
GOVERNMENT FINANCE

STATISTICS MANUAL 2001

COMPANION MATERIAL

**NONFINANCIAL PUBLIC SECTOR STATISTICS —
CONSOLIDATION**



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OCTOBER 2008**

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“Consolidation is an imperfect science” (Government Finance Statistics Manual, 1986).

The *Government Finance Statistics Manual 2001 (GFSM 2001)* calls for the compilation of consolidated statistics for the general government sector, as well as the public sector. Consolidation—which is the last step in the process of compiling statistics that comply with the *GFSM 2001*—is a method of presenting data for a set of units as if they constituted a single unit. Being a conceptual document, the *GFSM 2001* does not provide any guidance on the practical aspects of the consolidation process. However, an earlier paper in the *GFSM 2001* Companion Material series contained such guidance, albeit limited to the general government sector.¹ This paper expands on that work by proposing standardized and methodologically sound procedures for consolidating statistics of the nonfinancial public corporations subsector, and for consolidating these statistics with those of the general government sector to derive nonfinancial public sector statistics. This paper does not address the selection of data sources and preparation, derivation, and classification of nonfinancial public corporations statistics.²

The *GFSM 2001* framework can be used for analyzing and evaluating fiscal policy for any subsector or component of the public sector (e.g., general government), or for the entire public sector. The focus of this paper is the **nonfinancial public sector**. The purpose of consolidated statistics for the nonfinancial public sector is (i) to measure the macroeconomic impact of government and its nonfinancial public corporations on the rest of the economy; and (ii) to identify all sources of potential fiscal risk in the nonfinancial public sector. To this end, all main *GFSM 2001* statements, aggregates, and balancing items should be compiled.

It is important to distinguish between **aggregated** statistics and **consolidated** statistics because improper use of the terms “consolidation” and “consolidated statistics” may mislead users of nonfinancial public sector (or general government) statistics. Often, the simple aggregation of data for different units or subsectors (e.g., adding general government and nonfinancial public corporations statistics) is incorrectly called “consolidation,” or the result of such a simple aggregation of data is called “consolidated statistics”. The latter would be true **only** if there are no flows or reciprocal stock positions among the units for which the statistics are compiled. For nonfinancial public sector statistics, this would be extremely unlikely; normally, many flows occur and considerable reciprocal stock positions are held between these units in the public sector.

Conceptually, consolidation entails the elimination of **all** flows and **all** debtor-creditor relationships among the units that are combined into a single group. The reason for consolidation, however, should always be to produce analytically useful aggregates. Proper consolidation depends on a thorough review of the accounts in order to identify transactions and stock positions among members of that group. For practical reasons, the goal is usually not perfect consolidation, but rather the elimination, in a consistent manner, of flows and stock positions that will have a significant effect on the final aggregates. Where a review of the accounts reveals the existence of small flows or stocks of which the

¹ See *GFSM 2001* Companion Material, *Consolidation of the General Government Sector*, by Kevin O’Connor (IMF Expert), Ethan Weisman and Tobias Wickens, November 2004, IMF, Washington, DC. (<http://www.imf.org/external/pubs/ft/gfs/manual/comp.htm>)

² This paper is the first in a series of papers on the compilation of *GFSM 2001* statistics for public corporations.

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counterparty is difficult to identify, this paper recommends that resources should not be wasted in identifying these minor transactions and their magnitudes.

This paper proposes two approaches to the consolidation of transactions of the general government sector with those of nonfinancial public corporations; each approach being determined by data availability and analytical needs:

- (i) 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, net lending/borrowing balances, and net acquisitions of financial assets and net incurrences of liabilities of the general government and the nonfinancial public corporations; or
- (ii) 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 incurrences of liabilities of the general government and the nonfinancial public corporations.

For most analytical purposes, this paper does not propose to consolidate any taxes, as well as fines and penalties, payable by nonfinancial public corporations to general government. It can be argued that these compulsory transfers are made by public corporations, which are *market producers*, and that, for analytical purposes, all such payments from market producers to government (a nonmarket producer) should be treated similarly, regardless of whether they are in the public or private sector. Therefore, from an analytical point of view, voluntary transfers and exchanges are the only flows that need to be consolidated in revenue and expense transactions. For consolidated nonfinancial public sector statistics, the following items should be consolidated, in likely order of importance under each type of flow/stock:

- (i) Revenue and expense transactions:
 - Dividends and withdrawals of income from quasi-corporations;
 - Subsidies receivable/payable;
 - Current and capital transfers;
 - Interest income/expense;
 - Rent receivable/payable; and
 - Purchases/sales of goods and services.
- (ii) Flows and stocks of nonfinancial assets:
 - Acquisition and disposals
- (iii) Flows and stocks of financial assets and liabilities:
 - Shares and other equity;
 - Loans;
 - Securities other than shares; and
 - Other accounts receivable/payable.

To maintain symmetry, it is important to ensure that, if flows in assets and liabilities are consolidated, the corresponding stock positions are also consolidated. This paper provides practical guidelines and rules of thumb to assist compilers of consolidated nonfinancial public sector statistics, and illustrates the consolidation process with numerical examples.

I. THE CONSOLIDATION OF STATISTICS—AN INTRODUCTION³

*This paper discusses the consolidation of nonfinancial public sector statistics. Specifically, it deals with the consolidation of statistics for the **nonfinancial public corporations subsector**, and with the consolidation of statistics for the **nonfinancial public sector** (general government and nonfinancial public corporations).*

The Government Finance Statistics Manual 2001 (GFSM 2001) calls for the compilation of consolidated statistics for the general government sector as well as the public sector. The conceptual framework of the GFSM 2001 system can be applied for analyzing and evaluating fiscal policy for any subsector or component of the public sector (e.g., general government), or for the entire public sector.⁴

The first section of this paper gives a general overview of the consolidation process, in the context of the GFSM 2001 statistics compilation process. Section II defines the public sector and its subsectors and Section III discusses public corporations and public sector statistics. It examines the reasons for compiling statistics for public corporations and the public sector, and discusses the statements, aggregates, and balancing items to be compiled. Section IV discusses in detail the consolidation of nonfinancial public sector statistics. Attention is given to several aspects: the individual flows and stocks that should be consolidated, some practical guidelines, e.g., priorities in the consolidation process, and, lastly, some rules of thumb to guide compilers when encountering problems in the consolidation process.

A. Overview of the GFSM 2001 Statistics Compilation Process

The government finance statistics (GFS) compilation process requires defining the scope and coverage of the general government sector and its subsectors (or the public sector and its subsectors); the selection of appropriate primary sources for the units and entities covered; a thorough analysis of the source data to identify any adjustments that may be required to meet the *GFSM 2001* methodology, the appropriate and consistent application of these adjustments to the primary source data (including the classification of the source data in terms of the *GFSM 2001* nomenclature); and, lastly, combining these statistics, through the process of consolidation, to form a specific subsector or sector of government (or the public sector). **Four main stages can be distinguished in this process:**⁵

1. **Institutional Coverage and Sectorization.** The first stage requires identifying all units and entities constituting the general government sector, as well as public corporations (institutional coverage), and classifying these units/entities into the subsector to which they belong (sectorization).

³ The author gratefully acknowledges helpful suggestions on earlier drafts provided by Mrs. Sagé de Clerck and Messrs. Kevin O'Connor and Cor Gorter.

⁴ A shift from the *GFSM 1986* to the *GFSM 2001* statistical framework will significantly ease the compatibility problem between general government and public corporations data and, thus, the compilation of comprehensive statistics for the entire public sector (or a subsector thereof). This is largely because the *GFSM 2001* emphasizes the recording of statistics on an accrual basis (without losing information on cash).

⁵ In principle, all these stages are followed, regardless of whether the compilation process is automated or not. In practice, some of these stages may take place simultaneously, especially in an automated data compilation system.

