balance sheet" because it excludes nonfinancial assets). Partial balance sheet information may be available from asset registers maintained by the government and debt registers maintained by the debt management unit. Care needs to be exercised to ensure that the coverage of these registers is complete and to identify the valuation criterion followed for

each asset and liability. Balance sheets and the notes usually attached to them are also a main source for data on other economic flows.

226. The basis of recording (cash, accrual or other) and valuation (acquisition cost, market price, or other) of stocks and flows source data are very important in the selection of source data when compiling data on an accrual basis. However, they are less important when compiling data on a cash basis. Countries should focus initially on expanding the institutional and data coverage, as well as improving the periodicity and timeliness of their GFS on a cash basis, before adopting an accrual basis of recording.

227. The selection of data sources often depends on whether the statistics to be compiled are preliminary or final. It is possible that the data sources for both are different. Certain adjustments are only made annually and audited financial statements, sometimes available with long lags, are often the main source for final GFS. Compilation and dissemination of timely GFS usually implies that the statistics are preliminary when first disseminated, and should clearly be identified as such.

## B. Adjustments to Source Data

228. When all data sources have been selected, the compiler must identify and make any needed adjustments to the information before actually using it to compile GFS. More specifically, the source data should be analyzed to identify any adjustments needed to follow the *GFSM 2001* guidelines, both in terms of coverage and accounting rules. Adjustments may be needed for: coverage, presentation of transactions, valuation, netting and grossing of flows and stocks, classification, and inconsistencies between periodicities. Of course, if compiling GFS on an accrual basis, adjustments for time of recording are very important. The types of adjustments needed are illustrated in Chapter 8, while compiling GFS for Country Z.

229. Coverage adjustments refer to institutional coverage and sectoring, as well as transaction coverage. For example, source data for general government units may include the operations of unincorporated entities that operate as corporations (i.e. quasi-corporations). These entities should be excluded from the GFS for the general government sector and included with public corporations statistics. Similarly, source data for transactions may not cover all transactions and may exclude, for example, nonmonetary transactions, such as grants in-kind. In such cases, supplementary information for these transactions needs to be collected if compiling GFS on an accrual basis. In all cases, if coverage is incomplete and estimates are not possible, metadata should clearly indicate that the statistics exclude the relevant category of flows or stocks, or institutional entities/units.

230. Presentation adjustments to information on transactions may be necessary to reflect the economic substance of the event actually taking place. Compilers may need to modify certain transactions to bring out their underlying economic nature. Rerouting, partitioning, and reassignment are three types of modifications employed for this purpose in the GFS

system; as discussed in Chapter 3. Valuation adjustments, especially of stocks, may be necessary if not valued at current market prices.

231. Adjustments for netting/grossing of flows and stocks may be necessary for some transactions or stocks that should be recorded on a gross basis (or rarely vice versa). See Chapter 3 for guidance on presenting data on a gross or net basis. Adjustments for inconsistencies between periodicities may be necessary to ensure that, for example, source data with different fiscal years are brought to a common fiscal year. Also, very importantly, monthly or quarterly *GFSM 2001* statistics should add up to the annual *GFSM 2001* statistics. However, this is often not the case, as certain information is only available annually, and sub-annual statistics are not adjusted accordingly.

232. Classification adjustments are necessary because source data often follow a classification system that differs from the *GFSM 2001* classifications. Reclassification of data according to the *GFSM 2001* nomenclature is addressed through bridge tables, and is discussed in detail in Chapter 8.

233. Identifying all necessary adjustments to source data to compile GFS can be an arduous task, and require the participation of several government officials familiar with the source data for the various GFS aggregates and subsectors. Nevertheless, it is a key step in the compilation of good quality GFS and proper attention should be given to this task.

234. For additional information on the topic of data sources see:

- IMF, *GFSM 2001 Companion Material*, Selection of Data Sources, Preparations, and the Compilation of *GFSM 2001* Statistics.

## CHAPTER 8. FROM SOURCE DATA TO GOVERNMENT FINANCE STATISTICS

*This chapter describes the process followed to convert source data in national formats and classifications to GFS in GFSM 2001 format and classifications, and illustrates the process with a real world example.*

235. After completing the preparations to compile *GFSM 2001* statistics (i.e., after identifying all adjustments that have to be made to the data sources), the actual compilation of GFS for each of the subsectors of the general government sector (public sector) can begin. The first step is to reclassify the source data according to the *GFSM 2001* format, using derivation tables and bridge tables. This task is likely to be the most time consuming task of the compilation process when compiling GFS following the guidelines of the *GFSM 2001* for the first time. Once compilers complete the compilation of GFS for each subsector of the general government sector (public sector), they will proceed to aggregate and consolidate the statistics, as discussed in Chapter 9.

236. Derivation tables link the fiscal aggregates used by each country to the major aggregates used in the GFS classification system.[54] They detail all the adjustments that need to be made to national aggregates to obtain the corresponding *GFSM 2001* aggregates. Derivation tables help compilers to systematically compile statistics, leave a clear record of the compilation process, and facilitate consistency in future compilation of GFS following *GFSM 2001* guidelines. Bridge tables help compilers link the detailed source data to the detailed *GFSM 2001* categories, for each of the government units or subsectors.

237. The process of compiling GFS is illustrated with an example drawn from an actual country case, which has been adapted for purposes of the Guide. The summary table disseminated by the authorities is presented below as Table 11. Starting from this table and using more detailed information not disseminated, the derivation tables, bridge tables, Statement of Sources and Uses of Funds and detail tables presented below were initially prepared during an actual technical assistance mission. The original figures and tables have been modified for purposes of the Guide.

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[54] Derivation tables can also be prepared for the main categories of each major aggregate, and compilers may find it useful to prepare these tables.

**Table 11. Government Budget Outturn, Fiscal Year 2009**
All figures in millions of Country Z Pounds.

| | 2007 | 2008 | 2009 |
|---|---|---|---|
| **Total Revenue and Grants** | **4,277.3** | **5,234.7** | **8,698.9** |
| **Total Revenue** | **4,204.4** | **4,324.0** | **7,003.7** |
| Current Revenue | 4,183.7 | 4,289.7 | 6,972.0 |
| Capital Revenue | 20.7 | 34.3 | 31.7 |
| **Grants** | **72.9** | **910.7** | **1,695.2** |
| Cash Grants | 10.0 | 100.0 | 500.0 |
| Project Grants | 62.9 | 810.7 | 1,195.2 |
| **Expenditure and Net Lending** | **4,011.2** | **6,101.6** | **8,873.2** |
| **Total Expenditure** | **4,011.2** | **6,101.6** | **8,873.2** |
| Current Expenditure | 2,784.5 | 4,240.1 | 4,845.8 |
| Capital Expenditure | 1,226.7 | 1,861.5 | 4,027.4 |
| **Net Lending** | **0.0** | **0.0** | **0.0** |
| **Overall Balance** | **266.1** | **-866.9** | **-174.3** |
| Overall Balance excluding grants | 193.2 | -1,777.6 | -1,869.5 |
| Current Balance | 1,399.2 | 49.6 | 2,126.2 |
| **Financing** | **-266.1** | **866.9** | **174.3** |
| Foreign Financing | 403.7 | 316.2 | 1,759.0 |
| Domestic Financing* | -669.8 | 550.7 | -1,584.7 |
| **Total Debt** | **4,282.8** | **5,066.5** | **7,122.5** |
| Foreign Debt | 3,026.6 | 3,342.8 | 5,101.9 |
| Domestic Debt | 1,256.2 | 1,723.7 | 2,020.6 |

* Domestic financing includes borrowing from domestic sources, changes in cash balances, and errors and omissions.

## A. Derivation Tables

238. An example of derivation tables prepared for the major GFS aggregates is presented in Table 12. Starting from the main fiscal aggregates published in Country Z's *Government Budget Outturn, Fiscal Year 2009*, the country's budget execution data was carefully reviewed to identify the adjustments that had to be made to derive the corresponding GFS aggregates for revenue, expense, net acquisition of nonfinancial assets, net acquisition of financial assets and net incurrence of liabilities, and debt. Starting the adjustment process from the national aggregates that the authorities are familiar with facilitates understanding of

the adjustments made to conform to the *GFSM 2001* methodology. We discuss the adjustments made to Country Z's budget execution data below. To facilitate following the adjustments, an ad-hoc numbering system has been used for the adjustments, which are not GFS codes.[55]

239. The adjustments made to derive Revenue were to subtract from total revenue and grants: (a) loan disbursements and loan repayments received/paid by government (Ar1, Ar2, and Ar3), which are classified as transactions in financial liabilities in the *GFSM 2001*; (b); capital revenues (Ar4), which are classified as transactions in nonfinancial assets; (c) reimbursements of expenses previously paid (Ar5), which are classified as negative expense; and (d) revaluation gains (Ar6, and Ar7), which are classified as holding gains. In addition, we had to add: (e) the reimbursement of lease payments received in excess by the government (Ar8), which is classified as negative revenue and not an expense. As a result, the 2009 national total income figure of Z£8,698.9 becomes the *GFSM 2001* total revenue figure of Z£6.508.1. See Table 12.

240. The adjustments made to derive Expense (by economic type) were to subtract from total expenditure: (a) loan repayments made by government (Ae1), which are classified as transactions in financial assets in the *GFSM 2001*; (b) capital contributions (Ae2 and Ae9), which are also classified as transactions in financial assets; (c) capital expenditures, which except for capital transfers are classified as transactions in nonfinancial assets (Ae3); (d) revaluation losses, which are classified as holding losses; and (e) the reimbursement of lease payments received in excess by the government, which are classified as negative revenue and not an expense (Ae5). In addition, we had to add: (f) the reimbursement of expenses, which are classified as negative expense (Ae6); (g) capital transfers to NPI's serving households to acquire nonfinancial assets, which are classified as expense (Ae7); (h) payments by one government unit on behalf of other government units (Ae8), which are an expense and not a loan if repayment is not expected; (i) capital contributions to public corporations, which are classified as transactions in financial assets (Ae9); and (j) payments on debt guarantees, which are classified as expense if no effective financial assets are received in exchange (Ae10). As a result, the 2009 national total expenditure figure of Z£8,875.2 becomes the *GFSM 2001* total expense figure of Z£5,042.6. See Table 12.

241. The adjustments made to derive the Net acquisition of nonfinancial assets were to subtract from capital expenditure: (a) loan repayments and loan disbursements made by government (Ak1, and Ak2), which are treated as transactions in financial assets and liabilities; (b) payments by one government unit on behalf of other government units (Ak3), which are an expense and not a loan if repayment is not expected; (c) equity or capital contributions (Ak4, Ak5, and Ak6), which are classified as transactions in financial assets; (d) capital transfers to NPI's serving households to acquire nonfinancial assets, which are

[55] Adjustments to revenue are preceded by Ar, to expense by Ae, and to capital expenditure by Ak, respectively.

classified as expense (Ak7). In addition, we had to add: (f) the sales of nonfinancial assets, which are classified as transactions in nonfinancial assets (Ak8). As a result, the 2009 national capital expenditure figure of Z£4,027.4 becomes the *GFSM 2001* net acquisition of nonfinancial assets figure of Z£3,408.0. See Table 12.

242. To derive the Net acquisition of domestic financial assets it was necessary to combine items that were classified under various national categories, but belong to this major GFS aggregate under the *GFSM 2001* classifications. Starting from the changes in cash balances,[56] we subtracted: (a) the repayment of loans made by government (Ar2). Then we added: (b) loan disbursements by government (Ak2); and (c) equity or capital contributions made by government (Ak4, and Ak5). As a result, we arrived at a *GFSM 2001* net acquisition of domestic financial assets figure of Z£50.4. The only item that currently constitutes a transaction in foreign financial assets for the government is the subscription payment to the IBRD (Ae2). Thus, this single item constitutes the *GFSM 2001* net acquisition of foreign financial assets. The sum of the domestic and foreign net acquisition of financial assets gives us the *GFSM 2001* total net acquisition of financial assets. See Table 12.

243. To derive the Net incurrence of domestic liabilities we used the figures for financing from the central bank, as the government only borrows domestically from this entity.[50] As a result, we arrived at a *GFSM 2001* net incurrence of domestic liabilities figure of Z£329.7. To derive the Net incurrence of foreign liabilities we re-classified items from revenue and expense. Thus, we added foreign loan disbursements (Ar1, and Ar3) and subtracted foreign loan repayments (Ae1). As a result, we arrived at a *GFSM 2001* net incurrence of foreign liabilities figure of Z£1,759.0. Again, the sum of the domestic and foreign net incurrence of liabilities gives us the total Net incurrence of liabilities. See Table 12.

244. Finally, no balance sheet is available for Country Z, but as in most countries information is available on domestic and external debt, a major component of a country's liabilities. In Table 12 we see a *GFSM 2001* domestic financial liabilities figure of Z£2,020.6, and a *GFSM 2001* foreign financial liabilities figure of Z£5,101.9, both obtained directly from the country's debt recording system. This information can be used to build a partial balance sheet immediately, and over time this information can be complemented with other information on financial assets and liabilities.

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[56] The information on the changes in cash balances and financing from the central bank were taken from the financial statements of the central bank.

**Table 12. Country Z Derivation Tables between National Aggregates and Main *GFSM 2001* Aggregates for Central Government**

Note: all national GFS aggregates come from *Government Budget Outturn,* Fiscal Year 2009.
All figures in millions of Country Z Pounds.

| GFS Code | Category | 2007 | 2008 | 2009 |
|---|---|---|---|---|
| | **REVENUE** | | | |
| | **Total revenue and grants** | **4,277.3** | **5,234.7** | **8,698.9** |
| ***Less:*** | | | | |
| Ar1 | Project loan disbursements | 595.8 | 569.3 | 1,408.5 |
| Ar2 | Subsidiary loan repayments | 113.8 | 75.1 | 71.3 |
| Ar3 | Foreign budget support loan | 0.0 | 0.0 | 640.0 |
| Ar4 | Capital revenues/sales of fixed assets | 20.7 | 34.3 | 31.7 |
| Ar5 | Reimbursement of previously disbursed budget funds | 5.7 | 4.1 | 0.0 |
| Ar6 | Foreign exchange gains | 126.3 | 33.4 | 15.3 |
| Ar7 | Gold revaluation | 16.7 | 14.3 | 15.0 |
| ***Plus:*** | | | | |
| Ar8 | Reimbursement of lease payments | (6.2) | (5.9) | (9.0) |
| **1** | **Total revenue *GFSM 2001*** | **3,392.1** | **4,498.3** | **6,508.1** |
| | **EXPENSE BY ECONOMIC TYPE** | | | |
| | **Total expenditure** | **4,011.2** | **6,101.6** | **8,873.2** |
| ***Less:*** | | | | |
| Ae1 | Loan repayments | 192.1 | 253.1 | 289.4 |
| Ae2 | Capital contribution to IBRD | 0.0 | 0.8 | 13.0 |
| Ae3 | Capital expenditures | 991.0 | 1,590.8 | 3,716.4 |
| Ae4 | Foreign exchange losses | 43.6 | 16.7 | 8.5 |
| Ae5(Ar8) | Reimbursement of lease payments | 6.2 | 5.9 | 9.0 |
| ***Plus:*** | | | | |
| Ae6 (Ar5) | Reimbursement of previously disbursed budget funds | (5.7) | (4.1) | (0.0) |
| Ae7 | Transfers to NPIs to acquire fixed assets to benefit households | 11.0 | 51.3 | 25.0 |
| Ae8 | Government agency assisting another government agency | 0.0 | 0.3 | 0.7 |
| Ae9 | Capital contribution to for-profit public enterprises | 3.6 | 0.2 | 35.1 |
| Ae10 | Payments on government guarantee | 0.0 | 0.0 | 145.0 |
| **2** | **Total expense *GFSM 2001*** | **2,787.2** | **4,282.0** | **5,042.6** |

**Table 12. Country Z Derivation Tables between National Aggregates and Main *GFSM 2001* Aggregates for Central Government *(continued)***

Note: all national GFS aggregates come from *Government Budget Outturn*, Fiscal Year 2009.
All figures in millions of Country Z Pounds.

| GFS Code | Category | 2007 | 2008 | 2009 |
|---|---|---|---|---|
| **NET ACQUISITION OF NONFINANCIAL ASSETS** | | | | |
| | **Capital expenditure** | **1,226.7** | **1,861.5** | **4,027.4** |
| ***Less:*** | | | | |
| Ak1(Ae1) | Loan repayments | 192.1 | 253.1 | 289.4 |
| Ak2 | Loan outlays | 45.7 | 18.8 | 10.6 |
| Ak3 (Ae8) | Government agency assisting another government agency | 0.0 | 0.3 | 0.7 |
| Ak4 | Equity capital to public enterprises | 7.0 | 38.6 | 83.1 |
| Ak5 (Ae9) | Capital contribution to for-profit public enterprises | 3.6 | 0.2 | 35.1 |
| Ak6 (Ae2) | Capital contribution to IBRD | 0.0 | 0.8 | 13.0 |
| Ak7(Ae7) | Transfers to NPIs to acquire fixed assets to benefit households | 11.0 | 51.3 | 25.0 |
| Ak8 (Ar4) | Capital revenues/sales of fixed assets | 20.7 | 34.3 | 31.7 |
| ***Plus:*** | | | | |
| Ak9 | Payments against losses in previous years | 0.0 | 0.0 | 2.7 |
| **31** | **Net acquisition of NFA *GFSM 2001*** | **946.7** | **1,464.1** | **3,408.0** |
| **TRANSACTIONS IN FINANCIAL ASSETS AND LIABILITIES** | | | | |
| **32** | **Net acquisition of financial assets** | **-9.4** | **28.8** | **63.4** |
| **321** | **Domestic** | | | |
| | Changes in cash balances | 48.1 | 45.5 | -7.1 |
| ***Less:*** | | | | |
| Ar2 | Subsidiary loan repayments | 113.8 | 75.1 | 71.3 |
| ***Plus:*** | | | | |
| Ak2 | Loan outlays | 45.7 | 18.8 | 10.6 |
| Ak4 | Equity capital to public enterprises | 7.0 | 38.6 | 83.1 |
| Ak5 (Ae9) | Capital contribution to for-profit public enterprises | 3.6 | 0.2 | 35.1 |
| | **Net acquisition of domestic financial assets *GFSM 2001*** | **-9.4** | **28.0** | **50.4** |
| **322** | **Foreign** | | | |
| Ae2 | Capital contribution to IBRD | 0.0 | 0.8 | 13.0 |
| | **Net acquisition of foreign financial assets *GFSM 2001*** | **0.0** | **0.8** | **13.0** |

**Table 12. Country Z Derivation Tables between National Aggregates and Main *GFSM 2001* Aggregates for Central Government *(continued)***

Note: all national GFS aggregates come from *Government Budget Outturn,* Fiscal Year 2009.
All figures in millions of Country Z Pounds.

| GFS Code | Category | 2007 | 2008 | 2009 |
|---|---|---|---|---|
| **TRANSACTIONS IN FINANCIAL ASSETS AND LIABILITIES *(continued)*** | | | | |
| 33 | **Net incurrence of liabilities** | **206.0** | **1,243.0** | **2,088.7** |
| **331** | **Domestic** | | | |
| | Financing from central bank | -197.7 | 926.8 | 329.7 |
| | **Net incurrence of domestic liabilities *GFSM 2001*** | **-197.7** | **926.8** | **329.7** |
| **332** | **External** | | | |
| Ar1 | Project loan disbursements | 595.8 | 569.3 | 1,408.4 |
| ***Less:*** | | | | |
| Ae1 | Loan repayments | 192.1 | 253.1 | 289.4 |
| ***Plus:*** | | | | |
| Ar3 | Foreign budget support loan | 0.0 | 0.0 | 640.0 |
| | **Net incurrence of foreign liabilities *GFSM 2001*** | **403.7** | **316.2** | **1,759.0** |
| | **Total debt** | **4,282.8** | **5,066.5** | **7,122.5** |
| | **Liabilities *GFSM 2001*** | **4,282.8** | **5,066.5** | **7,122.5** |
| **631** | **Domestic** | | | |
| | Domestic debt | 1,256.2 | 1,723.7 | 2,020.6 |
| | **Financial domestic liabilities *GFSM 2001*** | **1,256.2** | **1,723.7** | **2,020.6** |
| **632** | **External** | | | |
| | External debt | 3,026.6 | 3,342.8 | 5,101.9 |
| | **Financial domestic liabilities *GFSM 2001*** | **3,026.6** | **3,342.8** | **5,101.9** |

245. Derivation tables need to be prepared for each subsector. Compilers will use the resulting major GFS aggregates to ensure that the adjustments to source data are applied consistently, and as control totals in the more detailed compilation of the *GFSM 2001* statistics. Now we turn to the bridge tables, which link every single item in the national classifications to their appropriate *GFSM 2001* classifications (codes). If possible, the link should be established directly to the chart of accounts of the adjusted source data, and incorporated into the accounting system. In this manner, GFS can be generated directly by automated information systems from accounting records.

### B. Bridge Tables

246. The appropriate level of detail of the data sources should be used to build the bridge tables. The level of detail selected should allow the compiler to identify the correspondence between each item in the national classification and the most detailed *GFSM 2001* category (i.e., the corresponding four of five digit *GFSM 2001* code). A lesser level of detail will not allow full compilation of the detailed tables, while a significantly greater level of detail would result in bridge tables with a very large number of items. In practice, the level of detail selected usually results in about 200-500 total items being linked in the bridge tables per subsector.

247. While developing the bridge tables, compilers should identify significant transactions and stock positions among: (a) the units/entities that constitute a particular subsector of the general government (public) sector (for example, within budgetary central government), and (b) the different subsectors of the general government (public) sector (for example, between budgetary central government and an extra-budgetary unit or between budgetary central government and local governments). This information is necessary for intra- and intergovernmental consolidation—the last step in the *GFSM 2001* statistics compilation process (see Chapter 9 below).

248. The bridge tables for Country Z's budgetary central government are presented below in Table 13. The tables show the correspondence between the national codes and descriptors and the *GFSM 2001* codes. No chart of accounts is available for transactions in financial assets and liabilities or debt, therefore only the national descriptor is provided. When preparing bridge tables the descriptor can be helpful to determine the proper *GFSM 2001* classification of a given item, but it may also be misleading. It is most important to check item by item what exactly is recorded under a code before deciding on its correct classification. This usually involves contacting various officials knowledgeable about the respective categories.

249. The tables illustrate two circumstances compilers are likely to encounter while preparing bridge tables: (a) national codes may be too aggregated to allow determination of their exact *GFSM 2001* codes, and/or (b) national codes may include more than one item under a given code. In these cases, additional information should be obtained to breakdown the source data to the necessary level of detail, or to separate the various items. Codes 10252 and 20088 in Table 13 below are examples of these circumstances.

**Table13. Country Z Bridge Tables between National Chart of Accounts and *GFSM 2001* Classifications**

| **REVENUE** | | | REVENUE (*continued*) | | |
|---|---|---|---|---|---|
| **National Code** | **National descriptor** | ***GFSM 2001* Code No.** | **National Code** | **National descriptor** | ***GFSM 2001* Code No.** |
| | **Tax revenue** | | 1018 | Revenue stamps | **116** |
| 1001 | Income taxes | | 1019 | Dividends from public companies | **1412** |
| 10011 | Income tax on private persons | **1111** | | (deduct revaluation from central bank dividends) | |
| 10012 | Income tax on corporate bodies | **1112** | 1020 | Rent and equipment rentals | |
| 1002 | Residential houses tax | **1131** | 10201 | Government building rent | **1421** |
| 1003 | Sales tax on goods | **11412** | 10202 | Resort lease rent | **1415** |
| 1004 | Sales tax on selected goods and services | | 10203 | Government machinery rental | **1421** |
| 10041 | Gasoline | **1142** | 10204 | Miscellaneous rentals | **1421** |
| 10042 | Cigarettes | **1142** | 1021 | Permit fees | |
| 10043 | Electricity | **1142** | 10211 | Expatriate visa charges | **1422** |
| 10044 | Restaurants and hotels | **1144** | 10212 | Permit to operate in Country Z | **11452** |
| 1005 | Import duty | **1151** | 10213 | Work permit fee | **1422** |
| 10051 | Import duty private sector | **1151** | 10214 | Telecommunications license fee | **11452** |
| 10052 | Import duty public sector | **1151** | 10215 | Other permit charges | **11452** |
| 1006 | Export duty | **1152** | | Charges on government services | |
| 10061 | Export duty private sector | **1152** | 1022 | Passports | **1422** |
| 10062 | Export duty public sector | **1152** | 10221 | Landing charges | **1421** |
| 1007 | Tourism tax | **1144** | 10222 | Examination fee | **1422** |
| 1008 | Land sale tax | **1134** | 10223 | Other charges on gov. services | **1423** |
| 1009 | Ownership transfer tax | **1134** | 10224 | | |
| 1010 | Bank profit tax | **1112** | 1023 | Miscellaneous items | |
| | **Nontax revenue** | | 10231 | Reimbursement of previously disbursed budget funds | **-2821** |
| 1016 | Fees | | 10232 | Reimbursement of damage to government property | **145** |
| 10161 | Trade fee | **11452** | 10233 | Other miscellaneous | **145** |
| 10162 | Trade fee sale of imported goods | **11452** | 1024 | Fines and penalties (except tax related) | **143** |
| 10163 | Trade fee hotels, restaurants, canteens | **11452** | | | |
| 10164 | Company annual fee | **11452** | 1025 | Donations | |
| 10165 | Company registration fee | **11452** | 10251 | Donations from local parties | **144, 133** |
| 10166 | Motor vehicles and other vehicles fee | **11451** | 10252 | Donations from foreign parties | **131, 132** |
| 10167 | Guesthouse registration fee | **11452** | | If donor is a: | |
| 1017 | Royalties | | | Foreign government | **131** |
| 10171 | Royalty from copper mines | **1415** | | International organization | **132** |
| 10172 | Royalty from fish exports | **1415** | | Another general government unit | **133** |
| 10173 | Royalty from fuel re-export | **1152** | | An individual, private nonprofit institution, nongovernmental foundation, or corporation | **144** |
| 10174 | Royalty from foreign businesses | **1146** | | | |

**Table 13. Country Z Bridge Tables between National Chart of Accounts and *GFSM 2001* Classifications** *(continued)*

| REVENUE (continued) | | | EXPENSE (continued) | | |
|---|---|---|---|---|---|
| **National Code** | **National descriptor** | ***GFSM 2001* Code No.** | **National Code** | **National descriptor** | ***GFSM 2001* Code No.** |
| **1026** | Loan service charge | | **20063** | Electricity | 22 |
| **10261** | Service charge on loans | 1411 | **20064** | Building rents | 22 |
| **10262** | Time deposit | 1411 | **20065** | Fees for cleaning and waste | 22 |
| **10263** | Repayment of loans by public companies | -3214 | **20066** | Bank charges and commissions | 22 |
| **1027** | Sale of goods (non capital) | 1421 | **20067** | Other services | 22 |
| **1028** | Sale of capital assets | 311 | **2007** | Interest payments | |
| **EXPENSE** | | | **20071** | To public entities | |
| | | | **20072** | To other local private parties | |
| **2001** | Personal emoluments | | **20073** | To foreign parties | 241 |
| **20011** | Salaries and wages | 2111 | **2008** | Grants, contributions and subsidies | |
| **20012** | Overtime pay | 2111 | **20081** | Subsidies | 2511 |
| **20013** | Salary increment | 2111 | **20082** | Welfare payments | 272 |
| **20014** | Special allowance for the post | 2111 | **20083** | Grants to private parties | 272 |
| **20015** | Food allowance | 2111 | **20084** | Donations to foreign parties or foreign governments | 261 |
| **20016** | Holiday allowance | 2111 | **20085** | To foreign gov. and international organizations | 261(2) |
| **20017** | Other allowance | 2111 | **20086** | To other nonresidents | 2821(2) |
| **2002** | Pensions, retirement benefits and gratuities | | **20087** | Scholarship awards | 2821 |
| **20021** | Pensions | 2121 | **20088** | Payments against losses and write-off to gov. agencies | |
| **20022** | Retirement benefits and gratuities | 2821 | | If to compensate for operating losses of public corp. | 25, 2822 |
| **2003** | Traveling expenses by land, sea and air | 22 | | If to honor loan guarantee to another gen. gov. unit | 2632 |
| **2004** | Supplies and requisites | | **20089** | Other assistance | 2821 |
| **20041** | Stationery and office supplies | 22 | **2009** | Capital equipment and construction | |
| **20042** | Fuel and lubricants | 22 | **20091** | Machinery and equipment | 31122 |
| **20043** | Spare parts | 22 | **20092** | Vehicles | 31121 |
| **20044** | Employees meals in office hours | 2112 | **20093** | Tools, instruments and apparatus | 31122 |
| **20045** | Others | 22 | **20094** | Land acquisition | 3141 |
| **2005** | Repairs and maintenance | | **20095** | Buildings and construction | 31112 |
| **20051** | Buildings | 22 | **20096** | Roads, ports, water and sanitation systems | 31113 |
| **20052** | Machinery and equipment | 22 | **2010** | Debt amortization | |
| **20053** | Vehicles | 22 | | To public entities | -3314 |
| **20054** | Others | 22 | | To other local private parties | -3314 |
| **2006** | Services | | | To foreign parties | -3324 |
| **20061** | Telephone | 22 | | | |
| **20062** | Postage and message | 22 | | | |

**Table 13. Country Z Bridge Tables between National Chart of Accounts and *GFSM 2001* Classifications** *(continued)*

| EXPENSE *(continued)* | | | FINANCING AND DEBT *(continued)* | | |
|---|---|---|---|---|---|
| **National Code** | **National descriptor** | ***GFSM 2001* Code No.** | **National Code** | **National descriptor** | ***GFSM 2001* Code No.** |
| **2011** | Investment outlays | | | **Foreign financing** | 332 |
| **20111** | Government agency assisting another gov. agency | 2821, 2822 | | Project loan disbursements | 3324 |
| **20112** | Equity capital to public enterprises | 3215 | | Budget support loan | 3324 |
| **20113** | Capital contribution to profit oriented public agencies | 3215 | | Debt amortization | -3324 |
| **20114** | Subscription contributions to international organizations | 3225 | | Subscription to IBRD and regional banks | 3225 |
| **20115** | Other economic dev. expenditure from gov. budget | 3214 | | **Financing (by sector)** | 82, 83 |
| | If expenditure for research | 2821 | | **Domestic financing** | 831 |
| **2012** | Loan outlays given: | | | Changes in cash balances at central bank | 8212 |
| | To private parties | 3214 | | Short term loans and advances from central bank | 8312 |
| | To government employees | 3214 | | **Foreign financing** | |
| **FINANCING AND DEBT** | | | | Long term loans from: | |
| | | | | Foreign governments | 8321 |
| | **Financing (by type of debt instrument)** | 32, 33 | | International development institutions | 8327 |
| | **Domestic financing** | 331 | | Financial corporations other than international org. | 8328 |
| | Changes in cash balances | 3212 | | from other nonresidents | 8329 |
| | Short term loans and advances | 3314 | | Subscription to IBRD and regional banks | 8227 |
| | Loan outlays | 3214 | | **Debt** | 63 |
| | Subsidiary loan repayments | -3214 | | **Domestic debt** | 631 |
| | Equity capital to public enterprises | 3215 | | Short term loans and advances | 6314 |
| | | | | **Foreign debt** | 632 |
| | | | | Long term loans | 6324 |

250. Compilers will notice that derivation tables were prepared for three years, while the bridge tables were prepared for just one period. There are two reasons why this is the case: (a) derivation tables are needed for every year (or period), whereas bridge tables may not change from one period to the next, and just a simple verification of the need to update them or not is sufficient; and (b) when compiling statistics using a new methodology it is useful to compile the data for at least three years (better five) to facilitate users' understanding of the new presentation by comparison to the old one, and for analysis of trends and changes between periods.

## C. Classification Assistant

251. To facilitate the task of preparing the bridge tables and using them to compile GFS following the *GFSM 2001* guidelines, the IMF has prepared a Classification Assistant tool.[57] This Excel based tool has specific columns to enter the national codes and descriptors for every item, and provides a pull-down menu of *GFSM 2001* codes and descriptors. See Table 14. Compilers have to select the appropriate *GFSM 2001* code for each item. The proper classification of each item is important, and as indicated often requires involving officials knowledgeable about the various categories (e.g., revenues, expenses, financial assets, etc.). Once the bridge tables are finished for all subsectors they are usually applied automatically to compile statistics, and any errors in the classification become difficult to detect in the output tables. It is best to double check the initial classification.

252. The Classification Assistant has columns to enter data next to each item after the bridge tables are completed. It then automatically assigns each item in the source data for a given period and subsector to its proper *GFSM 2001* detail table and summary statement.[58] The four statements the GFS system uses are, as indicated in Chapter 4, the: Statement of Government Operations, Statement of Sources and Uses of Cash, Statement of Other Economic Flows, and Balance Sheet. These four statements are complemented by nine detail tables:

Table 1. Revenue;

Table 2. Expense by economic type;

Table 3. Transactions in assets and liabilities;

Table 4. Holding gains in assets and liabilities;

Table 5. Other changes in the volume of assets and liabilities;

Table 6. Balance sheet;

Table 7. Outlays by functions of government;

Table 8. Transactions in financial assets and liabilities by sector; and

Table 9. Total other economic flows.

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[57] The Classification Assistant tool is available at http://www.imf.org/external/pubs/ft/gfs/manual/comp.htm.

[58] The Classification Assistant has two versions, one for all periodicities (monthly. quarterly, annual) for a given subsector, and another one for a single period for all subsectors and sectors.

253. The number of each detail table above corresponds to the first digit of the GFS codes of the items included in a given table, and is the number assigned to the tables in the *GFS Yearbook* and in the *GFS Yearbook Questionnaire*.[59] These same numbers have been given to the detail tables presented in the annex to this chapter. However, these or similar tables are given different numbers in this Guide and in the *GFSM 2001*, based on whether they appear in the chapter that discusses the classification of the GFS major aggregates or in the Appendix that presents all GFS codes together in one place. This use of different table numbers for tables with essentially the same content can be somewhat confusing. However, the names of all items and their GFS codes are identical in all tables.

254. The Classification Assistant provides the option of entering cash or accrual source data, the compiler must make the appropriate selection. If the cash option is selected, the data in the detail tables will be summarized in the Statement of Sources and Uses of Cash, while if the accrual option is selected, the data in the detail tables will be summarized in the Statement of Government Operations. Most data should be entered with a positive sign, and the tool automatically changes the sign if warranted for a given aggregate or balancing item. However, certain data such as refunds of revenues and expenses must be entered with a negative sign. A very useful feature of the tool is the set of built-in vertical and horizontal checks in the statements and detail tables, which provide automatic verification that the sum of the components of an aggregate or a sector is correct. In most cases, the value of all these checks should be zero.

[59] *The GFS Yearbook Questionnaire* can be found at http://www.imf.org/external/pubs/ft/gfs/manual/comp.htm.