2. **Selection of Data Sources.** The second stage involves the selection of appropriate (primary) data sources for each unit/entity of the general government sector (or the public sector) for which data are compiled.

3. **Preparations before the Compilation of GFSM 2001 Statistics.** The third stage involves an analysis of the primary data sources to *identify* any adjustments to the source data that are required to comply with *GFSM 2001* methodology. These adjustments may range from adjustments for coverage and basis of recording to classification adjustments. The latter is achieved by the *development* of bridge tables (or classification keys).

4. **Compilation of GFSM 2001 Statistics.** The fourth stage consists of two distinct tasks: (i) the classification and derivation of *GFSM 2001* statistics, and (ii) the consolidation of *GFSM 2001* statistics.

- During the *classification and derivation* task, the adjustments identified during the analysis in the third stage are *applied* to the source data in a consistent manner. This is achieved through the *application* of *bridge tables* and *derivation tables* to the source data for a specific period. Bridge tables facilitate the classification of the detailed source data to the detailed *GFSM 2001* categories, for each of the government units/entities. Derivation tables are used to derive the *GFSM 2001* statistics for transactions (revenue, expense, and transactions in assets and liabilities), other economic flows (holding gains and other changes in the volume of liabilities), and stocks (nonfinancial assets, financial assets, liabilities). Once the data from each of the sources have been adjusted to the *GFSM 2001* methodology, the results are *combined by simple aggregation* to provide a first “measure” of the data in terms of the *GFSM 2001* principles.
- **Consolidation** refers to presenting statistics for the combined set of government units (as derived and aggregated in the preceding task) as if they constituted a single unit. In principle, this process involves eliminating all transactions and reciprocal stock positions among the government (or public sector) units/entities being combined.

It is imperative that the *GFSM 2001* statistics compilation process produces properly and consistently prepared data that are useful for fiscal analysis. To achieve this, appropriate and systematic data compilation procedures should be established and followed at all four stages.

This paper focuses primarily on the last step of the *GFSM 2001* compilation process, i.e., consolidation. Specifically, it deals with the consolidation of general government and nonfinancial public corporations⁶ statistics. Other steps/stages in the general government data compilation process are discussed in separate papers.⁷ Other than this paper, no companion materials for the compilation steps/stages of public corporations statistics have been developed at this stage.

⁶ The nonfinancial public corporations subsector, as well as other subsectors of the public sector, are defined in Section II.

⁷ See the *GFSM 2001* Companion Material webpage: <http://www.imf.org/external/pubs/ft/gfs/manual/comp.htm>.

B. What is Consolidation?

Definitions

The process of consolidation, as outlined in the *GFSM 1986*, can be summarized as follows: When compiling statistics for a sector or subsector of government (or the public sector), it is necessary to eliminate flows⁸ and reciprocal stock positions between all the units within the circle of government (or public sector) being measured, and to combine in a common set of categories the sum of their “external” transactions or stock positions crossing the circle to and from the rest of the economy.⁹ In a similar vein, the *GFSM 2001* defines consolidation as a method of presenting statistics for a set of units (or entities) as if they constituted a single unit.

While different wording is used in the *GFSM 1986* and *GFSM 2001*, the mechanism for, and meaning of, consolidation is the same. A consolidated set of accounts for a unit or group of units is produced by, first, an **aggregation** of all flows and stocks within an agreed analytical framework, followed by the **elimination** of all flows and stocks that represent relationships among the units or entities being consolidated.

When compiling public sector statistics, two types of consolidation may be necessary:

- First, consolidation is done **within** a particular subsector (e.g., consolidation within the nonfinancial public corporations subsector) to produce consolidated statistics for that particular subsector.
- Second, consolidation is done **between** subsectors of the public sector (e.g., between the general government sector and the nonfinancial public corporations subsector) to produce consolidated statistics for a particular grouping of the public sector.

These two types of consolidation are discussed in detail in Section IV.A. of this paper, but can, nonetheless, be illustrated with the two simple examples in Tables 1 and 2 below.

Example 1, Consolidation of transactions within a subsector: Assume there are three nonfinancial public corporations. Corporation 1 extends a loan of 200 currency units to corporation 3. No other flows or reciprocal stock positions exist. At the end of the period, the Statement of Operations of the **consolidated nonfinancial public corporations subsector** will be as follows:

⁸ As in other macroeconomic statistical systems, changes in stocks can be fully explained by the flows in the *GFSM 2001* system. There are two types of flows: transactions and other economic flows. The latter comprises holding gains/losses (revaluations) and other changes in the volume of assets and liabilities.

⁹ See *A Manual on Government Finance Statistics*, IMF, 1986, p. 63.

**Table 1: Illustrating Consolidation Within a Subsector
Nonfinancial Public Corporations Subsector – Statement of Operations**

	Nonfinancial public corporation 1	Nonfinancial public corporation 2	Nonfinancial public corporation 3	Aggregated nonfinancial public corporations subsector	Consolidation	Consolidated nonfinancial public corporations subsector
	[1]	[2]	[3]	[1]+[2]+[3]=[4]	[5]	[4]-[5]=[6]
Revenue	5,000	1,000	3,000	9,000	0	9,000
Expense	4,000	1,200	3,500	8,700	0	8,700
<i>Net operating balance</i>	<i>1,000</i>	<i>-200</i>	<i>-500</i>	<i>300</i>	<i>0</i>	<i>300</i>
Net acquisition of nonfinancial assets	800	100	650	1,550	0	1,550
<i>Net lending/borrowing</i>	<i>200</i>	<i>-300</i>	<i>-1,150</i>	<i>-1,250</i>	<i>0</i>	<i>-1,250</i>
Net acquisition of financial assets o/w loan to corporation 3	2,000	450	900	3,350	-200	3,150
	200	0	0	200	-200	0
Net incurrence of liabilities o/w loan from corporation 1	1,800	750	2,050	4,600	-200	4,400
	0	0	200	200	-200	0

Example 2, Consolidation of transactions between subsectors: The general government sector makes a capital transfer of 350 currency units to nonfinancial public corporation 2. At the end of the period, the Statement of Operations of the *consolidated nonfinancial public sector* will be as follows:

**Table 2: Illustrating Consolidation Between Subsectors
Nonfinancial Public Sector – Statement of Operations**

	General government sector (consolidated)	Nonfinancial public corporations subsector (consolidated)	Aggregated nonfinancial public sector	Consolidation	Consolidated nonfinancial public sector
	[1]	[2]	[1]+[2]=[3]	[4]	[3]-[4]=[5]
Revenue o/w capital transfer from general government	12,000	9,000	21,000	-350	20,650
	0	350	350	-350	0
Expense o/w capital transfer to non-financial public corporation 2	14,000	8,700	22,700	-350	22,350
	350	0	350	-350	0
<i>Net operating balance</i>	<i>-2,000</i>	<i>300</i>	<i>-1,700</i>	<i>0</i>	<i>-1,700</i>
Net acquisition of nonfinancial assets	3,000	1,550	4,550	0	4,550
<i>Net lending/borrowing</i>	<i>-5,000</i>	<i>-1,250</i>	<i>-6,250</i>	<i>0</i>	<i>-6,250</i>
Net acquisition of financial assets	4,500	3,150	7,650	0	7,650
Net incurrence of liabilities	9,500	4,400	13,900	0	13,900

Aggregated vs. consolidated statistics

It is important to distinguish between aggregated statistics and consolidated statistics because improper use of the terms “consolidation” and “consolidated statistics” may mislead users of public sector (or general government) statistics.

Often, a simple horizontal aggregation¹⁰ of data (adding general government and nonfinancial public corporations statistics) is incorrectly called “consolidation,” or the result of such a simple aggregation of data is called “consolidated statistics”. The latter would be true *only* if there are no flows or reciprocal stock positions among the units for which the statistics are compiled. For nonfinancial public sector statistics, this would be extremely unlikely.