**Table 14. Classification Assistant**

| | | | | | |
|---|---|---|---|---|---|
| **LEVEL:** | **Budgetary central government** | | | | |
| **NATIONAL CODE AND NOMENCLATURE** | | | | | |
| **National Code** | | **GFS CLASSIFICATION ASSISTANT** | **Annual** | **Annual** | **Annual** |
| | **National Nomenclature** | **Drop-down menu below C= Cash** | **2007** | **2008** | **2009** |
| **Revenue** | | | | | |
| | **Tax revenue** | | | | |
| 1001 | Income taxes | | | | |
| 10011 | Income tax on private persons | C1111: Taxes on income: Payable by individuals | 0.0 | 0.0 | 0.0 |
| 10012 | Income tax on corporate bodies | C1112: Taxes on income: Payable by corporations and other enterprises | 45.5 | 61.0 | 87.8 |
| 1002 | Residential houses tax | C1131: Taxes on property: Recurrent taxes on immovable property | 0.2 | 1.9 | 7.0 |
| 1003 | Sales tax on goods | C11412: General taxes on goods and services: Sales taxes | 203.6 | 178.4 | 231.9 |
| 1004 | Sales tax on selected goods and services | | | | |
| 10041 | Gasoline | C1142: Taxes on goods and services: Excises | 61.4 | 61.8 | 70.2 |
| 10042 | Cigarettes | C1142: Taxes on goods and services: Excises | 7.2 | 6.2 | 8.4 |
| 10043 | Electricity | C1142: Taxes on goods and services: Excises | 11.8 | 9.6 | 13.1 |
| 10044 | Restaurants and hotels | C1142: Taxes on goods and services: Excises | 22.3 | 18.5 | 25.6 |
| 1005 | Import duty | | | | |
| 10051 | Import duty private sector | C1151: Taxes on international trade and transactions: Customs and other import duties | 1,034.7 | 976.3 | 1286.4 |
| 10052 | Import duty public sector | C1151: Taxes on international trade and transactions: Customs and other import duties | 124.4 | 172.2 | 243.7 |
| 1009 | Ownership transfer tax | C1134: Taxes on property: Taxes on financial and capital transactions | 0.3 | 0.4 | 0.4 |
| 1010 | Bank profit tax | C1112: Taxes on income: Payable by corporations and other enterprises | 3.1 | 4.7 | 3.6 |

## D. Summary Statements and Detail Tables

255. The summary statement and detail tables for Country Z for years 2007 through 2009 are presented below (Table 15) and in the Annex to this chapter. The presentation of the tables followed is the same one used in the *GFS Yearbook*.[60] They show the results of entering the source data for those years into the corresponding items in the bridge tables in the Classification Assistant. The values for the major aggregates in the Statement of Sources and Uses of Cash and detail tables match exactly the figures obtained earlier in the derivation tables for revenue, expense, net acquisition of nonfinancial assets, net acquisition of financial assets (domestic and foreign), net incurrence of liabilities (domestic and foreign), domestic debt, and foreign debt. Reaching this outcome usually requires in practice several iterations between the derivation tables and the bridge tables, with the compiler introducing corrections to both until the correct figures are obtained.

256. You may also notice that the value for the statistical discrepancy between net lending calculated as revenue minus expense, minus the net acquisition of non-financial assets, and as the net acquisition of financial assets minus the net incurrence of liabilities, shows values for all years. This is the usual outcome, as a statistical discrepancy is normally to be expected when using a variety of data sources. The discrepancy should always be identified separately, and not included within another category. Keeping track of the discrepancy is a useful check of data quality. If the discrepancy is significant it needs to be investigated, as this is normally an indication of problems compiling GFS.

257. Another important point to note is that the Net change in the stock of cash in the Statement of Sources and Uses of Cash is equal to the sum of the changes in the currency and deposits (domestic plus foreign) in Table 3 in the Annex. In the GFS system, as indicated above, cash is defined as currency and deposits. An inconsistency between the two indicates a problem that requires investigation.

258. Once statistics are compiled for a given period and subsector it is important to check the consistency of the data, a key attribute of good quality data. This consistency has several aspects. The data should be consistent over time, between sub-annual and annual data (monthly or quarterly data with annual data), between preliminary and final data, and with information from other macroeconomic datasets (e.g., receipts of foreign grants and disbursements and repayments of external loans with balance of payments statistics; domestic financing with information from the monetary statistics).

[60] A more detailed presentation of the tables is used in the *GFS Yearbook Questionnaire*, which is similar to the tables used in Chapter 5 to present the classification of the major GFS aggregates.

## Table 15. Country Z Statement of Sources and Uses of Cash
### Millions of Country Z Pounds

| | | 2007 | 2008 | 2009 |
|---|---|---|---|---|
| | Accounting method: | Cash | Cash | Cash |
| | **CASH FLOWS FROM OPERATING ACTIVITIES:** | | | |
| **C1** | **Cash receipts from operating activities** | **3,392.2** | **4,498.4** | **6,508.0** |
| C11 | Taxes | 1,770.3 | 1,725.5 | 2,235.4 |
| C111 | Taxes on income, profits, and capital gains | 48.6 | 65.7 | 91.4 |
| C112 | Taxes on payroll & workforce | 0.0 | 0.0 | 0.0 |
| C113 | Taxes on property | 0.5 | 2.3 | 7.4 |
| C114 | Taxes on goods & services | 550.4 | 492.6 | 584.8 |
| C115 | Taxes on international trade & transactions | 1,159.1 | 1,148.5 | 1,530.1 |
| C116 | Other taxes | 11.7 | 16.5 | 21.6 |
| C12 | Social contributions | 0.0 | 0.0 | 0.0 |
| C13 | Grants | 72.9 | 910.7 | 1,695.2 |
| C14 | Other receipts | 1,548.9 | 1,862.3 | 2,577.4 |
| **C2** | **Cash payments for operating activities** | **2,787.2** | **4,281.9** | **5,042.5** |
| C21 | Compensation of employees | 1,336.3 | 1,740.9 | 2,157.6 |
| C22 | Purchases of goods and services | 1,007.1 | 1,197.5 | 1,590.5 |
| C24 | Interest | 138.6 | 128.0 | 216.2 |
| C25 | Subsidies | 12.2 | 219.9 | 88.2 |
| C26 | Grants | 1.1 | 2.1 | 1.7 |
| C27 | Social benefits | 103.4 | 160.0 | 119.5 |
| C28 | Other payments | 188.5 | 833.5 | 868.7 |
| ***CIO*** | ***Net cash inflow from operating activities (1-2-ADJz)*** | **604.9** | **216.5** | **1,465.5** |
| | **CASH FLOWS FROM INVESTMENTS IN** | | | |
| **C31.1** | **Purchases of nonfinancial assets** | **967.3** | **1,498.4** | **3,439.6** |
| C311.1 | Fixed assets | 951.2 | 1,488.4 | 3,435.8 |
| C312.1 | Inventories | 0.0 | 0.0 | 0.0 |
| C313.1 | Valuables | 0.0 | 0.0 | 0.0 |
| C314.1 | Nonproduced assets | 16.1 | 10.0 | 3.8 |
| **C31.2** | **Sales of nonfinancial assets** | **20.7** | **34.3** | **31.7** |
| C311.2 | Fixed assets | 20.7 | 34.3 | 31.7 |
| C312.2 | Inventories | 0.0 | 0.0 | 0.0 |
| C313.2 | Valuables | 0.0 | 0.0 | 0.0 |
| C314.2 | Nonproduced assets | 0.0 | 0.0 | 0.0 |
| **C31** | ***Net cash outflow: investments in NFAs (31=31.1-31.2)*** | **946.6** | **1,464.1** | **3,407.9** |
| ***CSD*** | ***Cash surplus / deficit (1-2-ADJz-31+CSDz)*** | **-341.7** | **-1,247.6** | **-1,942.4** |
| | **CASH FLOWS FROM FINANCING ACTIVITIES:** | | | |
| **C32x** | **Net acquisition of financial assets other than cash** | **-57.5** | **-16.7** | **70.5** |
| C321x | Domestic | -57.5 | -17.5 | 57.5 |
| C322x | External | 0.0 | 0.8 | 13.0 |
| C323 | Monetary gold and SDRs | 0.0 | 0.0 | 0.0 |
| **C33** | **Net incurrence of liabilities** | **206.0** | **1243.0** | **2,088.8** |
| C331 | Domestic | -197.7 | 926.8 | 329.7 |
| C332 | External | 403.7 | 316.2 | 1,759.1 |
| ***NFB*** | ***Net cash inflow from financing activities (-32x+33)*** | **263.5** | **1259.7** | **2,018.3** |
| ***NCB*** | ***Net change in the stock of cash (3212+3222)*** | **48.1** | **45.5** | **-7.1** |
| ***CSD*** | ***Statistical discrepancy (CSD+NFB-NCB=0 ?)*** | -126.3 | -33.4 | 83.0 |

259. In many developing countries, statistics are initially only available for budgetary central government, particularly on a sub-annual basis. It is also typical that information on transactions in nonfinancial assets is fairly aggregated, and that balance sheet data are limited to debt liabilities. Over time, efforts should be made to expand the institutional coverage to the main extra-budgetary units and social security funds, and to include additional information on the financial balance sheet. The information needed is usually available, though in a dispersed manner, and the compiler has to locate it and bring it together. Statistics for the central government and its subsectors should be compiled on a monthly basis, usually within 3 to 5 years after deciding to adopt the *GFSM 2001*.

260. The compilation process for all subsectors is essentially the same as described above. Obtaining appropriate source data is often the major challenge, especially for some extra-budgetary units and local governments. Statistics for all other subsectors of the general government (public) sector should eventually be compiled, at least on an annual basis.

261. For additional information on the topic of derivation tables, bridge tables, and summary and detail tables see:

- IMF, *GFSM 2001 Companion Material*, Selection of Data Sources, Preparations, and the Compilation of *GFSM 2001* Statistics.
- IMF, *GFSM 2001 Questionnaires*, Annual GFS Questionnaire.

## Annex 8.1

## Detail Tables for Revenue, Expense, Assets and Liabilities, and Other Economic Flows (table numbers as they appear in the *GFS Yearbook*)

### GFSY Table 1. Revenue

**Millions of Country Z Pounds**

| | | Budgetary Central Government | | |
|---|---|---|---|---|
| | | 2007 | 2008 | 2009 |
| **Table 1** | **Revenue** | | | |
| **1** | **Revenue** | **3,392.2** | **4,498.4** | **6,508.0** |
| **11** | **Taxes** | **1,770.3** | **1,725.5** | **2,235.4** |
| 111 | Taxes on income, profits & capital gains | 48.6 | 65.7 | 91.4 |
| 1111 | Individuals | 0.0 | 0.0 | 0.0 |
| 1112 | Corporations and other enterprises | 48.6 | 65.7 | 91.4 |
| 112 | Taxes on payroll and workforce | 0.0 | 0.0 | 0.0 |
| 113 | Taxes on property | 0.5 | 2.3 | 7.4 |
| 114 | Taxes on goods and services | 550.4 | 492.6 | 584.8 |
| 1141 | General taxes on goods and services | 203.6 | 178.4 | 231.9 |
| 1142 | Excises | 102.7 | 96.1 | 117.3 |
| 115 | Taxes on international trade and transactions | 1,159.1 | 1,148.5 | 1,530.1 |
| 116 | Other taxes | 11.7 | 16.5 | 21.6 |
| **12** | **Social contributions** | **0.0** | **0.0** | **0.0** |
| 121 | Social security contributions | 0.0 | 0.0 | 0.0 |
| 122 | Other social security contributions | 0.0 | 0.0 | 0.0 |
| **13** | **Grants** | **72.9** | **910.7** | **1,695.2** |
| 131 | From foreign governments | 35.0 | 223.9 | 275.3 |
| 132 | From international organizations | 37.9 | 686.7 | 1,419.9 |
| 133 | From other general government units | 0.0 | 0.0 | 0.0 |
| **14** | **Other revenue** | **1,548.9** | **1,862.3** | **2,577.4** |

## GFSY Table 2. Expense

**Millions of Country Z Pounds**

| | | Budgetary Central Government | | |
|---|---|---|---|---|
| | | **2007** | **2008** | **2009** |
| **Table 2** | **Expense by economic type** | | | |
| **2** | **Expense** | **2,787.2** | **4,281.9** | **5,042.5** |
| **21** | **Compensation of employees** | **1,336.3** | **1,740.9** | **2,157.6** |
| 211 | Wages and salaries | 1,299.9 | 1,700.4 | 2,107.8 |
| 212 | Social contributions | 36.5 | 40.5 | 49.7 |
| **22** | **Uses of goods and services** | **1,007.1** | **1,197.5** | **1,590.5** |
| **23** | **Consumption of fixed capital** | **....** | **....** | **....** |
| **24** | **Interest** | **138.6** | **128.0** | **216.2** |
| **25** | **Subsidies** | **12.2** | **219.9** | **88.2** |
| **26** | **Grants** | **1.1** | **2.1** | **1.7** |
| 261 | To foreign governments | 1.1 | 2.1 | 1.7 |
| 262 | To international organizations | 0.0 | 0.0 | 0.0 |
| 263 | To other general government units | 0.0 | 0.0 | 0.0 |
| 2631 | Current | 0.0 | 0.0 | 0.0 |
| 2632 | Capital | 0.0 | 0.0 | 0.0 |
| **27** | **Social benefits** | **103.4** | **160.0** | **119.5** |
| **28** | **Other expense** | **188.5** | **833.5** | **868.7** |
| 281 | Property expense other than interest | 0.0 | 0.0 | 0.0 |
| 282 | Miscellaneous other expense | 188.5 | 833.5 | 868.7 |
| 2821 | Current | 184.7 | 202.4 | 726.7 |
| 2822 | Capital | 3.8 | 631.2 | 141.9 |

## GFSY Table 3. Transactions in assets and liabilities

**Millions of Country Z Pounds**

| | | Budgetary Central Government | | |
|---|---|---|---|---|
| | | **2007** | **2008** | **2009** |
| **3** | **Change in net worth from transactions** | **....** | **....** | **....** |
| **31** | **Net Acquisition of Non-financial Assets** | **946.7** | **1,464.1** | **3,407.9** |
| 311 | Fixed assets | 930.5 | 1,454.1 | 3,404.1 |
| 3111 | Building and structures | 693.6 | 1,199.7 | 2,957.1 |
| 3112 | Machinery and equipment | 236.9 | 254.4 | 447.1 |
| 3113 | Other fixed assets | 0.0 | 0.0 | 0.0 |
| 312 | Inventories | 0.0 | 0.0 | 0.0 |
| 313 | Valuables | 0.0 | 0.0 | 0.0 |
| 314 | Nonproduced assets | 16.2 | 10.0 | 3.7 |
| 3141 | Land | 16.2 | 10.0 | 3.7 |
| 3142 | Mineral and energy resources | 0.0 | 0.0 | 0.0 |
| 3143 | Other naturally occurring assets | 0.0 | 0.0 | 0.0 |
| 3144 | Intangible non-produced assets | 0.0 | 0.0 | 0.0 |
| **32** | **Net acquisition of financial assets** | **-9.4** | **28.8** | **63.4** |
| | *by instrument* | | | |
| 3201 | Monetary gold and SDRs | 0.0 | 0.0 | 0.0 |
| 3202 | Currency and deposits | 48.1 | 45.5 | -7.1 |
| 3203 | Debt securities | 0.0 | 0.0 | 0.0 |
| 3204 | Loans | -64.6 | -56.3 | -12.6 |
| 3205 | Equity and investment fund shares | 7.1 | 39.6 | 83.1 |
| 3206 | Insurance, pension, and standardized guarantee schemes | 0.0 | 0.0 | 0.0 |
| 3207 | Financial derivatives and employee stock options | 0.0 | 0.0 | 0.0 |
| 3208 | Other accounts receivable | 0.0 | 0.0 | 0.0 |
| | *by debtor* | | | |
| **321** | **Domestic** | **-9.4** | **28.0** | **50.4** |
| **322** | **External** | **0.0** | **0.8** | **13.0** |
| **33** | **Net incurrence of liabilities** | **206.0** | **1,243.0** | **2,088.8** |
| | *by instrument* | | | |
| 3301 | Special Drawing Rights (SDRs) | 0.0 | 0.0 | 0.0 |
| 3302 | Currency and deposits | 0.0 | 0.0 | 0.0 |
| 3303 | Debt securities | 0.0 | 0.0 | 0.0 |
| 3304 | Loans | 206 | 1,243.0 | 2,088.8 |
| 3305 | Equity and investment fund shares | 0.0 | 0.0 | 0.0 |
| 3306 | Insurance, pension, and standardized guarantee schemes | 0.0 | 0.0 | 0.0 |
| 3307 | Financial derivatives and employee stock options | 0.0 | 0.0 | 0.0 |
| 3308 | Other accounts payable | 0.0 | 0.0 | 0.0 |
| | *by debtor* | | | |
| **331** | **Domestic** | **-197.7** | **926.8** | **329.7** |
| **332** | **External** | **403.7** | **316.2** | **1,759.1** |

## GFSY Table 4. Holding gains in assets and liabilities

**Millions of Country Z Pounds**

| Budgetary Central Government | | 2009 |
|---|---|---|
| **4** | **Change in net worth from holding gains** | **....** |
| **41** | **Nonfinancial assets** | **....** |
| 411 | Fixed assets | .... |
| 412 | Inventories | .... |
| 413 | Valuables | .... |
| 414 | Nonproduced assets | .... |
| **42** | **Financial assets** | **....** |
| | *by instrument* | |
| 4201 | Monetary gold and SDRs | .... |
| 4202 | Currency and deposits | .... |
| 4203 | Debt securities | .... |
| 4204 | Loans | .... |
| 4205 | Equity and investment fund shares | .... |
| 4206 | Insurance, pension, and standardized guarantee schemes | .... |
| 4207 | Financial derivatives and employee stock options | .... |
| 4208 | Other accounts receivable | .... |
| | *by debtor* | |
| **421** | **Domestic** | **....** |
| **422** | **External** | **....** |
| **43** | **Liabilities** | **....** |
| | *by instrument* | |
| 4301 | Special Drawing Rights (SDRs) | .... |
| 4302 | Currency and deposits | .... |
| 4303 | Debt securities | .... |
| 4304 | Loans | .... |
| 4305 | Equity and investment fund shares | .... |
| 4306 | Insurance, pension, and standardized guarantee schemes | .... |
| 4307 | Financial derivatives and employee stock options | .... |
| 4308 | Other accounts payable | .... |
| | *by debtor* | |
| **431** | **Domestic** | **....** |
| **432** | **External** | **....** |

## GFSY Table 5. Other changes in the volume of assets and liabilities

**Millions of Country Z Pounds**

| Budgetary Central Government | | 2009 |
|---|---|---|
| **5** | **Change in net worth from other vol. changes** | **....** |
| **51** | **Nonfinancial assets** | **....** |
| 511 | Fixed assets | .... |
| 512 | Inventories | .... |
| 513 | Valuables | .... |
| 514 | Nonproduced assets | .... |
| **52** | **Financial assets** | **....** |
| | *by instrument* | |
| 5201 | Monetary gold and SDRs | .... |
| 5202 | Currency and deposits | .... |
| 5203 | Debt securities | .... |
| 5204 | Loans | .... |
| 5205 | Equity and investment fund shares | .... |
| 5206 | Insurance, pension, and standardized guarantee schemes | .... |
| 5207 | Financial derivatives and employee stock options | .... |
| 5208 | Other accounts receivable | .... |
| | *by debtor* | |
| **521** | **Domestic** | **....** |
| **522** | **Foreign** | **....** |
| **53** | **Liabilities** | **....** |
| | *by instrument* | |
| 5301 | Special Drawing Rights (SDRs) | .... |
| 5302 | Currency and deposits | .... |
| 5303 | Debt securities | .... |
| 5304 | Loans | .... |
| 5305 | Equity and investment fund shares | .... |
| 5306 | Insurance, pension, and standardized guarantee schemes | .... |
| 5307 | Financial derivatives and employee stock options | .... |
| 5308 | Other accounts payable | .... |
| | *by debtor* | |
| **531** | **Domestic** | **....** |
| **532** | **External** | **....** |

## GFSY Table 6. Balance sheet

**Millions of Country Z Pounds**

| **Budgetary Central Government** | | **2007** | **2008** | **2009** |
|---|---|---|---|---|
| **6** | **Net worth** | **....** | **....** | **....** |
| **61** | **Nonfinancial assets** | **....** | **....** | **....** |
| **611** | **Fixed assets** | **....** | **....** | **....** |
| 6111 | Buildings and structures | .... | .... | .... |
| 6112 | Machinery and equipment | .... | .... | .... |
| 6113 | Other fixed assets | .... | .... | .... |
| **612** | **Inventories** | **....** | **....** | **....** |
| **613** | **Valuables** | **....** | **....** | **....** |
| **614** | **Non-produced assets** | **....** | **....** | **....** |
| 6141 | Land | .... | .... | .... |
| 6142 | Mineral and energy resources | .... | .... | .... |
| 6143 | Other naturally occurring assets | .... | .... | .... |
| 6144 | Intangible non-produced assets | .... | .... | .... |
| **62** | **Financial assets** | **....** | **....** | **....** |
| | *by instrument* | | | |
| 6201 | Monetary gold and SDRs | .... | .... | .... |
| 6202 | Currency and deposits | .... | .... | .... |
| 6203 | Debt securities | .... | .... | .... |
| 6204 | Loans | .... | .... | .... |
| 6205 | Equity and investment fund shares | .... | .... | .... |
| 6206 | Insurance, pension, and standardized guarantee schemes | .... | .... | .... |
| 6207 | Financial derivatives and employee stock options | .... | .... | .... |
| 6208 | Other accounts receivable | .... | .... | .... |
| | *by debtor* | | | |
| **621** | **Domestic** | **....** | **....** | **....** |
| **622** | **External** | **....** | **....** | **....** |
| **63** | **Liabilities** | **4,282.8** | **5,066.5** | **7,122.5** |
| | *by instrument* | | | |
| 6301 | Special Drawing Rights (SDRs) | - | - | - |
| 6302 | Currency and deposits | - | - | - |
| 6303 | Debt securities | - | - | - |
| 6304 | Loans | 4,282.8 | 5,066.5 | 7,122.5 |
| 6305 | Equity and investment fund shares | - | - | - |
| 6306 | Insurance, pension, and standardized guarantee schemes | - | - | - |
| 6307 | Financial derivatives and employee stock options | - | - | - |
| 6308 | Other accounts payable | - | - | - |
| | *by debtor* | | | |
| **631** | **Domestic** | **1,256.2** | **1,723.7** | **2,020.6** |
| **632** | **External** | **3,026.6** | **3,342.8** | **5,101.9** |
| | **Memorandum items** | | | |
| 6M2 | Net Financial Worth | .... | .... | .... |
| 6M3 | Debt at market value | .... | .... | .... |
| 6M35 | Debt at face value | 4,282.8 | 5,066.5 | 7,122.5 |
| 6M4 | Debt at nominal value | .... | .... | .... |
| 6M5 | Arrears | .... | .... | .... |
| 6M6 | Net obligations for soc. security benefits | .... | .... | .... |
| 6M71 | Publicly guaranteed debt (nominal value) | .... | .... | .... |

## GFSY Table 7. Outlays by functions of government

**Millions of Country Z Pounds**

| | | Budgetary Central Government | | |
|---|---|---|---|---|
| | | **2007** | **2008** | **2009** |
| **7** | **Total Outlays** | **3,733.8** | **5,746.0** | **8,450.3** |
| **701** | **General public services** | **825.7** | **1,111.4** | **1,525.6** |
| 7017 | Public debt transactions | 138.6 | 128.0 | 216.2 |
| 7018 | Transfers of general character between levels of government | - | - | - |
| **702** | **Defense** | **496.7** | **590.7** | **716.6** |
| **703** | **Public order and safety** | **101.3** | **132.5** | **183.2** |
| **704** | **Economic affairs** | **563.7** | **648.4** | **1,087.5** |
| 7042 | Agriculture, forestry, fishing, and hunting | 25.2 | 86.8 | 121.2 |
| 7043 | Fuel and energy | 13.1 | 27.2 | 361.5 |
| 7044 | Mining, manufacturing, and construction | 0.0 | 0.0 | 0.0 |
| 7045 | Transport | 376.6 | 422.8 | 439.0 |
| 7046 | Communication | 48.4 | 111.6 | 165.8 |
| **705** | **Environmental protection** | **32.6** | **37.2** | **82.7** |
| **706** | **Housing and community amenities** | **269.5** | **1,047.2** | **2,046.2** |
| **707** | **Health** | **427.3** | **508.5** | **768.2** |
| 7072 | Outpatient services | 106.8 | 130.2 | 166.2 |
| 7073 | Hospital services | 226.2 | 265.5 | 410.3 |
| 7074 | Public health services | 0.0 | 0.0 | 0.0 |
| **708** | **Recreation, culture and religion** | **131.0** | **141.3** | **174.0** |
| **709** | **Education** | **755.1** | **834.7** | **1,172.6** |
| 7091 | Pre-primary and primary education | 356.7 | 466.5 | 676.3 |
| 7092 | Secondary education | 136.0 | 143.0 | 175.3 |
| 7094 | Tertiary education | 56.7 | 66.3 | 88.1 |
| **710** | **Social protection** | **176.2** | **511.1** | **269.8** |
| 7 | Statistical discrepancy: Total outlays | 0.0 | 0.0 | 0.0 |

## GFSY Table 8. Transactions in financial assets and liabilities by sector

**Millions of Country Z Pounds**

| | | Budgetary Central Government | | |
|---|---|---|---|---|
| | | **2007** | **2008** | **2009** |
| **82** | **Net acquisition of financial assets (=32)** | **-9.4** | **28.8** | **63.4** |
| **821** | **Domestic** | **-9.4** | **28.0** | **50.4** |
| 8211 | General government | -57.5 | -17.5 | 57.5 |
| 8212 | Central bank | 48.1 | 45.5 | -7.1 |
| 8213 | Other depository corporations | 0.0 | 0.0 | 0.0 |
| 8214 | Financial corporations not elsewhere classified | 0.0 | 0.0 | 0.0 |
| 8215 | Nonfinancial corporations | 0.0 | 0.0 | 0.0 |
| 8216 | Households & NPIs serving h/holds | 0.0 | 0.0 | 0.0 |
| **822** | **External** | **0.0** | **0.8** | **13.0** |
| 8221 | General government | 0.0 | 0.0 | 0.0 |
| 8227 | International organizations | 0.0 | 0.8 | 13.0 |
| 8228 | Financial corporations other than international organizations | 0.0 | 0.0 | 0.0 |
| 8229 | Other nonresidents | 0.0 | 0.0 | 0.0 |
| | | | | |
| **83** | **Net incurrence of liabilities** | **206.0** | **1,243.0** | **2,088.8** |
| **831** | **Domestic** | **-197.7** | **926.8** | **329.7** |
| 8311 | General government | 0.0 | 0.0 | 0.0 |
| 8312 | Central bank | -197.7 | 926.8 | 329.7 |
| 8313 | Other depository corporations | 0.0 | 0.0 | 0.0 |
| 8314 | Financial corporations not elsewhere classified | 0.0 | 0.0 | 0.0 |
| 8315 | Nonfinancial corporations | 0.0 | 0.0 | 0.0 |
| 8316 | Households & nonprofit institutions serving h/holds | 0.0 | 0.0 | 0.0 |
| **832** | **External** | **403.7** | **316.2** | **1,759.1** |
| 8321 | General government | 45.4 | 143.4 | 523.4 |
| 8327 | International organizations | 132.4 | 163.8 | 578.4 |
| 8328 | Financial corporations other than international organizations | 179.2 | -26.8 | 267.2 |
| 8329 | Other nonresidents | 46.7 | 35.8 | 390.1 |

## GFSY Table 9. Total other economic flows

**Millions of Country Z Pounds**

| | | **Budgetary Central Government** | | |
|---|---|---|---|---|
| | | **2007** | **2008** | **2009** |
| **9** | **CHANGE IN NET WORTH: OTHER FLOWS** | **....** | **....** | **....** |
| **91** | **Nonfinancial assets** | **....** | **....** | **....** |
| **911** | **Fixed assets** | **....** | **....** | **....** |
| 9111 | Buildings and structures | .... | .... | .... |
| 9112 | Machinery and equipment | .... | .... | .... |
| 9113 | Other fixed assets | .... | .... | .... |
| **912** | **Inventories** | **....** | **....** | **....** |
| **913** | **Valuables** | **....** | **....** | **....** |
| **914** | **Non-produced assets** | **....** | **....** | **....** |
| 9141 | Land | .... | .... | .... |
| 9142 | Mineral and energy resources | .... | .... | .... |
| 9143 | Other naturally occurring assets | .... | .... | .... |
| 9144 | Intangible non-produced assets | .... | .... | .... |
| **92** | **Financial assets** | **....** | **....** | **....** |
| | *by instrument* | | | |
| 9201 | Monetary gold and SDRs | .... | .... | .... |
| 9202 | Currency and deposits | .... | .... | .... |
| 9203 | Debt securities | .... | .... | .... |
| 9204 | Loans | .... | .... | .... |
| 9205 | Equity and investment fund shares | .... | .... | .... |
| 9206 | Insurance, pension, and standardized guarantee schemes | .... | .... | .... |
| 9207 | Financial derivatives and employee stock options | .... | .... | .... |
| 9208 | Other accounts receivable | .... | .... | .... |
| | *by debtor* | | | |
| **921** | **Domestic** | **....** | **....** | **....** |
| **922** | **External** | **....** | **....** | **....** |
| **93** | **Liabilities** | **....** | **....** | **....** |
| | *by instrument* | | | |
| 9301 | Special Drawing Rights (SDRs) | .... | .... | .... |
| 9302 | Currency and deposits | .... | .... | .... |
| 9303 | Debt securities | .... | .... | .... |
| 9304 | Loans | .... | .... | .... |
| 9305 | Equity and investment fund shares | .... | .... | .... |
| 9306 | Insurance, pension, and standardized guarantee schemes | .... | .... | .... |
| 9307 | Financial derivatives and employee stock options | .... | .... | .... |
| 9308 | Other accounts payable | .... | .... | .... |
| | *by debtor* | | | |
| **931** | **Domestic** | **....** | **....** | **....** |
| **932** | **External** | **....** | **....** | **....** |
| 9M2 | Change in net fin worth: other economic flows [92-93] | .... | .... | .... |
| 9M3 | Debt at market value: other economic flows | .... | .... | .... |

# CHAPTER 9. CONSOLIDATION

*This chapter describes the process followed to present consolidated statistics for the general government sector and the nonfinancial public sector.*

262. When GFS have been compiled for all individual subsectors of the general government (public) sector, these statistics must be aggregated and consolidated. Aggregation is the simple addition of all data categories across subsectors. Consolidation is a method of presenting statistics for a set of units grouped together as if they constituted a single unit, which involves the elimination of all transactions and reciprocal stock positions between units in the subsector or sector being consolidated. Consolidation is normally the final step in organizing and presenting government data following the accounting rules of the *GFSM 2001* system.[61] The main reason for presenting GFS in a consolidated manner is because it provides a more effective way of assessing the overall impact of government operations on the total economy, or the sustainability of government operations; in other words, because consolidation heightens the analytical usefulness of the statistics.

## A. Purpose of Consolidation

263. Consolidation eliminates double counting of transactions or stocks among units being consolidated, thereby producing aggregates not affected by internal interactions. At identical levels of activity, without consolidation, a country that employs a unified or centralized budgetary mechanism to carry out transactions would show smaller unconsolidated aggregates than a country that conducts the same level of activity, but uses a decentralized mechanism to channel funds from the budget. Table 16 below illustrates the point.

264. Two countries, A and B, have the same values for revenue, expense and the gross operating balance at the central government level. However, they channel their resources very differently. The central government of country A spends 110 directly and transfers 10 to its local governments, which spend the whole amount; whereas the central government of country B spends 30 directly and transfers 90 to its local governments, which spend the whole amount. If we now compare in the table both countries at the general government level, we see that simply aggregating transactions for central government and local governments shows country B to have significantly higher revenue and expense than country A. However, if we add the figures after consolidation (i.e., after the elimination of internal transactions) then both countries have the same aggregates of revenue and expense at the general government level. We also notice that the Gross Operating Balance (GOB) of the general government is unaffected by consolidation.

[61] As indicated earlier when discussing the accounting rules, the *2008 SNA* presents national accounts data on an unconsolidated manner.

**Table 16. Illustration of Unconsolidated Versus Consolidated Data**

| **Unconsolidated** | **Country A** | | | | **Country B** | | | |
|---|---|---|---|---|---|---|---|---|
| | Central Gov. | Local Gov. | | General Gov. | Central Gov. | Local Gov. | | General Gov. |
| **Revenue** | 100 | 10 | | 110 | 100 | 90 | | 190 |
| **Expense** | 120 (110+10) | 10 | | 130 | 120 (30 + 90) | 90 | | 210 |
| **GOB (R-E)** | -20 | 0 | | -20 | -20 | 0 | | -20 |

| **Consolidated** | **Country A** | | | | **Country B** | | | |
|---|---|---|---|---|---|---|---|---|
| | Central Gov. | Local Gov. | Consol. Column | General Gov. | Central Gov. | Local Gov. | Consol. Column | General Gov. |
| **Revenue** | 100 | 10 | -10 | 100 | 100 | 90 | -90 | 100 |
| **Expense** | 120 | 10 | -10 | 120 | 120 | 90 | -90 | 120 |
| **GOB (R-E)** | -20 | 0 | 0 | -20 | -20 | 0 | 0 | -20 |

GOB: Gross Operating Balance

265. The main impact of consolidation is on the magnitude of aggregates, as illustrated above. Consolidation adjustments do not have an impact on the balancing items in the GFS system, as the consolidation process is symmetric within a given table or statement (set of accounts), again as illustrated above. Consolidation takes place both within a particular subsector (intra-governmental) and between subsectors (inter-governmental) that belong to a given sector. Therefore, intra-governmental consolidation always takes place when compiling GFS for any given subsector, whereas inter-governmental consolidation only takes place when compiling GFS for a sector that groups together more than one subsector. Typical sectors compiled where inter-governmental consolidation takes place include the central government, general government, nonfinancial public sector, and public sector. Intra-governmental consolidation within a particular subsector is always done before any inter-governmental consolidation.

### B. Key Items to Focus on Consolidation

266. Proper consolidation depends on a thorough review of the accounts to be consolidated to identify internal transactions and stockholdings. The goal is not perfect consolidation, but rather to eliminate—in a consistent manner—transactions and positions that have a significant effect on the final aggregates. Where a review of the accounts reveals that there are small transactions that may be difficult to fully identify, resources should not be devoted to identifying these transactions and their magnitudes. Generally, it is recommended that for the consolidation of flows of the central government and general government sectors priority be given to identifying three potential items for elimination through consolidation: transfers between government units, transactions in financial assets and liabilities, and interest income/expense. Only in cases where intergovernmental taxes and purchases of goods and

services are known to be large, should efforts be made to identify and eliminate through consolidation these transactions. For stocks, priority should be given to identifying two items: loans, and debt securities.

267. For many countries, the largest class of intra- and inter-governmental transactions eligible for consolidation relates to various types of transfer payments. These may be current and capital grants between levels of government, transfers within institutional units or transfers among institutional units. Central governments frequently make grants to lower levels of government or to other institutional units (for example, universities, hospitals, and nonprofit institutions) at the central government level. These transfers are generally easy to identify and should all be eliminated through consolidation. For social security funds, general transfers between subsectors should be consolidated. However, direct payments by government as an employer to social security schemes are never consolidated. These payments are always shown as if paid to employees who, in turn, make the contributions to social security schemes, and are treated as part of compensation of employees.

268. There are many types of financial transactions among government units. Governments may make loans to other governments for policy and other purposes, and government units may acquire the liabilities of other government units for liquidity and other purposes. All direct loans between government units should be eliminated through consolidation, and all acquisitions of other governments' securities in direct transactions should also be eliminated. Government debt instruments acquired on secondary markets should not be consolidated in transactions data, as these transactions take place with nongovernmental units. However, these acquisitions should be consolidated in balance sheet or debt statistics.

269. Intra- and inter-governmental holdings of financial assets and liabilities, and therefore interest payments, are very common. Interest income from and expense to other government units is generally easy to identify in the accounts and should always be subject to consolidation. Concerning stocks, consolidation is necessary in the presentation of financial assets and liabilities for a government's balance sheet. Only claims on units outside the government subsector or sector to be consolidated and liabilities to outside units should remain on the consolidated balance sheet. In other words, all reciprocal creditor-debtor relationships within the units being consolidated should be eliminated, but priority should be given to those related to loans and debt securities.

270. All transactions that are to be consolidated should preferably be identified in the accounting codes for transactions, with the counterparty of the transaction also clearly identified. If such counterpart identification is not currently included in accounting codes, this should be a priority when the chart of accounts is revised. In general, this procedure facilitates the consolidation process and, in particular, its automation.

## C. Rules of Thumb for Consolidation

271. In principle, when a transaction to be eliminated through consolidation is identified (e.g., a grant from the central government to the local government), the corresponding receipt should be found in the accounts of the counterparty (in this case the local government). However, when the counterparts' accounts are reviewed, there may be no record of the grant, or the grant may be credited in a different period, or the grant receivable may have a different value from the grant payable, or it may be classified as something other than a grant. There are many reasons for such discrepancies (timing differences, classification differences, accounting discrepancies, valuation differences, etc.). Addressing these discrepancies not only promotes proper consolidation, but also improves the overall quality of the data.

272. A practical way to address discrepancies when consolidating data is to use the following rules of thumb:

(a) The "one-side" rule of thumb. If there is convincing evidence from one of the parties that a transaction took place, it can be imputed to the other side, even in the absence of the counterpart records. When such an adjustment is made in the data for a unit where the transactions cannot be directly identified, the records for that unit need to be properly modified.

(b) The "top-down" rule of thumb. Often, budgetary accounts, or central government accounts as a whole, are more complete, timely, detailed, and accurate than, for example, the local government accounts (or even extra-budgetary accounts). When there is clear evidence that the central government made a transfer (or any other transaction) to a local government, the transaction, its timing, and its value can be imputed to the local government. Similarly, one can often rely on the originator of a transaction to have more reliable accounting records.

(c) The "creditor is right" rule of thumb. For transactions in financial assets and liabilities, normally the creditor can be expected to maintain the most reliable records. For loans, the creditor unit usually maintains the most complete records, although in some cases the debtor unit may be equally reliable. For securities, especially bearer instruments, only the creditor may have the information needed for consolidation. For example, when a central government issues bearer securities, some may be acquired by local governments, and the central government may have no direct information on who is holding the securities, especially if they can be acquired on secondary markets. It is, therefore, necessary to rely on the creditor records of the local governments.

Judgment and the cost/benefit rule must always be applied during consolidation, the effort and cost to identify an amount to be consolidated should be directly proportional to the expected amount and its impact on the aggregates.

273. An effective tool to use during the consolidation process is a table that presents both parties to the flows or stocks, and shows the amounts each party has recorded for each item to be consolidated. Then the rules of thumb can be applied to reach consistency on the amounts between both parties, while at the same time keeping the balancing items unchanged. One such table appears as Annex 1 of the *GFS Yearbook Questionnaire*. Applying the rules of thumb often leads to making corrections to the accounts of one or even

both parties, thereby modifying the values of balancing items. However, these corrections are a benefit of the consolidation process, and not a result of the consolidation itself, which is always symmetric. In other words, the consolidation takes place after the amounts have been reconciled, and involves eliminating the same amount for both parties.

### D. Differences in the *GFSM 1986* and *GFSM 2001* Consolidation Presentations

274. The principle of consolidation remains the same whether the *GFSM 1986* methodology or the *GFSM 2001* methodology is followed. However, the presentation differs significantly, as can be seen below in Table 17. In essence, the difference is that in the *GFSM 1986* presentation the original values of the items being consolidated are directly modified, whereas in the *GFSM 2001* presentation the consolidation values are shown in a separate column, without modifying the original values of the items being consolidated. The *GFSM 2001* presentation also results in financing having the same sign and values as net lending/borrowing for the subsectors subject to consolidation, unlike the *GFSM 1986* presentation, where financing and the deficit/surplus have different signs and values for the subsectors consolidated.

**Table 17. Illustration of *GFSM 1986* versus *GFSM 2001* Consolidation Presentations**

| ***GFSM 1986* Presentation** | **Budget account** | **Social security fund** | **Consolidated central government** |
|---|---|---|---|
| Revenue and grants | 120 | 55-20 = 35 | 155 |
| *of which grant from BA* | 0 | 20 | 0 |
| Expenditure and L-R* | 180-20 = 160 | 23 | 183 |
| *of which grant to SSF* | 20 | 0 | 0 |
| Deficit/Surplus | 120-160 = -40 | 35-23 = 12 | -28 |
| Financing | +60 | -32 | +28 |

**** Assume L-R=0***

| ***GFSM 2001* Presentation** | **Budget account** | **Social security fund** | **Consolidation** | **Consolidated central government** |
|---|---|---|---|---|
| Revenue | 120 | 55 | -20 | 120+55-20 = 155 |
| Expense | 165 | 23 | -20 | 165+23-20 = 168 |
| Net operating balance | -45 | 32 | 0 | -13 |
| NFAs | 15 | 0 | 0 | 15 |
| Net lending/borrowing | -60 | +32 | 0 | -28 |
| Financing | -60 | +32 | 0 | -28 |

## E. Consolidation of Nonfinancial Public Corporations

275. The discussion above has focused on the consolidation of statistics for the general government sector with its subsectors. If we want to compile GFS for the nonfinancial public sector, we have to consolidate the general government sector with selected nonfinancial corporations (or the whole nonfinancial corporations subsector). There are two approaches to the consolidation of transactions of the general government sector with those of nonfinancial public corporations, which one to use is determined by data availability and analytical needs. These approaches are:

(a) If detailed data are available and an analytical need exists for such aggregates, consolidate appropriate revenue and expense, net/gross operating balances, net acquisitions of nonfinancial assets, net lending/borrowing balances, and net acquisitions of financial assets and net incurrence of liabilities of the general government and the nonfinancial public corporations; or

(b) If detailed data are not available to consolidate the appropriate revenue and expense transactions, or analytical needs do not require such aggregates, only consolidate net/gross operating balances, net acquisition of nonfinancial assets, net lending/borrowing balances, and net acquisition of financial assets and net incurrence of liabilities of the general government and the nonfinancial public corporations.

276. When compiling statistics for the nonfinancial public corporations subsector or the nonfinancial public sector, it is recommended that priority be given to identifying the following potential items for intra- and inter-sector consolidation:

(a) For revenue and expense transactions: (i) dividends receivable/payable and withdrawals from income of quasi-corporations; (ii) subsidies receivable/payable; and (iii) current and capital transfers receivable and/or payable. Only in cases where intra- and inter-sector current and capital transfers are known to be large, should efforts be made to identify and eliminate these transactions in consolidation.

(b) For assets and liabilities: For flows and stocks of nonfinancial assets: (i) Gross acquisitions and disposals of nonfinancial assets. However, if only the aggregate net acquisition of nonfinancial assets is compiled, there is no need for any consolidation of this aggregate. There is always no need for any consolidation of other economic flows in or stocks of nonfinancial assets, because nonfinancial assets only appear in the balance sheet of one public sector unit. For flows and stocks of financial assets and liabilities: (i) Equity and investment fund shares; (ii) loans; and (iii) debt securities.

277. If the alternative approach is followed, where no revenue and expense statistics are compiled for the consolidated nonfinancial public sector, the proposed revenue/expense items are only eliminated in intra-sector consolidation when compiling revenue and expense aggregates for the consolidated nonfinancial public corporations subsector. In other words, there is only intra-governmental consolidation, but no inter-governmental consolidation of revenue and expense.

278. The possible discrepancies and the rules of thumb to address them discussed above in relation to the consolidation of the general government sector, are equally valid for the consolidation of the nonfinancial public sector.

279. For detailed examples of consolidation and additional information on the topic of consolidation see:

- IMF, *GFSM 2001 Companion Material*, Consolidation of the General Government Sector, and Non-Financial Public Sector Statistics – Consolidation.

## PART III. OTHER ISSUES

280. In Part III we discuss other issues related to the compilation of GFS. More specifically, we show the recording of typical cash transactions and of complex transactions in the GFS system, provide guidance on data dissemination, and address the gradual adoption of the *GFSM 2001* methodology.

281. The recording of typical transactions and complex transactions is illustrated with examples for the various classification categories, using double entry accounting and, in a few cases, the GFS analytic framework. As stated earlier in Chapter 3, the use of double entry accounting helps ensure the identity total assets equal to total liabilities plus net worth is maintained, and that statistical discrepancies are minimized; both key features of a good statistical system. Figure 11 below reminds us of the accounting convention for debit and credit entries, and is intended to facilitate understanding of the examples presented below.

**Figure 11. Debits and Credits**

| Debit (DR) | Credit (CR) |
|---|---|
| **+**<br>**Assets** | **+**<br>**Liabilities**<br>**Net worth** |
| **-**<br>**Liabilities**<br>**Net worth** | **-**<br>**Assets** |

282. A fundamental characteristic of the GFS system is the use of double entry accounting. If the country does not follow this practice it is strongly recommended that it be adopted. Recording both sides of a transaction has obvious benefits and is the only way to ensure that all flows associated with government units are accurately recorded. Double entry accounting is useful even without its formal adoption for accounting purposes, as it is a good way to identify the counterpart to any transaction. For example, a transfer from the central government to a local government has to appear as an expense of the central government and as revenue of the local government, otherwise the accounts of the government where it is missing need to be adjusted.

## CHAPTER 10. RECORDING OF TYPICAL CASH TRANSACTIONS

*This chapter illustrates the recording of typical cash transactions under the GFS system by providing examples for the various classification categories, using mainly double entry accounting.*

283. We will look first at a number of examples of how to record typical transactions in the GFS system, using a cash basis for the time of recording.[62] The recording will show the GFS classification code and item for the relevant debit and credit entries. As indicated in Chapter 5, cash in the GFS system corresponds to the category Currency and deposits.[63] All entries are shown from the perspective of the government unit involved in the transaction.

### A. Revenue

284. Let us look first at some examples of revenue transactions:

**Taxes**

**Example 10.01: An individual paid Z£225 in income tax.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3212 | Domestic currency and deposits | 225 | |
| 1111 | Taxes on income, profits, and capital gains payable by individuals | | 225 |

**Example 10.02: A corporation paid Z£875 in profits tax.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3212 | Domestic currency and deposits | 875 | |
| 1112 | Taxes on income, profits, and capital gains payable by corporations and other enterprises | | 875 |

[62] The key difference with an accrual basis of recording is that the transaction would be recorded at the time the event took place, instead of when the associated payment took place. Whenever the timing between these two bases of recording differs, the counterpart entry is an account receivable or payable (instead of currency and deposits).

[63] The code 3212 has been used in all the examples for Currency and deposits. However, depending on the residence of the entity holding the funds, the code 3222 may be appropriate.

**Example 10.03: A corporation paid Z£150 for a tax based on its number of employees.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3212 | Domestic currency and deposits | 150 | |
| 112 | Taxes on payroll and workforce | | 150 |

**Example 10.04: An individual paid Z£400 as annual tax on his house.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3212 | Domestic currency and deposits | 400 | |
| 1131 | Taxes on property, recurrent taxes on immovable property | | 400 |

**Example 10.05: An individual paid Z£100 on an inheritance from her grandmother.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3212 | Domestic currency and deposits | 100 | |
| 1133 | Taxes on property, estate, inheritance and gift taxes | | 100 |

**Example 10.06: A company paid Z£520 in sales tax.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3212 | Domestic currency and deposits | 520 | |
| 11412 | Taxes on goods and services, sales taxes | | 520 |

**Example 10.07: The Electricity Company of Country Z paid the government Z£210 it had collected from its customers for a tax on electricity consumption.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3212 | Domestic currency and deposits | 210 | |
| 1144 | Taxes on specific services | | 210 |

**Example 10.08: An individual received a refund of Z£35 for overpayment of the annual tax to use his car on the roads of Country Z.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 11451 | Taxes on use of goods and on permission to use goods or perform services, motor vehicle taxes | 35 | |
| 3212 | Domestic currency and deposits | | 35 |

**Example 10.09: An importer paid Z£330 for a tax on import of goods.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3212 | Domestic currency and deposits | 330 | |
| 1151 | Taxes on international trade and transactions, customs and other import duties | | 330 |

285. Payments for taxes received by the government are treated as revenue, and refunds of these taxes are treated as negative revenue. If the tax payments are received in cash, then we need to debit Currency and deposits and credit the appropriate tax category; while refunds are recorded as a reduction in the tax category where the revenue was initially recorded. Payments received by government that are classified as social contributions, grants, and other revenue, are also treated as revenue. In all cases, as a result of these transactions there is an increase in the net worth of government (except in the case of a refund which is a decrease in net worth).

**Social contributions**

286. The entries made below are from the perspective of the National Social Security Fund, a unit of the social security funds subsector of central government. Social contributions are the main source of revenue for social security funds, and are recorded in a similar manner to taxes, with a debit to Currency and deposits and a credit to the appropriate category of social contribution revenues.

**Example 10.10: A self-employed individual paid Z£15 to the National Social Security Fund.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3212 | Domestic currency and deposits | 15 | |
| 1213 | Social security contributions, self-employed or non-employed social security contributions | | 15 |

**Example 10.11: The government paid Z£1,750 as social contributions on behalf of its employees to the National Social Security Fund.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3212 | Domestic currency and deposits | 1,750 | |
| 1212 | Social security contributions, employer social security contributions | | 1,750 |

**Grants**

**Example 10.12: A foreign government made a transfer of Z£10,000 to the government of Country Z for the construction of a hospital.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3212 | Domestic currency and deposits | 10,000 | |
| 1312 | Grants from foreign governments, capital | | 10,000 |

**Example 10.13: The state government of Savanna land received a transfer of Z£2,500 from the central government of Country Z for no specific purpose.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3212 | Domestic currency and deposits | 2,500 | |
| 1331 | Grants from other general government units, current | | 2,500 |

**Other revenue**

**Example 10.14: The government received an interest payment of Z£80 on a loan made to a public corporation.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3212 | Domestic currency and deposits | 80 | |
| 1411 | Property income, interest | | 80 |

**Example 10.15: The government received a payment of Z£140 as a profit distribution of an oil company on which it owns shares.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3212 | Domestic currency and deposits | 140 | |
| 1412 | Property income, dividends | | 140 |

**Example 10.16: The government received a payment of Z£15,000 as royalties for leasing oil fields.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3212 | Domestic currency and deposits | 15,000 | |
| 1415 | Property income, rent | | 15,000 |

**Example 10.17: The government received a payment of Z£45 from sales at the gift shop of a museum.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3212 | Domestic currency and deposits | 45 | |
| 1421 | Sales of goods and services, sales by market establishments | | 45 |

**Example 10.18: The government collected Z£90 from the issuance of passports.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3212 | Domestic currency and deposits | 90 | |
| 1422 | Sales of goods and services, administrative fees | | 90 |

**Example 10.19: The government collected Z£260 from fines for traffic violations.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3212 | Domestic currency and deposits | 260 | |
| 143 | Fines, penalties, and forfeits | | 260 |

**Example 10.20: The government collected Z£95 from corporations for the late payment of taxes on profits.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3212 | Domestic currency and deposits | 95 | |
| 1112 | Taxes on income, profits, and capital gains payable by corporations and other enterprises | | 95 |

**Example 10.21: The government received a transfer of Z£3,250 from a local charity organization to help build a school.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3212 | Domestic currency and deposits | 3,250 | |
| 1442 | Voluntary transfers other than grants, capital | | 3,250 |

## B. Expense

287. Let us look now at some examples of expense transactions:

**Compensation of employees**

**Example 10.22: The government paid its employees Z£5,000 for services provided in the month of June.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 2111 | Wages and salaries in cash | 5,000 | |
| 3212 | Domestic currency and deposits | | 5,000 |

**Example 10.23: The government paid its employees Z£800 for overtime work done in the month of June.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 2111 | Wages and salaries in cash | 800 | |
| 3212 | Domestic currency and deposits | | 800 |

**Example 10.24: The government paid Z£500 to an insurance company as its employer contribution to the pension fund of its employees.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 2121 | Social contributions, actual | 500 | |
| 3212 | Domestic currency and deposits | | 500 |

**Use of goods and services**

**Example 10.25: The government paid Z£185 for office supplies.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 22 | Use of goods and services | 185 | |
| 3212 | Domestic currency and deposits | | 185 |

**Example 10.26: The government paid Z£270 for road maintenance.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 22 | Use of goods and services | 270 | |
| 3212 | Domestic currency and deposits | | 270 |

**Example 10.27: The government paid Z£40 to a consultant company for an environmental study.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 22 | Use of goods and services | 40 | |
| 3212 | Domestic currency and deposits | | 40 |

**Example 10.28: The government was reimbursed Z£50 for an excess payment on its electricity bill.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3212 | Domestic currency and deposits | 50 | |
| 22 | Use of goods and services | | 50 |

288. As indicated above in Chapter 5 when discussing the classification of expenses, the *GFSM 2001* methodology records the actual use of goods and services during an accounting period. To the extent that inventories of certain goods are kept and reliable records are available, the purchases of these goods need to be adjusted by the change in the inventories to determine the actual usage.

**Interest**

**Example 10.29: The government paid Z£325 as interest on a loan to an international organization.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 241 | Interest to non-residents | 325 | |
| 3212 | Domestic currency and deposits | | 325 |

**Example 10.30: The government paid Z£140 as interest on Treasury bills held by local governments.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 243 | Interest to other general government units | 140 | |
| 3212 | Domestic currency and deposits | | 140 |

**Subsidies**

**Example 10.31: The government paid Z£200 to the public food retail company to keep the unit price of bread low.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 2511 | Subsidies to nonfinancial public corporations | 200 | |
| 3212 | Domestic currency and deposits | | 200 |

**Example 10.32: The government paid Z£375 to private financial corporations to increase their workforce by 10%.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 2522 | Subsidies to financial private enterprises | 375 | |
| 3212 | Domestic currency and deposits | | 375 |

### Grants

**Example 10.33: The government made a Z£600 donation to the International Red Cross.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 2621 | Grants to international organizations, current | 600 | |
| 3212 | Domestic currency and deposits | | 600 |

**Example 10.34: The central government transferred Z£1,250 to a local government to build a road.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 2632 | Grants to other general government units, capital | 1,250 | |
| 3212 | Domestic currency and deposits | | 1,250 |

### Social benefits

**Example 10.35: The National Social Security Fund paid Z£725 to its pensioners.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 2711 | Social security benefits in cash | 725 | |
| 3212 | Domestic currency and deposits | | 725 |

**Example 10.36: The government paid mothers of infants Z£860 as reimbursement for milk purchases.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 2722 | Social assistance benefits in kind | 860 | |
| 3212 | Domestic currency and deposits | | 860 |

**Other expense**

**Example 10.37: The government paid Z£190 to a nonprofit organization to provide polio vaccines to children under five years old.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 2821 | Miscellaneous other expense, current | 190 | |
| 3212 | Domestic currency and deposits | | 190 |

**Example 10.38: The government gave Z£370 to the best high school students for college tuition.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 2821 | Miscellaneous other expense, current | 370 | |
| 3212 | Domestic currency and deposits | | 370 |

**Example 10.39: The government transferred Z£1,300 to the electric company to buy two new generators.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 2822 | Miscellaneous other expense, capital | 1,300 | |
| 3212 | Domestic currency and deposits | | 1,300 |

289. Payments made by the government that are classified as compensation of employees, use of goods and services, consumption of fixed capital, interest, subsidies, grants, social benefits, and other expense, are treated as expense with the exception noted in the next paragraph. Refunds of these payments are treated as negative expense, i.e., a reduction in the expense category where the expense was initially recorded. If the payments are made in cash, then we need to debit the appropriate expense and credit Currency and deposits; while refunds are recorded as a reduction in the expense category where the outflow was initially recorded. In all cases, as a result of these transactions there is a decrease in the net worth of government (except in the case of a refund which is an increase in net worth).

290. As indicated above in Chapter 5 when discussing the classification of expenses, the *GFSM 2001* methodology treats payments that under most circumstances would be recorded as expenses, as the acquisition of nonfinancial assets if made in connection to own-account capital formation. In other words, if a government itself builds a nonfinancial asset, the payments made in connection to its construction are not recorded as expenses, but as the acquisition of the asset.

## C. Nonfinancial Assets

291. Let us look now at some examples of transactions in nonfinancial assets:

**Example 10.40: The government spent Z£3,100 in payment of wages, use of goods and services, and interest associated to the construction of a road by its Works Department.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 31113 | Fixed assets, other structures | 3,100 | |
| 3212 | Domestic currency and deposits | | 3,100 |

**Example 10.41: The government bought two generators for Z£3,400. Transport and installation charges amounted to Z£500, and an engineering fee of Z£100 also had to be paid to put the generators into operation.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 31122 | Fixed assets, other machinery and equipment | 4,000 | |
| 3212 | Domestic currency and deposits | | 4,000 |

**Example 10.42: The government sold land to a private buyer for Z£1,925.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3212 | Domestic currency and deposits | 1,925 | |
| 3141 | Nonproduced assets, land | | 1,925 |

**Example 10.43: The government bought 100 tons of rice for Z£80 for reserve in cases of emergency.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 31224 | Inventories, goods for resale | 80 | |
| 3212 | Domestic currency and deposits | | 80 |

292. Payments for the acquisition of nonfinancial assets are recorded by a debit entry to the corresponding asset category of the asset bought, and a counterpart credit entry to Currency and deposits. Dispositions of nonfinancial assets are recorded by a debit to Currency and deposits, and a counterpart credit entry to the corresponding asset category of the asset sold. Of course the government may finance the acquisition/disposition of assets in

a variety of ways other than immediate cash payments, for example through a loan. In those cases the counterpart entry will still be a credit but to a different category (e.g., 3324 if the asset purchase was financed through an external loan, as illustrated below in Example 10.44).

**Example 10.44: The government bought an office building for Z£7,500, financed by a loan from a foreign bank.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 31112 | Fixed assets, buildings other than dwellings | 7,500 | |
| 3324 | External loans | | 7,500 |

## D. Financial Assets and Liabilities

293. Let us look now at some examples of transactions in financial assets and liabilities:

**Example 10.45: The government issued one year Treasury bills to residents for Z£13,000. An underwriting fee of Z£650 was paid in connection to the issuance.**

| Recording the issuance of the securities: | | | |
|---|---|---|---|
| GFS Code | Descriptor | Debit | Credit |
| 3212 | Domestic currency and deposits | 13,000 | |
| 3313 | Domestic debt securities | | 13,000 |
| Recording the commissions paid to the underwriter: | | | |
| 22 | Use of goods and services | 650 | |
| 3212 | Domestic currency and deposits | | 650 |

**Example 10.46: The government borrowed Z£25,000 from an international bank.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3212 | Domestic currency and deposits | 25,000 | |
| 3324 | External loans | | 25,000 |

**Example 10.47: The government bought shares in a local enterprise for Z£3,500.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3215 | Domestic equity and investment fund shares | 3,500 | |
| 3212 | Domestic currency and deposits | | 3,500 |

**Example 10.48: The government made a Z£1,400 payment to amortize a loan from a foreign government.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3324 | External loans | 1,400 | |
| 3212 | Domestic currency and deposits | | 1,400 |

294. The examples above have been presented using double entry accounting. To illustrate the same entries from a different perspective, Table 18 shows how these entries would appear in the GFS overall framework, using some of the examples presented above. Values have been entered in the opening balance sheet to illustrate the effect of transactions on stocks.

**Table 18. Recording of Cash Transactions in Overall Framework**
**Examples 10.02, 10.22, 10.41, and 10.45**

| | Stocks | Flows | | Stocks |
|---|---|---|---|---|
| | Opening Balance Sheet | Transactions | Other Economic Flows | Closing Balance Sheet |
| **Revenue** | | | | |
| Taxes on income, profits, and capital gains | | 875 | | |
| **Expense** | | | | |
| Wages and salaries in cash<br>Use of goods and services | | 5,000<br>650 | | |
| **Net worth /**<br>**Net operating balance** | -45,000 | -4,775 | | -49,775 |
| **Nonfinancial assets** | 120,000 | | | 124,000 |
| Other machinery and equipment | | 4,000 | | |
| **Net financial worth /**<br>**Net lending/borrowing** | -165,000 | -8,775 | | -173,775 |
| **Financial assets** | 10,000 | | | 14,225 |
| Currency and deposits | | 4,225 (875-5,000-4000-650-+13,000) | | |
| **Liabilities** | 175,000 | | | 188,000 |
| Debt securities | | 13,000 | | |
| | | | | |

*Net Financial Worth (NFW) = Financial assets – Liabilities.*
*Net worth = NFW + Nonfinancial assets.*
*Revenue- Expense = Net operating balance (Gross operating balance* if *Expense* excludes *Consumption of fixed capital*).
*Net Lending/Borrowing = Revenue - Expense – Net acquisition of nonfinancial assets* (computed from "above the line") = *Net acquisition of financial assets – Net incurrence of liabilities* (computed from "below the line").

295. The overall framework shows that as a result of the four transactions recorded the government's net worth decreased by Z£4,775 during the period, while its net financial worth decreased by Z£8,775. The decrease in net worth was the net result of the amount collected as taxes, less the amounts paid as compensation of employees and use of goods and services. The decrease in net financial worth is explained by the transactions just mentioned, plus the acquisition of two generators. This latter transaction does not affect net worth because it is an exchange of assets, but it does affect net financial worth because it is an exchange of a financial asset for a nonfinancial asset.

## E. Accrual Recording of Transactions

296. The previous examples of the recording entries for typical transactions have all been presented, as indicated, using a cash basis for the time of recording. If these transactions were to be presented instead using an accrual basis for the time of recording, there would be a need to bridge the time between when the event takes place and when the associated cash flow occurs. The way the GFS system bridges the timing difference is through the use of accounts receivable/payable, as illustrated below using some of the examples already presented above, but now showing both the recording on a cash basis and on an accrual basis.

**Example 10.49: A corporation presented its mid-year income tax declaration for 2009, which showed it owed Z£875. Payment will be made after its self-assessment is confirmed as accurate by the revenue authority.**

| **At the time the assessment is received (accrual):** | | | |
|---|---|---|---|
| GFS Code | Descriptor | Debit | Credit |
| 3218 | Domestic other accounts receivable | 875 | |
| 1112 | Taxes on income, profits, and capital gains payable by corporations and other enterprises | | 875 |
| **At the time the payment is collected (Example 10.02):** | | | |
| 3212 | Domestic currency and deposits | 875 | |
| 3218 | Domestic other accounts receivable | | 875 |

**Example 10.50: The public oil company declared a dividend of Z£140, payable at the end of the following quarter.**

| At the time when the shares go ex-dividend (accrual): | | | |
|---|---|---|---|
| GFS Code | Descriptor | Debit | Credit |
| 3218 | Domestic other accounts receivable | 140 | |
| 1412 | Property income, dividends | | 140 |
| **At the time the dividend is paid (Example 10.15):** | | | |
| 3212 | Domestic currency and deposits | 140 | |
| 3218 | Domestic other accounts receivable | | 140 |

**Example 10.51: The government bought Z£185 for office supplies, which it has 30 days to pay.**

| At the time the goods are received (accrual): | | | |
|---|---|---|---|
| GFS Code | Descriptor | Debit | Credit |
| 22 | Uses of goods and services | 185 | |
| 3318 | Domestic other accounts payable | | 185 |
| **At the time the goods are paid (Example 10.25):** | | | |
| 3318 | Domestic other accounts payable | 185 | |
| 3212 | Domestic currency and deposits | | 185 |

**Example 10.52: The government awarded Z£370 to the best high school students for college tuition.**

| At the time of the awards (accrual): | | | |
|---|---|---|---|
| GFS Code | Descriptor | Debit | Credit |
| 2821 | Miscellaneous other expense, current | 370 | |
| 3318 | Domestic other accounts payable | | 370 |
| **At the time of payment of the awards (Example 10.38):** | | | |
| 3318 | Domestic other accounts payable | 370 | |
| 3212 | Domestic currency and deposits | | 370 |

**Example 10.53: The government received Z£15,000 as pre-payment for royalties on oil exports to be delivered next year.**

| **At the time the payment is received (Example 10.16):** | | | |
|---|---|---|---|
| GFS Code | Descriptor | Debit | Credit |
| 3212 | Domestic currency and deposits | 15,000 | |
| 3318 | Domestic other accounts payable | | 15,000 |
| **At the time the oil is delivered (accrual):** | | | |
| 3318 | Domestic other accounts payable | 15,000 | |
| 1415 | Property income, rent | | 15,000 |

297. The five examples above illustrate transactions where the economic event takes place at a different time than the associated cash flows, and the use of accounts receivable/payable to bridge the timing difference. The recording of transactions with no associated cash flows (nonmonetary transactions) will be illustrated in the next chapter when discussing selected transactions of this type.

## CHAPTER 11. RECORDING OF COMPLEX TRANSACTIONS

*This chapter describes the treatment and recording of selected complex transactions under the GFS system, and provides examples using mainly double entry accounting.*

298. We now turn to the recording of selected complex transactions in the GFS system. These transactions include monetary and nonmonetary transactions that are considered to be of particular relevance to developing countries.[64] The monetary transactions discussed are: (a) revenues from natural resources, (b) transactions with the IMF, (c) transactions related to social protection, and (d) interest; while the nonmonetary transactions discussed are: (a) in-kind transactions, (b) selected debt operations, and (c) arrears. Finally, a few examples of the recording of other economic flows, both for holding gains and losses, and other changes in the volume of assets, are provided.

### A. Monetary Transactions

#### Revenues from natural resources

299. Many governments of developing countries derive a significant proportion of their revenues from natural resources (e.g., oil deposits, mineral deposits, etc.), and find it useful to identify these revenues separately in their fiscal statistics.[65] There is no formal definition of revenues from natural resources in international statistical methodologies, because it is left to countries to develop their own definition based on national circumstances and policy concerns. We suggest for GFS purposes two possible definitions of revenues from natural resources, one narrow and the other broad. The narrow definition includes all revenues derived directly from: (a) ownership of the natural assets, and (b) exploitation (exploration, extraction, processing, and commercialization) of these assets. The broad definition includes all direct and indirect revenues, i.e., the narrow definition plus indirect revenues.

300. The narrow definition of revenues from natural resources includes items such as rent (royalties), income and profits taxes, sales taxes, value added taxes, excise taxes, taxes on imports, taxes on exports, profits of fiscal monopolies, taxes on property, business and operating fees, social contributions, dividends, and other revenues that meet the criteria of being directly linked to the ownership or exploitation of the assets. If GFS are compiled for the nonfinancial public sector or the public sector, the sales of the natural resources by public corporations would be a major item included in the definition. The source data for these

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[64] Monetary transactions involve cash flows at some point in time, whereas nonmonetary transactions do not involve cash flows. If transactions are recorded on a cash basis, the time of recording will be when the cash flow occurs, and noncash transactions are not recorded. If transactions are recorded on an accrual basis, the time of recording will be when the economic event occurs, regardless of whether it involves a cash flow.

[65] Often, there are specific natural resources that countries want to identify separately, such as oil, gold, copper, etc.

revenues are mainly the accounting records (or budget execution data) of the government, and the accounting records (or financial statements) of the corporations that exploit the assets. The entities that make these payments to government are the corporations directly involved in the exploitation of the natural resources.

301. The broad definition of revenues from natural resources includes all direct revenues, plus the indirect revenues generated by the exploitation of the natural resources. These indirect revenues may fall under the same categories as those included in the narrow definition, but are at least one step removed from the ownership or exploitation of the natural assets. The entities that make these payments to government are usually the corporations that supply goods and services to the corporations that exploit the resource directly. The common sense cost/benefit rule applies here. The information requirements to compile statistics for indirect revenues are increasingly high, and the cost of gathering them may well exceed their benefit.

302. Based on the two definitions presented above, a country may choose for its purposes a more restricted definition within the narrow or broad definitions, or even a combination of items from both. The important point here is to clearly specify the definition being used, i.e., to list the items included in the country's particular definition.

303. Revenues from natural resources take different forms as indicated above, and proper classification requires identifying their economic nature. Names can be misleading, what is called dividends may actually be a different type of revenue such as rent, or a combination of types of revenues. If it is not possible to identify the components of all revenues, at least the major component should be identified and used for classification purposes. Policy makers often look for specific data on, for example, "the oil versus the nonoil economy." Such delineation can't be completely unambiguous, but can at least be made reasonably clear if the items included in the definition of revenues from natural resources are specified (e.g., in a footnote) as indicated above.

304. There are no specific categories to record the flows and stocks of individual assets in the GFS system, but the coding system is flexible enough to accommodate this need. As shown in the example below, compilers can consider adding digits to the code of the corresponding classification category (e.g., rent, income taxes, etc.) to identify the natural asset of interest within the category, and can usefully complement this information with a memorandum item in the Statement of Sources and Uses of Cash (or Statement of Government Operations) for the total value of the revenues directly related to such natural asset.

305. Let us consider for example the case of a country that produces oil, and wants to identify separately the revenues generated by that natural resource. A major component of the revenues for the government of this country will likely be royalties paid by the companies exploiting the resource. The proper item in the GFS classification system to record these revenues is Rent (code 1415), but no further breakdown is provided. A compiler can add a

digit at the end of the code for rent to allow for such breakdown. In this manner, Rent from oil deposits could be assigned the code 14151 and Rent from other nonproduced assets the code 14152. Alternatively, the country could use an "of which" sub-category under each relevant category, as the way to identify separately the revenues associated with the natural resource.

306. The preceding paragraphs in this section have discussed revenues from natural resources. However, it is often the case that there are expenses associated with the ownership and exploitation of these resources. Governments may also want to identify these expenses separately, especially if interested in an estimate of net revenues from natural resources. In addition, there may be transactions in nonfinancial assets and financial assets associated to natural resources. The previous two paragraphs on the recording of revenues from natural resources within the GFS system apply equally to the recording of these transactions, as well as any other flows and stocks associated with natural resources.

307. Let us turn to a brief discussion of natural resources in general. The *GFSM 2001* and the *2008 SNA* provide some guidance on the treatment of natural resources in different sections of the manuals. The paragraphs below present a summary of several of these guidelines. Natural resources are treated as nonproduced assets (land, mineral and energy resources, other naturally occurring assets), but exploration and evaluation of mineral resources are treated as produced assets (intellectual property products).[66] In terms of valuation of these assets, because market prices are seldom available for mineral and energy resources, the default valuation recommended for these assets is the present value of future receipts of resource rent. For mineral exploration and evaluation, the valuation recommended is the market price if purchased, and the sum of costs plus an appropriate mark-up if undertaken on own-account.[67]

308. The *2008 SNA* recommends that payments by an extractor to the owner of the mineral resources corresponding to a share of the resource rent be shown as property income even if they are described as taxes and treated as such in the government's accounts. It also recommends that when the legal owner of a mineral reserve contracts with another unit to undertake extraction, on pragmatic grounds the resource may continue to be shown on the balance sheet of the legal owner with payments by the extractor to the owner treated as

[66] See Chapter 5 for additional information on the classification of these assets, and a description of resource leases.

[67] The treatment of other natural resources (spectra for mobile phones, radio spectra, land, timber, fish, and water) is discussed in Chapter 17 of the *2008 SNA,* and is outside the scope of this Guide.

property income (rent).[68] Example 11.01 below shows the recording of payments by the extracting unit to the government.

**Example 11.01: The government has received a payment of Z£5,000 from the private enterprise exploiting a government-owned molybdenum deposit.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3212 | Domestic currency and deposits | 5,000 | |
| 1415 | Rent | | 5,000 |

309. The recognition of a natural resource on the government's balance sheet should occur when the asset becomes economically exploitable. In practice, it may be difficult to determine the exact time the event occurs. Often the first substantial commercial exploitation or the signing of a contract to permit commercial exploitation is used to establish the time of recording. In the GFS system assets are recognized and added to the balance sheet through another volume change (see discussion on other economic flows at the end of this chapter), as illustrated in Example 11.02. As natural assets are exploited over time the reserves are gradually depleted. This depletion is also recognized in the GFS system through another volume change, as illustrated in Example 11.03.