The process of consolidation *follows* the horizontal aggregation of data and it is only after the consolidation process that *consolidated statistics* (consolidated nonfinancial public sector) are produced. When statistics are added horizontally and no flows or reciprocal stock positions are eliminated, these statistics should be called *aggregated statistics* (e.g., aggregated nonfinancial public sector), not consolidated statistics.

C. What are the Effects of Consolidation?

By eliminating all flows and reciprocal stock positions among the units being consolidated, consolidation has the effect of *only measuring flows or stocks of the consolidated unit(s) vis-à-vis units outside the boundary*. Consolidation will not reflect the economic interaction within the grouping of institutional units, but only those flows or stocks that involve interactions with all other institutional units in the economy (or rest of the world).

Consolidation avoids double-counting of transactions or stocks among a grouping of institutional units, thus producing aggregates that are not affected by internal transactions or stock positions. *It is this avoidance of double-counting that produces the increased analytical usefulness of consolidated statistics.*

Consolidation *does not affect the GFSM 2001 balancing items* (e.g., the net operating balance, net lending/borrowing, or net worth). In other words, the balancing items produced by simple aggregation (aggregated statistics) are the same as those produced by consolidated statistics. This is the result of the *symmetry of the consolidation process*, wherein the two sides of the consolidation adjustment always fall within the same broad section of the *GFSM 2001* analytical framework.

This principle can be illustrated as follows (see Table 3 below): Suppose the general government sector’s net lending/borrowing is –550 and that of public corporations is –250. Included in these numbers is a loan of 400 from the general government sector (e.g., the budgetary central government) to a public corporation. The net lending/borrowing of –800 of the “aggregated public sector” and “consolidated public sector” is the same, although the net acquisition of financial assets (general government) and the net incurrence of liabilities (public corporation) would be smaller under consolidation than under aggregation.

¹⁰ Horizontal aggregation is the process of adding together data for institutional units/entities, subsectors, or sectors within an analytical framework. On the other hand, vertical aggregation of data refers to aggregation of flows or stocks *within* the accounts for an individual institutional unit, subsector, or sector, and produces “aggregates” that have a specific meaning within an analytic framework. For example, in the *GFSM 2001*, all transactions for a specific institutional unit that increase net worth are added together (vertically) to produce the aggregate “revenue”. Balancing items (e.g., the net operating balance) are calculated as the difference between aggregates.

Table 3: Illustrating the Effect of Consolidation on the *GFSM 2001* Balancing Items

	General Government	Public Corporations	Aggregated Public Sector	Consolidation	Consolidated Public Sector
	[1]	[2]	[3]=[1]+[2]	[4]	[5]=[3]+[4]
Revenue	1,200	500	1,700	0	1,700
Expense	1,500	400	1,900	0	1,900
Net operating balance	-300	100	-200	0	-200
Net acquisition of non-financial assets	250	350	600	0	600
Net lending/borrowing	-550	-250	-800	0	-800
Net acquisition of financial assets	450	600	1,050	-400	650
o/w Currency & deposits	-400	400	0	0	
o/w Loans	400	0	400	-400	0
Net incurrence of liabilities	1,000	850	1,850	-400	1,450
o/w Loans	0	400	400	-400	0

When consolidated data produce different balancing items from the unconsolidated (aggregated) data, errors have been made; *consolidation adjustments must, both in principle and in practice, be symmetrical.*¹¹

D. Why Consolidate *GFSM 2001* Statistics?

In the standard *1993 SNA* presentation, national accounts data are always presented on a gross, unconsolidated basis. The IMF's government finance statistics have always been presented on a consolidated basis. The reasons why general government statistics should be consolidated are discussed in detail in the paper *Consolidation of the General Government Sector*.¹² In summary, that paper concludes that:

“The *GFSM 2001* recommends the consolidated presentation of general government statistics because of its analytical usefulness. Consolidation eliminates the distorting effects on aggregates of differing administrative arrangements across countries. [...] The main impact of consolidation on the data is on the magnitude of the aggregates [...] To relate government aggregates to the economy as a whole (for example, revenue or expense to GDP ratios), it is better to eliminate the internal churning of funds and include only those transactions that actually cross the boundaries with other sectors or nonresidents. If, indeed, the main analytical use for consolidated data is in the aggregates that are compiled, it may be prudent to determine the extent of internal transactions before committing substantial resources to the consolidation exercise. The general guideline to be followed is that resources should be allocated to identifying consolidation items in direct proportion to their numeric importance.”

¹¹ It should be noted that in the *GFSM 1986* there was one major instance in which this symmetry was not observed. Loans for policy purposes by central government to local government(s) were classified “above-the-line” for central government as lending minus repayments (a deficit determining item), while the local government classified them “below-the-line” as financing. As such, consolidating the central government and local government in the *GFSM 1986* resulted in overall deficit/surplus and financing data that were different from when the transactions were simply aggregated. This asymmetry has been removed in the *GFSM 2001* framework by classifying all transactions in financial assets and liabilities within the same account.

¹² *GFSM 2001* Companion Material, *Consolidation of the General Government Sector*, by Kevin O’Connor (IMF Expert), Ethan Weisman and Tobias Wickens, November 2004, IMF, Washington, DC. (<http://www.imf.org/external/pubs/ft/gfs/manual/comp.htm>)

The very same arguments apply to *why statistics of the public corporations and those of the public sector should be consolidated: It is done to get rid of the distorting effects on the magnitudes caused by the internal flows of funds and stock positions, and thereby including only those flows or stock positions that actually cross the boundaries with other sectors of the economy or nonresidents.*

Before discussing in detail the consolidation of public corporations’ statistics and public sector statistics, it is necessary to define and discuss the sectorization of the public sector briefly.

II. THE PUBLIC SECTOR

This section provides definitions of the various public sector units, and describes briefly the sectorization of the public sector.

A. Definitions

The **public sector** includes all resident institutional units controlled directly or indirectly by resident government units, i.e., all units of the general government sector and all resident public corporations (see Figure 1).¹³

Figure 1: The Public Sector and Its Relation to Other Institutional Sectors of the Economy

General Government Sector	Nonfinancial Corporations Sector	Financial Corporations Sector	Nonprofit Institutions Serving Households Sector	Households Sector
Public	Public	Public	Private	Private
	Private	Private		

The **general government sector** comprises all government units and all nonmarket nonprofit institutions (NPIs) that are controlled by government units (*GFSM 2001*, para. 2.28):

- **Government units** are institutional units that carry out the functions of government as their primary activity¹⁴, i.e., they have legislative, judicial, or executive authority over other institutional units within a given area; they assume responsibility for the provision of goods

¹³ This paper does not elaborate on the sectorization of institutional units, nor the delineation issues between the general government and public corporations subsectors. For a complete discussion on the sectorization of the public sector, see *GFSM 2001 Companion Material, Coverage and Sectorization of the Public Sector*, by Paul Cotterell, Ethan Weisman, and Tobias Wickens, December 2006, IMF, Washington, DC. (<http://www.imf.org/external/pubs/ft/gfs/manual/comp.htm>)

¹⁴ Sometimes governments establish public corporations that sells goods or services exclusively to government without tendering for a contract with the government in competition with the private sector. Such a public corporation is called an ancillary unit and will be classified in the general government sector (its parent unit). Often, government ancillary units are set up as Special Purpose Entities (SPEs). These units, which are legally corporations, should be classified within the general government sector.

and services to the community *on a nonmarket basis*; they make transfer payments to redistribute income and wealth; and they finance their activities (directly or indirectly) mainly by means of taxes and other compulsory transfers from units in other sectors of the economy.

- *Nonmarket NPIs* controlled by government units are legal or social entities created for the purpose of producing or distributing goods and services *on a nonmarket basis*, and they are not a source of income, profit, or other financial gain for government. Even though they may be legally nongovernment entities, they are considered to be carrying out government policies and, thus, effectively are part of government.

The *public corporations subsector* includes all corporations owned or otherwise controlled by government units or other public corporations.¹⁵ Corporations are legal entities that are created for the purpose of producing goods and services for the market (i.e., *on a market basis*), and being a source of profit or other financial gain to their owners. Quasi-corporations, which are not incorporated or otherwise legally established, but function as if they were corporations, are also classified as corporations. Market NPIs (i.e., NPIs engaging in market production) are also classified as corporations. Depending on the nature of their primary activity, all corporations are part of the nonfinancial corporations sector or financial corporations sector in the economy. Within these sectors, a distinction is made between public and private nonfinancial corporations, on the one hand, and public and private financial corporations, on the other.

Nonfinancial public corporations comprise corporations and quasi-corporations that engage primarily in the production of goods and nonfinancial services. They include corporations engaged in agriculture, mining, manufacturing, electricity, construction, wholesale or retail distribution services, transportation, communications, health, education, and other nonfinancial personal and business services. Nonprofit institutions (NPIs) that are controlled by government and are market producers of goods and nonfinancial services are also included here. For example, schools, universities, hospitals, clinics, etc. that are established as NPIs are market producers when they charge fees that are based on their production costs, and that are sufficiently high to have a significant impact on the demand for their services. Such NPIs are not charities, their objective is to provide educational, health, or other services.

Financial public corporations are corporations and quasi-corporations that are controlled directly or indirectly by government, and are principally engaged in financial intermediation or related auxiliary financial activities. Financial public corporations comprise the central bank, other public depository corporations, public insurance corporations and pension funds, other public financial intermediaries, and public financial auxiliaries.

The objectives, functions, and behavior of public corporations differ from general government units in one fundamental aspect: public corporations are primarily *market producers* (i.e., providing goods and services to the market) that finance their productive activities by charging economically significant prices (market prices). In contrast, general government units are primarily *nonmarket producers* (charging nonmarket prices or providing goods and services for free) that finance their productive activities through taxation or transfers. Nonetheless, all public sector units can be considered to be carrying out the fiscal (or public) policies of government in one way or another.

¹⁵ Control is defined as the ability to determine general corporate policy of the corporation, where “general corporate policy” is understood in a broad sense to mean the key financial and operating policies relating to the corporation’s strategic objectives as a market producer. Control does not necessarily mean owning more than half of the shares of a corporation—eight indicators of control should be considered. (see “Government Control of Corporations”, par. 4.77-4.80, *System of National Accounts, 2008, Pre-edit version of Volume I.*)

B. Subsectoring of the Public Sector

When compiling statistics of public corporations, various groupings—or subsectors of the public sector—can be constructed to meet analytical demands. The *GFSM 2001* lists four groupings that may likely form the foundation from which other groupings can be created (*GFSM 2001*, para. 2.61): 3

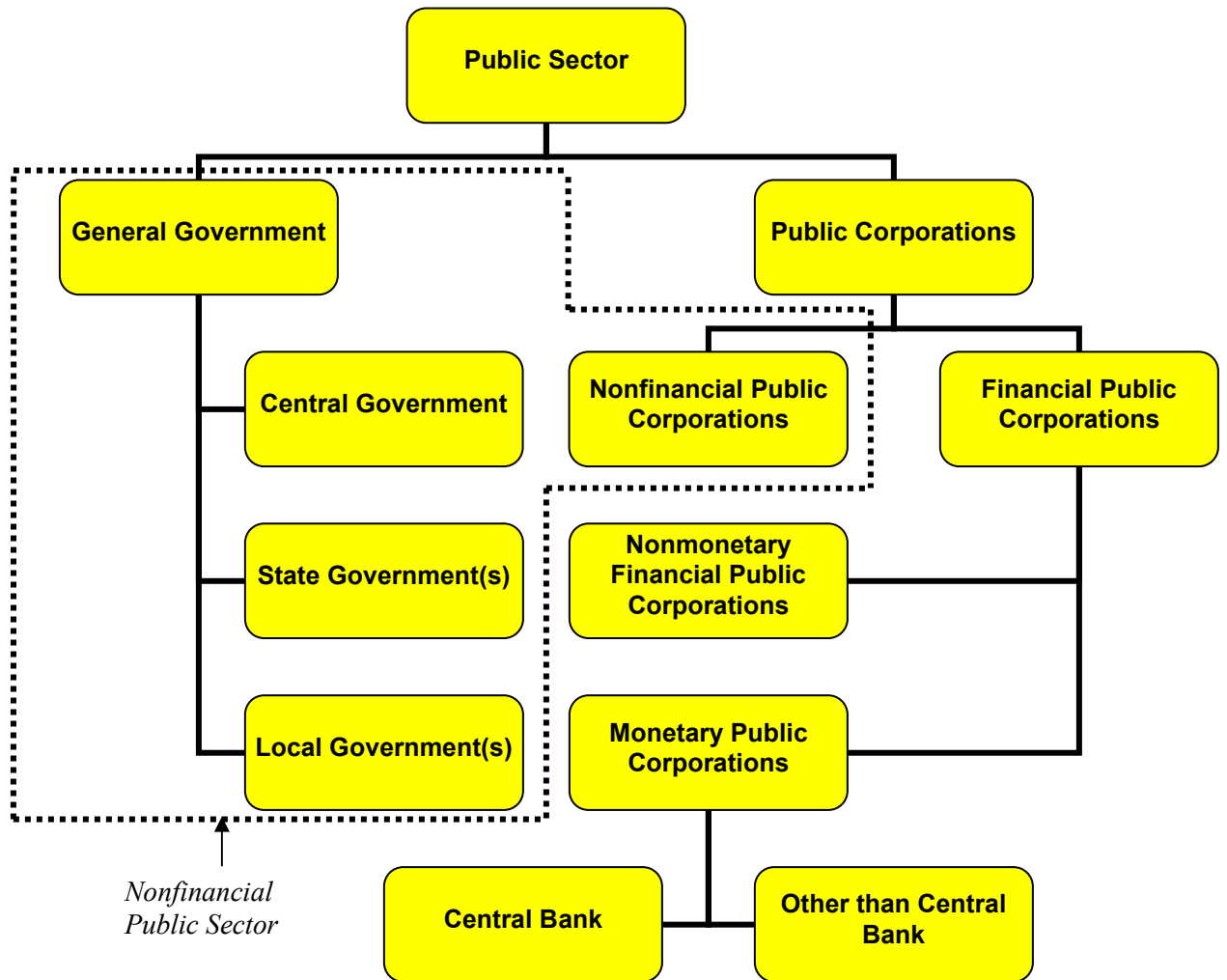
- ***Nonfinancial public corporations***, i.e., all resident nonfinancial corporations controlled by general government units or other public corporations. Examples of nonfinancial public corporations might include a national airline company, a national railways company, and a national electricity company.
- ***Nonmonetary financial public corporations***, i.e., all resident financial corporations controlled by general government units (or other public corporations) except the central bank and other public depository corporations.¹⁶ Examples of nonmonetary financial public corporations include public insurance corporations, public pension funds, development banks, financial intermediaries such as financial leasing companies and securities underwriters and dealers, and financial auxiliaries such as public exchanges and securities markets, brokers and agents, and financial guarantee corporations.
- ***Monetary public corporations other than the central bank***, i.e., all resident depository corporations other than the central bank that are controlled by general government units (or other public corporations). Examples of monetary public corporations other than the central bank are all commercial banks controlled by government.
- ***The central bank***, which consists of the central bank itself, currency boards or independent currency authorities that issue national currency that is fully backed by foreign reserves, and other government-affiliated agencies that are separate institutional units and primarily perform central bank activities.