**Example 11.02: The government has signed a contract for the exploitation of a titanium deposit. Initial estimates place the value of its reserves at Z£75,000.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 5142 | Nonproduced assets, mineral and energy reserves | 75,000 | |
| | Net worth | | 75,000 |

**Example 11.03: The exploitation of government oil deposits during the period has lowered the value of proven reserves by Z£15,000.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| | Net worth | 15,000 | |
| 5142 | Nonproduced assets, mineral and energy reserves | | 15,000 |

[68] When a unit owning a mineral resource cedes all rights over it to another unit, this constitutes the sale of this resource.

310. The nonfinancial corporations exploring and exploiting natural resources may of course be public corporations. If such is the case, these corporations will reflect in their financial statements the flows and stocks associated with their operations. These flows may include flows to and from government units, which would not be consolidated when compiling GFS for the general government sector, but would be subject to consolidation when compiling GFS for the public sector (or nonfinancial public sector). A classification issue may arise concerning the payments to government by a public corporation for the right to explore a natural resource. These payments are treated by government as revenue (rent), and by the corporation as an operating expense (rent). The distribution of profits (residual between all operating revenues and operating expenses) by the corporation to government as owner of the company is treated as dividends by both entities.

**Transactions with the IMF**

311. Membership in the IMF is quota based. Each member is assigned a quota, expressed in SDRs, which determines the member country’s voting power, quantity of IMF resources to which it has potential access, and its share in allocations of SDRs. Each member is required to designate a fiscal agent and a depository, which can be the same institution. The fiscal agent is authorized to carry out all operations and transactions with the IMF. The depository maintains the IMF’s currency holdings and ensures that the assets and liabilities of IMF membership are properly reflected in its accounts and presented in its financial statements. The central banks are the depository for most member countries. Therefore, because central banks are not included in the definition of general government, transactions with the IMF usually do not affect the GFS compiled for the general government sector or the nonfinancial public sector for member countries.

312. The financial transactions and operations of the IMF are conducted through its General Department, the SDR Department, and the Administered Accounts. Most of the IMF’s financial activities occur in the General Resources Account (GRA), which is part of the General Department. For example, quota payments are received, and members purchase (borrow) other members’ currencies and repurchase (repay) their own currencies, in the GRA. The SDR Department records all transactions and operations involving SDRs. The Administered Accounts represent resources contributed by members and held by the IMF for purposes that are consistent with its Articles of Agreement, such as financial and technical assistance. These accounts are legally and financially separate from all other accounts of the IMF.

313. For operational purposes, depositories generally maintain four accounts to record transactions conducted in the GRA: (a) IMF Subscription Account, (b) IMF No. 1 Account, (c) IMF No. 2 Account, and (d) IMF Securities Account. The Subscription Account reflects the initial and subsequent quota payments by member countries. Each member is required to

pay 25 percent of its quota in SDRs or in foreign currencies acceptable to the IMF.[69] The remaining 75 percent of the quota is payable in the member's own currency, and a member may choose to substitute noninterest bearing notes for most of the corresponding amount.[70]

314. IMF holdings of the member's own currency are held in the No. 1 Account and the No. 2 Account. The No. 1 Account is used for the IMF's operational transactions, while the No. 2 Account is used for the payment of administrative expenses incurred by the IMF in the member's currency. Securities substituted for currency are convertible to cash on demand by the IMF and are recorded in the Securities Account. The depository records the IMF Subscription Account as an asset; while the No.1 Account, the No. 2 Account, and the Securities Account are recorded as liabilities from an accounting perspective (See paragraph 317 below). All transactions with the IMF are treated as transactions with nonresidents, and are denominated in SDRs, though the actual financial flows may be in convertible currencies or SDRs. In the examples below the SDR values have been converted to domestic currency.

315. The balance sheet of the depository institution normally includes:

(a) On the assets side: (1) holdings of SDRs, acquired through allocations by the IMF or through transactions with the IMF and other designated holders; and (2) claims on the IMF, which arise from the payment of its quota subscription in convertible currencies and local currency, and loans to the IMF.

(b) On the liabilities side: (1) deposits of the IMF (No.1 Account, No. 2 Account, Securities Account), balances on these accounts are created by the payment of the domestic currency component of the quota subscription, and purchases of IMF resources in exchange for domestic currency; (2) loans received from the IMF, provided through accounts administered by the IMF; (3) allocations of SDRs by the IMF; and (4) exchange revaluations, which reflect the counterpart to changes, positive or negative, in all of the above positions due to changes in the market exchange rate between the members' currency and the SDR.

316. **The accounting treatment and the statistical treatment of the domestic currency component of quota subscriptions**. For statistical purposes, transactions involving the No. 1 Account and the Securities Account are not recorded, only the transactions in the No. 2 Account are recorded. The reason for the different treatment is that only the transactions in

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[69] This portion of a member's quota is a component of a country's reserve assets and, together with any sale by the IMF of a country's currency to meet the demand for use of IMF resources by other member countries, constitutes what is known as the country's reserve tranche. In turn, the reserve tranche plus any indebtedness of the IMF (under a loan agreement) in the GRA that is readily available to the member country, constitutes the country's reserve position in the IMF.

[70] A minimum currency balance of one-quarter of one percent of quota must be maintained in the No. 1 Account.

the No. 2 account are considered to involve actual flows of resources. By extension, the liabilities associated with the No. 1 Account and the Securities Account should also not be recorded for statistical purposes. The examples below illustrate the recording in the GFS system of various transactions with the IMF, and therefore reflect the statistical treatment.

317. **A quota subscription**. Let us assume a quota increase of Z£2,500, of which Z£625 (25 percent) has to be paid in SDRs or foreign currencies acceptable to the IMF and Z£1,875 (75 percent) in national currency.

**Example 11.04: A quota subscription to the IMF.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3222 | External currency and deposits (reserve tranche) | 625 | |
| 3222 | External currency and deposits | | 625 |
| Comment: The depositories' foreign assets remain unchanged as a result of the quota subscription (Z£625), as the reduction in foreign currencies due to the payment of the quota subscription is offset by an equal increase in the country's reserve tranche. The amount paid in domestic currency (Z£1,875) into the No. 1 Account is not recorded in the GFS system (or other macroeconomic statistics); however, it is recorded in the accounting books of the depository. | | | |

318. **A transfer from the No 1 Account to the No. 2 Account**. Let us assume that the IMF decides to transfer Z£175 from its No. 1 Account to its No. 2 Account to cover local administrative expenses, and makes a payment of Z£80 from the account.

**Example 11.05: A transfer from the No. 1 Account to the No. 2 Account.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3222 | External currency and deposits (reserve tranche) | 175 | |
| 3322 | External currency and deposits (No.2 Account) | | 175 |
| 3322 | External currency and deposits (No. 2 Account) | 80 | |
| 3212 | Domestic currency and deposits | | 80 |
| Comment: The transfer results in an increase in the country's reserve tranche, and an increase in liabilities relating to currency and deposits. The payment results in a decrease in liabilities, and a corresponding decrease in assets. | | | |

319. **Use of the reserve tranche**. Let us assume a member country wants to use Z£450 from its reserve tranche at the IMF to alleviate an imbalance in its balance of payments. To carry out this transaction it must purchase foreign exchange from the IMF by "selling" its own currency to the Fund. The sale occurs through an increase in the Fund's No. 1 Account

with the member country's central bank or through the country's issuance to the IMF of a security with a value equal to the amount of currency sold.

**Example 11.06: A member country's reserve tranche purchase (borrowing).**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3222 | External currency and deposits | 450 | |
| 3222 | External currency and deposits (reserve tranche) | | 450 |
| Comment: As a result of the acquisition of foreign exchange from the IMF the country's reserve position at the IMF decreases by the amount of the purchase, and its foreign exchange holdings increase by the same amount. | | | |

320. **Credits and loans from the IMF**. When a member country exhausts its reserve tranche and needs additional funds from the IMF to address an imbalance in its balance of payments, it has to borrow foreign exchange from the IMF. The IMF can lend from its own facilities or through accounts administered by the IMF, resources provided from the former are called IMF credit and from the latter Trust loans. The economic impact and statistical recording of both is the same, but the lending arrangements are executed in different ways. The use of IMF credit is similar to the use of the reserve tranche, where the member country "purchases" foreign exchange from the IMF by selling its own currency, except that a liability is recorded instead of a decrease in the reserve tranche. The use of IMF loans is treated as any other loan from a nonresident institutional unit. Example 11.06 illustrates a credit from the IMF to a member country for an amount equivalent to Z£900. The recording entries would be exactly the same if instead of an IMF credit the transaction was a Trust loan from the IMF (for example, a loan under the Poverty Reduction and Growth Facility).

**Example 11.07: An IMF credit (or Trust loan) to a member country.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3222 | External currency and deposits | 900 | |
| 3324 | External loans | | 900 |
| Comment: As a result of the credit from the IMF the country's foreign exchange holdings increase by the amount of the credit, and its foreign liabilities increase by the same amount. | | | |

321. If the central bank is the depository for a country and it on-lends funds from IMF borrowing to the budgetary central government, the central bank will have a domestic financial claim on the general government unit, which in turn has a domestic debt liability to repay. The budgetary central government will record an increase in currency and deposits, and an increase in a domestic liability (loans). Let us assume that the central bank on-lends to

the budgetary central government Z£1,500, which in turn on-lends the funds to a local government.

**Example 11.08: Central bank on-lends funds from IMF lending to a member country to the budgetary central government, which in turn on-lends the funds to a local government.**

| **At the time the budgetary central government receives the funds from the central bank:** | | | |
|---|---|---|---|
| GFS Code | Descriptor | Debit | Credit |
| 3212 | Domestic currency and deposits | 1,500 | |
| 3314 | Domestic loans | | 1,500 |
| **At the time interest the budgetary central government on-lends the funds to a local government:** | | | |
| 3214 | Domestic loans | 1,500 | |
| 3318 | Domestic currency and deposits | | 1,500 |

Comment: As a result of the budgetary central government's loan to the local government its holdings of currency and deposits decrease by the amount of the loan, and its domestic assets increase by the same amount. The local government would record an increase in currency and deposits, and a counterpart increase in the same amount of its domestic liabilities.

322. **Remuneration**. The IMF pays its members "remuneration" quarterly on the basis of their reserve tranche position, except for a small portion related to prior quota payments in gold that are interest-free resources to the IMF. The rate of remuneration is equal to the SDR interest rate, adjusted for burden sharing. Remuneration is denominated in SDRs, unless the IMF or the member decides that the payment be made in domestic currency. Let us assume a remuneration payment of Z£28.

**Example 11.09: IMF pays remuneration to a member country.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3212 | External currency and deposits | 28 | |
| 1411 | Interest | | 28 |
| Comment: As a result of the remuneration from the IMF the country's foreign exchange holdings increase by the amount of the remuneration, and interest revenue is recorded in the same amount. | | | |

323. **Other possible transactions with the IMF are loans to the Fund by member countries, allocations of SDRs, and payment of interest on SDR allocations**. A loan to the IMF is recorded as any other loan to a nonresident institutional unit, while the allocation of

SDRs will result in an increase in the country's holdings of the asset, and an increase in its liabilities to the rest of the world in the same amount. Let us assume an IMF allocation of SDRs equivalent to Z£250 to a member country.

**Example 11.10: An IMF allocation of SDRs to a member country.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3221 | External monetary gold and SDRs | 250 | |
| 3321 | External Special Drawing Rights | | 250 |
| Comment: As a result of the allocation the member country increases its holdings of SDRs, and its SDR liabilities by the same amount. | | | |

324. It should be mentioned that the treatment of SDRs has changed from the *1993 SNA* to the *2008 SNA*. Under the *1993 SNA*, SDRs were considered to be a financial asset with no counterpart liability. Under the *2008 SNA* a counterpart liability with the rest of the world is recognized. In terms of the balance sheet of the depository, this means that the counterpart entry is now a liability account, whereas before it was an increase in equity. The new treatment better reflects the fact that a country has to pay interest to the IMF on its SDR allocations, and that they are repayable if the scheme is wound-up or the country ceases to be a member of the institution. The interest payments on SDR allocations are recorded in the same way as any interest payment on debt liabilities to nonresident units.[71]

325. If the ministry of finance was the depository for a member country, the entries for the transactions illustrated above would be the same. The difference would be that the transactions would be reflected in the accounts and financial statements of the ministry of finance, and thereby in the GFS for the budgetary central government.

**Social protection**

326. All countries provide social protection to their populations in a variety of ways. The various arrangements to provide this protection and the recording of the flows associated to these arrangements are discussed and illustrated below.

327. Social protection consists of systematic interventions by government intended to relieve households and individuals of the hardships that may result from a defined set of social risks. Social risks are events or circumstances that may adversely affect the welfare of households either by imposing additional demands on their resources or by reducing their

[71] In practice, the administrative arrangement for the payment of interest in SDR allocations is to net the amount payable by the country from the amount receivable, if any, as remuneration on its reserve tranche.

incomes.[72] The relief is provided in the form of social benefits, which may be payable in cash or in kind.[73] The social risks covered are liable to vary from country to country, and from scheme to scheme. The manner in which social protection is organized determines the classification of the associated transactions.

328. Social protection can be classified using a number of criteria. The most important criteria for purposes of the GFS system are whether the arrangements are: (a) contributory or noncontributory, (b) cover the whole (or large segments of the) population or just government employees, and (c) provide pension benefits or other type of benefits. Contributory schemes, called social insurance schemes, require payment of contributions to be eligible for benefits. Noncontributory arrangements, called social assistance, do not require the payment of contributions, but other eligibility requirements may apply. The risks covered by social insurance schemes may also be covered by nongovernment insurance. The relationship between social protection and insurance in a broad sense is illustrated below in Figure 12.

329. Within contributory schemes a major distinction is made between social security schemes, which serve the entire community or large sections of it, and employer social insurance schemes, which are restricted to the government's own employees and their dependents.[74] Employer social insurance schemes are distinguished between those that provide pensions, often called pension schemes, and those that provide other type of benefits (employer nonpension benefit schemes; medical, education, housing, unemployment, disability, etc.). Pension benefits are almost always paid in cash, whereas nonpension benefits may be paid in cash or in kind. Pension schemes are further distinguished by the degree of autonomy of the schemes, and whether the benefits they offer are based on a defined contribution or defined benefit model.

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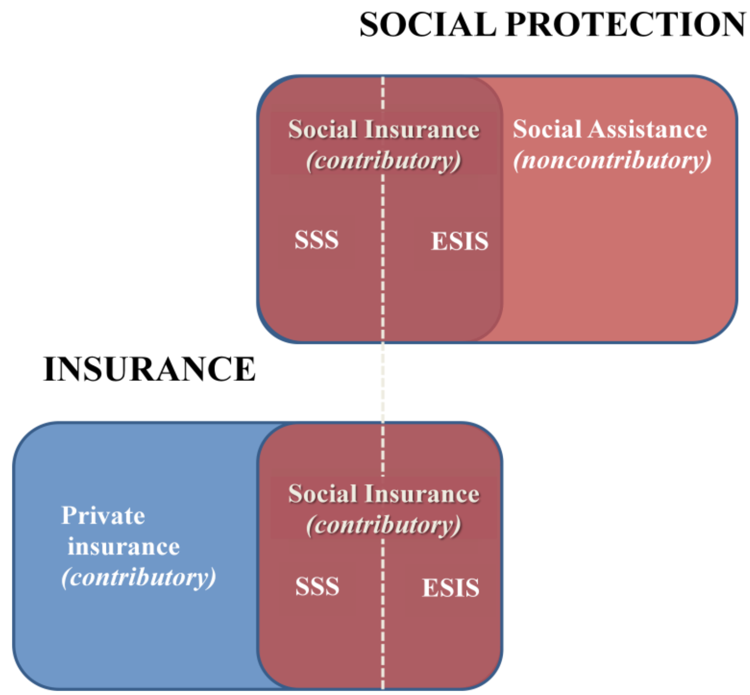
[72] Government assistance to households after unusual events, such as natural disasters, is not treated as social protection. Transfers related to these events are recorded as miscellaneous other expense.

[73] Transactions in kind in general are discussed in a separate section in this chapter.

[74] The same distinctions apply to employees of public corporations, which may also participate in a social security scheme or an employer social insurance scheme.

**Figure 12: Relationship between Social Protection and Insurance**




**SSS: Social Security Scheme**
**ESIS: Employer Social Insurance Scheme**

330. The typology in Figure 13 below is designed to assist compilers to properly classify social protection arrangements. This step is critical to the proper classification of the flows associated with these arrangements, as the recording entries depend on the type of scheme.

**a. Social assistance**.

331. By definition, social assistance is organized and operated by government units or NPISHs, and is noncontributory. The benefits are paid out of the government unit's general resources according to the eligibility conditions specified (e.g., lactating mothers, people below a certain income level, etc.). All benefits are current transfers and are classified as social assistance benefits. The benefits may be provided in cash or in kind. Social assistance benefits in kind can be provided to beneficiaries in two ways: (a) by providing directly to the households goods and services purchased from market producers, and (b) by market entities providing goods and services directly to households, with the government providing reimbursement, either directly to the provider, or to the householder, for expenses incurred. It should be noted that although households are reimbursed in cash for eligible purchases of goods and services, under both a cash and an accrual basis the transaction should be recorded

as social assistance benefits in kind.[75] See Table 19 (1.1 Social assistance) for a detailed illustration of how to record social assistance transactions.

332. Two important points concerning the recording of social benefits. First, if the government unit produces the goods and services provided to households, the transfers are not recorded as social benefits, instead the costs of producing the goods and services are recorded to the appropriate expense category (compensation of employees, use of goods and services, consumption of fixed capital, etc.). Second, if the government unit reimburses corporations for the cost of goods and services provided to targeted social assistance beneficiaries, the transfers are recorded as social assistance benefits. These transfers to corporations should be distinguished from subsidies, which are transfers intended to reduce prices or increase the provision of goods and services for the general population.

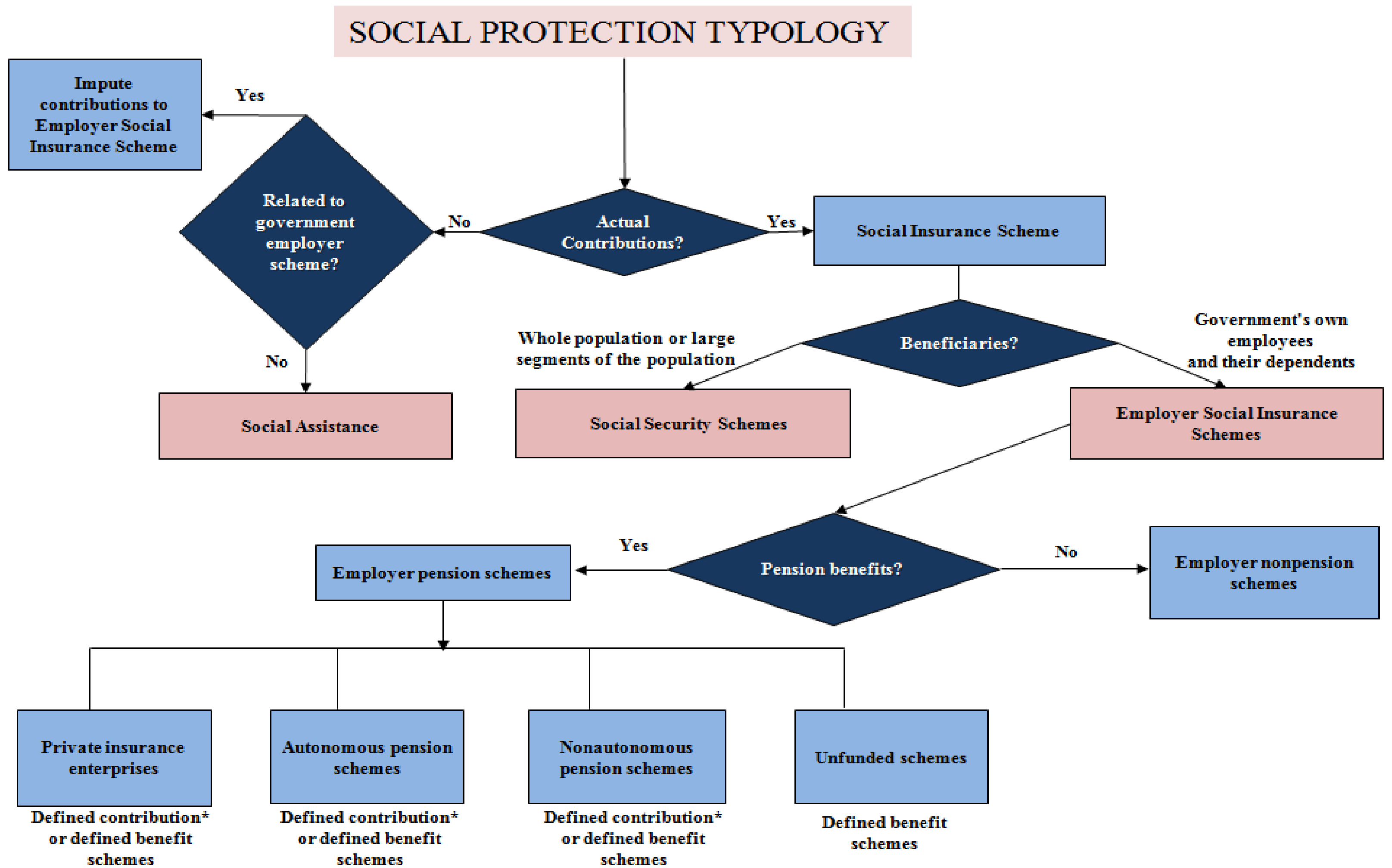
333. A typical recording entry for social assistance benefits in cash follows:

**Example 11.11: A government paid Z£3,000 to households earning less than half the minimum wage.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 2721 | Social assistance benefits in cash | 3,000 | |
| 3212 | Domestic currency and deposits | | 3,000 |

[75] This may seem counterintuitive at first glance, however, from the beneficiaries standpoint they were provided with goods and services by the market producer, whether the beneficiaries paid for them or not, not cash. In the accounts of the government unit the cash outflow is recorded as though the government purchased the goods directly, because the intermediate step of acquisition for inventory is not recorded (as would be the case in an accrual basis of recording).

**Figure 13. Social Protection Typology**




* Defined contribution schemes do not constitute social insurance because no insurance is involved.

**b. Social security schemes**.

334. By definition, social security schemes are contributory, imposed, controlled, and financed by government units, and cover the entire community or large sections of it. All benefits are current transfers and are classified as social security benefits. The benefits may be provided in cash or in kind. Again, social security benefits in kind can be provided to beneficiaries in the same two ways as social assistance benefits in kind. Also again, even if households are reimbursed in cash for eligible purchases of goods and services, under both a cash and an accrual basis the transaction should be recorded as social security benefits in kind. In many countries, the social security scheme is operated by a separate institutional unit. Such units are referred to as social security funds. The primary receipts of social security schemes are social contributions, which are classified according to their source (employee, employer, self-employed or nonemployed, and unallocable). See Table 19 (1.2 Social security schemes) for a detailed illustration of how to record social security transactions.

335. Because social security benefits can be changed by the government as part of its economic policy, there is uncertainty about the eventual payment or level of payment of social security benefits. As a result, no liabilities are associated with social security schemes in the GFS system and an expense is recorded only when payment of the benefits is required. However, the present value of future payments which they will be obliged to make according to existing laws and regulations, as a result of contributions received to date, should be calculated and be shown as a memorandum item.[76]

336. Typical recording entries for social security contributions and social security benefits in cash follow:

**Example 11.12: Employees paid Z£1,080 in contributions to the National Social Security Fund.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3212 | Domestic currency and deposits | 1,080 | |
| 1211 | Social security contributions, employee contributions | | 1,080 |

[76] The *2008 SNA* has introduced a supplementary table (Table 17.10) to show the extent of pension schemes included and excluded from the SNA sequence of accounts.

**Example 11.13: The National Social Insurance Fund paid its members Z£425 in unemployment benefits.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 2711 | Social security benefits in cash | 1,425 | |
| 3212 | Domestic currency and deposits | | 1,425 |

c. **Employer social insurance schemes**.

337. By definition, employer social insurance schemes are contributory, and cover only the government's own employees and dependents. The social benefits provided can broadly be grouped as pension benefits, and as nonpension benefits. All nonpension benefits are treated as current transfers and are classified as employer social benefits, while pension benefits paid are treated as reductions in liabilities. The benefits may be provided in cash or in kind. Again, employer social insurance nonpension benefits in kind can be provided to beneficiaries in the same two ways as social assistance or social security benefits in kind. Also again, even if households are reimbursed in cash for eligible purchases of goods and services, under both a cash and an accrual basis the transaction should be recorded as employer social insurance benefits in kind. See Table 19 (1.3 Employer social insurance schemes) for a detailed illustration of how to record employer social insurance transactions.

338. Employer social insurance schemes, whether they provide pension benefits or nonpension benefits, may be funded or unfunded. A scheme is funded if contributions are held in a segregated fund, from which future benefits will be paid. If the segregated fund is sufficient to finance the present value of the future benefits payable, the scheme is fully funded. If the segregated fund is insufficient to finance the net present value it is underfunded, and if it more than sufficient it is overfunded.

339. Employer social insurance schemes that involve pension benefits can be organized in a variety of ways, through: (a) insurance enterprises, (b) autonomous pension funds, (c) nonautonomous pension funds, and (d) unfunded employer social insurance pension schemes. The manner in which it is organized determines the recording of the associated transactions. Insurance enterprises and autonomous pension funds are units of the financial corporations sector, while nonautonomous pension funds and unfunded employer social insurance schemes are units of the general government sector.

340. Insurance enterprises (a) and autonomous pension funds (b). If the pension scheme is managed through an insurance enterprise or an autonomous pension fund, the government pays the required social contribution on behalf of its employees to that entity and records the payment as compensation of employees, under Actual social contributions (code 2121). No other transaction is recorded by the government unit, as it has no direct liability for future provision of social benefits. The entity managing the scheme, whether it is an insurance

enterprise or an autonomous pension fund, could of course be government controlled and thereby be part of the financial public sector. In this case, additional transactions would need to be recorded when compiling GFS for the public sector. The receipt of social contributions by these entities is treated as the incurrence of a liability (insurance, pension and standardized guarantee schemes) to pay future benefits, and the payment of the benefits as a reduction in the liability. Revenue from the investment of the financial resources is classified as property income attributed to policyholders. Since these resources are considered to be the property of the policyholders, an expense is recorded under property expense attributed to insurance policyholders, which increases the liability because policyholders have an increase in their claims for pension entitlements.

341. Nonautonomous pension funds (c). A nonautonomous pension fund operated by the government does not meet the criteria to be considered an institutional unit, and therefore is deemed to be under the control of the general government unit that operates the scheme, and which records all the flows and stocks associated with the fund. The treatment of the assets, liabilities, transactions, and other economic events related to the nonautonomous pension fund is similar to that of an autonomous pension fund. The contributions made to the nonautonomous pension fund are classified as an expense under Actual social contributions (code 2121). The same level of government that made the contributions will record as revenue the receipt of the contributions and will create the associated liability.

342. Unfunded employer social insurance pension schemes (d). An unfunded employer social insurance scheme exists where the employer pays social benefits to its employees or their dependents, out of its own resources, without creating a special fund or separate reserve for the purpose. If a cash basis of recording is followed, pension benefits are paid from the government's general resources and are recorded as Employer social benefits (code 2731), while if an accrual basis of recording is followed, payment of pension benefits are recorded as a reduction in a liability.

343. If an accrual basis of recording is followed, the amount that would be required to cover the social benefits must be imputed to calculate the actual cost of employment, and is recorded under Imputed social contributions (code 2122), with a counterpart entry which creates the associated liability for pension benefits. The imputation improves transparency because it records the cost of providing the social benefits to its employees, and the potential risks associated with the unfunded scheme. In addition, the net present value of future benefit entitlements increases solely because the date when the entitlements become payable becomes closer. This increase in the liability is recognized by recording an expense under property expense attributed to policyholders (code 2813). The calculation of imputed contributions and net present value of future benefits requires advanced actuarial techniques, and are not a task for the GFS compiler.

344. Employer social insurance schemes that involve pension benefits can only be organized as defined benefit schemes. A defined contribution scheme that provides pension

benefits is not a social protection scheme because no insurance is provided to contributors, it is a savings scheme.[77] In defined benefit schemes future benefits do not depend on the value of the assets of the scheme, but other factors such as length of service, wages and salaries at retirement, etc. The contributions received (or imputed if not fully funded) give rise to a liability (insurance, pension and standardized guarantee schemes), whose value is unlikely to be equal to the value of the assets of the scheme. A shortfall indicates a long-term fiscal risk because the government will have to provide the necessary resources to fund the commitments.

345. Employer social insurance schemes not involving pension benefits can be operated by the government or by autonomous nongovernment entities. In either case, the actual or imputed costs of the insurance cover for social benefits are included in the compensation of employees, under social contributions. For funded schemes the contributions made to the scheme are classified under Actual social contributions (code 2121). For unfunded schemes the amount that would be required to purchase equivalent social benefits must be imputed, and is classified under Imputed social contributions (code 2122). Where the scheme is operated by the government, a simultaneous transfer equal to the actual or imputed social contributions is imputed from the household sector back to government, and classified under Other social contributions (employer contributions, code 1222). The social benefits provided by the government under employer social insurance schemes not involving pension benefits are classified under Employer social benefits (code 273). These schemes are usually of a defined benefit nature.

346. The recording of all social protection flows discussed above is shown in Table 19, using double entry recording, and from the perspective of the general government.[78] The table also shows the recording of assistance provided to households outside social protection schemes. The cash transactions can be easily identified because one of the recording entries is to Currency and deposits (cash, code 3212). The noncash flows apply only under an accrual basis of recording.

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[77] It should be noted that the defined contribution or defined benefit nature of a pension scheme determines whether it constitutes social protection or no, but makes no difference in terms of the debit and credit entries to record the flows and stocks associated with the scheme.

[78] There may be public insurance enterprises and pension funds, which would be included in public sector statistics. The recording of these transactions is generally the same as for general government, but are outside the scope of the Guide.

347. Social assistance and social security transactions are classified in a similar way in the *GFSM 1986* and the *GFSM 2001*, although the *GFSM* 1986 provides less detail for benefit transactions, and social security contributions are classified as a sub-category of taxes. The major differences between the *GFSM 1986* and the *GFSM 2001* social assistance and social security schemes relate to the basis of recording, and to the consolidation of social security payments and receipts. In the *GFSM 1986* system, social security contributions made by general government units, and corresponding receipts by the social security schemes, are treated as being internal to general government, and are therefore consolidated (eliminated) when compiling statistics for the general government sector. However, in the *GFSM 2001* system social security contributions made by general government units are rerouted through the household sector (i.e., treated as being paid by government to the employees, who then make the contributions to the social security scheme), and social security payments and receipts are therefore not consolidated in statistics for the general government or public sectors. The treatment of employer social insurance schemes differs fundamentally between the *GFSM 1986* and the *GFSM 2001*.