Starting with the four groupings above and the general government sector (or its subsectors), public sector units can be combined in several ways, depending on the analytical needs. The most common public sector groupings are (Figure 2):

- The ***nonfinancial public sector***—the general government sector plus nonfinancial public corporations;
- The ***nonmonetary public sector***—the general government sector plus nonfinancial public corporations plus nonmonetary financial public corporations;
- The ***monetary public sector***—the general government sector plus nonfinancial public corporations plus monetary public corporations; and
- The ***overall public sector***—the general government sector plus nonfinancial public corporations plus all financial public corporations (i.e., monetary and nonmonetary).

¹⁶ 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 2: The Public Sector and Its Subsectors



III. PUBLIC CORPORATIONS AND PUBLIC SECTOR STATISTICS

A primary measure of government's accountability to the public is its formulation and implementation of fiscal policy, and the results (and consequences) as reflected in public sector statistics. Such statistics provide information on the total resources controlled by governments, and how those resources are employed. The *GFSM 2001* system can be applied to analyze and evaluate the activities of public corporations, as well as those of the public sector (or any subsector thereof).

The selection of data sources, and the preparation, derivation, and classification of public corporations statistics are not addressed in this paper.¹⁷ These data compilation stages are taking place prior to the process of consolidation of public sector statistics, which is the focus of this paper.

In this section, the reasons for compiling public corporations and public sector statistics are examined. Recommendations are made as to the statements, aggregates, and balancing items that should be compiled for public corporations and the public sector.

A. Why Statistics for Public Corporations and the Public Sector?¹⁸

Statistics are compiled for the entire public sector, or for a subsector of the public sector, to measure (i) the macroeconomic impact of government and its public corporations; and (ii) all sources of potential fiscal risk in the public sector.

Although public corporations are primarily engaged in market activity, the reasons for their existence are abundant: For example, public corporations may exist to serve as an instrument of public (or fiscal) policy for government, to generate profits for general government, to protect key resources, to provide competition where barriers to entry may be large, and to provide basic services where costs are prohibitive. Public corporations exist in many countries, often they are large and/or numerous, and they do have a fiscal impact, for example:

- Often public corporations are involved in so-called *quasi-fiscal operations* (i.e., they carry out government operations at the behest of the government units that control them) in addition to the market activities that public corporations normally engage in as market producers. The IMF's *Manual on Fiscal Transparency* distinguishes three main types of quasi-fiscal activities: (i) operations related to the financial system, (ii) operations related to the exchange rate system, and (iii) operations related to the commercial enterprise sector.¹⁹ Some specific examples of quasi-fiscal operations are where government may require public corporations to employ more staff than required, lend at below-market interest rates, pay above-market prices for inputs, or sell a large share of its output for prices that are less than what the market price would be if only private producers were involved (*GFSM 2001*, para. 2.59). If these quasi-fiscal activities are sizeable, the statistics covering general government fail to capture government's complete financial position and complicates the design of fiscal policy. Also,

¹⁷ At the time of publishing this paper, no companion materials have been developed on the selection of data sources and preparation, derivation, and classification of public corporations' statistics.

¹⁸ The arguments made in this section apply to all public corporations, the entire public sector, or subsectors thereof.

¹⁹ See *Manual on Fiscal Transparency*, Fiscal Affairs Department, IMF, 2007 Revised Edition, Box 19.

because quasi-fiscal activities often have a redistributive effect, it is important that they be subjected to public scrutiny.

- Often the borrowing by public corporations is a source of government *contingent liabilities*, for example, when a public corporation borrows from abroad and this loan is guaranteed by (central) government. Should this public corporation be unable to pay the interest and/or principal, central government (as guarantor) may assume this loan, make transfers to the public corporation, or provide a loan to the public corporation to assist in servicing the foreign loan.
- Often *transactions* (e.g., subsidies, capital transfers, taxes, shares and other equity, dividends, and loans) *between government units and public corporations, or between public corporations, are significant*. These transactions might be difficult to characterize, as the legal designation of a flow may not reflect its economic substance. For example, transactions that are legally considered loans are often, effectively, subsidies.
- Public corporations' accounts show the sources of changes in public corporations' net worth, which affect the *shares or equity that general government holds* in public corporations (a financial asset for the general government). From the accounts of public corporations, principal ratios and indicators for public corporations in terms of the corporate sector and the whole economy can be derived. This information is useful for the *analysis of fiscal sustainability and other aspects of fiscal analysis*.

Public corporations may also be of significance to government because of the *effects their magnitude or strategic position may have on macroeconomic objectives*, such as bank credit, aggregate demand, borrowing abroad, and the balance of payments.

Many public corporations may also represent *a sizeable investment of national resources, at considerable opportunity costs*. With resources coming predominantly from government rather than private investors, these investments may not benefit from the business analysis usually provided by financial markets as regards management efficiency and a rate of return on capital.

Public corporations not only have *a macroeconomic impact, they also are a potential source of fiscal risk*. For this reason, it is particularly important that government be provided with a regular flow of current data on their activities to allow appropriate monitoring of public corporations. These data must be grouped according to the nature of the activities of the public corporation, i.e., nonfinancial or financial. Not only are a specific grouping of public corporations' data monitored and evaluated, but also those of individual public corporations.

Compiling and disseminating statistics with a coverage beyond the general government sector will *improve transparency and accountability*, as well as help identify any emerging problems in the public corporations subsector. To this end, the IMF's *Manual on Fiscal Transparency* states that a basic requirement of fiscal transparency is that the annual reports of nonfinancial and financial public corporations also indicate the nonmarket (noncommercial) goods and services that the government requires them to provide.²⁰

²⁰ See *Manual on Fiscal Transparency*, Fiscal Affairs Department, IMF, 2007 Revised Edition, para. 198.

B. Nonfinancial Public Corporations and the Nonfinancial Public Sector

The *nonfinancial public sector* comprises the general government sector plus nonfinancial public corporations. *This excludes monetary public corporations* (i.e., the central bank and resident public depository corporations other than the central bank) *and other financial public corporations*. Useful measures of the nonfinancial public sector's impact on the economy are statistics for its transactions (and stocks) in financial assets and liabilities, i.e., their financing activities and net financial worth. Of particular significance are data for these subsectors' financing obtained from the central bank and other monetary public corporations. It is primarily because such financing represents so important a measure of the outcome of these subsectors' operations that they are measured separately from monetary public corporations and/or all financial public corporations.

When the nonfinancial public sector and financial public sectors are combined, statistics for flows and stocks in financial assets and liabilities between these subsectors are eliminated, *and an important aspect of financing statistics used in fiscal policy making and analysis is obscured*. However, it should be noted that, by excluding financial public corporations from the public sector being measured here in this paper, entails also exclusion of any saving or investment at these institutions.

C. What Statements, Aggregates, and Balancing Items to Compile for Nonfinancial Public Corporations and the Nonfinancial Public Sector?

In principle, the main aggregates and balancing items included in the four *GFSM 2001* statements should be compiled for nonfinancial public corporations and the nonfinancial public sector.²¹ These aggregates and balances are shown in Table 4, and they are discussed, in turn, in the following sections.

Statement of operations

Revenue is the sum of all transactions that increase the net worth of nonfinancial public corporations or the nonfinancial public sector. Revenue excludes sales of nonfinancial assets, as well as any profits made on such sales. It also excludes any other holding gains (revaluations) in assets and liabilities.

Expense is the sum of all transactions that decrease the net worth of nonfinancial public corporations or the nonfinancial public sector. Expense excludes purchases of nonfinancial assets, as well as any holding losses (revaluations) in assets and liabilities.

The *net operating balance*²² is a summary measure of the ongoing sustainability of the operations of nonfinancial public corporations and the nonfinancial public sector because it shows the change in its net worth due to its operations (transactions) in a specific period. This component of the change in net worth can be attributed directly to government's and public corporations' policies since they have control over their transactions. The net operating balance is comparable to the national accounting concept of saving plus net capital transfers receivable.²³

²¹ The four statements are: the Statement of Operations, the Statement of Sources and Uses of Cash, the Statement of Other Economic Flows, and the Balance Sheet.

²² Gross operating balance if consumption of fixed capital is excluded. For both government and public corporations, the net/gross operating balance exclude holding gains/losses. These should have been reclassified appropriately earlier in the data compilation process.

²³ By definition, saving is equal to the net operating balance minus net capital transfers receivable.

Table 4: Main Aggregates and Balancing Items for the Consolidated General Government Sector, Consolidated Nonfinancial Public Corporations Sector, and Consolidated Nonfinancial Public Sector

	General Government Sector	Nonfinancial Public Corporations Subsector	Consolidated Nonfinancial Public Sector
STATEMENT OF OPERATIONS			
Revenue	X	X	X
Expense	X	X	X
Net/gross operating balance	X	X	X
Net acquisition of nonfinancial assets	X	X	X
Net lending/borrowing	X	X	X
Net acquisition of financial assets	X	X	X
Net incurrence of liabilities	X	X	X
STATEMENT OF SOURCES AND USES OF CASH			
Cash receipts from operating activities	X	X	X
Cash payments for operating activities	X	X	X
Net cash inflow from operating activities	X	X	X
Net cash outflow from investments in nonfinancial assets	X	X	X
Cash surplus/deficit	X	X	X
Net acquisition of financial assets other than cash	X	X	X
Net incurrence of liabilities	X	X	X
Net cash inflow from financing activities	X	X	X
Net change in the stock of cash	X	X	X
OTHER ECONOMIC FLOWS			
Change in net worth/financial net worth due to other economic flows	X	X	X
Nonfinancial assets	X	X	X
Financial assets	X	X	X
Liabilities	X	X	X
BALANCE SHEET			
Net worth / Financial net worth	X	X	X
Nonfinancial assets	X	X	X
Financial assets	X	X	X
Liabilities	X	X	X

X = compile data

The *net acquisition of nonfinancial assets* shows the net change in the nonfinancial assets of nonfinancial public corporations and the nonfinancial public sector. While this may involve different types of productive assets in government and nonfinancial public corporations, in both cases the net acquisition of assets represents nonfinancial assets used in the production of goods and services, held for resale or use at a later date, or as a store of value. An additional aggregate, public investment (gross fixed capital formation) in the nonfinancial public sector can be derived from these statistics.²⁴

Net lending (+) / net borrowing (-) is a summary measure indicating the financial impact of nonfinancial public corporations and the nonfinancial public sector on the rest of the economy and nonresidents. It shows the extent to which financial resources are put to the disposal of other sectors in the economy and nonresidents (net lending) or utilizing the financial resources generated by other

²⁴ Gross fixed capital formation equals acquisitions minus disposals of fixed capital assets, which is a component of nonfinancial assets. In other words, gross fixed capital formation excludes consumption of fixed capital, and transactions in inventories, valuables, and nonproduced assets.

sectors and nonresidents (net borrowing). Net lending/borrowing can also be referred to as the “overall financing requirement” of nonfinancial public corporations or the nonfinancial public sector.

Details of net lending or net borrowing are reflected in the financial transactions of nonfinancial public corporations or the nonfinancial public sector, i.e., the *net acquisition of financial assets* and the *net incurrence of liabilities*. These aggregates show those transactions that change the nonfinancial public corporations’ or nonfinancial public sector’s holdings of financial assets and liabilities. The net acquisition of financial assets minus the net incurrence of liabilities is sometimes called “total financing”, and its domestic and foreign components are arguably the most useful and important aggregates in nonfinancial public corporations or nonfinancial public sector statistics.

Statement of sources and uses of cash

The Statement of Sources and Uses of Cash is important for assessing the liquidity of nonfinancial public corporations and the nonfinancial public sector. It shows:

- *Cash receipts from operating activities*, i.e., the amount of cash generated by the current operations of nonfinancial public corporations or the nonfinancial public sector;
- *Cash payments for operating activities*, i.e., the amount of cash absorbed by the current operations of nonfinancial public corporations or the nonfinancial public sector;
- The *net cash inflow from operating activities*, i.e., the net amount of cash generated or absorbed by the current operations of nonfinancial public corporations or the nonfinancial public sector;
- The *net cash outflow from investments in nonfinancial assets*, i.e., cash purchases of nonfinancial assets minus cash sales of nonfinancial assets of nonfinancial public corporations or the nonfinancial public sector;
- The *cash surplus/deficit*, i.e., the extent to which nonfinancial public corporations or the nonfinancial public sector is either putting cash financial resources to the disposal of other sectors in the economy and nonresidents (cash surplus) or utilizing the cash financial resources generated by other sectors and nonresidents (cash deficit). The cash surplus/deficit can also be referred to as the “cash financing requirement” of nonfinancial public corporations or the nonfinancial public sector;
- The cash flows from financing activities, which are divided into the *net acquisition of financial assets other than cash*, and the *net incurrence of liabilities*. The net result of these two aggregates show the *net cash inflow from financing activities*. These aggregates show the cash transactions that change in the nonfinancial public corporations’ or the nonfinancial public sector’s holdings of financial assets other than cash and liabilities; and
- The *net change in the stock of cash* itself, i.e., the net change in the financial asset “currency and deposits” due to the cash operations of nonfinancial public corporations or the nonfinancial public sector.

Statement of other economic flows and balance sheet

The Statement of Other Economic Flows presents *changes in* nonfinancial public corporations’ or the nonfinancial public sector’s *net worth that are not the result of transactions*. The main aggregates for other economic flows are nonfinancial assets, financial assets, and liabilities and, ideally, holding gains and other changes in the volume of assets should be compiled separately for these aggregates. The

main balancing item in this statement is the *change in net worth due to other economic flows*.²⁵ In addition, the *change in financial net worth due to other economic flows* is shown, because the focus is on financial assets rather than total assets in certain fiscal analyses.

The Balance Sheet of nonfinancial public corporations or the nonfinancial public sector represents statistics on the *stocks of nonfinancial assets, financial assets, liabilities*, as well as the overall *net worth*. In addition, the *financial net worth* is shown because the focus is on financial assets rather than total assets in certain fiscal analyses.

Relationship between basis of recording and statements to be compiled

The feasibility to compile all four *GFSM 2001* statements for nonfinancial public sector statistics *will depend on the basis of recording* of the general government statistics (assuming that all the nonfinancial public corporations' data are available on an accrual basis and all four *GFSM 2001* statements can be compiled for nonfinancial public corporations).²⁶

- If the general government data are on a cash basis, *only* the Statement of Sources and Uses of Cash can be compiled for the nonfinancial public sector, using the cash flow data for general government and nonfinancial public corporations. It may be possible to compile a partial Balance Sheet or debt data for the consolidated nonfinancial public sector as well, depending on what Balance Sheet (or debt) data are available for the general government.
- If the general government data are on a noncash basis,²⁷ it should be feasible to compile *both* the Statement of Operations and Statement of Sources and Uses of Cash for the nonfinancial public sector. The possibility of compiling a Statement of Other Economic Flows and Balance Sheet will depend on (i) whether full accrual data are available for general government, and (ii) the completeness and valuation of Balance Sheet data for general government. It may very well only be possible to compile a partial balance sheet (or debt data) for the nonfinancial public sector because the general government data are not on a full accrual basis and/or only a partial balance sheet is available for general government.

²⁵ The change in net worth due to other economic flows is the sum of changes in net worth due to holding gains/losses and changes in net worth due to other volume changes in assets and liabilities, respectively.