**Table 19. Recording of Social Protection Flows**

## 1. Social Protection

| **1.1 Social assistance** | **Debit** | | **Credit** | |
|---|---|---|---|---|
| ***1.1.1 Government provides benefit payments to qualifying persons under social assistance*** | | | | |
| Assistance to households in cash | 2721 | Social assistance benefits in cash | 3212/ 3318 | Currency and deposits /Other accounts payable* |
| ***1.1.2 Government provides goods and services purchased from market producers to qualifying persons under social assistance*** | | | | |
| Government acquires the goods and services | 31224 | Inventories (goods for resale)* | 3212/ 3318 | Currency and deposits /Other accounts payable* |
| Government provides goods and services to households | 2722 | Social assistance benefits in kind | 31224 | Inventories (goods for resale)* |
| ***1.1.3 Government reimburses market providers or households for goods and services provided by market entities under social assistance*** | | | | |
| Government reimburses providers or households | 2722 | Social assistance benefits in kind | 3212/ 3318 | Currency and deposits /Other accounts payable* |
| ***1.1.4 Government produces and provides goods or services to the population under social assistance*** | | | | |
| No social assistance benefits recorded - record the normal operational costs incurred in the production of the goods and services, as appropriate | 21, 22, 23 | Compensation of employees, use of goods and services, consumption of fixed capital | 3212/ 3318 | Currency and deposits /Other accounts payable* |

**Table 19. Recording of Social Protection Flows *(continued)***

1. **Social Protection**

| **1.2 Social security schemes** | **Debit** | | **Credit** | |
|---|---|---|---|---|
| ***1.2.1 The government social security scheme receives contributions from various contributors*** | | | | |
| Social security contributions - Employee contributions | 3212/3218 | Currency and deposits /Other accounts receivable* | 1211 | Employee contributions |
| Social security contributions - Employer contributions (on behalf of their employees) | 3212/3218 | Currency and deposits /Other accounts receivable* | 1212 | Employer contributions |
| Social security contributions - Self or nonemployed contributions | 3212/3218 | Currency and deposits /Other accounts receivable* | 1213 | Self and non-employed contributions |
| Social security contributions - Unallocable | 3212/3218 | Currency and deposits /Other accounts receivable* | 1214 | Unallocable contributions |
| ***1.2.2 Government as employer makes contributions to social security schemes on behalf of their employees*** | | | | |
| Government pays contributions as employer | 2121 | Actual social contributions | 3212/3318 | Currency and deposits /Other accounts payable* |
| ***1.2.3 The government social security scheme provides social security benefits to the beneficiaries*** | | | | |
| Social security scheme pays benefits in cash | 2711 | Social security benefits in cash | 3212/3318 | Currency and deposits /Other accounts payable* |
| ***1.2.4 The government social security scheme provides goods and services purchased from market producers to qualifying beneficiaries*** | | | | |
| Social security scheme acquires the goods and services | 31224 | Inventories (goods for resale)* | 3212/3318 | Currency and deposits /Other accounts payable* |
| Social security scheme provides goods and services to households | 2712 | Social security benefits in kind | 31224 | Inventories (goods for resale)* |
| ***1.2.5 The government social security scheme reimburses market providers or households for goods and services provided by market entities in accordance with the rules of a social security scheme*** | | | | |
| Social security scheme reimburses providers or households | 2712 | Social security benefits in kind | 3212/ 3318 | Currency and deposits /Other accounts payable* |
| ***1.2.6 The government social security scheme produces and provides goods or services to the population in accordance with a social security scheme*** | | | | |
| No social security benefits recorded - record the normal operational costs incurred in the production of the goods and services, as appropriate | 21, 22, 23 | Compensation of employees, use of goods and services, consumption of fixed capital | 3212/3318 | Currency and deposits /Other accounts payable* |
| Comment: The present value of future payments already earned by contributors to social security schemes should be recorded as a memorandum item. | | | | |

**Table 19. Recording of Social Protection Flows *(continued)***

1. **Social Protection**

| **1.3 Employer social insurance schemes**<br>**1.3.1 Nonpension benefits** | **Debit** | | **Credit** | |
|---|---|---|---|---|
| ***1.3.1.1 Employer social insurance contributions received from various contributors*** | | | | |
| Receipt of employee contributions | 3212/ 3218 | Currency and deposits /Other accounts receivable* | 1221 | Other social contributions - Employee contributions |
| Receipt of employer contributions (from employees) | 3212/ 3218 | Currency and deposits /Other accounts receivable* | 1222 | Other social contributions - Employer contributions |
| ***1.3.1.2 Government makes employer social insurance scheme contributions on behalf of its employees*** | | | | |
| Government pays contributions as employer | 2121 | Actual social contributions | 3212/3318 | Currency and deposits /Other accounts payable* |
| ***1.3.1.3 Employer social insurance scheme imputes contributions to secure benefit where contributions were not made*** | | | | |
| Imputed contributions | 2122 | Imputed social contributions | 1223 | Other social contributions - Imputed contributions |
| ***1.3.1.4 Employer social insurance scheme provides benefits to government employees*** | | | | |
| Employer social insurance scheme pays benefits in cash | 2731 | Employer social benefits in cash | 3212/3318 | Currency and deposits /Other accounts payable* |
| ***1.3.1.5 Employer social insurance scheme provides goods and services purchased from market producers to employees under an employer social insurance scheme*** | | | | |
| Employer social insurance scheme acquires the goods and services | 31224 | Inventories (goods for resale)* | 3212/3318 | Currency and deposits /Other accounts payable* |
| Employer social insurance scheme provides goods and services to households | 2732 | Employer social benefits in kind | 31224 | Inventories (goods for resale)* |
| ***1.3.1.6 Employer social insurance scheme reimburses market providers or households for goods and services provided by market entities in accordance with the rules of a social security scheme*** | | | | |
| Employer social insurance scheme reimburses providers or households | 2732 | Employer social benefits in kind | 3212/3318 | Currency and deposits /Other accounts payable* |
| ***1.3.1.7 Government produces and provides goods or services to the population in accordance with an employer social insurance scheme*** | | | | |
| No employer social insurance benefits recorded - record the normal operational costs incurred in the production of the goods and services, as appropriate | 21, 22, 23 | Compensation of employees, use of goods and services, consumption of fixed capital | 3212/3318 | Currency and deposits /Other accounts payable* |

**Table 19. Recording of Social Protection Flows *(continued)***

**1. Social Protection *(continued)***

| **1.3 Employer social insurance schemes *(continued)*** **1.3.2 Pension benefits** | **Debit** | | **Credit** | |
|---|---|---|---|---|
| ***1.3.2.1 Government makes pension contributions on behalf of its employees to an autonomous pension fund maintained by an insurance company (i.e. it is part of the financial sector)*** | | | | |
| Government pays social contributions as component of compensation of employees | 2121 | Actual social contributions | 3212/3318 | Currency and deposits /Other accounts payable* |
| ***1.3.2.2 Government operates a funded nonautonomous pension fund for their employees (i.e. a separate reserve is maintained in the government account but it is not an institutional unit)*** | | | | |
| Government pays social contributions as component of compensation of employees | 2121 | Actual social contributions | 3212/3318 | Currency and deposits /Other accounts payable* |
| Receipts of social contributions by the pension fund creates a liability | 3212/ 3218 | Currency and deposits /Other accounts receivable* | 3316 | Insurance, pension, and standardized guarantee schemes |
| Government receives property income on the investments of the pension contributions - deemed to be for the benefit of policy holder in the scheme | 3212/ 3218 | Currency and deposits /Other accounts receivable* | 1411<br>1412 | Interest<br>Dividends |
| Government attributes the property income to the policy holders | 2813 | Property expense attributed to insurance policy holders | 3316 | Insurance, pension, and standardized guarantee schemes |
| Government provides pension benefit payments to eligible former employees | 3316 | Insurance, pension, and standardized guarantee schemes | 3212/3318 | Currency and deposits /Other accounts payable* |
| ***1.3.2.3 Government operates an unfunded nonautonomous pension fund for their employees (i.e. no actual contributions and a separate reserve is not maintained in the government account)*** | | | | |
| Impute social contributions as component of compensation of employees | 2122 | Imputed social contributions | 3316 | Insurance, pension, and standardized guarantee schemes |
| Government provides pension benefit payments to eligible former employees - cash environment | 2731 | Employer social benefits in cash | 3212 | Currency and deposits |
| Government provides pension benefit payments to eligible former employees - accrual environment | 3316 | Insurance, pension, and standardized guarantee schemes | 3212/3318 | Currency and deposits /Other accounts payable* |
| Government recognizes the increase in liability for benefit entitlements due to time passing. | 2813 | Property expense attributed to insurance policy holders | 3316 | Insurance, pension, and standardized guarantee schemes |

**Table 19. Recording of Social Protection Flows *(continued)***
**2. Other Assistance to households**

<table>
<tr><th>2. Other Assistance to households</th><th colspan="2">Debit</th><th colspan="2">Credit</th></tr>
<tr><td colspan="5">2.1 Government provides assistance to households other than social benefits (i.e. the need of the household did not originate from social risks)</td></tr>
<tr><td rowspan="2">Government provides compensation for injuries or damages from natural disasters, and/or damages caused by general government units</td><td>2821</td><td>Miscellaneous other expense, current</td><td>3212/ 3318</td><td>Currency and deposits /Other accounts payable*</td></tr>
<tr><td>2822</td><td>Miscellaneous other expense, capital</td><td>3212/ 3318</td><td>Currency and deposits /Other accounts payable*</td></tr>
<tr><td colspan="5">2.2 Government provides goods and services purchased from market producers to household for reasons other than social benefits</td></tr>
<tr><td>Government acquires the goods and services</td><td>31224</td><td>Inventories (goods for resale)*</td><td>3212/ 3318</td><td>Currency and deposits/Other accounts payable*</td></tr>
<tr><td rowspan="2">Government provides goods and services to households for reasons other than social benefits</td><td>2821</td><td>Miscellaneous other expense, current</td><td>31224</td><td>Inventories (goods for resale)</td></tr>
<tr><td>2822</td><td>Miscellaneous other expense, capital</td><td>31224</td><td>Inventories (goods for resale)</td></tr>
<tr><td colspan="5">* In a noncash environment, the revenue/expense should accrue when all eligibility criteria have been met and it became due for receipt/payment. If cash payments were not made, an account receivable/payable should be recorded as the counterpart entry.</td></tr>
</table>

348. The gradual adoption the *GFSM 2001* methodology is discussed in Chapter 13. One of the steps towards the adoption involves the collection of data for selected noncash items: accrued interest, in-kind transactions, debt operations, and arrears. The treatment of these items under the *GFSM 2001* is discussed in this and the following sections.

**Interest**

349. As stated above in Chapter 5, interest is the expense incurred by government units for using funds owned by another institutional unit. In most cases, the rate at which interest accrues is determined when the contract is established and the funds are borrowed.[79] Under a cash basis of recording, interest is recorded when paid, but under an accrual basis of recording interest accrues continuously over the life of the liability. This is one category were the cash basis of recording and the accrual basis of recording can lead to significantly different results. It is also a category where an accrual basis of recording can be introduced with relative ease and considerable benefit.

350. The *GFSM 2001* recommends that accrued but unpaid interest be added to the principal of the underlying instrument. Following this recommended treatment the principal of the underlying instrument would increase as interest accrues, and would decrease when interest is paid. It is recognized, however, that accrued but unpaid interest may have to follow national practices and be classified under accounts payable.

351. Certain financial instruments, such as bills and zero-coupon bonds, are such that the debtor does not have to make payments to the creditor until the liability matures. Instruments of this type can be described as discounted, because the amount initially borrowed is less than the amount to be repaid. The difference between the amount to be repaid at maturity and the amount originally borrowed is interest, which must be allocated over the accounting periods between the beginning and the end of the contract. Of course, there can be cases where the instrument is issued at a premium, which is treated as negative interest. Also, there are cases where discounted instruments require periodic payments.

352. Let us look at an example of a discounted instrument to illustrate the difference in the recording of interest under a cash basis and an accrual basis of recording. Let us consider the issuance of a 3-year bond with a face value of 100 for 70, purchased by a resident.

Under a cash basis the transactions are recorded as follows:

[79] The exception is index-linked securities. In these cases the formulas are determined but not the values.

**Example 11.14: Recording transactions related to the issuance of a debt instrument and payment of interest (cash basis).**

| | **When issued** | **When redeemed** |
|---|---|---|
| Revenue | 0 | 0 |
| Expense | 0 | 30 |
| Cash surplus/deficit | 0 | -30 |
| Net incurrence of liabilities | 70 | -70 |
| Net change in the stock of cash (currency and deposits) | 70 | -100 |
| | | |
| Debt outstanding | +100 | -100 |

No expense (interest) is recorded until maturity and the debt is recorded at the face value of the instrument. At maturity the full interest of 30 is recorded. Therefore, the recording on a cash basis understates expense during the life of the issue, overstates outstanding debt until maturity, and overstates expense when the bill is redeemed. A very different picture emerges if an accrual basis of recording is followed.

Under an accrual basis the transactions are recorded as follows:

**Example 11.15: Recording transactions related to the issuance of a debt instrument and payment of interest (accrual basis) –Part 1**

| **At the time of issue:** | | | |
|---|---|---|---|
| GFS Code | Descriptor | Debit | Credit |
| 3212 | Domestic currency and deposits | 70 | |
| 3313 | Domestic debt securities | | 70 |

**Example 11.15: Recording transactions related to the issuance of a debt instrument and payment of interest (accrual basis) –Part 2**

| **At the time interest accrues (recommended treatment):** | | | |
|---|---|---|---|
| GFS Code | Descriptor | Debit | Credit |
| 242 | Interest to residents other than general government | 10 | |
| 3313 | Domestic debt securities | | 10 |
| **At the time interest accrues (alternative treatment, if mandated by national practices):** | | | |
| 242 | Interest to residents other than general government | 10 | |
| 3318 | Domestic other accounts payable | | 10 |

**Example 11.15: Recording transactions related to the issuance of a debt instrument and payment of interest (accrual basis) –Part 3**

| **At maturity (recommended treatment):** | | | |
|---|---|---|---|
| GFS Code | Descriptor | Debit | Credit |
| 3313 | Domestic debt securities | 100 | |
| 3212 | Domestic currency and deposits | | 100 |
| **At maturity (alternative treatment, if mandated by national practices):** | | | |
| 3313 | Domestic debt securities | 70 | |
| 3318 | Domestic other accounts payable | 30 | |
| 3212 | Domestic currency and deposits | | 100 |

The treatment under an accrual basis records interest as it accrues (10 each year in the example) and reflects properly the value of the bill at issue, during its life, and at maturity. This approach provides a more accurate and analytically useful picture.[80]

### B. Nonmonetary Transactions and Other Economic Flows

353. The *GFSM 2001*, as indicated in Chapter 1, covers both monetary and nonmonetary transactions (flows). Some of these nonmonetary transactions are highly significant to understand fiscal developments in developing countries. Four of these nonmonetary transactions (flows) are discussed in the following sections: in-kind transactions, debt

[80] For simplicity purposes the interest accruing periodically has been given a value of 10 per year. Strictly speaking the formula for compound interest should be used, and the values of the interest accruing periodically would increase over time.

operations, arrears, and other economic flows. None of these transactions are covered under the *GFSM 1986*, as no cash flows are involved.

**In-kind transactions**

354. Transactions in kind are flows of goods and services for which there are no flows of payment (money or debt instruments) in the opposite direction, or for which goods and/or services flow in both directions. There are four types of transactions in kind: (a) barter transactions, (b) compensation of employees in kind, (c) transfers received in kind (e.g., taxes, grants, other revenue), and (d) transfers paid in kind (e.g., grants, social benefits, other transfers). All of these transactions should be recorded, but the GFS classification system only has specific categories for in-kind transactions related to compensation of employees and social benefits. Countries may find it useful to add digits to the code for certain categories to separately identify in-kind transactions, as illustrated for rent in paragraph 305.

355. For all nonmonetary transactions a monetary value must be assigned. The recommended and preferred option is the use of market prices. However, such prices are not always available and alternative options may have to be used. The selected option should always be indicated. Three alternative options are recommended: donor valuation, comparison with similar transactions occurring on markets, and the cost of production.

356. There are no particular methodological issues associated with the recording of in-kind transactions per se. The main challenges are identifying that such a transaction took place and valuing the transaction. Once these two steps have been taken, the actual recording is straightforward, as illustrated by the example below.

Example: The government has received a donation of 100 tons of wheat from a foreign government, currently selling in international grain markets for US$300 per ton. The exchange rate between the US dollar and the local currency on the day the wheat was received was 1US$ equal to 1.25 Z£. The wheat is later distributed by the government to households in need. Proper recording of this example, as shown below, requires identifying that two transactions are actually involved and recording each separately, and valuing the donation (100 × 300 × 1.25 = Z£37,500).

**Example 11.16: Wheat donation by foreign government (transaction 1)**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 31224 | Inventories, goods for resale | 37,500 | |
| 1311 | Grants from foreign governments, current | | 37, 500 |

**Example 11.17: Wheat distribution by domestic government (transaction 2)**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 2722 | Social assistance benefits in kind | 37,500 | |
| 31224 | Inventories, goods for resale | | 37, 500 |

**Debt operations**

357. Besides regular debt operations, government units often undertake a range of complex debt operations, usually involving nonmonetary transactions and sometimes other economic flows. These operations include debt assumption, debt payments on behalf of other units, debt forgiveness, debt restructuring, debt conversion, and debt write-offs.[81] Countries following a cash basis of recording and those applying the *GFSM 1986* do not register any of these transactions because they do not involve cash flows. Before discussing the treatment and recording of these transactions under the *GFSM 2001*, let us define debt. The *GFSM 2001* defines debt as 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 equity and investment fund shares and financial derivatives and employee stock options.[82]

358. To better understand the treatment and recording of complex debt operations let us consider first an example of the recording on an accrual basis of the flows associated with regular debt operations. See Example 18. Assume an opening debt stock of Z£25,000; borrowing of Z£ 2,000 at the end of the first quarter from a nonresident; interest accrual of Z£300 at the end of the second, third, and fourth quarter; interest payments of Z£500 at the end of the fourth quarter; and a holding loss for the year due to exchange rate fluctuations of Z£700. The recording on an accrual basis follows.

[81] The Public Sector Debt Statistics Guide provides detailed explanations and examples of these and other debt operations, and should be consulted when dealing with debt related matters. The guide is available at www.tffs.org/PSDStoc.htm.

[82] The traditional definition of debt used by many countries only covers two types of instrument: debt securities, and loans. The *GFSM 2001* definition of debt also covers SDRs, currency and deposits, insurance, pension, and standardized guarantee schemes, and other accounts payable.

**Example 11.18: Treatment and recording of regular debt operations.**

| **Borrowing of Z£ 2,000 at end Q1** | | | |
|---|---|---|---|
| GFS Code | Descriptor | Debit | Credit |
| 3222 | External currency and deposits | 2,000 | |
| 3324 | External loans | | 2,000 |
| **Interest accrual at end of Q2, Q3, and Q4** | | | |
| 241 | Interest to nonresidents | 300 | |
| 3324 | External loans | | 300 |
| **Interest payments at end of Q4** | | | |
| 3324 | External loans | 500 | |
| 3222 | External currency and deposits | | 500 |
| **Holding loss at end Q4** | | | |
| | Net worth | 700 | |
| 4324 | External loans | | 700 |

359. At the end of the year the new stock of debt is: 25,000 + 2,000 + 300 + 300 + 300 – 500 + 700 = 28,100. The stock of debt increases in terms of the domestic currency due to the additional borrowing, the accrual of interest and the holding loss, while the payment of interest decreases the outstanding debt. We can also show the recording using the overall framework of the *GFSM 2001*. See Table 20. Values have been entered in the opening balance sheet to illustrate the effect of transactions on stocks.

**Table 20. Recording of Regular Debt Operations in Overall Framework (Example 11.18).**

| | Stocks | Flows | | Stocks |
|---|---|---|---|---|
| | Opening Balance Sheet | Transactions | Other Economic Flows | Closing Balance Sheet |
| **Revenue** | | | | |
| | | | | |
| **Expense** | | | | |
| Interest to nonresidents | | 900 (300*3) | | |
| **Net worth / Net operating balance** | 35,500 | -900 | -700 | 33,900 |
| **Nonfinancial assets** | 57,000 | | | 57,000 |
| | | | | |
| **Net financial worth / Net lending/borrowing** | -21,500 | -900 | -700 | -23,100 |
| **Financial assets** | 3,500 | | | 5,000 |
| External currency and deposits | | 1,500 (2,000-500) | | |
| **Liabilities** | 25,000 | | | 28 ,100 |
| External loans | | 2,400 (2,000+900-500) | 700 | |
| | | | | |

*Net Financial Worth (NFW) = Financial assets – Liabilities.*
*Net worth = NFW + Nonfinancial assets.*
*Revenue- Expense = Net operating balance (Gross operating balance* if *Expense* excludes *Consumption of fixed capital*).
*Net Lending/Borrowing = Revenue - Expense – Net acquisition of nonfinancial assets* (computed from “above the line”) = *Net acquisition of financial assets – Net incurrence of liabilities* (computed from “below the line”).

### a. Debt assumption

360. Let us now consider the case of debt assumption, which normally occurs when a government debt guarantee is called. Typically, it involves three institutional units, the creditor, the original debtor, and a government unit. In debt assumption, the government always incurs a new liability to the creditor, and the liability of the original debtor is extinguished. The recording of this transaction depends on whether the government unit acquires an effective claim against the original debtor or not. An effective claim means a claim that has a realistic probability of being honored. Let us consider three scenarios.

361. First scenario, the government unit acquires an effective claim against the original debtor. The unit should record an increase in financial assets with the original debtor, and an increase in liabilities to the creditor. Thus, in this case there is no change in the government’s net worth. See example below.

**Example 11.19: Government assumes a foreign loan from a public corporation that provides in exchange a security of equal value, in the amount of Z£4,750.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3213 | Domestic debt securities | 4,750 | |
| 3324 | External loans | | 4,750 |

362. Second scenario, the government unit does not acquire an effective claim against the original debtor. The unit classifies the transaction depending on the relationship between the government unit and the original debtor, and the latter's economic situation. If the original debtor is a public corporation, owned and controlled by the assuming government, and the corporation remains a profitable going concern, the debt assumption is treated as an increase in the equity of the government unit. The government would record an increase in its equity on the original debtor, and an increase in liabilities to the creditor. Thus, in this case again there is no change in the government's net worth. See example below.

**Example 11.20: Government assumes a foreign loan from a public corporation that remains a profitable going concern, in the amount of Z£8,000.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3215 | Domestic equity and investment fund shares | 8,000 | |
| 3324 | External loans | | 8,000 |

363. Third scenario, similar to the second scenario, but the original debtor is a public corporation that is not a profitable going concern (or is no longer a going concern), or is not an entity owned or controlled by the assuming government unit. The debt assumption is then treated as a transfer payment. The government unit would record an expense, which is classified as a capital grant if the original debtor is another general government unit (or a foreign government, or international organization) and as miscellaneous other expense (capital) otherwise; and an increase in liabilities to the creditor. Unlike the first two cases, in the third case there is a decrease in the government's net worth. See example below.

**Example 11.21: Government assumes a foreign loan from a public corporation that is not a profitable going concern, in the amount of Z£3,500.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 2822 | Miscellaneous other expense, capital | 3,500 | |
| 3324 | External loans | | 3,500 |

364. An important point to highlight concerning debt assumption of public corporations by government units is that unless solid arguments can be made that an effective claim is being provided in exchange by the corporations, and that the corporation is truly a going concern (profitable over the medium term), debt assumption of public corporations should be treated as a capital transfer by government units. This situation arises often in developing countries, where public corporations are usually not profitable, but remain in operation for a long time. Debt assumption in this context should be treated as a capital transfer from government; in other words, it should be recorded as an expense. Governments are often reluctant to follow this guideline because it entails the recognition of a decrease in net worth.

### b. Debt payments on behalf of other units

365. Government units may make one or more debt-service payments on behalf of other units, without actually assuming the debt.[83] This case occurs when certain units are temporarily unable to meet their debt obligations, but are expected to be able to do so in the future. The treatment of these payments again depends on whether the government unit acquires an effective claim against the original debtor and, if not, the nature of the entity. If the government unit obtains an effective claim against the original debtor, it records an increase in financial assets with the original debtor as counterparty, and a decrease in cash. Thus, there is no change in the government's net worth. See example below.

**Example 11.22: Government makes a payment on behalf of a public corporation that provides in exchange a security of equal value, in the amount of Z£180.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3213 | Domestic debt securities | 180 | |
| 3222 | External currency and deposits | | 180 |

366. If the government unit does not acquire an effective claim against the original debtor, then it records an expense, which is classified as a capital grant if the original debtor is another general government unit (or a foreign government, or international organization), and as miscellaneous other expense (capital) otherwise. Thus, there is a decrease in the government's net worth. See example below.

[83] If the government unit pays the entire liability of the debtor in a single payment, then the transaction is treated as debt assumption.

**Example 11.23: Government makes a payment on behalf of a non-financial public corporation that does not provide an effective claim in exchange, in the amount of Z£135.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 2822 | Miscellaneous other expense, capital | 135 | |
| 3222 | External currency and deposits | | 135 |

### c. Debt forgiveness

367. Debt forgiveness is the cancellation of a debt by mutual agreement between a creditor and a debtor. It is always recorded as the creditor providing a capital grant or transfer to the debtor. General government units may be involved in debt forgiveness as a creditor or a debtor. Debt forgiveness results in a decrease in financial assets and an expense for the creditor, and a decrease in liabilities and revenue for the debtor. If the second party to the transaction is a foreign government, international organization, or another general government unit, then the transaction is a capital grant for both the creditor and the debtor. If the second party to the transaction is any other type of unit, then the transaction is classified as miscellaneous other expense (capital) when the government unit is the creditor and as other revenue (voluntary transfers other than grants, capital) when it is the debtor. See example below.

**Example 11.24: The central government agrees to forgive a loan to a local government, in the amount of Z£260.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 2632 | Grants to other general government units, capital | 260 | |
| 3214 | Domestic loans | | 260 |

### d. Debt restructuring

368. Government units may agree with other institutional units to modify the terms for servicing an existing debt, either as a creditor or a debtor, usually on more favorable terms for the debtor and possibly with partial debt forgiveness. The terms may be modified, among other, to extend repayment schedules, add or extend grace periods for interest and principal payments, reschedule debt-service payments that are due and/or in arrears, and lower interest rates. Under the *GFSM 2001* these transactions are treated as the extinction of the liability being restructured and the creation of a new liability. Any debt forgiveness is treated as a capital transfer. See example below.

**Example 11.25: A government unit restructures a loan previously received from an international bank in more favorable terms, in the amount of Z£5,000.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3324 | External loans (old) | 5,000 | |
| 3324 | External loans (new) | | 5,000 |

369. Debt restructuring often involves the granting of concessional terms, i.e., terms more favorable that current market terms. In principle, the resulting transfer element should be recorded as a separate transaction, but in practice this is often not the case given the difficulty of calculating the amount of the transfer.

### e. Debt conversion

370. Debt conversion (swap) is an exchange of a debt liability for a nondebt liability or for counterpart funds that can be used to finance a particular project or policy. Debt-for-equity, debt-for-exports, debt-for-nature, and debt-for-development are examples of debt swaps. If the conversion is conditional, then the debt liability should be extinguished gradually as the conditions are met. See example below of debt conversion for counterpart funds.

**Example 11.26: The central government has agreed with a foreign government to convert an issue of Treasury bills in the amount of Z£2,400, for counterpart funds to be used for certain educational expenditures. In the current period, repayments of Z£400 would have been made, but were spent instead in the acquisition of textbooks for students, as agreed.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 3212 | Use of goods and services | 400 | |
| 22 | Domestic currency and deposits | | 400 |
| 3323 | External debt securities | 400 | |
| 1312 | Grants from foreign governments (capital) | | 400 |

Comment: The government uses its own funds to acquire textbooks, and afterwards the creditor converts a portion of the outstanding debt into a grant. The process will repeat itself until the entire debt is converted.

### f. Debt write-offs

371. Government units that are creditors may decide to write-off financial assets on their own, without an agreement with the debtor and even without informing the debtor. Unlike the previous debt operations, this is not a transaction, as there is no agreement between two parties; it is instead another economic flow (another change in the volume of assets). See

example below. Unilateral write-offs (debt repudiation) by debtors are not recognized in the GFS system.

**Example 11.27: A government unit decides to write-off a loan made to a foreign government, in the amount of Z£1,800.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 5224 | External loans | 1,800 | |
| | Net worth | | 1,800 |

### g. International debt relief initiatives

372. Debt operations are often the result of international debt relief initiatives by creditors. Examples of these initiatives are the Paris Club debt rescheduling arrangements, the Heavily Indebted Poor Countries (HIPC) initiative, and the Multilateral Debt Relief Initiative (MDRI). These initiatives provide flow and/or stock debt relief to debtors in a variety of ways, usually involving one or more of the debt operations previously described. Compilers must identify in each case the type of operations(s) involved and treat it accordingly. The detailed treatment of these initiatives is presented in the debt guides mentioned at the end of the chapter. Compilers should consult these guides if interested in the recording details of these debt relief initiatives.

## Arrears

373. Under an accrual basis of recording, a debt liability is in arrears when interest and/or principal are not paid on the due-for-payment date. In all cases, the debtor has effectively obtained additional financing by not making the scheduled payments, and this information should be recorded separately. The *GFSM 2001* recommends, in the case of arrears, that the missed payment be treated as though it had been paid (i.e., to impute the payment) and then replaced by a new short-term liability. However, the *2008 SNA* recommends that the arrears remain in the value of the original debt instrument, and the revised GFS manual will adopt a treatment of arrears consistent with the national accounts manual.[84]

374. The treatment of arrears presented here is an elaboration of the treatment in the *2008 SNA* that was presented and endorsed by the GFS Advisory Committee at its February 2011 meeting. Whenever the amounts are significant, the liability in arrears should be

[84] The *2008 SNA* also recommends that if the contract provides for a change in the characteristics of a financial instrument when it goes into arrears, the change be recorded as a reclassification of the instrument. It also recommends that when feasible and important each debt liability be divided into current and in-arrears sub-categories.

reclassified within the same debt liability category. In other words, for all debt liability categories the component in arrears should be identified separately, for example by creating an “of which: in arrears” subcategory. In addition, the total amount of debt in arrears should be indicated as a memorandum item in the balance sheet.

375. Arrears can arise not only when scheduled payments on existing debt liabilities due for payment are missed, but also in some cases when new liabilities are incurred. If contractually agreed payments on items such as compensation of employees, social contributions, use of goods and services, and social benefits are not made when due for payment, a new financial liability (other accounts payable) should be recognized, and would be considered to be in arrears from the start.

376. Under a cash basis of recording arrears are usually not recorded when they are incurred because they do not involve cash flows at the time. However, when arrears are paid later they do involve a cash flow and should be recorded at that time. In addition, arrears may not be paid but formally recognized at a certain point in time as a fixed-term contractual liability, which should also be recorded. This often applies in the case of arrears related to overdue contractual obligations other than overdue liabilities (as described in the previous paragraph). In summary, arrears can be paid in cash or by issuing a liability in exchange, and the payment may be related to overdue liabilities or other overdue obligations. In all cases, the payment of arrears should be recorded under a cash basis.

377. The GFS system treats the payment of arrears under a cash basis of recording in the same way as a similar transaction not in arrears. The recording of transactions related to the payment of arrears is illustrated below in Example 11.28. Some countries record the outflows related to arrears under an expense category denominated “arrears” and/or a financing category with the same name. These categories do not exist in the GFS system, and the payments should be recorded instead under the corresponding GFS expense or financing category, as shown in the example.

378. Information on arrears is vital when assessing the liquidity or solvency of a government. Countries that follow a cash basis of recording should keep good records of all obligations in arrears, regardless of when the respective transactions are reflected in the fiscal statistics of government operations.

**Example 11.28: Treatment and recording of arrears.**

| **Payment of Z£735 on the overdue principal of an external loan.** | | | |
|---|---|---|---|
| GFS Code | Descriptor | Debit | Credit |
| 3324 | External loans | 735 | |
| 3222 | External currency and deposits | | 735 |
| **Payment of Z£475 for overdue wages and salaries.** | | | |
| 2111 | Compensation of employees | 475 | |
| 3212 | External currency and deposits | | 475 |
| **Payment of Z£580 for overdue bills from suppliers by issuance of a Treasury bond.** | | | |
| 22 | Use of goods and services | 580 | |
| 3313 | Domestic debt securities | | 580 |

**Other economic flows**

379. Other economic flows refer to price changes called holding gains and losses, and to volume changes called other changes in the volume of assets, that affect assets and liabilities, and thereby the net worth of general government (public) units.[85] The recording of these flows is necessary to fully reconcile flows and stocks, and for this reason are briefly discussed here. There is one other economic flow that most countries currently calculate on a regular basis, the valuation change in the stock of foreign debt from one period to another due to changes in the exchange rate (price of foreign exchange) between the domestic currency and foreign currencies. The only way to reconcile the opening stock and the closing stock of foreign debt expressed in domestic currency is to take into account not only the disbursements and repayments during the period, but also the valuation changes (holding gains or losses) as a result of changes in currency exchange rates.

380. Let us consider the following example. A country has a stock of foreign debt as of January 1 equivalent to US$10 billion, which expressed in domestic currency is equivalent to Z£70.0 billion, at an exchange rate of US$1 equal to Z£7. During the year there are disbursements in the amount of US$0.8 billion and repayments in the amount of US$0.3 billion. In addition, the exchange rate as of December 31 is US$1 equal to Z£8. Therefore, we know that the stock of foreign debt at the end of the year is US$10.5 billion (10+0.8-0.3), which expressed in domestic currency using the exchange rate at the end of the period is equal to Z£84.0 billion (10.5*8). Let us now reconcile the opening and closing stocks of debt in domestic currency.

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[85] Most other economic flows have as counterpart entry Net worth, which does not have a classification code in the GFS system. See examples below.

381. First, the US$0.8 billion disbursement took place on a day when the exchange rate was US$1 equal to Z£7.4, therefore it was equivalent to Z£5.92. Second, the US$0.3 billion repayment took place on a day when the exchange rate was US$1 equal to Z£7.6, therefore it was equivalent to Z£2.28. If we take the opening balance, plus the disbursement and minus the repayment in domestic currency, we obtain Z£73.64 as the closing balance (70.0+5.92-2.28). However, we know that closing stock of foreign debt in domestic currency is Z£84.0 billion. The difference between the two figures is Z£10.36 (84.0-73.64), which represents the holding loss due to the depreciation of the domestic currency. This loss is as another economic flow (code 4324), and its recording is necessary to reconcile the opening and closing stocks of debt in domestic currency. See the corresponding double entries for all the flows during the period below. Also see Example 11.18 above for another illustration of how to record debt flows.

**Example 11.29: Recording of foreign debt flows.**

| **Disbursements of Z£ 5.92 billion (US$0.8 billion)** | | | |
|---|---|---|---|
| GFS Code | Descriptor | Debit | Credit |
| 3222 | External currency and deposits | 5.92 | |
| 3324 | External loans | | 5.92 |
| **Repayments of Z£2.28 billion (US$0.3 billion)** | | | |
| 3324 | External loans | 2.28 | |
| 3222 | External currency and deposits | | 2.28 |
| **Holding loss of Z£10.36 billion** | | | |
| | Net worth | 10.36 | |
| 4324 | External loans | | 10.36 |

382. Other changes in the volume of assets cover a wide variety of events. The discovery of oil or mineral deposits that are economically exploitable, depletion of subsoil assets, destruction of assets due to natural disasters or war, uncompensated seizure of assets (for reasons other than failure to pay taxes or similar levies), monetization of gold, reclassifications of units from one subsector to another, and reclassification of assets from one category to another, are all cases that result in volume changes. We already provided two examples above as part of the discussion of revenues from natural resources. Let us look at two other examples of events that result in other changes in the volume of assets, one related to a natural disaster, and the other to an uncompensated seizure of a private enterprise.

**Example 11.30: Floods have resulted in the destruction of roads and bridges with a current replacement cost of Z£75,000.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| 51113 | Produced assets, other structures | 75,000 | |
| | Net worth | | 75,000 |

**Example 11.31: The government has expropriated without payment a private enterprise currently valued at Z£15,000 in the stock exchange.**

| GFS Code | Descriptor | Debit | Credit |
|---|---|---|---|
| | Net worth | 15,000 | |
| 5215 | Domestic equity and investment fund shares | | 15,000 |

383. The examples presented above in Chapter 10 and Chapter 11illustrate how to record monetary and nonmonetary transactions, as well as other economic flows, on both a cash basis and an accrual basis. There are no direct recording entries for stocks under either basis of recording, as changes in the level and value of stocks between two periods are always explained by the transactions and other economic flows that occurred during that period.

384. For additional information on the topic of transactions with the IMF, social protection, interest, in-kind transactions, debt operations, and arrears see:

- *2008 SNA*, Appendix 2, Debt Reorganization and Related Transactions.
- IMF, *GFSM 2001*, Annex to Chapter 2, Social Protection; Appendix 2, Government Debt Operations.
- IMF and others, *External Debt Statistics: Guide for Compilers and Users*, Chapter 8, Debt Reorganization.
- IMF, *Public Sector Debt Statistics: Guide for Compilers and Users*, Chapter 4, Selected Issues in Public Sector Debt.
- IMF, *BPM 6*, Annex 7.1, Positions and Transactions with the IMF.
- IMF, *MFSM 2000*, Appendix 1, Accounts with the IMF.
- IMF Pamphlet Series No. 45, Sixth edition.

# CHAPTER 12. DATA DISSEMINATION

*This chapter describes the IMF's standards for data dissemination and related issues.*

## A. Data Dissemination Standards

385. Most countries compile more fiscal statistics than they actually disseminate, and are often uncertain as to what is the best practice regarding information to be made public. On the subject of data dissemination, the IMF's Special Data Dissemination Standard (SDDS), and the General Data Dissemination System (GDDS) provide specific guidance.[86]

386. The SDDS was first approved by the IMF Executive Board in March 1996 to guide member countries that have, or might seek access to international capital markets, on the dissemination of economic and financial data to the public. The SDDS has been subject to periodic reviews to ensure its adequacy to evolving demands for information from the markets. Subscription to the SDDS is voluntary, but carries a commitment by a subscribing member to observe the standard. The coverage (categories and components), periodicity, and timeliness of the data to be disseminated are specified. In addition, subscribing countries have to submit information about their data compilation and dissemination practices (metadata), which are posted on an electronic bulletin board maintained by the IMF called the Dissemination Standards Bulletin Board (DSBB).[87] The DSBB also provides hyperlinks to a country's National Summary Data Page (NSDP) for all subscribers, which constitutes a comprehensive source for all data categories and their components prescribed by the SDDS.

387. The categories required for the fiscal sector currently included in the SDDS are: general government operations (or public sector operations, as relevant), central government operations, and central government debt. For each of these categories a number of components are mandated and a few are encouraged. If the country uses the *GFSM 1986* framework, the mandated components for:

(a) general government (or public sector) operations are revenue, expenditure, balance (deficit/surplus), aggregate financing (disaggregated by domestic and foreign, or by maturity, and either instrument or currency of issue);

(b) central government operations the components are the same as for general government operations, and

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[86] The SDDS is available at http://dsbb.imf.org/pages/sdds/home.aspx, and the GDDS at http://dsbb.imf.org/pages/gdds/home.aspx.

[87] The DSBB is available at http://dsbb.imf.org.

(c) central government debt they are debt by maturity and by residency, or by instrument, or by currency of issue, and noncentral government debt guaranteed by central government, as relevant.[88]

If the country uses the *GFSM 2001* framework, the components are essentially the Statement of Sources and Uses of Cash, or the Statement of Government Operations.

388. The periodicity and timeliness standards set by the SDDS are for data for general government (public sector) operations to be disseminated annually (quarterly encouraged) with no more than a two quarter lag (one quarter encouraged), for data for central government operations to be disseminated monthly with no more than a month lag, and for data for central government debt to be disseminated quarterly with no more than a quarter lag.