²⁶ In practice, cash and accrual (or noncash) data can be *acceptable analytical proxies* for each other *when the differences are identified and quantified*. Often adjustments would be made to general government cash data, which are combined with the accrual data of public corporations. This approach will almost never provide perfect accountability, but it will proxy economic variables, such as changes in aggregate demand, liquidity, sustainability, etc. The main requirement for mixed bases of recording to improve, rather than invalidate, analysis is that the analyst has adequate information about all of the proxies being employed and can either adjust away inconsistencies or interpret them appropriately. This approach is a best-effort basis for a comprehensive fiscal analysis that would transcend the limitations of statistics that are only on a cash basis. Since the focus of this paper is on the *process of consolidating* general government and nonfinancial public corporations flows and stocks, and not on the selection of data sources, derivation, and classification processes, no guidelines are provided here on these types of adjustments.

²⁷ "Noncash basis" of recording refers to either a full accruals basis, or a mixture of cash and accrual within a subsector or between subsectors.

IV. CONSOLIDATION OF NONFINANCIAL PUBLIC SECTOR STATISTICS

In this section, the consolidation of nonfinancial public sector statistics is discussed in detail. After outlining what should be consolidated, some guidelines and rules of thumb are given for application in practice.

A. What should be consolidated?

Conceptually, consolidation entails the elimination of *all* flows and *all* debtor-creditor relationships among the units that are combined.

Proper consolidation depends on a thorough review of the accounts to be consolidated in order to identify internal transactions. The goal is not necessarily perfect consolidation, but rather to eliminate, in a consistent manner, flows and stock positions that will have a significant effect on the final aggregates. Where a review of the accounts reveals that there are small flows or stocks that may be difficult to identify, resources should not be devoted to identifying these transactions and their magnitudes.

As mentioned, when compiling nonfinancial or nonmonetary public sector statistics, *two types of consolidation* may take place:

- First, consolidation is done *within* the subsectors of the public sector—*intrasectoral consolidation*. In the case of this paper’s focus, intrasectoral consolidation involves the consolidation of flows and stocks among nonfinancial public corporations.²⁸
- Second, consolidation is done *between* subsectors of the public sector—*intersectoral consolidation*. In the case of this paper’s focus, intersectoral consolidation involves the consolidation of stocks and flows between the general government sector and the nonfinancial public corporations subsector to produce consolidated nonfinancial public sector statistics.

Intrasectoral consolidation is always done before intersectoral consolidation.

As explained in Section III.C, in principle, all major *GFSM 2001* statements, aggregates, and balancing items are compiled for nonfinancial public *corporations* and nonfinancial public *sector* statistics. All the items that possibly need to be eliminated in consolidation when compiling these statements, aggregates, and balancing items, are discussed next.

Unlike in the consolidation of general government and nonfinancial public *corporations* revenue and expense, there are different views on the degree of consolidation of nonfinancial public *sector* revenue and expense. While consolidation is a method of presenting statistics for a set of units (or entities) as if they constituted a single unit, the reason for consolidation should always be to produce aggregates that are analytically useful.

In principle, all relevant *revenue and expense transactions should be eliminated in both intra- and intersectoral consolidation*. This includes compulsory transfers (i.e., taxes, most social contributions, and fines and penalties), if such consolidated statistics are considered to be analytically useful. In most cases, it will be useful not to eliminate taxes and fines and penalties payable by nonfinancial public

²⁸ Intrasectoral consolidation is also done for the general government subsectors.

corporations to the general government sector in intersectoral consolidation. It can be argued that these compulsory transfers are made by public corporations, which are *market producers*, and that, for analytical purposes, all such payments from market producers to government (a nonmarket producer) should be treated similarly, regardless of whether they are in the public or private sector.²⁹ Therefore, from an analytical point of view, voluntary transfers and exchanges are the only flows that need to be consolidated in revenue and expense transactions.

This translates into the following revenue and expense transactions (all voluntary transfers or exchanges) that have to be eliminated within the nonfinancial public corporations sector, or between the general government sector and nonfinancial public corporations, in likely order of importance:³⁰

- Dividends receivable/payable and withdrawals from income of quasi-corporations;
- Subsidies receivable/payable;³¹
- Current and capital transfers receivable or payable;
- Interest income/expense receivable or payable;
- Rent receivable/payable; and
- Purchases/sales of goods and services.

An alternative approach to nonfinancial public sector revenue and expense is presented in Appendix I. According to that approach, no revenue and expense statistics are compiled for the *consolidated nonfinancial public sector*. Such consolidated statistics are only compiled for the net/gross operating balance (net result of revenue and expense), net lending/borrowing, and all transactions in assets and liabilities. However, revenue and expense aggregates for nonfinancial public *corporations* are still compiled, and should be consolidated, as needed (intrasectoral consolidation).

For both intra- and intersectoral consolidation, transactions in nonfinancial assets should be eliminated when separate data are compiled on gross acquisitions and disposals in order to calculate the net acquisition of nonfinancial assets (with or without consumption of fixed capital).³² However, if only the aggregate *“net acquisition of nonfinancial assets” is compiled, there is no need for consolidation*—neither for intrasectoral nor for intersectoral consolidation. This principle can be illustrated in the following example: Suppose the general government sector sells a fixed asset worth

²⁹ Social security contributions are not eliminated in consolidation, because these are considered to be made to the employees who, in turn, make the contributions to the social security funds (rerouting).

³⁰ In the Statement of Source and Uses of Cash, the same transactions in cash should be consolidated, i.e., dividends paid/received and withdrawals of income from quasi-corporations, subsidies received or paid, current and capital transfers received or paid, interest income/expense received or paid, rent received or paid, and purchases and sales of goods and services.

³¹ The *GFSM 2001* classification system does not separately identify subsidies receivable in revenue. These revenues are classified in *GFSM 2001* category *Voluntary transfers other than grants, Current* (revenue category 1441). Subsidies payable to nonfinancial public corporations are identified in the expense classification of the *GFSM 2001* system (expense category 2511).

³² In the Statement of Source and Uses of Cash, the same transactions in cash should be consolidated, i.e., cash purchases and sales of nonfinancial assets.

1,000 to a nonfinancial public corporation. Table 5 shows the aggregated and consolidated transactions in nonfinancial assets, as well as the effect of the consolidation on the components.

Table 5: Illustrating the Consolidation of Nonfinancial Assets

	General Government	Public Corporation	Aggregated Public Sector	Consolidation	Consolidated Public Sector
	(1)	(2)	(3)=(1)+(2)	(4)	(5)=(3)+(4)
Net acquisition of non-financial assets	-1,000	+1,000	0	0	0
Acquisitions	0	+1,000	+1,000	-1,000	0
Disposals	-1,000	0	-1,000	-(-1,000)	0

No consolidation is needed for other economic flows in, or stocks of nonfinancial assets. The nonfinancial assets appear only in the balance sheet of one public sector unit and, by implication, so does the other economic flows that relate to these assets. The result of transactions in nonfinancial assets is the change in ownership of the assets in question from one unit to another, and the resulting movement of the asset from the balance sheet of the selling unit to the purchasing unit.

For *both intra- and intersectoral consolidation, the following major transactions in financial assets and liabilities*, in likely order of importance, should be eliminated when compiling nonfinancial public corporations or nonfinancial public sector statistics:³³

- Shares and other equity;
- Loans receivable/payable;
- Acquisitions/disposals of securities other than shares; and
- Other accounts receivable/payable.

Following from the above transactions in financial assets and liabilities, *other economic flows and stocks (in the balance sheets) for the same categories of financial assets and liabilities* should be eliminated in both intra- and intersectoral consolidation. To maintain symmetry, it is important to ensure that if flows in assets and liabilities are consolidated, the corresponding stock positions are also consolidated.

In the next section, the flows and stocks that should be eliminated in intra- and intersectoral consolidation are discussed, in turn, in detail.