389. The GDDS was approved by the IMF Executive Board in December 1998 to provide member countries a framework for statistical development. Participation in the GDDS is voluntary, but carries a commitment by participating members to use the GDDS framework, prepare and post metadata, and develop short- and long-term plans for improvement of their practices. The recommended coverage, periodicity, and timeliness of the data that countries should aim to compile and disseminate eventually are specified. Participation in the GDDS is strongly recommended to all non-SDDS subscribing member countries. The GDDS provides a useful developmental tool that can lead over time to subscription of the SDDS.[89]

390. The categories and components recommended for the fiscal sector included in the GDDS are the same as in the SDDS. However, the periodicity and timeliness guidelines recommended differ, as they are less demanding. The recommendations in the GDDS are for data for general government (public sector) operations to be disseminated annually with no more than a six to nine month lag, for data for central government operations to be disseminated quarterly (monthly encouraged) with no more than a quarter lag (one month encouraged), and for data for central government debt to be disseminated quarterly with no more than a one to two quarter lag.

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[88] The encouraged components for general government operations and central government operations are interest payments, and financing of public enterprises separately identified; while for central government debt they are debt service projections for short, medium and long-term debt. It should be noted that one of the external sector recommended components is public and publicly guaranteed external debt, broken down by maturity.

[89] Unlike the SDDS which establishes dissemination standards that a participating country must observe, the GDDS is a system which provides guidelines for the improvement of a country’s statistical system.

**Figure 14. Dissemination Guidance for Fiscal Statistics**

| | GDDS | | SDDS | |
|---|---|---|---|---|
| ***P=Periodicity, T =Timeliness*** | **P** | **T** | **P** | **T** |
| **Government Sector** | | | | |
| General government operations | A | 6-9M | A | 2Q |
| Central government operations | Q | 1Q | M | 1M |
| Central government debt | Q | 1-2Q | Q | 1Q |
| M.- month/monthly, Q.- quarter/quarterly, A.- annual/annually<br>Source: <http://dsbb.imf.org>. | | | | |

391. The GDDS and SDDS guidance on data dissemination summarized in Figure 14 above applies irrespective of whether the *GFSM 1986*, *GFSM 2001*, an internationally accepted methodology, or a national methodology is used for compiling fiscal statistics by the country.[90] Most countries have available at least budget execution data in national formats for budgetary central government, and should aim to disseminate these data immediately following the recommendations for central government. As the statistical systems of countries improve over time, they will be able to provide GFS for broader aggregates of government, with higher periodicity and greater timeliness.

## B. Other Aspects of Data Dissemination

392. In addition to the recommendations above on the coverage, periodicity, and timeliness of the data to be disseminated, there are several other aspects of data dissemination that should be addressed to ensure good dissemination practices are followed. These aspects include public availability of metadata (methodology, legislation and regulations, institutional arrangements), advance release calendars, ease of access to the data, availability of time series, and contact information. Users interested in seeing actual country examples of these various aspects of data dissemination should go to the SDDS and GDDS websites identified above.

### Metadata

393. The public availability of metadata is a key factor in the quality of data dissemination. Users should be informed of the legal and institutional framework under which data are compiled, and the methodology underlying the data. The legal and institutional framework metadata should include information on the agency responsible for compiling and

[90] If a national methodology is used, it is useful to indicate in the metadata how major aggregates and balancing items differ from those presented in the GFS manuals.

disseminating the data, as well as the main laws and regulations supporting the compilation and dissemination of data. The methodology metadata should include information on the concepts, scope, classifications, basis of recording, valuation, data sources, and revision policy used. As previously indicated, subscription to the SDDS or participation in the GDDS, requires posting metadata for fiscal statistics.[91]

**Advance release calendar**

394. Advance release calendars (ARC) are an important feature of good dissemination practices. Users should be informed well ahead of time when to expect data to be released, and of course it is best practice to release data to all users at the same time. An approximate date can be provided at first, followed by a specific date and time closer to the actual dissemination date. SDDS requires subscribers to provide at a minimum a quarter-ahead ARC.

**Dissemination formats**

395. Traditional dissemination formats (e.g., hardcopy, CD ROM) remain important. However, a website that is easy to navigate is an increasingly fundamental aspect of data dissemination. SDDS subscribers are required and GDDS participants are encouraged to disseminate data on a website using a NSDP. Users should be able to find the data they are looking and to download these data with ease. Graphs, charts, and comments to facilitate interpretation of the data are helpful. For analytical purposes, time series of the data disseminated are also valuable to users; if possible, a 5-10 year time series should be provided at a minimum.[92] SDDS subscribers and GDDS participants are encouraged to provide hyperlinks from an NSDP to time series data. Finally, contact information for users interested in obtaining additional information on the statistics should be provided (for example, a telephone number, or an e-mail address).

## C. Data Reporting to the IMF

396. At present countries report a variety of data to the IMF on a regular basis, including fiscal statistics. Usually the data reported are sent to various departments within the IMF for different purposes, often using different formats. This imposes a burden on reporting countries and in practice often constitutes a disincentive to adopt the *GFSM 2001* methodology. It is expected that this situation will change following the IMF's Executive

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[91] The metadata for the SDDS or GDDS are presented following the format of the DQAF, and cover the aspects discussed here, as well as other aspects relevant to producing good quality data.

[92] Longer time series are often required for certain types of economic analyses, and should be provided to the extent possible. The Classification Assistant tool discussed in Chapter 8 can be used to convert data from various formats to the *GFSM 2001* format, and thereby obtain a long(er) time series.

Board decision to adopt the *GFSM 2001* format in Article IV staff reports beginning in May 2011, and that soon thereafter the majority of fiscal statistics reported to the IMF will follow the same format. The fiscal statistics reported to the IMF's Statistics Department are already published exclusively using the *GFSM 2001* format.

397. Government finance statistics reported by member countries to the IMF's Statistics Department appear in *International Financial Statistics* (*IFS*) and in the *Government Finance Statistics Yearbook* (*GFS Yearbook*), or in the GFS Yearbook database. The *IFS* presents high frequency (monthly or quarterly) summary data for one or two sectors, while the *GFS Yearbook* presents annual data for general government and its subsectors. The data reported for the *GFS Yearbook* are carefully reviewed by IMF economists to ensure conformity with *GFSM 2001* guidelines. This makes the yearbook the best source for fiscal statistics comparable across countries.

398. It is important to highlight that countries that decide to adopt the *GFSM 2001* format, and in particular to use the recommended summary statements and detail tables, will have available a large part of the data on government operations often requested by domestic and foreign users. For example, the information requested by the IMF's Statistics Department in the questionnaires to collect high frequency (monthly, quarterly) data for the *IFS*, and annual data for the *GFS Yearbook*, is all available in those summary statements and detail tables.

399. For additional information on the topic of data dissemination see:

- IMF, *The Special Data Dissemination Standard (SDDS), Guide for Subscribers and Users*. Available at <http://dsbb.imf.org/pages/sdds/home.aspx>.

- IMF, *The General Data Dissemination System (GDDS), Guide for Subscribers and Users*. Available at <http://dsbb.imf.org/pages/GDDS/Guide.aspx>.

## CHAPTER 13. ADOPTION OF THE *GFSM 2001* METHODOLOGY

*This chapter describes in general terms the way in which countries can gradually adopt over time the GFSM 2001 methodology to compile GFS.*

### A. Introduction

400. The previous chapters have explained how to compile GFS in accordance with the guidelines of the *GFSM 2001*, and why we strongly recommend that all countries adopt its methodology. Implementation of the fully integrated GFS system will take time and resources. How much time and resources are required will depend on the needs and circumstances of each country. Initially, many countries may only be able compile GFS for budgetary central government on a cash basis. Eventually, countries should compile GFS for the whole general government (public) sector and its subsectors, on both a cash basis and an accrual basis of recording, and with a sub-annual and annual periodicity.

401. The adoption of the *GFSM 2001* methodology involves a deliberate political decision by senior officials. Only with political support at high level can the necessary human and financial resources be allocated to the task. To facilitate gaining this support and undertaking the task in a systematic manner, we recommend: (a) developing a "migration plan" that outlines the country-specific steps to be taken, as well as identifies the resources and timetable associated with the steps; and (b) compiling GFS in addition to budget execution data at the beginning.[93] The discussion below aims to assist compilers in developing their migration plan.

402. We recommend that developing countries adopt the *GFSM 2001* methodology in stages. Each stage entails expanding the coverage of GFS, both in terms of institutional units, and of the flows and stocks associated with these units. From a broad perspective, and for presentation purposes, we identify four main stages in the discussion below, and identify steps often associated with each stage (though many different combinations of the stages, as well as the steps associated with each stage are possible):

Stage 1 – introducing the presentation (summary statements and detail tables) and classifications of the *GFSM 2001* only for existing budget execution data, commonly referred to as adoption of the *GFSM 2001* format;

Stage 2 – expanding the institutional and transactional coverage of GFS to include all general government (public) units, on a cash basis;

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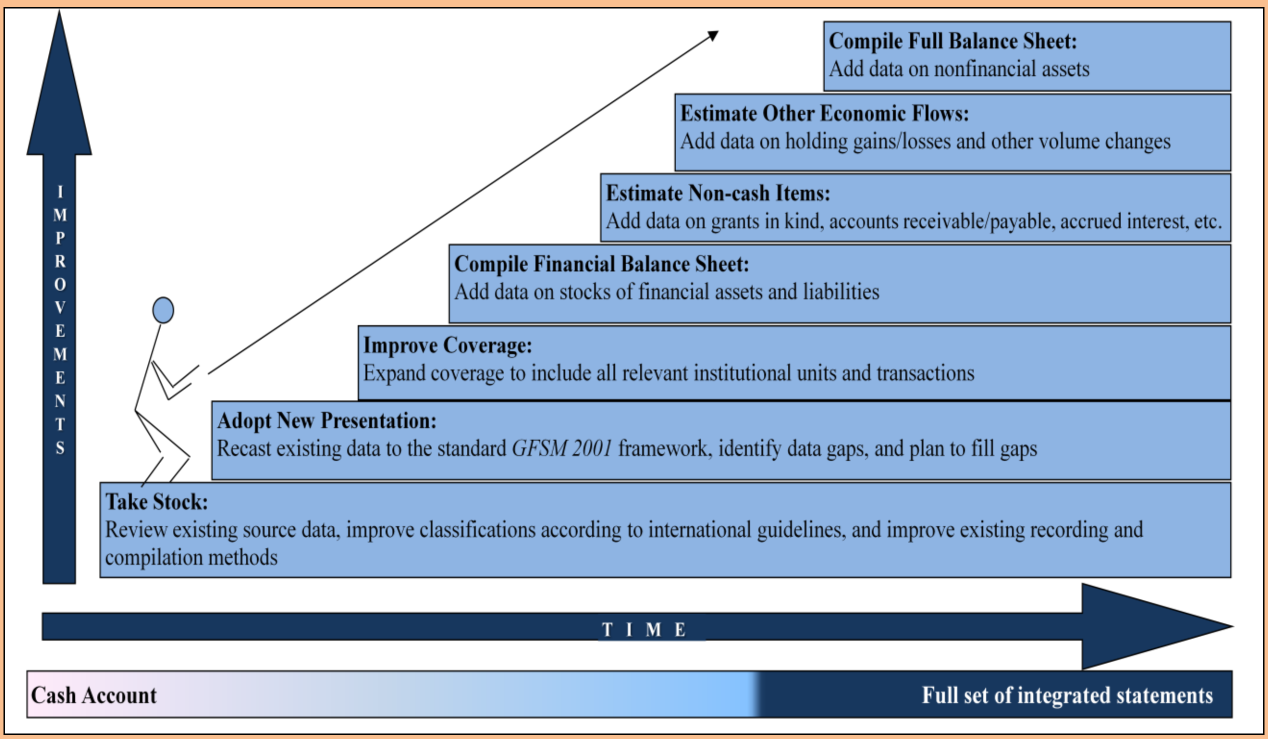
[93] Over time, as officials gain familiarity with the presentation and benefits of GFS, it is possible that the classifications and tables of the *GFSM 2001* will also be used for budget preparation and monitoring, and not just for statistical reporting.

Stage 3 – expanding the coverage of GFS to include selected noncash items, commonly referred to as compiling GFS on a modified cash basis; and,

Stage 4 – expanding the coverage of GFS to cover all flows and stocks associated with general government (public) units, i.e., compilation of GFS on both a cash basis and an accrual basis for the whole general government (public) sector and its subsectors.

403. Implementation of each stage will require an increasing amount of resources and time. The advantages of beginning to compile GFS on a cash basis of recording are its simplicity, low cost, and timeliness. The main disadvantage is its limited scope. As accrual recording is introduced the availability of information expands significantly, but the complexity and costs become higher, and the timeliness decreases. Countries have to decide based on their specific circumstances, such as starting point and availability of resources, the pace at which to implement the various stages; and the decision taken should be reflected in the migration plan. The gradual adoption of the *GFSM 2001* methodology is illustrated in Figure 15 below.

**Figure 15. Building Government Finance Statistics Step by Step**



## B. Stage 1: Introducing the *GFSM 2001* Format to Existing Data

404. Implementation of stage 1 involves two main steps: assessing the current status of compilation and dissemination of fiscal statistics, and the conversion of existing data from the national format to the *GFSM 2001* format. As previously discussed in the introduction to Part II- Data compilation, the DQAFs used to conduct the assessment of macroeconomic statistics, provide a useful tool to identify a country's strengths and weaknesses in the compilation and dissemination of macroeconomic statistics. It is recommended that countries conduct a self-assessment using the DQAF for GFS, and use the results to help develop their migration plan.

405. Another useful action at this stage is to prepare a list of all entities and units that compose the general government (public) sector and its subsectors, as discussed in Chapter 2. This list should be prepared jointly by all data producing agencies, and agreed upon as the official list for compiling the country's macroeconomic statistics. Based on this list, the institutional and data (transactions, other economic flows, stocks) coverage of the fiscal statistics currently compiled and existing gaps should be identified. A useful way to present all this information is to prepare an institutional table, as discussed in Chapter 6. The institutional table summarizes the current coverage of fiscal statistics in a given country, and identifies the areas where improvement is needed.

406. The conversion of existing data from the national format to the *GFSM 2001* format involves two major actions: the introduction of the manual's presentation (summary statements and detail tables), and the reclassification of existing data (preparation of derivation tables and bridge tables, and the use of the Classification Assistant tool), as discussed in detail in Chapters 4 and 8.

407. In parallel with the initial recasting of a country's statistics to the *GFSM 2001* format, the need for changes to the existing chart of accounts should be identified, as to ensure it provides the detail necessary to classify transactions and stocks in accordance with the *GFSM 2001* classifications.[94] Another highly recommended action is to introduce the *GFSM 2001* classification codes into the accounting system (using the bridge tables between the national and the *GFSM 2001* classifications), to generate the summary statements and detail tables automatically.

408. Implementation of stage 1 is relatively straightforward, and requires limited resources and time. It can be accomplished in a short period (about one year). Very importantly, the benefits derived from implementation of the relatively low cost steps associated with this stage are substantial. The main benefits are identifying the data gaps in existing source data,

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[94] The modification of the existing chart of accounts is a medium-term task, and its undertaking should be incorporated into the migration plan.

and presenting fiscal statistics in an internationally standardized and analytically useful manner.

### C. Stage 2: Expanding the Institutional and Transactional Coverage of GFS

409. Implementation of stage 2 involves two main steps: expanding the coverage of GFS to all institutional units and transactions of the general government sector and subsectors, and compiling a financial balance sheet; on a cash basis. The expansion of the coverage would focus initially on the central government, and later on state and local governments, as relevant. Statistics for nonfinancial public corporations and financial corporations can also be addressed later.[95] Efforts to develop data on a noncash basis should also be undertaken later, as discussed below.

410. In order to compile statistics for the central government, the data for the budgetary central government subsector must be complemented by data for the extra-budgetary units and the social security funds subsectors. Compilers should initially focus on the main units belonging to these two last subsectors. Usually there are just a few major units in each subsector that account for a significant majority of the activity in the subsector. Monthly or quarterly data sources need to be identified for these major units and processed as explained in Chapters 7-9, and illustrated in Appendix 2.

411. Next, annual data sources for state (if applicable) and local governments need to be identified. Sometimes annual reports with financial information are sent by local governments to a budgetary central government entity (e.g., Ministry of Local Development) or an auditing body (e.g., Court of Auditors), other times these units may have financial statements that are presented to the local legislature. Any of these two sources can be adequate to compile fiscal statistics. It may also well be the case that surveys need to be developed to collect data from local governments. These surveys should be simple and emphasis should be placed initially on the major aggregates for the largest local governments. Importantly, the surveys should be based on the existing chart of accounts (terminology) used by local governments. In our experience, mandatory reporting requirements on government institutions, backed by a proper legal framework and enforced by the controlling government units through credible sanctions if necessary, renders the best results. Achieving complete coverage of local government units is a medium-term task, and may require using estimation techniques.

412. In a majority of countries there is relatively good quality data for budgetary central government in terms of transactional coverage. The one significant exception is often

[95] It is possible that several countries may want to include data for selected nonfinancial and financial corporations from the beginning. Caution should be exercised in these cases, as the consolidation of public corporations with general government units presents some complex challenges, which if not properly handled can result in statistics that are not analytically useful.

information on foreign grants, both current and capital, especially when the grants are not directly received in cash by the government. A potential source of information may be the entity that compiles balance of payments, but often quarterly surveys need to be distributed to donors to address this deficiency. Data on financial transactions are usually available for the budgetary central government, but are often derived from the monetary accounts. If this is the case, compilers should develop direct data sources and reconcile the information with the one from the monetary accounts. At this stage, efforts should also be made to improve the timeliness of the data for budgetary central government.[96]

413. The compilation of a financial balance sheet, which incorporates all financial assets and liabilities associated with each unit of the general government sector, should also be undertaken at this stage. Usually a significant amount of information to compile the financial balance sheet is readily available, though it is often dispersed and not publicly disseminated. Some information can be obtained from available debt data, such as information on domestic and external debt liabilities of budgetary central government units, which are often compiled by Debt Departments in Ministries of Finance. In countries where extra-budgetary units and social security funds do not have borrowing powers, such debt data will also be equal to the debt data for the consolidated central government. Where applicable, information on financial assets and liabilities will also appear in the balance sheets of several institutional units, particularly those that belong to the extra-budgetary units and social security funds subsectors. Other information to compile the financial balance sheet may require more effort to collect, such as information on the government's equity holdings in public corporations, but generally information on a government's financial assets and liabilities is available somewhere.

414. After the financial balance sheet has been compiled, the financial assets and liabilities should be valued at nominal or market prices, as relevant. It is important to note that the financial balance sheet should be disseminated even if initially only partial information is available, and not wait until it is complete to make it publicly available.

415. Implementation of stage 2 requires significant resources and more time than the previous stage, but these remain relatively moderate because although data sources need to be identified for all general government units, these sources tend to exist already for cash flows. Implementation of this stage can be accomplished in a period of two to four years.

[96] Chapter 12 provides guidance on the recommended timeliness of fiscal statistics.

### D. Stage 3: Expanding the Coverage of GFS to Selected Noncash Items

416. Implementation of stage 3 involves the collection of data for selected noncash items. We recommend focusing on the following items: (a) in-kind transactions, (b) debt operations, (c) arrears, and (d) accrued interest. Expanding the coverage to include these items will significantly expand the coverage of flows and the analytical usefulness of fiscal statistics. These four items are discussed in Chapter 11. For many developing countries in-kind transactions and debt operations have a major impact on GFS aggregates, while information on arrears and accrued interest not only do the same, but also would provide a country that generally follows a cash basis of recording with advance notice of upcoming significant outlays.

417. Implementation of stage 3 requires more resources and a longer time than the previous stages, about three to five years. However, it allows countries to enjoy many of the benefits of accrual accounting, without having to incur the costs of full adoption of that basis of recording. Let us explain this assertion. There are two fundamental differences between a cash basis of recording and an accrual basis of recording: the type of flows recorded, and the time at which flows are recorded. In practice, the noncash flows which are important to record for GFS, and the items for which using an accrual basis of recording makes a significant difference, are few in both cases. If countries focus on these few flows and items, the task of adopting an accrual basis of recording is greatly simplified, and the amount of resources and time needed substantially reduced.

### E. Stage 4: Expanding the Coverage of GFS to Cover All Flows and Stocks

418. Implementation of stage 4 involves two main steps: collecting data on other economic flows, and compiling a balance sheet for nonfinancial assets. Once a financial balance sheet has been compiled and valued at nominal or market prices as relevant, the values of the stock of assets and liabilities will change over time due to transactions (acquisitions and disposals), and changes in prices or other changes in volume. At this stage countries would already have available the information concerning transactions, and need to add the information concerning other economic flows (price and volume changes). The same need for information on other economic flows will apply to nonfinancial assets once a balance sheet of nonfinancial assets is compiled.

419. The main source of information on prices for financial assets and liabilities will be the markets in which the instruments are traded or reports by entities that follow these markets, while the main change in volume is likely to be write-offs, for which the source of information will be the corresponding document supporting the decision to write-off a given financial asset.[97] The availability of information on other economic flows that affect financial

[97] Changes in nominal values of assets and liabilities are not holdings gains and losses.

assets and liabilities will allow compilers to integrate flows and stocks, and thereby to be able to explain all changes between two balance sheets from one period to another. This type of integration is only done currently by many countries for the two liabilities (debt securities and loans) usually included in their definition of debt. The sources of information on prices for nonfinancial assets will depend on the valuation method used for the particular assets, as discussed below; while the sources for information on volume changes will vary depending on the type of event causing the volume change, which are normally the result of the recognition or de-recognition of assets (e.g., discovery of mineral deposit, depletion of natural resources), natural disasters or war.

420. The compilation of a balance sheet for nonfinancial assets is the other step at this stage. The information collected for this purpose also allows for the calculation of improved estimates of consumption of fixed capital, because these estimates are based on information on the stock of nonfinancial assets at market prices. Two approaches can be taken to measuring the stock of nonfinancial assets: (a) an accounting approach based on a register of individual assets, and (b) a statistical estimation approach based on aggregate data generated by the perpetual inventory method. Under either approach, GFS compilers will not actually calculate the stock of nonfinancial assets, but rely instead on information provided by accounting units for the accounting approach, and by national accounts units for the statistical estimation approach.

421. An initial action for an accounting approach is to prepare a register of the nonfinancial assets owned by the respective government units, if possible including either their acquisition cost or current depreciated value in the accounting books. If none of these two valuation options are available, existing assets can be initially recognized at a nominal value (e.g., one domestic currency unit), and later revalued appropriately. Another possible action is to have government units begin recording the acquisition and disposal of nonfinancial assets at market prices.[98] In the case of disposals, an adjustment between the value in the books and the market value should be made prior to the sale, and recorded as a holding gain or loss. After an initial balance sheet for nonfinancial assets has been compiled, the assets should all be valued at market prices to the extent possible. Valuation of certain nonfinancial assets to market, especially infrastructure and heritage assets, can be complicated. Techniques are available for this purpose, but the task is complex and may require technical assistance from experts in this field. GFS compilers might propose or

[98] This action, recording the acquisition and disposal of nonfinancial assets from a given date forward, can of course be initiated at any point of the migration.

support this approach, but it requires a large amount of information, which would have to be supplied by all reporting agencies.[99]

422. Alternatively, under a statistical estimation approach, the perpetual inventory method can be used to estimate the value of nonfinancial assets. This method cumulates aggregate data on net acquisition of these assets over many years (after deduction of the accumulated consumption of fixed capital, amortization, or depletion), adjusted to current values with price indexes. This method is generally carried out by, or in conjunction with, national accounts compilers. National accounts compilers usually have the required time series of capital formation and price indexes, and may already make estimates of capital stock and/or consumption of fixed capital for their own purposes. Depending on the availability of resources and data, aggregated approaches can be implemented very simply, while methods based on detailed breakdowns of asset categories, asset life distributions, and details of specific entities would require more resources. The OECD has produced a manual on this method, which includes information on country practices and asset lives.[100]

423. Once the two steps have been undertaken it is possible to have a fully integrated set of financial statements, which allows for the complete reconciliation of flows and stocks. However, a third step is needed to have a GFS system that properly uses an accrual basis of recording: the introduction of accrual accounting for all general government (public) units. This introduction usually requires changing the accounting legislation of the country and entails a major change in accounting records and the preparation of financial statements.[101] The effort and costs associated with this action are high.

424. Implementation of stage 4 requires substantial resources and a long time, especially if it includes the introduction of proper accrual accounting at all levels of government. The collection of data on other economic flows, the compilation of a balance sheet for nonfinancial assets and its valuation at market prices, and the introduction of accrual accounting, demand considerable resources and time, possibly up to ten years or even more.

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[99] On the subject of valuation of nonfinancial assets compilers can consult: (a) International Public Sector Accounting Standards, available at http://www.ifac.org; and (b) "Valuation of Physical Non-Current Assets at Fair Value", available at http://www.treasury.nsw.gov.au.

[100] *Measuring Capital – OECD Manual 2009,* available at: http://www.oecd-ilibrary.org/.

[101] IFAC Public Sector Committee, *Transition to the Accrual Basis of Accounting: Guidance for Governments and Government Entities*.

## F. Conclusion

425. The gradual adoption of the *GFSM 2001* methodology, at least through stage 3, is strongly recommended to all member countries, because the GFS system provides a systematic and analytically useful way to record and present all flows and stocks associated with general government (public) units, can be applied to any basis of recording, and facilitates cross-country comparisons of the resulting statistics. Stated differently, the benefits of adopting the methodology significantly exceed the costs of introducing the same.

426. The pace of the migration will depend on the particular circumstances of each country, but a number of steps can be readily taken at relatively low cost and with high returns. Other steps may require greater effort and entail higher costs. A systematic approach to the migration, and more specifically the development of a migration plan, which details the country specific steps to be taken and sets a timetable, as well as an estimate of the resources (human, financial, computer, etc.) associated with each step, is highly recommended. These steps can be implemented in sequence or simultaneously, depending on the status of a country's fiscal statistics and specific circumstances.

427. This Guide places emphasis on providing information to assist countries to take all the steps through stage 3. The information needed to take the steps associated with stage 4 is outside the scope of the Guide, and is unlikely to be relevant to developing countries in the near future. Full implementation of the *GFSM 2001* methodology will take time, and the sooner countries begin the migration the sooner they will enjoy its benefits. The IMF's STA is actively working to help countries develop and implement their migration plans towards adoption of the *GFSM 2001* methodology, and stands ready to support efforts by any country to achieve this goal.

## Appendix 1. Classification Categories and Codes for all Flows and Stocks

*This appendix provides all of the classification categories and codes used in the GFS system.*

1. Chapter 4 of the Guide includes a section on the GFS classification and coding system, which provides detailed information on the subject. Chapter 5 discusses the various GFS classification categories, and presents in tables included throughout the main text the GFS classification codes for revenue, expense, transactions in assets and liabilities, other economic flows, and stocks. These two chapters should be consulted by compilers interested in understanding the GFS classification categories and codes.

2. Here in Appendix 1all the classification categories and codes used in the GFS system are presented together in one place for ease of reference.[102] Table A1.1 refers to revenue, Table A1.2 refers to the economic classification of expense, Table A1.3 refers to flows and stocks in assets and liabilities, Table A1.4 refers to outlays by functions of government, and Table A1.5 refers to transactions in financial assets and liabilities by sector. As indicated in Table A1.3, the classification for flows and stocks in assets and liabilities has been harmonized with the classification in the *2008 SNA.*

3. As discussed in Chapter 4, the coding system used in the GFS system can be expanded by compilers interested in more detailed classifications by adding digits or extensions to the codes. In addition, as mentioned in Chapter 11, compilers may find it useful to introduce "of which" categories to identify separately certain items, for example, revenues and/or expenses associated with natural resources, or the component of liabilities in arrears.

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[102] The version of the classification categories and codes presented in Appendix 1 for flows and stocks in assets and liabilities (Table A1.3), and for outlays by functions of government (Table A1.4), is more detailed than the one presented in Chapter 5. The increased level of detail provided for these two tables is not likely to be useful to developing countries for now, but is presented to cover the full range of the GFS classification system. The classification of transactions in financial assets and liabilities by sector (Table A1.5) is not presented in the main text of the Guide.

**Table A1.1 Classification of Revenue**

| | | | |
|---|---|---|---|
| **1** | **Revenue** | **12** | **Social contributions** |
| **1** | **Taxes** | 121 | Social security contributions |
| 111 | Taxes on income, profits, and capital gains | 1211 | Employee contributions |
| 1111 | Payable by individuals | 1212 | Employer contributions |
| 1112 | Payable by corporations and other enterprises | 1213 | Self-employed or nonemployed contributions |
| 1113 | Unallocable | 1214 | Unallocable contributions |
| 112 | Taxes on payroll and workforce | 122 | Other social contributions |
| 113 | Taxes on property | 1221 | Employee contributions |
| 1131 | Recurrent taxes on immovable property | 1222 | Employer contributions |
| 1132 | Recurrent taxes on net wealth | 1223 | Imputed contributions |
| 1133 | Estate, inheritance, and gift taxes | **13** | **Grants** |
| 1134 | Taxes on financial and capital transactions | 131 | From foreign governments |
| 1135 | Other nonrecurrent taxes on property | 1311 | Current |
| 1136 | Other recurrent taxes on property | 1312 | Capital |
| 114 | Taxes on goods and services | 132 | From international organizations |
| 1141 | General taxes on goods and services | 1321 | Current |
| 11411 | Value-added taxes | 1322 | Capital |
| 11412 | Sales taxes | 133 | From other general government units |
| 11413 | Turnover and other general taxes on goods and services | 1331 | Current |
| 1142 | Excises | 1332 | Capital |
| 1143 | Profits of fiscal monopolies | **14** | **Other revenue** |
| 1144 | Taxes on specific services | 141 | Property income |
| 1145 | Taxes on use of goods and on permission to use goods or perform activities | 1411 | Interest |
| 11451 | Motor vehicle taxes | 1412 | Dividends |
| 11452 | Other taxes on use of goods and on permission to use goods or perform activities | 1413 | Withdrawals from income of quasi-corporations |
| 1146 | Other taxes on goods and services | 1414 | Property income attributed to insurance policyholders |
| 115 | Taxes on international trade and transactions | 1415 | Rent |
| 1151 | Customs and other import duties | 142 | Sales of goods and services |
| 1152 | Taxes on exports | 1421 | Sales by market establishments |
| 1153 | Profits of export or import monopolies | 1422 | Administrative fees |
| 1154 | Exchange profits | 1423 | Incidental sales by nonmarket establishments |
| 1155 | Exchange taxes | 1424 | Imputed sales of goods and services |
| 1156 | Other taxes on international trade and transactions | 143 | Fines, penalties, and forfeits |
| 116 | Other taxes | 144 | Voluntary transfers other than grants |
| 1161 | Payable solely by business | 1441 | Current |
| 1162 | Payable by other than business or unidentifiable | 1442 | Capital |
| | | 145 | Miscellaneous and unidentified revenue |

**Table A1.2 Economic Classification of Expense**

| | | | |
|---|---|---|---|
| **2**<br>**21** | **Expense**<br>**Compensation of employees** | **26** | **Grants *(continued)*** |
| 211 | Wages and salaries | 262 | To international organizations |
| 2111 | Wages and salaries in cash | 2621 | Current |
| 2112 | Wages and salaries in-kind | 2622 | Capital |
| 212 | Social contributions | 263 | To other general government units |
| 2121 | Actual social contributions | 2631 | Current |
| 2122 | Imputed social contributions | 2632 | Capital |
| **22** | **Use of goods and services** | **27** | **Social benefits** |
| **23** | **Consumption of fixed capital** | 271 | Social security benefits |
| **24** | **Interest** | 2711 | Social security benefits in cash |
| 241 | To nonresidents | 2712 | Social security benefits in-kind |
| 242 | To residents other than general government | 272 | Social assistance benefits |
| 243 | To other general government units | 2721 | Social assistance benefits in cash |
| **25** | **Subsidies** | 2722 | Social assistance benefits in-kind |
| 251 | To public corporations | 273 | Employer social benefits |
| 2511 | To nonfinancial public corporations | 2731 | Employer social benefits in cash |
| 2512 | To financial public corporations | 2732 | Employer social benefits in-kind |
| 252 | To private enterprises | **28** | **Other expense** |
| 2521 | To nonfinancial private enterprises | 281 | Property expense other than interest |
| 2522 | To financial private enterprises | 2811 | Dividends (public corporations only) |
| **26** | **Grants** | 2812 | Withdrawals from income of quasi-corporations (public corporations only) |
| 261 | To foreign governments | 2813 | Property expense attributed to insurance policyholders |
| 2611 | Current | 2814 | Rent |
| 2612 | Capital | 282 | Miscellaneous other expense |
| | | 2821 | Current |
| | | 2822 | Capital |

**Table A1.3 Classifications of Flows and Stocks in Assets and Liabilities (Harmonized with the *2008 SNA*)**

| | Transactions | Holding gains/ losses | Other volume changes | Total other economic flows | Stocks |
|---|---|---|---|---|---|
| **Net worth and its changes** | **3** | **4** | **5** | **9** | **6** |
| **Nonfinancial assets** | **31** | **41** | **51** | **91** | **61** |
| **Produced assets** | **310** | **410** | **510** | **910** | **610** |
| **Fixed assets** | **311** | **411** | **511** | **911** | **611** |
| Buildings and structures | 3111 | 4111 | 5111 | 9111 | 6111 |
| Dwellings | 31111 | 41111 | 51111 | 91111 | 61111 |
| Buildings other than dwellings | 31112 | 41112 | 51112 | 91112 | 61112 |
| Other structures | 31113 | 41113 | 51113 | 91113 | 61113 |
| Land improvements | 31114 | 41114 | 51114 | 91114 | 61114 |
| Machinery and equipment | 3112 | 4112 | 5112 | 9112 | 6112 |
| Transport equipment | 31121 | 41121 | 51121 | 91121 | 61121 |
| Other machinery and equipment | 31122 | 41122 | 51122 | 91122 | 61122 |
| Information, communication and telecommunication (ICT) equipment | 311221 | 411221 | 511221 | 911221 | 611221 |
| Other machinery and equipment | 311222 | 411222 | 511222 | 911222 | 611222 |
| Other fixed assets | 3113 | 4113 | 5113 | 9113 | 6113 |
| Cultivated biological resources | 31131 | 41131 | 51131 | 91131 | 61131 |
| Animal resources yielding repeat products | 311311 | 411311 | 511311 | 911311 | 611311 |
| Tree, crop, and plant resources yielding repeat products | 311312 | 411312 | 511312 | 911312 | 611312 |
| Intellectual property products | 31132 | 41132 | 51132 | 91132 | 61132 |
| Research and development | 311321 | 411321 | 511321 | 911321 | 611321 |
| Mineral exploration and evaluation | 311322 | 411322 | 511322 | 911322 | 611322 |
| Computer software and databases | 311323 | 411323 | 511323 | 911323 | 611323 |
| Computer software | 3113231 | 4113231 | 5113231 | 9113231 | 6113231 |
| Databases | 3113232 | 4113232 | 5113232 | 9113232 | 6113232 |
| Entertainment, literary or artistic originals | 311324 | 411324 | 511324 | 911324 | 611324 |
| Other intellectual property products | 311325 | 411325 | 511325 | 911325 | 611325 |
| Costs of ownership transfer of nonproduced assets (other than land) | 31133 | 41133 | 51133 | 91133 | 61133 |
| Weapons systems | 31134 | 41134 | 51134 | 91134 | 61134 |
| **Inventories** | **312** | **412** | **512** | **912** | **612** |
| Materials and supplies | 31221 | 41221 | 51221 | 91221 | 61221 |
| Work-in-progress | 31222 | 41222 | 51222 | 91222 | 61222 |
| Work-in-progress on cultivated biological assets | 312221 | 412221 | 512221 | 912221 | 612221 |
| Other work-in-progress | 312222 | 412222 | 512222 | 912222 | 612222 |
| Finished goods | 31223 | 41223 | 51223 | 91223 | 61223 |
| Goods for resale | 31224 | 41224 | 51224 | 91224 | 61224 |
| Military inventories | 31225 | 41225 | 51225 | 91225 | 61225 |
| **Valuables** | **313** | **413** | **513** | **913** | **613** |
| Precious metals and stones | 3131 | 4131 | 5131 | 9131 | 6131 |
| Antiques and other art objects | 3132 | 4132 | 5132 | 9132 | 6132 |
| Other valuables | 3133 | 4133 | 5133 | 9133 | 6133 |

**Table A1.3 Classifications of Flows and Stocks in Assets and Liabilities**
**(Harmonized with the *2008 SNA*) (*continued*)**

| | Transactions | Holdings gains/losses | Other volume changes | Total other economic flows | Stocks |
|---|---|---|---|---|---|
| **Nonfinancial assets *(continued)*** | **31** | **41** | **51** | **91** | **61** |
| **Nonproduced assets** | **314** | **414** | **514** | **914** | **614** |
| Natural resources | 3140 | 4140 | 5140 | 9140 | 6140 |
| Land | 3141 | 4141 | 5141 | 9141 | 6141 |
| Mineral and energy resources | 3142 | 4142 | 5142 | 9142 | 6142 |
| Other naturally occurring assets | 3143 | 4143 | 5143 | 9143 | 6143 |
| Noncultivated biological resources | 31431 | 41431 | 51431 | 91431 | 61431 |
| Water resources | 31432 | 41432 | 51432 | 91432 | 61432 |
| Other natural resources | 31433 | 41433 | 51433 | 91433 | 61433 |
| Radio spectra | 314331 | 414331 | 514331 | 914331 | 614331 |
| Other | 314332 | 414332 | 514332 | 914332 | 614332 |
| Intangible nonproduced assets | 3144 | 4144 | 5144 | 9144 | 6144 |
| Contracts, leases, and licenses | 31441 | 41441 | 51441 | 91441 | 61441 |
| Marketable operating leases | 314411 | 414411 | 514411 | 914411 | 614411 |
| Permits to use natural resources | 314412 | 414412 | 514412 | 914412 | 614412 |
| Permits to undertake specific activities | 314413 | 414413 | 514413 | 914413 | 614413 |
| Entitlement to future goods and services on an exclusive basis | 314414 | 414414 | 514414 | 914414 | 614414 |
| Goodwill and marketing assets | 31442 | 41442 | 51442 | 91442 | 61442 |
| **Financial assets** | **32** | **42** | **52** | **92** | **62** |
| **Total by instrument** | | | | | |
| Monetary gold and SDRs | 3201 | 4201 | 5201 | 9201 | 6201 |
| Currency and deposits | 3202 | 4202 | 5202 | 9202 | 6202 |
| Debt securities | 3203 | 4203 | 5203 | 9203 | 6203 |
| Loans | 3204 | 4204 | 5204 | 9204 | 6204 |
| Equity and investment fund shares | 3205 | 4205 | 5205 | 9205 | 6205 |
| Insurance, pension, and standardized guarantee schemes | 3206 | 4206 | 5206 | 9206 | 6206 |
| Financial derivatives and employee stock options | 3207 | 4207 | 5207 | 9207 | 6207 |
| Other accounts receivable | 3208 | 4208 | 5208 | 9208 | 6208 |
| **Domestic** | **321** | **421** | **521** | **921** | **621** |
| Currency and deposits | 3212 | 4212 | 5212 | 9212 | 6212 |
| Debt securities | 3213 | 4213 | 5213 | 9213 | 6213 |
| Loans | 3214 | 4214 | 5214 | 9214 | 6214 |
| Equity and investment fund shares | 3215 | 4215 | 5215 | 9215 | 6215 |
| Insurance, pension, and standardized guarantee schemes | 3216 | 4216 | 5216 | 9216 | 6216 |
| Financial derivatives and employee stock options | 3217 | 4217 | 5217 | 9217 | 6217 |
| Other accounts receivable | 3218 | 4218 | 5218 | 9218 | 6218 |

**Table A1.3 Classifications of Flows and Stocks in Assets and Liabilities**

**(Harmonized with the *2008 SNA*) (*continued*)**

| | Transactions | Holdings gains/ losses | Other volume changes | Total other economic flows | Stocks |
|---|---|---|---|---|---|
| **Financial assets *(continued)*** | **32** | **42** | **52** | **92** | **62** |
| **External** | **322** | **422** | **522** | **922** | **622** |
| Monetary gold and SDRs | 3221 | 4221 | 5221 | 9221 | 6221 |
| Currency and deposits | 3222 | 4222 | 5222 | 9222 | 6222 |
| Debt securities | 3223 | 4223 | 5223 | 9223 | 6223 |
| Loans | 3224 | 4224 | 5224 | 9224 | 6224 |
| Equity and investment fund shares | 3225 | 4225 | 5225 | 9225 | 6225 |
| Insurance, pension, and standardized guarantee schemes | 3226 | 4226 | 5226 | 9226 | 6226 |
| Financial derivatives and employee stock options | 3227 | 4227 | 5227 | 9227 | 6227 |
| Other accounts receivable | 3228 | 4228 | 5228 | 9228 | 6228 |
| **Liabilities** | **33** | **43** | **53** | **93** | **63** |
| **Total by instrument** | | | | | |
| Special Drawing Rights (SDRs) | 3301 | 4301 | 5301 | 9301 | 6301 |
| Currency and deposits | 3302 | 4302 | 5302 | 9302 | 6302 |
| Debt securities | 3303 | 4303 | 5303 | 9303 | 6303 |
| Loans | 3304 | 4304 | 5304 | 9304 | 6304 |
| Equity and investment fund shares | 3305 | 4305 | 5305 | 9305 | 6305 |
| Insurance, pension, and standardized guarantee schemes | 3306 | 4306 | 5306 | 9306 | 6306 |
| Financial derivatives and employee stock options | 3307 | 4307 | 5307 | 9307 | 6307 |
| Other accounts payable | 3308 | 4308 | 5308 | 9308 | 6308 |
| **Domestic** | **331** | **431** | **531** | **931** | **631** |
| Currency and deposits | 3312 | 4312 | 5312 | 9312 | 6312 |
| Debt securities . | 3313 | 4313 | 5313 | 9313 | 6313 |
| Loans | 3314 | 4314 | 5314 | 9314 | 6314 |
| Equity and investment fund shares | 3315 | 4315 | 5315 | 9315 | 6315 |
| Insurance, pension, and standardized guarantee schemes | 3316 | 4316 | 5316 | 9316 | 6316 |
| Financial derivatives and employee stock options | 3317 | 4317 | 5317 | 9317 | 6317 |
| Other accounts payable | 3318 | 4318 | 5318 | 9318 | 6318 |
| **External** | **332** | **432** | **532** | **932** | **632** |
| Special Drawing Rights (SDRs) | 3321 | 4321 | 5321 | 9321 | 6321 |
| Currency and deposits | 3322 | 4322 | 5322 | 9322 | 6322 |
| Debt securities | 3323 | 4323 | 5323 | 9323 | 6323 |
| Loans | 3324 | 4324 | 5324 | 9324 | 6324 |
| Equity and investment fund shares | 3325 | 4325 | 5325 | 9325 | 6325 |
| Insurance, pension, and standardized guarantee schemes | 3326 | 4326 | 5326 | 9326 | 6326 |
| Financial derivatives and employee stock options | 3327 | 4327 | 5327 | 9327 | 6327 |
| Other accounts payable | 3328 | 4328 | 5328 | 9328 | 6328 |
| **Memorandum items:** | | | | | |
| Net financial worth [=62-63] | | | | | 6M2 |
| Gross debt at market value | | | | | 6M3 |
| Gross debt at face value | | | | | 6M35 |
| Gross debt at nominal value | | | | | 6M4 |
| Arrears | | | | | 6M5 |
| Net obligations for future social security benefits | | | | | 6M6 |
| Loan and other debt instrument guarantees (publicly guaranteed debt at nominal value) | | | | | 6M71 |

**Note: the classification of all assets and liabilities can be expanded to record acquisitions, disposals, and consumption of fixed capital (as relevant) by adding to the end of each category an extension of the code (.1, or .2, or .3, respectively).**

**Table A1.4 Classification of Outlays by Functions of Government**

| | | | |
|---|---|---|---|
| **7** | **Total outlays** | 70441 | Mining of mineral resources other than mineral fuels |
| **701** | **General public services** | 70442 | Manufacturing |
| 7011 | Executive and legislative organs, financial and fiscal affairs, external affairs | 70443 | Constructions |
| 70111 | Executive and legislative organs | 7045 | Transport |
| 70112 | Financial and fiscal affairs | 70451 | Road transport |
| 70113 | External affairs | 70452 | Water transport |
| 7012 | Foreign economic aid | 70453 | Railway transport |
| 70121 | Economic aid to developing countries and countries in transition | 70454 | Air transport |
| 70122 | Economic aid routed through international agencies | 70455 | Pipeline and other transport |
| 7013 | General services | 7046 | Communication |
| 70131 | General personnel services | 7047 | Other industries |
| 70132 | Overall planning and statistical services | 70471 | Distributive trades, storage, and warehousing |
| 70133 | Other general services | 70472 | Hotels and restaurant |
| 7014 | Basic research | 70473 | Tourism |
| 7015 | R&D[1] General public services | 70474 | Multipurpose development projects |
| 7016 | General public services n.e.c.[2] | 7048 | R&D Economic affairs |
| 7017 | Public debt transactions | 70481 | R&D General economic, commercial, and labor affairs |
| 7018 | Transfers of a general character between different levels of government | 70482 | R&D Agriculture, forestry, fishing, and hunting |
| **702** | **Defense** | 70483 | R&D Fuel and energy |
| 7021 | Military defense | 70484 | R&D Mining, manufacturing, and construction |
| 7022 | Civil defense | 70485 | R&D Transport |
| 7023 | Foreign military aid | 70486 | R&D Communication |
| 7024 | R&D Defense | 70487 | R&D Other industries |
| 7025 | Defense n.e.c. | 7049 | Economic affairs n.e.c. |
| **703** | **Public order and safety** | **705** | **Environmental protection** |
| 7031 | Police services | 7051 | Waste management |
| 7032 | Fire protection services | 7052 | Waste water management |
| 7033 | Law courts | 7053 | Pollution abatement |
| 7034 | Prisons | 7054 | Protection of biodiversity and landscape |
| 7035 | R&D Public order and safety | 7055 | R&D Environmental protection |
| 7036 | Public order and safety n.e.c. | 7056 | Environmental protection n.e.c. |
| **704** | **Economic affairs** | **706** | **Housing and community amenities** |
| 7041 | General economic, commercial, and labor affairs | 7061 | Housing development |
| 70411 | General economic and commercial affairs | 7062 | Community development |
| 70412 | General labor affairs | 7063 | Water supply |
| 7042 | Agriculture, forestry, fishing, and hunting | 7064 | Street lighting |
| 70421 | Agriculture | 7065 | R&D Housing and community amenities |
| 70422 | Forestry | 7066 | Housing and community amenities n.e.c. |
| 70423 | Fishing and hunting | **707** | **Health** |
| 7043 | Fuel and energy | 7071 | Medical products, appliances, and equipment |
| 70431 | Coal and other solid mineral fuels | 70711 | Pharmaceutical products |
| 70432 | Petroleum and natural gas | 70712 | Other medical products |
| 70433 | Nuclear fuels | 70713 | Therapeutic appliances and equipment |
| 70434 | Other fuels | 7072 | Outpatient services |
| 70435 | Electricity | 70721 | General medical services |
| 70436 | Nonelectric energy | 70722 | Specialized medical services |
| 7044 | Mining, manufacturing, and construction | 70723 | Dental services |

**Table A1.4 Classification of Outlays by Functions of Government *(continued)***

| | | | |
|---|---|---|---|
| 70724 | Paramedical services | 7093 | Postsecondary nontertiary education |
| 7073 | Hospital services | 7094 | Tertiary education |
| 70731 | General hospital services | 70941 | First stage of tertiary education |
| 70732 | Specialized hospital services | 70942 | Second stage of tertiary education |
| 70733 | Medical and maternity center services | 7095 | Education not definable by level |
| 70734 | Nursing and convalescent | 7096 | Subsidiary services to education |
| 7074 | Public health services | 7097 | R&D Education |
| 7075 | R&D[1] Health | 7098 | Education n.e.c. |
| 7076 | Health n.e.c. [2] | **710** | **Social protection** |
| **708** | **Recreation, culture, and religion** | 7101 | Sickness and disability |
| 7081 | Recreation and sporting services | 71011 | Sickness |
| 7082 | Cultural services | 71012 | Disability |
| 7083 | Broadcasting and publishing services | 7102 | Old age |
| 7084 | Religious and other community services | 7103 | Survivors |
| 7085 | R&D Recreation, cultural, and religion | 7104 | Family and children |
| 7086 | Recreation, culture, and religion n.e.c. | 7105 | Unemployment |
| **709** | **Education** | 7106 | Housing |
| 7091 | Pre-primary and primary education | 7107 | Social exclusion n.e.c. |
| 70911 | Pre-primary education | 7108 | R&D Social protection |
| 70912 | Primary education | 7109 | Social protection n.e.c. |
| 7092 | Secondary education | | |
| 70921 | Lower-secondary education | | |
| 70922 | Upper-secondary education | | |
| | | | |

[1]R&D = research and development, [2]n.e.c. = not elsewhere classified

**Table A1.5 Classification of Transactions in Financial Assets and Liabilities by Sector**

| | |
|---|---|
| **8** | **Net financial worth change due to transactions (=82-83)** |
| **82** | **Financial assets (=32)** |
| **821** | **Domestic (=321)** |
| 8211 | General government |
| 8212 | Central bank |
| 8213 | Other depository corporations |
| 8214 | Financial corporations not elsewhere classified |
| 8215 | Nonfinancial corporations |
| 8216 | Households and nonprofit institutions serving households |
| **822** | **External (=322)** |
| 8221 | General government |
| 8227 | International organizations |
| 8228 | Financial corporations other than international organizations |
| 8229 | Other nonresidents |
| **83** | **Liabilities (=33)** |
| **831** | **Domestic (=331)** |
| 8311 | General government |
| 8312 | Central bank |
| 8313 | Other depository corporations |
| 8314 | Financial corporations not elsewhere classified |
| 8315 | Nonfinancial corporations |
| 8316 | Households and nonprofit institutions serving households |
| **832** | **External (=332)** |
| 8321 | General government |
| 8327 | International organizations |
| 8328 | Financial corporations other than international organizations |
| 8329 | Other nonresidents |
| | |

## Appendix 2. Compilation of GFS from Financial Statements

*This appendix presents two cases to illustrate how to compile GFS from financial statements, one for a social security fund and one for a nonfinancial public corporation.*

### A. Introduction

1. The main source data for budgetary central government, state governments, and local governments are likely to be accounting records or budget execution data. However, for extra-budgetary units/entities, social security funds, and public corporations the main source data are likely to be financial statements. This appendix presents two cases of compilation of GFS from financial statements, one for a social security fund and one for a nonfinancial corporation. Both cases are based on actual cases, which have been slightly modified for presentation purposes.

2. The financial statements to be used are the income statement, balance sheet, and cash flow statement. These statements will usually have been prepared in accordance to private sector accounting rules, and follow a noncash basis of recording. Thus, the statements need to be adjusted to conform to the guidelines of the *GFSM 2001*. The compilation process is similar to the one followed with the example presented in Chapter 8, but has some particular aspects that will be identified in the discussion below.

3. In general terms, the process involves preparing bridge tables and derivation tables, and then using them to convert the source data from the national presentation to the *GFSM 2001* presentation. The task can be done using the Classification Assistant tool, although some prior work to obtain information on the transactions in assets and liabilities to make the necessary adjustments to source data must be done. However, the cases presented in this section have been done directly, without using the Classification Assistant, to better illustrate the process.

4. More specifically, the steps to follow to compile GFS from financial statements are: (a) prepare bridge tables for the income statement, balance sheet, and cash flow statement; (b) calculate the changes between the closing and opening balance sheet values for each category of assets and liabilities; (c) prepare derivation tables for the major GFS aggregates; (d) compile *GFSM 2001* detail tables and summary statements; and (e) verify the accuracy of the process. Comments on these steps follow.

5. Preparation of the bridge tables requires classifying all items in the financial statements according to the *GFSM 2001* classifications. In particular, all flows that are not transactions should be identified and excluded from revenue, expense, and transactions in assets and liabilities. These flows as we have seen earlier are called other economic flows, and comprise price changes (revaluations) and other changes in the volume of assets and liabilities. In the income statement these flows are typically called gains/losses from sales of

assets, foreign exchange rate gains/losses, impairment of assets/losses, revaluations, provisions, and allowances.

6. The information on the transactions in assets and liabilities for a given period is obtained in general from changes in balance sheet (stock) values. More specifically, the differences between the closing and opening balance sheet values have to be calculated, and then adjusted to remove other economic flows. The information on stocks of assets and liabilities should be calculated for many assets as the balance sheet value of the asset minus accumulated depreciation, minus depreciation for the current accounting period. While for other assets it should be calculated as the balance sheet value of the asset minus allowances for impairment or doubtful accounts.

7. Preparation of the derivation tables and bridge tables requires making prior adjustments to the financial statements to conform to *GFSM 2001* classifications. Financial statements frequently include under revenue and expense items that the *GFSM 2001* classifications include elsewhere. Common examples are: (a) the disposals and acquisitions of nonfinancial assets, which the *GFSM 2001* classifies as transactions in nonfinancial assets; (b) loan disbursements and repayments, which the *GFSM 2001* classifies as transactions in financial assets; and (c) profits and losses in the sale of assets, which the *GFSM 2001* classifies as other economic flows. Once the necessary derivation tables and bridge tables have been prepared they can be used to compile GFS for the various subsectors and sectors.

8. Several actions can be taken to verify the accuracy of the compilation process. First, the values of the major GFS aggregates should correspond to the values calculated in the derivation tables. This action normally involves iteration between the bridge tables, derivation tables, and detail tables/summary statements. Second, the value for net lending/borrowing should be the same whether calculated as revenue minus expense minus transactions in nonfinancial assets, or as net acquisitions of financial assets minus net incurrence of liabilities. In practice, there is often a difference, which should be recorded as a statistical discrepancy in a separate line. Third, the values for each category of assets and liabilities in the closing balance sheet should be equal to their opening balance sheet value, plus transactions and other economic flows during the period. Fourth, the net change in the financial asset Currency and deposits in the Statement of Government Operations should be equal to the net change in the stock of cash in the Statement of Sources and Uses of Cash (and the institution’s cash flow statement).

9. There are two items that will appear regularly in financial statements that require guidance on how to address: provisions and depreciation. Provisions are not an item in the GFS system, which does not consider them liabilities, but only a setting aside of funds for a specific purpose. The flow is recorded only when the actual loss is incurred. Depreciation is also not an item in the GFS system, which uses instead the concept of consumption of fixed capital. Excluding the items for provisions and depreciation of assets when compiling GFS from financial statements would introduce discrepancies, thereby making the task more

difficult. We recommend that the following rules of thumb be used instead: (a) treat provisions as a proxy for a loss, and (b) treat depreciation as a proxy for consumption of fixed capital. In other words, treat provisions as another change in the volume of assets, and depreciation as an expense.

10. A caveat regarding consumption of fixed capital. Compilers should always try first to obtain figures for this item from the entity responsible for compiling national accounts. It is possible that figures would be available quarterly and annually for general government and its subsectors, and perhaps also for public corporations. Only to the extent that these figures are not available should depreciation be used as a proxy for consumption of fixed capital. Also, depreciation is likely to be a good proxy if assets are valued at fair market prices, but a poor proxy if assets are valued at historical costs.

11. A note of caution concerning the compilation of GFS from financial statements. One of the more challenging aspects of the compilation task is to get the signs right when calculating the major GFS aggregates and balancing items. For example, the financial statements may include under revenue an item with a negative sign, which the GFS system treats as an expense. In the compilation process this item would be moved to expense with a positive sign. Another example concerns holding gains and losses, which can appear with different signs depending on where they are presented in the financial statements. A further example concerns financing items. In the *GFSM 1986* financing is shown with a sign opposite the overall deficit/surplus, whereas in the *GFSM 2001* it is shown with the same sign as the cash surplus/deficit. Briefly stated, keeping track of the signs can be challenging, and getting the signs wrong leads to discrepancies. Therefore, when compiling GFS from financial statements close attention has to be paid to how the item affects a certain aggregate or balancing item to get the signs right.[103] The importance of this note of caution becomes evident when following Tables A2.1 through A2.15 to understand the two cases presented below.

## B. Compilation of GFS for a Social Security Fund

12. Let us look now at the first case of how to compile GFS from financial statements, the case of a social security fund. The three financial statements for 2009, income statement, balance sheet, and cash flow statement, are presented in Table A2.1, Table A2.2, and Table A2.3, respectively. These tables also show the correspondence between the national items in the financial statements and the *GFSM 2001* classifications. Table A2.2 also includes a column of the changes in the values of each asset and liability category from the opening balance sheet to the closing balance sheet. We see in Table A2.1 that both revenues and

[103] In the GFS system, an increase in a GFS category has a positive sign and a decrease has a negative sign. All cash items are entered with a positive sign, with formulas being used to determine whether there has been a net inflow or outflow.

expenses in the financial statements include national items that are classified differently under the *GFSM 2001* guidelines, such as holding gains and losses.

13. Tables A2.4A and A2.4B present the derivation of all major *GFSM 2001* flow aggregates. Starting from information in the financial statements for the major aggregates, adjustments are made to conform to the *GFSM 2001* classifications. Using the bridge tables and derivation tables, the *GFSM 2001* statements are prepared. Table A2.5 shows the Statement of Government Operations, while Table A2.6 shows a shortened Statement of Sources of Uses and Cash, and Table A2.7 shows the balance sheet. Finally, Table A2.8 presents an integrated vision of the stocks and flows for 2009 using the *GFSM 2001* overall framework. The corresponding detail tables are not shown, as most of the information contained in the financial statements for the social security fund already appears in the summary statements. Nevertheless, it is recommended that these detail tables be compiled.

14. We turn now to verifying the accuracy of the compilation process. We see in the Statement of Government Operations (Table A2.5) that the values for revenue (805,863), expense (153,598), net acquisition of nonfinancial assets (57,767), net acquisition of financial assets (567,875), and net incurrence of liabilities (-27,058), are the same as those calculated in the Derivation Tables (A2.4A). We also see that the value for net lending borrowing (594,598) is the same whether calculated from above or below. The overall framework (Table A2.8) shows that the opening balance sheet values can be fully reconciled with the closing balance sheet values. Finally, we see in the Statement of Sources and Uses of Cash (Table A2.6) that the net change in the stock of cash (-33,147) coincides with the one calculated in the Derivation Tables (A2.4B). Briefly stated, the compilation process was accurate. However, compilers need to keep in mind that this outcome is the result of several iterations between the various steps, and not the result of the initial effort.

15. The process of compiling GFS from financial statements illustrated in the case needs to be followed for all extra-budgetary entities and social security funds in order to compile GFS for the central government. Afterwards, the resulting GFS for each institution need to be aggregated by subsector and sector. Finally, consolidation needs to be carried out within (intra) and across (inter) subsectors, as discussed in Chapter 9.

## C. Compilation of GFS for a Nonfinancial Public Corporation

16. Let us look now at the second case of how to compile GFS from financial statements, the case of a nonfinancial public corporation. The three financial statements for 2009, income statement, balance sheet, and cash flow statement, are presented in Table A2.9, Table A2.10, and Table A2.11, respectively. These tables also show the correspondence between the national items in the financial statements and the *GFSM 2001* classifications. Table A2.10 also includes a column of the changes in the values of each asset and liability category from the opening balance sheet to the closing balance sheet. We see in Table A2.9 that both revenues and expenses in the financial statements include items that are classified differently under the *GFSM 2001* guidelines, such as holding gains and losses.

17. Tables A2.12A and A2.12B present the derivation of all major *GFSM 2001* flow aggregates. Starting from information in the financial statements for the major aggregates, adjustments are made to conform to the *GFSM 2001* classifications. Using the bridge tables and derivation tables, the *GFSM 2001* statements are prepared. Table A2.13 shows Revenue and Expense, while Table A2.14 shows a shortened Statement of Sources and Uses of Cash. Finally, Table A2.15 presents an integrated vision of the stocks and flows for 2009 using the *GFSM 2001* overall framework, including detailed balance sheets. The presentation of the flows and stocks of the nonfinancial corporation for 2009 is somewhat different than in the example for the social security fund, but all the same information is provided for both institutions. The corresponding detail tables are not shown, as most of the information contained in the financial statements for the nonfinancial corporation already appears in the summary statements. Nevertheless, it is recommended that these tables be compiled.

18. We turn now to verifying the accuracy of the compilation process. We see in the Table of Revenue and Expense (Table A2.13) and the Integrated Statement of Stocks and Flows (Table A2.15) that the values for revenue (202,230), expense (215,244), net acquisition of nonfinancial assets (4,980), net acquisition of financial assets (-21,064), and net incurrence of liabilities (-3,069), are the same as those calculated in the Derivation Tables (A2.12A). We also see that the value for net lending borrowing (-17,994) is the same whether calculated from above or below.[104] The Integrated Statement of Stocks and Flows (Table A2.15) also shows that the opening balance sheet values can be fully reconciled with the closing balance sheet values. Finally, we see in the Statement of Sources and Uses of Cash (Table A2.14) that the net change in the stock of cash (-18,221) coincides with the one calculated in the Derivation Tables (A2.12B). Briefly stated, the compilation process was accurate. However, as for the earlier case, compilers need to keep in mind that this outcome is the result of several iterations between the various steps, and not the result of the initial effort.

19. The process of compiling GFS from financial statements illustrated in the case needs to be followed for all public corporations in order to compile GFS for the nonfinancial and financial corporations subsectors. Afterwards, the resulting GFS for each institution need to be aggregated by subsector and sector. Finally, consolidation needs to be carried out within (intra) and across (inter) subsectors, as discussed in Chapter 9.

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[104] The value for net lending/borrowing is not shown directly, it has to be calculated from the information in Table A2.15.

**Table A2.1 National Social Security Fund – Bridge Table from Accounting Income Statement to *GFSM 2001* Classifications (thousands of Country Z pounds)**

| **Revenues** | **2009** | | **GFSM 2001 Codes and Descriptors** | | **Comments** |
|---|---|---|---|---|---|
| | | | | | |
| Member service operations: | | | | | |
| Contributions receivable from members | 562,036 | | 1211 | Social security employee contributions | |
| | | | | | |
| Investment revenue: | | | | | |
| Interest on government bonds | 134,692 | | 1411 | Interest | |
| Interest on treasury bills | 64,528 | | 1411 | Interest | |
| Interest on term deposits | 33,052 | | 1411 | Interest | |
| Rental income | 4,033 | | 1421 | Sales by market establishments | |
| Dividend income | 1,572 | | 1412 | Dividends | |
| Management fees | 2,991 | | 1421 | Sales by market establishments | |
| Medical levies | -5,774 | | 2711 | Social security benefits in cash | Include in expense |
| Surplus (deficit) on revaluation of investments (equity) | -93,030 | | 421 | Holding gains/losses: Financial assets domestic | Exclude from revenues |
| Surplus (deficit) on revaluation of financial assets (securities) | 31,168 | | 421 | Holding gains/losses: Financial assets domestic | Exclude from revenues |
| Interest on loans and advances | 888 | | 1411 | Interest | |
| Sub-total | 174,120 | | | | |
| | | | | | |
| Other operating income: | | | | | |
| Exchange gains (losses), equity | 1,662 | | 421 | Holding gains/losses: Financial assets domestic | Exclude from revenues |
| Gains (losses) on disposal of investment property | 176 | | 411 | Holding gains/losses: Fixed assets | Exclude from revenues |
| Sundry income | 2,071 | | 145 | Miscellaneous and unidentified revenue | |
| Sub-total | 3,909 | | | | |
| **Total revenues** | **740,065** | | | | |

**Table A2.1 National Social Security Fund – Bridge Table from Accounting Income Statement to *GFSM 2001* Classifications (thousands of Country Z pounds) *(continued)***

| **Expenses** | **2009** | | **GFSM 2001 Codes and Descriptors** | | **Comments** |
|---|---|---|---|---|---|
| | | | | | |
| Benefits claims and refunds (lump sum) | 27,226 | | 2711 | Social security benefits in cash | |
| Normal retirement pensions | 8,625 | | 2711 | Social security benefits in cash | |
| | | | | | |
| Management and administration expenses: | | | | | |
| Employee benefit expenses | 43,416 | | 2111 | Wages and salaries in cash | |
| Administration expenses | 31,191 | | 22 | Use of goods and services | |
| Rental charges | 1,248 | | 22 | Use of goods and services | |
| Pension cost | 2,678 | | 2121 | Actual social contributions | |
| Bad and doubtful debts provision (accounts receivable) | -217 | | 521 | Other changes in the volume of assets | Not an item in GFS classifications? |
| Depreciation | 3,350 | | 23 | Consumption of fixed capital | |
| Sub-total | 81,666 | | | | |
| | | | | | |
| **Total expenses** | **117,517** | | | | |
| | | | | | |
| **Surplus (deficit)before finance costs and taxation** | **622,548** | | | | |
| | | | | | |
| Interest expense | 0 | | 24 | Interest | |
| Tax expenses | 30,090 | | 282 | Miscellaneous other expense | |
| | | | | | |
| **Surplus (deficit)** | **592,458** | | | | |

**Table A2.2 National Social Security Fund – Bridge Table from Accounting Balance Sheet to *GFSM 2001* Classifications (thousands of Country Z pounds)**

| Category and accounts | 2009 | 2008 | Change | GFSM 2001 Codes and Descriptors | |
|---|---|---|---|---|---|
| | | | | | |
| **Assets** | | | | | |
| Bank and cash balances | 58,277 | 91,424 | -33,147 | 6202 | Currency and deposits |
| Financial assets | 2,135,076 | 1,607,132 | 527,944 | | |
| Treasury bills | 597,042 | 510,447 | 86,595 | 6203 | Debt securities |
| Government bonds | 958,946 | 884,751 | 74,195 | 6203 | Debt securities |
| Term deposits | 384,346 | 101,976 | 282,370 | 6202 | Currency and deposits |
| Equities | 161,661 | 32,013 | 129,648 | 6205 | Equity and investment fund shares |
| Fixed interest securities | 33,081 | 77,945 | -44,864 | 6203 | Debt securities |
| Loans and advances | | | | | |
| Employee receivables | 7,827 | 14,788 | -6,961 | 6208 | Other accounts receivable |
| Members' contributions receivables | 33,146 | 20,649 | 12,497 | 6208 | Other accounts receivable |
| Other receivables | 16,541 | 9,416 | 7,125 | 6208 | Other accounts receivable |
| Inventory | 497 | 488 | 9 | 612 | Nonfinancial assets: Inventories |
| Property, plant and equipment | 64,304 | 6,370 | 57,934 | 611 | Nonfinancial assets: Fixed assets |
| **Total assets** | **2,315,668** | **1,750,267** | **565,401** | | |
| | | | | | |
| **Liabilities** | | | | | |
| Current account | -22,784 | 7,347 | -30,131 | 6302 | Currency and deposits |
| Other payables and accrual | 6,320 | 10,321 | -4,001 | 6308 | Other accounts payable |
| Claims payable | 5,250 | 970 | 4,280 | 6308 | Other accounts payable |
| Deferred liabilities | 1,215 | 828 | 387 | 6308 | Other accounts payable |
| Current tax liabilities | 12,896 | 10,489 | 2,407 | 6308 | Other accounts payable |
| **Total liabilities** | **2,897** | **29,955** | **-27,058** | | |
| | | | | | |
| **Accumulated funds** | | | | | |
| Accumulated funds | 2,363,673 | 1,676,593 | 687,080 | | |
| Investment revaluation reserves | -50,902 | 43,719 | -94,621 | | |
| **Total liabilities and accumulated funds** | **2,315,668** | **1,750,267** | **565,401** | | |

**Table A2.3 National Social Security Fund – Bridge Table from Accounting Cash Flow Statement to *GFSM 2001* Classifications (thousands of Country Z pounds)**

| | 2009 | | GFSM 2001 Codes and Descriptors | | Comments |
|---|---|---|---|---|---|
| | | | | | |
| **Cash flows from operating activities** | | | | | |
| **Increase (decrease) in net assets** | **592,458** | | | | |
| Adjusted for noncash items: | | | | | |
| Depreciation | 3,350 | | | | |
| Income tax expense | 30,090 | | | | |
| Dividend income | -1,572 | | | | |
| Interest income | -236,305 | | | | |
| Surplus on revaluation of investments | 93,030 | | | | |
| Gain (loss) on amortization of financial assets | -31,168 | | | | |
| Gain (loss) on disposal of property, plant and equipment | -176 | | | | |
| **Operating cash inflows before movements in operating funds** | **449,707** | | 1 | Cash receipts from operating activities | |
| | | | | | |
| **Movement in operating assets and liabilities:** | | | | | |
| Dividends received | 1,572 | | 1 | Cash receipts from operating activities | |
| Interest received | 236,305 | | 1 | Cash receipts from operating activities | |
| Purchase of financial assets | -589,807 | | 32x | Net acquisition of financial assets other than cash | Change sign |
| Increase (decrease) in deferred liabilities | 388 | | 33 | Net incurrence of liabilities | |
| Increase in employee receivables | 6,962 | | 32x | Net acquisition of financial assets other than cash | Change sign |
| Increase (decrease) in member's contributions receivables | -12,497 | | 32x | Net acquisition of financial assets other than cash | Change sign |
| Increase (decrease) in other receivables | -37,257 | | 32x | Net acquisition of financial assets other than cash | Change sign |
| Increase (decrease) in inventories | -9 | | 2 | Change in inventories/Purchases of nonfinancial assets | Change sign |
| Proceeds on disposal of property, plant and equipment | 1,000 | | 31.2 | Sales of nonfinancial assets | |
| Increase in other payables and accruals | 279 | | 33 | Net incurrence of liabilities | |
| **Net movement in operating assets and liabilities** | **-393,064** | | | | |
| | | | | | |

**Table A2.3 National Social Security Fund – Bridge Table from Accounting Cash Flow Statement to *GFSM 2001* Classifications (thousands of Country Z pounds) *(continued)***

| | **2009** | | **GFSM 2001 Codes and Descriptors** | | **Comments** |
|---|---|---|---|---|---|
| | | | | | |
| **Net movement in operating assets and liabilities** | **-393,064** | | | | |
| | | | | | |
| Income tax paid | -27,683 | | 2 | Cash payments for operating activities | Change sign |
| | | | | | |
| **Net cash utilized in operations** | **28,960** | | | | |
| | | | | | |
| Purchase of property, plant, and equipment | -62,107 | | 31.1 | Purchases of nonfinancial assets | Change sign |
| | | | | | |
| **Net cash inflows (outflows)** | **-33,147** | | | | |
| | | | | | |
| Cash and cash equivalents at beginning of the year | 91,424 | | | | |
| **Cash and cash equivalents at end of the year** | **58,277** | | | | |
| | | | | | |

**Table A2.4A National Social Security Fund – Derivation Tables for *GFSM 2001* Main Aggregates (thousands of Country Z pounds)**

| | | | |
|---|---|---|---|
| | | | **2009** |
| | **Total revenues (from Income Statement)** | | **740,065** |
| **Less:** | Medical levies | | -5,774 |
| | Surplus on revaluation of investments | | -93,030 |
| | Surplus on revaluation of financial assets | | 31,168 |
| | Exchange gains (losses) | | 1,662 |
| | Gains (losses) on disposal of investment property | | 176 |
| | | | |
| | **Total revenue *GFSM 2001*** | | **805,863** |
| | | | |
| | **Total expenses (from Income Statement)** | | **117,517** |
| **Less:** | Bad and doubtful debts provision (accounts receivable) | | -217 |
| **Plus:** | Medical levies | | 5,774 |
| | Tax expenses | | 30,090 |
| | | | |
| | **Total expense *GFSM 2001*** | | **153,598** |
| | | | |
| | From Balance Sheet and Income Statement | | |
| | Property, plant and equipment (change) | | 57,934 |
| | Inventory (change) | | 9 |
| **Less:** | Gains (losses) on disposal of investment property | | 176 |
| | | | |
| | **Net acquisition of nonfinancial assets *GFSM 2001*** | | **57,767** |
| | | | |
| | **From Income Statement and Balance Sheet** | | |
| | Currency and deposits (bank and cash balances, and term deposits) | | 249,223 |
| | Debt securities | | 115,926 |
| | Equity and investment fund shares | | 129,648 |
| | Other accounts receivable | | 12,661 |
| **Less:** | Surplus (deficit) on revaluation of financial assets (securities) | | 31,168 |
| | Exchange gains (losses), equity | | 1,662 |
| **Plus:** | Bad and doubtful debts provision (accounts receivable) | | 217 |
| | Surplus (deficit) on revaluation of investments (equity) | | 93,030 |
| | | | |
| | **Net acquisition of financial assets *GFSM 2001*** | | **567,875** |
| | | | |

**Table A2.4A National Social Security Fund – Derivation Tables for *GFSM 2001* Main Aggregates(thousands of Country Z pounds) *(continued)***

| | | | 2009 |
|---|---|---|---|
| | **From Income Statement and Balance Sheet** | | |
| | Current account | | -30,131 |
| | Equity and investment fund shares | | 0 |
| | Other accounts payable | | 3,073 |
| | | | |
| | **Net incurrence of liabilities *GFSM 2001*** | | **-27,058** |
| | | | |
| | **From Income Statement and Balance Sheet** | | |
| | Gains (losses) on disposal of investment property | | 176 |
| | Surplus (deficit) on revaluation of investments (equity) | | -93,030 |
| | Surplus (deficit) on revaluation of financial assets (securities) | | 31,168 |
| | Exchange gains (losses), equity | | 1,662 |
| | | | |
| | **Holding gains and losses *GFSM 2001*** | | **-60,024** |
| | | | |
| | **From income statement** | | |
| | Bad and doubtful debts provision (accounts receivable) | | -217 |
| | | | |
| | **Other changes in the volume of assets and liabilities *GFSM 2001*** | | **-217** |
| | | | |

**Table A2.4B National Social Security Fund – Derivation Tables for *GFSM 2001* Main Cash Aggregates (thousands of Country Z pounds)**

| | | | 2009 |
|---|---|---|---|
| | **From Cash Flow Statement** | | |
| | Operating cash inflows before movements in operating funds | | 449,707 |
| **Plus:** | Dividends received | | 1,572 |
| | Interest received | | 236,305 |
| **Less:** | Income tax paid | | 27683 |
| | | | |
| | **Net cash inflow from operating activities *GFSM 2001*** | | **659,901** |
| | | | |
| | **From Cash Flow Statement** | | |
| | Purchase of property, plant, and equipment | | 62,107 |
| **Plus:** | Increase (decrease in inventories) | | 9 |
| **Less:** | Proceeds on disposal of property, plant, and equipment | | 1,000 |
| | | | |
| | **Net cash outflow from investments in nonfinancial assets *GFSM 2001*** | | **61,116** |
| | | | |
| | **From Cash Flow Statement** | | |
| | Purchases of financial assets | | 589,807 |
| **Plus:** | Increase (decrease) in member's contributions receivable | | 12,497 |
| | Increase (decrease) in other receivables | | 37,257 |
| **Less:** | Increase in employee receivables | | 6,962 |
| | Increase (decrease) in deferred liabilities | | 388 |
| | Increase in other payables and accruals | | 279 |
| | | | |
| | **Net cash inflow from financing activities *GFSM 2001*** | | **-631,932** |
| | | | |
| | **From Cash Flow Statement** | | |
| | Cash and cash equivalents at the end of the period | | 58,277 |
| **Less:** | Cash and cash equivalents at the beginning of the period | | 91,424 |
| | | | |
| | **Net change in the stock of cash *GFSM 2001*** | | **-33,147** |
| | | | |

**Table A2.5 National Social Security Fund – *GFSM 2001* Statement of Government Operations (thousands of Country Z pounds)**

| | | | **2009** |
|---|---|---|---|
| | | | |
| 1 | **Revenue** | | **805,863** |
| 11 | Taxes | | 0 |
| 12 | Social contributions | | 562,036 |
| 13 | Grants | | 0 |
| 14 | Other revenue | | 243,827 |
| | | | |
| 2 | **Expense** | | **153,598** |
| 21 | Compensation of employees | | 46,094 |
| 22 | Use of goods and services | | 32,439 |
| 23 | Consumption of fixed capital | | 3,350 |
| 24 | Interest | | 0 |
| 25 | Subsidies | | 0 |
| 26 | Grants | | 0 |
| 27 | Social Benefits | | 41,625 |
| 28 | Other expense | | 30,090 |
| | | | |
| **NOB** | **Net operating balance (1-2)** | | **652,265** |
| | | | |
| 31 | **Net acquisition of nonfinancial assets** | | **57,767** |
| 311 | Fixed assets | | 57,758 |
| 312 | Change in inventories | | 9 |
| 313 | Valuables | | 0 |
| 314 | Nonproduced assets | | 0 |
| | | | |
| **NLB** | **Net lending/borrowing (1-2-31)** | | **594,498** |
| | | | |
| 32 | **Net acquisition of financial assets** | | **567,441** |
| 33 | **Net incurrence of liabilities** | | **-27,058** |
| | | | |
| * | Statistical discrepancy | | -1 |

**Table A2.6 National Social Security Fund – *GFSM 2001* Statement of Sources and Uses of Cash (thousands of Country Z pounds)**

| **Code** | | | **2009** |
|---|---|---|---|
| 1 | Cash receipts from operating activities | | 687,584 |
| 2 | Cash payments for operating activities | | 27,683 |
| **CIO** | **Net cash inflow from operating activities (1-2)** | | **659,901** |
| | | | |
| 31 | Cash flows from investments in nonfinancial assets | | |
| 31.1 | Purchases of nonfinancial assets | | 62,116 |
| 31.2 | Sales of nonfinancial assets | | 1,000 |
| | Net cash outflow from investments in nonfinancial assets | | 61,116 |
| **CSD** | **Cash surplus(+)/deficit** | | **598,785** |
| | | | |
| | Cash flows from financing activities | | |
| 32x | Net acquisition of financial assets other than cash | | 632,599 |
| 33 | Net incurrence of liabilities | | 667 |
| NFA | Net cash inflow from financing activities (33-32x) | | -631,932 |
| | | | |
| **NCB** | **Net change in the stock of cash (CSD+NFA)** | | **-33,147** |
| | | | |

**Table A2.7 National Social Security Fund – *GFSM 2001* Balance Sheet (thousands of Country Z pounds)**

| Code | | | 2009 |
|---|---|---|---|
| **61** | **Nonfinancial assets** | | **64,801** |
| 611 | Fixed assets | | 64,304 |
| 612 | Inventories | | 497 |
| 613 | Valuables | | 0 |
| 614 | Nonproduced assets | | 0 |
| | | | |
| **62** | **Financial assets** | | **2,250,867** |
| 6202 | Currency and deposits | | 442,623 |
| 6203 | Debt securities | | 1,589,069 |
| 6204 | Loans | | 0 |
| 6205 | Equity and investment fund shares | | 161,661 |
| 6206 | Insurance, pension and standardized guarantee schemes | | 0 |
| 6207 | Financial derivatives and employee stock options | | 0 |
| 6208 | Other accounts receivable | | 57,514 |
| | | | |
| **63** | **Liabilities** | | **2,897** |
| 6301 | Special Drawing Rights (SDRs) | | 0 |
| 6302 | Currency and deposits | | -22,784 |
| 6303 | Debt securities | | 0 |
| 6304 | Loans | | 0 |
| 6305 | Equity and investment fund shares | | 0 |
| 6306 | Insurance, pension and standardized guarantee schemes | | 0 |
| 6307 | Financial derivatives and employee stock options | | 0 |
| 6308 | Other accounts receivable | | 25,681 |
| | | | |

**Table A2.8 National Social Security Fund – *GFSM 2001* Overall Framework (thousands of Country Z pounds)**

| | Stocks | Flows | | Stocks |
|---|---|---|---|---|
| | Opening Balance Sheet | Transactions | Other Economic Flows | Closing Balance Sheet |
| **Revenue** | | 805,863 | | |
| | | | | |
| **Expense** | | 153,164 | | |
| | | | | |
| **Net worth /**<br>**Net operating balance** | 1,720,312 | 652,700<br>652,699 | -60,241 | 2,312,771 |
| **Nonfinancial assets** | 6,858 | 57,767 | 176 | 64,801 |
| | | | | |
| **Net financial worth /**<br>**Net lending/borrowing** | 1,713,454 | 594,933<br>594,932 | | 2,247,970 |
| **Financial assets** | 1,743,409 | 567,875 | -60,417 | 2,250,867 |
| | | | | |
| **Liabilities** | 29,955 | -27,058 | | 2,897 |
| | | | | |
| | | | | |

*Net Financial Worth (NFW) = Financial assets – Liabilities.*
*Net worth = NFW + Nonfinancial assets.*
*Revenue- Expense = Net operating balance (Gross operating balance* if *Expense* excludes *Consumption of fixed capital*).
*Net Lending/Borrowing = Revenue - Expense – Net acquisition of nonfinancial assets* (computed from “above the line”) = *Net acquisition of financial assets – Net incurrence of liabilities* (computed from “below the line”).

**Table A2.9 Shipping Corporation – Bridge Table from Accounting Income Statement to *GFSM 2001* Classifications (thousands of Country Z pounds)**

| | 2009 | GFSM 2001 Codes and Descriptors | Comments |
|---|---|---|---|
| **REVENUES** | | | |
| Freight | 164,319 | 1421: Other revenue: Sales of goods & services: Sales by market establishments | |
| Passengers | 25,841 | 1421: Other revenue: Sales of goods & services: Sales by market establishments | |
| Mail | 913 | 1421: Other revenue: Sales of goods & services: Sales by market establishments | |
| Other activities | 9,046 | 1421: Other revenue: Sales of goods & services: Sales by market establishments | |
| Interest income | 493 | 1411: Other revenue: Property income: Interest | |
| Other incomes | 1,994 | 1421: Other revenue: Sales of goods & services: Sales by market establishments | Exclude gains from sales of assets (373) and gain on current investments (2). This information is in the notes to the financial statements. |
| **Total revenues** | **202,606** | | |
| | | | |
| **EXPENSES** | | | |
| Personnel | 30,607 | 21: Expense: Compensation of employees | |
| Fuel and oil | 89,460 | 22: Expense: Use of goods and services | |
| Cargo service expenses | 19,939 | 22: Expense: Use of goods and services | |
| Inventories and supplies | 8,827 | 22: Expense: Use of goods and services | |
| Crew expenses | 6,542 | 22: Expense: Use of goods and services | |
| Vessels maintenance and overhaul costs | 10,848 | 22: Expense: Use of goods and services | |
| Depreciation and amortization | 20,281 | 23: Expense: Consumption of fixed capital | |
| Lease of vessel and spare parts | 3,651 | 22: Expense: Use of goods and services | |
| Sales and advertising costs | 6,932 | 22: Expense: Use of goods and services | |

**Table A2.9 Shipping Corporation – Bridge Table from Accounting Income Statement to *GFSM 2001* Classifications (thousands of Country Z pounds) *(continued)***

| | 2009 | GFSM 2001 Codes and Descriptors | Comments |
|---|---|---|---|
| **EXPENSES *(continued)*** | | | |
| Insurance | 751 | 22: Expense: Use of goods and services | |
| Damages arising from Antitrust/ Competition Law | 4,290 | 282: Other expense: Miscellaneous other expense | |
| Other operating expenses | 8,922 | 22: Expense: Use of goods and services | |
| Remuneration for Board of Directors | 21 | 22: Expense: Use of goods and services | |
| Aircraft impairment losses | 4,426 | 411: Holding gains/losses: Fixed assets | Exclude from expense |
| Other expenses | 688 | 282: Other expense: Miscellaneous other expense | |
| Losses on foreign currency exchange | 4,471 | 4304: Holding gains/losses: Liabilities: Loans | Exclude from expense |
| Share of losses (profits) from investments by the equity method | 65 | 4304: Holding gains/losses: Financial assets: Currency & deposits | Exclude from expense |
| **Total expenses** | **220,720** | | |
| | | | |
| Profits (Losses) before Finance Costs and Income Tax Expenses | -18,114 | | |
| Finance costs | 5,485 | 24: Expense: Interest | |
| Income tax expenses (income) | -2,285 | 282: Expense: Miscellaneous other expense | |
| **Net profits (losses)** | **-21,314** | | |
| Profits (Losses) Attributable to: | | | |
| Equity holders of the parent | -21,379 | | |
| Minority interest | 65 | | |
| Dividends paid | 824 | 281: Expense: Property expense other than interest | Not in profit & loss (income) statement. This information is elsewhere and should be added to expense. |

**Table A2.10 Shipping Corporation – Bridge Table from Accounting Balance Sheet to *GFSM 2001* Classifications (thousands of Country Z pounds)**

| | 2009 | 2008 | Change | GFSM 2001 Codes and Descriptors |
|---|---|---|---|---|
| **ASSETS** | | | | |
| Current Assets | | | | |
| Cash and cash equivalents | 7,531 | 25,813 | -18,282 | 6202: Stocks - Financial assets: Currency and deposits |
| Current investment | 530 | 181 | 349 | 6202: Stocks - Financial assets: Debt securities |
| Trade account receivables-net | 15,829 | 18,779 | -2,950 | 6208: Stocks - Financial assets: Other accounts receivable |
| Inventories and supplies-net | 6,779 | 6,104 | 676 | 612: Stocks - Nonfinancial assets: Inventories |
| Other current assets | 11,513 | 14,353 | -2,840 | 6208: Stocks - Financial assets: Other accounts receivable |
| **Total Current Assets** | **42,182** | **65,229** | **-23,048** | |
| Non-Current Assets | | | | |
| Investments in associated and subsidiary companies | 1,337 | 1,469 | -131 | 6205: Stocks - Financial assets: Equity and investment fund shares |
| Other long-term investments | 88 | 106 | -18 | 6205: Stocks - Financial assets: Equity and investment fund shares |
| Property, Plant and Equipment-Net | 207,064 | 207,153 | -89 | 611: Stocks - Nonfinancial assets: Fixed assets |
| Intangible assets-net | 808 | 898 | -90 | 611: Stocks - Nonfinancial assets: Fixed assets |
| Deferred income taxes | 6,406 | 3,976 | 2,429 | 6208: Stocks - Financial assets: Other accounts receivable |
| Other non-current assets | 1,650 | 1,444 | 206 | 6208: Stocks - Financial assets: Other accounts receivable |
| **Total Noncurrent Assets** | **217,353** | **215,046** | **2,307** | |
| **Total Assets** | **259,535** | **280,275** | **-20,741** | |
| **LIABILITIES** | | | | |
| Current Liabilities | | | | |
| Trade account payables | 7,375 | 10,066 | -2,691 | 6308: Stocks - Liabilities: Other accounts payable |
| Short-term loans | 21,488 | 4,962 | 16,526 | 6304: Stocks - Liabilities: Loans |
| Current portion of long-term loans | | | | |
| Debentures | 7,500 | 11,500 | -4,000 | 6304: Stocks - Liabilities: Loans |
| Long-term loans | 572 | 2,697 | -2,125 | 6304: Stocks - Liabilities: Loans |
| Liabilities under financial leases | 10,154 | 9,112 | 1,041 | 6304: Stocks - Liabilities: Loans |
| Promissory notes | 1,050 | 1,050 | 0 | 6304: Stocks - Liabilities: Loans |
| Provision | 458 | 0 | 458 | 6308: Stocks - Liabilities: Other accounts payable |

**Table A2.10 Shipping Corporation – Bridge Table from Accounting Balance Sheet to *GFSM 2001* Classifications *(continued)* (thousands of Country Z pounds)**

| | 2009 | 2008 | Change | GFSM 2001 Codes and Descriptors |
|---|---|---|---|---|
| **LIABILITIES** ***(continued)*** | | | | |
| Other current liabilities | | | | |
| Accrued expenses | 15,757 | 17,365 | -1,607 | 6308: Stocks - Liabilities: Other accounts payable |
| Accrued dividends | 71 | 3,121 | -3,049 | 6308: Stocks - Liabilities: Other accounts payable |
| Accrued income taxes | 34 | 879 | -845 | 6308: Stocks - Liabilities: Other accounts payable |
| Unearned transportation revenues | 30,263 | 32,482 | -2,219 | 6308: Stocks - Liabilities: Other accounts payable |
| Others | 3,861 | 4,317 | -456 | 6308: Stocks - Liabilities: Other accounts payable |
| **Total current liabilities** | **98,583** | **97,551** | **1,032** | |
| Non-Current Liabilities | | | | |
| Long-term debts | | | | |
| Debentures | 35,500 | 36,000 | -500 | 6303: Stocks - Liabilities: Debt Securities |
| Long-term loans | 4,831 | 1,355 | 3,476 | 6304: Stocks - Liabilities: Loans |
| Liabilities under financial leases | 65,336 | 70,572 | -5,236 | 6304: Stocks - Liabilities: Loans |
| Promissory notes | 750 | 1,800 | -1,050 | 6304: Stocks - Liabilities: Loans |
| Staff pension fund | 4,778 | 4,972 | -194 | 6306: Stocks - Liabilities: Insurance, pension and standardized guarantee schemes |
| Long-term provisions | 3,874 | 0 | 3,874 | 6308: Stocks - Liabilities: Other accounts payable |
| **Total noncurrent liabilities** | **115,070** | **114,699** | **370** | |
| **Total liabilities** | **213,652** | **212,250** | **1,402** | |

**Table A2.10 Shipping Corporation – Bridge Table from Accounting Balance Sheet to *GFSM 2001* Classifications *(continued)***
**(thousands of Country Z pounds)**

| | 2009 | 2008 | Change | GFSM 2001 Codes and Descriptors |
|---|---|---|---|---|
| **SHAREHOLDER'S EQUITY** | | | | |
| Share capital | | | | |
| Authorized | | | | |
| 1,700.00 million ordinary shares par value of Z£10 each | 17,000 | 17,000 | 0 | |
| Issued and paid-up | | | | |
| 1,698.90 million ordinary shares par value of Z£10 each | 16,989 | 16,989 | 0 | |
| Premium on share capital securities | 15,638 | 15,638 | 0 | |
| Retained earnings | | | | |
| Appropriated | | | | |
| Legal reserve | 1,700 | 1,700 | 0 | |
| Unappropriated | 11,276 | 33,423 | -22,147 | |
| Total Company Shareholders' Equity | 45,603 | 67,750 | -22,147 | |
| Minority Interests | 279 | 275 | 4 | |
| **Total Shareholders' Equity** | **45,882** | **68,025** | **-22,143** | 6305: Stocks - Liabilities : Equity and investment fund shares |
| **Total liabilities and shareholders' equity** | **259,535** | **280,275** | **-20,741** | |

**Table A2.11 Shipping Corporation – Bridge Table from Accounting Cash Flow Statement to *GFSM 2001* Classifications (thousands of Country Z pounds)**

| | **2009** | **GFSM 2001 Codes and Descriptors** |
|---|---|---|
| Cash Flows from Operating Activities | | |
| Profits (Losses) before Income Tax | -23,600 | |
| Adjustments to reconcile net profit to cash provided by (paid from) operating activities : | | |
| Depreciation and amortization | 20,281 | |
| Dividends income | - | |
| Income from investments by equity method | 64 | |
| Stock dividends | - | |
| Interest income | -493 | |
| Interest expenses | 5,485 | |
| Gains on sales of assets | -373 | |
| Gain on current investments-available-for-sale securities | -2 | |
| Losses on foreign currency exchange | 4,488 | |
| Provision for obsolete inventories and supplies | 107 | |
| Doubtful accounts | 45 | |
| Impairment loss of investment | - | |
| Impairment loss of vessels | 4,426 | |
| Impairment loss of assets | 324 | |
| Operating profit before changes in operating assets and liabilities | 10,752 | |
| Decrease (increase) in operating assets : | | |
| Trade account receivables | 2,330 | |
| Inventories and supplies | -783 | |
| Prepaid expenses and deposits | 342 | |
| Tax refund | 1,497 | |
| Other current assets | 1,463 | |
| Deferred Income Taxes | -20 | |
| Other assets | -74 | |
| Deferred charges | -338 | |
| Increase (decrease) in operating liabilities : | 0 | |
| Trade account payables | -2,714 | |
| Accrued expenses and other current liabilities | -1,408 | |
| Staff pension fund | -194 | |
| Unearned transportation revenue | -2,196 | |
| Long-term provisions | 3,874 | |
| Payment of income tax | -1,160 | |
| **Net Cash from Operating Activities** | **11,371** | CIO: Net cash inflow from operating activities |

**Table A2.11 Shipping Corporation – Bridge Table from Accounting Cash Flow Statement to *GFSM 2001* Classifications (thousands of Country Z pounds) *(continued)***

| | 2009 | GFSM 2001 Codes and Descriptors |
|---|---|---|
| **Net Cash from Operating Activities** | **11,371** | CIO: Net cash inflow from operating activities |
| **Cash Flows from Investing Activities** | | |
| Cash paid for acquisition of fixed assets | -21,403 | 31.1: Purchases of nonfinancial assets – ***change sign*** |
| Cash paid for intangible assets | -136 | 31.1: Purchases of nonfinancial assets- ***change sign*** |
| Cash received from transferring down payment of aircraft and aircraft spare parts | 317 | 31.2: Sales of nonfinancial assets |
| Cash received from sales of assets | 702 | 31.2: Sales of nonfinancial assets |
| Interest income | 471 | 1411: Other revenue: Property income: Interest |
| Dividends income | 67 | 1411: Other revenue: Property income: Dividends |
| Investments decrease (increase) | -1 | 32x: Net acquisition of financial assets other than cash – ***change sign*** |
| Cash received from current investments-available-for-sale securities | -327 | 32x: Net acquisition of financial assets other than cash –***change sign*** |
| **Net Cash Used in Investing Activities** | **-20,309** | |
| **Cash Flows from Financing Activities** | | |
| Cash received from debentures | 7,000 | 3303: Net incurrence of liabilities: Securities other than shares |
| Cash received from short-term loans | 52,272 | 3304: Net incurrence of liabilities: Loans |
| Cash received from long-term loans | 4,528 | 3304: Net incurrence of liabilities: Loans |
| Cash received from issuing ordinary shares | 0 | 3305: Net incurrence of liabilities: Shares & other equity |
| Cash received from premium on ordinary shares | 0 | 3305: Net incurrence of liabilities: Shares & other equity |
| Cash paid for repayment of short-term loans | -35,692 | 3304: Net incurrence of liabilities: Loans |
| Cash paid for repayment of debentures | -11,500 | 3304: Net incurrence of liabilities: Loans |
| Cash paid for repayment of long-term loans | -15,349 | 3304: Net incurrence of liabilities: Loans |
| Cash paid for repayment of promissory notes | -1,050 | 3304: Net incurrence of liabilities: Loans |
| Cash paid for loan interest | -5,619 | 24: Expense: Interest |
| Dividends paid | -3,873 | 281: Other expense: Property expense other than interest |
| **Net Cash from (used in) Financing Activities** | **-9,283** | |
| Increase in cash and cash equivalents | -18,221 | |
| Increase from changes in the exchange rate on cash and cash equivalents | -61 | |
| Cash and cash equivalents at the beginning of the periods | 25,813 | |
| **Cash and Cash Equivalents at the End of the Periods** | **7,531** | |

**Table A2.12A Shipping Corporation – Derivation Tables for *GFSM 2001* Main Aggregates (thousands of Country Z pounds)**

| | | | 2009 |
|---|---|---|---|
| | **Total revenues (from Income Statement)** | | **202,606** |
| **Less:** | Gains on sale of assets | | -373 |
| | Gain on capital investments | | -2 |
| | | | |
| | **Total revenue *GFSM 2001*** | | **202,230** |
| | | | |
| | **Total expenses (from Income Statement)** | | **220,720** |
| **Plus:** | Finance costs | | 5,485 |
| | Income tax expenses | | -2,285 |
| | Dividends paid | | 824 |
| **Less:** | Share of losses (profits) from investments by the equity method | | -65 |
| | Losses on foreign currency exchange | | -4,471 |
| | Increase from changes in exchange rate on cash and cash eq. | | -61 |
| | Impairment loss of vessels | | -4,426 |
| | Impairment loss of assets | | -324 |
| | Provision for obsolete inventories and supplies | | -107 |
| | Doubtful accounts | | -45 |
| | | | |
| | **Total expense *GFSM 2001*** | | **215,244** |
| | | | |
| | **From Balance Sheet and Income Statement** | | |
| | Property, Plant and Equipment-Net | | -89 |
| | Intangible assets-net | | -90 |
| | Inventories and supplies-net | | 676 |
| **Less:** | Gains on sale of assets | | -373 |
| | Impairment loss of vessels | | -4,426 |
| | Impairment loss of assets | | -324 |
| | Provision for obsolete inventories and supplies | | -107 |
| | | | |
| | **Net acquisition of nonfinancial assets *GFSM 2001*** | | **4,980** |
| | | | |
| | **From Balance Sheet and Income Statement** | | |
| | Cash and cash equivalents | | -18,282 |
| | Current investment (debt securities) | | 349 |
| | Investments in associated and subsidiary companies | | -131 |
| | Other long-term investments | | -18 |
| | Other accounts receivable | | -3,155 |
| **Plus:** | Increase from changes in exchange rate on cash and cash eq. | | 61 |
| | Gain on capital investments | | 2 |
| | Share of losses (profits) from investments by the equity method | | 65 |
| | Doubtful accounts | | 45 |
| | | | |
| | **Net acquisition of financial assets *GFSM 2001*** | | **-21,064** |
| | | | |

**Table A2.12A Shipping Corporation – Derivation Tables for *GFSM 2001* Main Aggregates *(continued)*(thousands of Country Z pounds)**

| | | | **2009** |
|---|---|---|---|
| | **From Balance Sheet and Income Statement** | | |
| | Debentures (debt securities) | | -500 |
| | Loans | | 8,632 |
| | Total shareholders' equity | | -22,143 |
| | Staff pension fund | | -194 |
| | Other accounts payable | | -6,536 |
| **Less:** | Losses on foreign currency exchange (loans) | | -4,471 |
| | Revaluation shareholder's equity | | 22,143 |
| | | | |
| | **Net incurrence of liabilities *GFSM 2001*** | | **-3,069** |
| | | | |
| | **From Income Statement** | | |
| | Gains on sale of assets | | 373 |
| | Gain on capital investments | | -2 |
| | Share of losses (profits) from investments by the equity method | | -65 |
| | Increase from changes in exchange rate on cash and cash eq. | | -61 |
| | Losses on foreign currency exchange (loans) | | -4,471 |
| | Revaluation shareholder's equity | | 22,143 |
| | Impairment loss of vessels | | -4,426 |
| | Impairment loss of assets | | -324 |
| | | | |
| | **Holding gains and losses *GFSM 2001*** | | **13,167** |
| | | | |
| | **From Cash Flow Statement** | | |
| | Provision for obsolete inventories and supplies | | -107 |
| | Doubtful accounts | | -45 |
| | | | |
| | **Other changes in the volume of assets and liabilities *GFSM 2001*** | | **-152** |

**Table A2.12B Shipping Corporation – Derivation Tables for *GFSM 2001* Main Cash Aggregates (thousands of Country Z pounds)**

| | | | 2009 |
|---|---|---|---|
| | **From Cash Flow Statement** | | |
| | Net cash from operating activities | | 11,371 |
| **Plus:** | Interest income | | 471 |
| | Dividends income | | 67 |
| **Less:** | Cash paid for loan interest | | 5,619 |
| | Dividends paid | | 3,873 |
| | | | |
| | **Net cash inflow from operating activities *GFSM 2001*** | | **2,418** |
| | | | |
| | **From Cash Flow Statement** | | |
| | Cash paid for acquisition of fixed assets | | 21,403 |
| | Cash paid for intangible assets | | 136 |
| **Less:** | Cash received from transferring down payment of aircraft and aircraft spare parts | | 317 |
| | Cash received from sales of assets | | 702 |
| | | | |
| | **Net cash outflow from investments in nonfinancial assets *GFSM 2001*** | | **20,520** |
| | | | |
| | **From Cash Flow Statement** | | |
| | Cash received from current investments, available for sale securities | | 327 |
| | Investments decrease | | 1 |
| **Plus:** | Cash received from debentures | | 7,000 |
| | Cash received from short-term loans | | 52,272 |
| | Cash received from long-term loans | | 4,528 |
| **Less:** | Cash paid for repayment of short-term loans | | 35,692 |
| | Cash paid for repayment of debentures | | 11,500 |
| | Cash paid for repayment of long-term loans | | 15,349 |
| | Cash paid for repayment of promissory notes | | 1,050 |
| | | | |
| | **Net cash inflow from financing activities *GFSM 2001*** | | **-119** |
| | | | |
| | **From Cash Flow Statement** | | |
| | Cash and cash equivalents at the end of the period | | 7,531 |
| **Less:** | Cash and cash equivalents at the beginning of the period | | 25813 |
| | Increase in the effect from changes in the exchange rate on cash and cash equivalents | | 61 |
| | | | |
| | **Net change in the stock of cash *GFSM 2001*** | | **-18,221** |

**Table A2.13 Shipping Corporation – *GFSM 2001* Revenue and Expense (thousands of Country Z pounds)**

| ***GFSM 2001* code** | ***GFSM 2001* descriptors** | **2009** |
|---|---|---|
| **1** | **Revenue** | **202,230** |
| 11 | Taxes | 0 |
| 12 | Social contributions | 0 |
| 13 | Grants | 0 |
| 14 | Other revenue | 202,230 |
| 141 | Property income | 493 |
| 142 | Sales of goods and services | 201,737 |
| 143 | Fines, penalties, and forfeits | 0 |
| 144 | Voluntary transfers other than grants | 0 |
| 145 | Miscellaneous other revenue | 0 |
| **2** | **Expense** | **215,244** |
| 21 | Compensation of employees | 30,607 |
| 22 | Use of goods and services | 155,892 |
| 23 | Consumption of fixed capital | 20,281 |
| 24 | Interest | 5,485 |
| 25 | Subsidies | 0 |
| 26 | Grants | 0 |
| 27 | Social benefits | 0 |
| 28 | Miscellaneous other expense | 2,979 |
| 281 | Property expense other than interest | 824 |
| 282 | Other expense | 2,155 |
| **NOB** | **Net operating balance** | **-13,014** |

**Table A2.14 Shipping Corporation – *GFSM 2001* Statement of Sources and Uses of Cash (thousands of Country Z pounds)**

| ***GFSM 2001*** **Code** | | **2009** |
|---|---|---|
| 1 | Cash receipts from operating activities | .... |
| 2 | Cash payments for operating activities | .... |
| **CIO** | **Net cash inflow from operating activities (1-2)** | **2,418** |
| 31 | Cash flows from investments in nonfinancial assets | |
| 31.1 | Purchases of nonfinancial assets | 21,539 |
| 31.2 | Sales of nonfinancial assets | 1,019 |
| | Net cash outflow from investments in nonfinancial assets | 20,520 |
| **CSD** | **Cash surplus(+)/deficit** | **-18,102** |
| | Cash flows from financing activities: | |
| 32x | Net acquisition of financial assets excluding cash | 328 |
| 33 | Net incurrence of liabilities | 209 |
| NFA | Net cash inflow from financing activities (33-32x) | -119 |
| **NCB** | **Net change in the stock of cash (CSD+NFA)** | **-18,221** |

**Table A2.15 Shipping Corporation – *GFSM 2001* Integrated Statement of Stocks and Flows (thousands of Country Z pounds)**

| ***GFSM 2001*** **Code** | | **2009 Opening Balance Sheet** | **Trans-actions** | **Other Economic Flows a/** | **2009 Closing Balance Sheet** |
|---|---|---|---|---|---|
| 1 | Revenue | | 202,230 | | |
| 2 | Expense | | 215,244 | | |
| | **Net worth/change in net worth** | **0** | **-13,014** | **13,015** | **0** |
| ***1** | **Nonfinancial assets** | **214,154** | **4,980** | **-4,484** | **214,651** |
| *11 | Fixed assets | 208,051 | 4,198 | -4,377 | 207,872 |
| *12 | Inventories | 6,104 | 783 | -107 | 6,779 |
| *13 | Valuables | 0 | 0 | 0 | 0 |
| *14 | Nonproduced assets | 0 | 0 | 0 | 0 |
| ***2** | **Financial assets** | **66,121** | **-21,064** | **-173** | **44,883** |
| *201 | Monetary gold and SDRs | 0 | 0 | 0 | 0 |
| *202 | Currency and deposits | 25,813 | -18,221 | -61 | 7,531 |
| *203 | Debt securities | 181 | 351 | -2 | 530 |
| *204 | Loans | 0 | 0 | 0 | 0 |
| *205 | Equity and investment fund shares | 1,574 | -84 | -65 | 1,425 |
| *206 | Insurance, pension and SGS | 0 | 0 | 0 | 0 |
| *207 | Financial derivatives | 0 | 0 | 0 | 0 |
| *208 | Other accounts receivable | 38,552 | -3,110 | -45 | 35,397 |
| ***3** | **Liabilities** | **280,275** | **-3,069** | **-17,672** | **259,535** |
| *301 | SDRs | 0 | 0 | 0 | 0 |
| *302 | Currency and deposits | 0 | 0 | 0 | 0 |
| *303 | Debt securities | 36,000 | -500 | 0 | 35,500 |
| *304 | Loans | 103,049 | 4,161 | 4,471 | 111,681 |
| *305 | Equity and investment fund shares | 68,025 | 0 | -22,143 | 45,882 |
| *306 | Insurance, pension and SGS b/ | 4,972 | -194 | 0 | 4,778 |
| *307 | Financial derivatives | 0 | 0 | 0 | 0 |
| *308 | Other accounts payable | 68,229 | -6,536 | 0 | 61,693 |
| | Memorandum items: | | | | |
| *M3 | Net financial worth | -214,154 | -17,995 | 17,499 | -214,651 |
| *M35 | Gross debt | 212,250 | -3,069 | 4,471 | 213,652 |

a/ Other economic flows are revaluations and other volume changes in assets and liabilities
For the *GFSM 2001* codes, replace * with 3 for transactions, 9 for other economic flows, and 6 for stock positions.

b/SGS: Standardized guarantee schemes

## Epilogue

We hope that this Guide provides answers to a large number of the questions compilers may have in connection to using the *GFSM 2001* methodology for compiling government finance statistics. The additional materials to which references have been provided in the various chapters should also help address questions compilers may have on the subject. Nevertheless, some questions are bound to be left unanswered. For these cases, it is important for GFS compilers in member countries to know that there is an economist in STA assigned to address issues related to their country. You may contact this economist at any time and at no cost to the country, by sending an e-mail to STAGOMail@imf.org.

Last, we appreciate receiving feedback from users of this Guide. If you have any comments suggestions, or questions concerning the Guide, you can send them to us at the e-mail indicated in the previous paragraph.