Revenue and expense transactions

Dividends and withdrawals from income of quasi-corporations

Like general government units, nonfinancial public corporations—in their capacity as shareholders and owners of other public corporations—are entitled to receive dividends as a result of placing equity funds at the disposal of that corporation. However, when the statistics for the shareholders and owners are combined with those of the dividend paying public corporations, such *dividend transactions are eliminated in both intra- and intersectoral consolidation*. Intrasectoral consolidation refers to the elimination of dividend transactions within the group of nonfinancial public corporations. Intersectoral

³³ In the Statement of Source and Uses of Cash, the same transactions in cash should be consolidated: cash transactions in shares and other equity, loans received/paid, and purchases/sales of securities other than shares.

consolidation refers to the elimination of dividends payable to the general government when nonfinancial public sector statistics are compiled.

Distributions of profits by public corporations may be irregular and/or may not be explicitly labeled as dividends. It can be difficult for data compilers to decide whether these receipts are dividends or withdrawals of equity. Dividends include all distributions of profits by corporations to their shareholders or owners. Dividends are payments a corporation makes out of its current income, which is derived from its ongoing productive activities, or payments from its reserves which are not withdrawals of equity. A corporation may, however, smooth the dividends it pays from one period to the next so that in some periods it pays higher dividends than it earns from its productive activities. Such payments are nevertheless dividends. Distributions by corporations to shareholders of proceeds from privatization receipts and other sales of assets and exceptional one-off payments based on accumulated reserves or holding gains are withdrawals of equity rather than dividends (see subsection “Shares and other equity” below for a discussion of transactions in equity).

Strictly speaking, nonfinancial quasi-corporations cannot distribute income in the form of dividends, but the owner may choose to withdraw some or all of the income it earned. Conceptually, the withdrawal of such income is equivalent to the distribution of corporate income through dividends and thus is treated the same way in the *GFSM 2001*. As with dividends, withdrawals from income of quasi-corporations do not include withdrawals of funds realized from the sale or other disposal of the quasi-corporation’s assets. The transfer of funds resulting from such disposals is recorded as a reduction of the equity of quasi-corporations owned by other public corporations. Similarly, funds withdrawn by liquidating large amounts of accumulated retained earnings or other reserves of the quasi-corporations are treated as withdrawals of equity. When the statistics for the owners are combined with those of the quasi-corporations, such *withdrawal transactions are eliminated in both intra- and intersectoral consolidation*.

Subsidies

Subsidies are current, unrequited payments that government units make to enterprises on the basis of the levels of their production activities or the quantities or values of the goods or services they produce, sell, export, or import. Subsidies are payable to producers only, not to final consumers, and are current transfers only, not capital transfers. Subsidies can be payable on specific products or on production in general.

All subsidies payable from government to nonfinancial public corporations should be eliminated when consolidated statistics are compiled for the nonfinancial public sector (i.e., in intersectoral consolidation). Nonfinancial public corporations do not pay subsidies and, therefore, there is no intrasectoral consolidation of subsidies when consolidated nonfinancial public corporations statistics are compiled.

Current and capital transfers

Current and capital transfers among nonfinancial public corporations may not be that common but, nonetheless, are generally easy to identify. Current transfers are those made for purposes of current expense and are not linked to or conditional on the acquisition of an asset by the recipient. Capital transfers involve the acquisition of assets by the recipient. Capital transfers may consist of a transfer of cash that the recipient is expected or required to use to acquire an asset or assets (other than inventories), the transfer of an asset (other than inventories and cash), the cancellation of a liability by mutual agreement between the creditor and debtor, or the assumption of another public corporation’s debt. Such *current and capital transfers should be eliminated when consolidated nonfinancial public corporations statistics are compiled (i.e., in intrasectoral consolidation)*.

Capital transfers between general government and nonfinancial public corporations are common and usually easily identifiable. These *capital transfers should be eliminated when consolidated nonfinancial public sector statistics are compiled (i.e., in intersectoral consolidation)*. However, care should be taken that transactions identified in the source data as capital transfers are indeed capital transfers. Conversely, source data may label a transaction as an acquisition of equity whereas it should be considered a capital transfer from an economic point of view. The following large, one-off payments are always considered to be capital transfers:

- To cover large operating deficits accumulated over two or more years (regardless of whether the public corporation is a going concern or not);
- To strengthen the liquidity of the public corporation, if it is no longer a going concern;
- To cancel a debt by mutual agreement; and
- To assume a debt of a public corporation that is no longer a going concern.

On the other hand, the following large, one-off payments are not considered to be capital transfers:

- To strengthen liquidity of public corporations that are going concerns—these are always classified as acquisitions of equity by government (i.e., a financial transaction).
- To assume debt of public corporations that are still going concerns—these are classified as (i) as acquisitions of equity by government (i.e., a financial transaction) if there is no explicit contract between government and the public corporation to repay this payment, or (ii) an acquisition of a financial claim (loans) on the public corporation if there is an explicit and effective contract between the government and the public corporation to repay the money.

Interest income/expense

Intrasectoral holdings of financial assets and liabilities among nonfinancial public corporations may not be common nor easy to identify in the accounts, if they do exist. Nonetheless, if possible, *interest income receivable from and interest expense payable to* other nonfinancial public corporations *should be eliminated when consolidated nonfinancial public corporations statistics are compiled (i.e., in intrasectoral consolidation)*.

However, because there are intersectoral holdings of financial assets and liabilities among general government units, on the one hand, and nonfinancial public corporations, on the other hand, interest payments among them are common and generally easy to identify. *Interest income/expense payable* between the general government and nonfinancial public corporations *should be eliminated when consolidated nonfinancial public sector statistics are compiled (i.e., in intersectoral consolidation)*.

Rent receivable/payable

Rent is the property income received from certain leases of land, subsoil assets, and other naturally occurring assets. It is possible, for example, that a nonfinancial public corporation may lease land owned by another, or that a nonfinancial public corporation may lease land owned by the general government.

Rent receivable/payable among nonfinancial public corporations *should be eliminated when consolidated nonfinancial public corporations statistics are compiled (i.e., in intrasectoral consolidation)*. *Rent receivable/payable* between the general government and nonfinancial public

corporations *should be eliminated when consolidated nonfinancial public sector are compiled (i.e., in intersectoral consolidation)*.

Purchases/sales of goods and services

The primary activity of nonfinancial public corporations is the provision of goods and/or services at market prices, i.e., “sales of goods and services” in the *GFSM 2001* classification system. These sales (and purchases) of goods and/or services may also take place among nonfinancial public corporations, or between general government and nonfinancial public corporations.

In principle, these intra- and intersectoral transactions have to be eliminated in consolidation when statistics for the consolidated nonfinancial public corporations subsector and consolidated nonfinancial public sector are compiled. However, *in practice it will most likely not be possible to eliminate these intra- and intersectoral transactions* because of a lack of detail on purchases and sales from/to individual public corporations. For example, it is very unlikely that the source data for the publicly-owned national airline will separately identify the sales of airline tickets for business-related flights of employees of government, especially if such tickets were bought through a travel agency.

Therefore, *it is not recommended to perform any intra- or intersectoral consolidation for purchases/sales of goods and services* due to a lack of detail on these transactions (and/or the substantial effort required to obtain such details), and quite possibly also because these transactions are, most likely, not significant in relation to the total purchases/sales of the public corporations to other units in the economy.

Flows and stocks of nonfinancial assets

Nonfinancial public corporations may acquire or dispose of nonfinancial assets, such as land, buildings, and equipment, in transactions with general government or with other nonfinancial public corporations. The result of such transactions is the change in ownership of the assets in question from one unit to another, and the resulting movement of the nonfinancial asset from the balance sheet of the selling unit to the purchasing unit.

Transactions in nonfinancial assets between general government and nonfinancial public corporations *should be eliminated in intra- and intersectoral consolidation*; only acquisitions or disposals of assets outside the units being consolidated should remain in the data. *The consolidation of these transactions does not result in the elimination of the asset from the balance sheet* of the nonfinancial public sector because it remains a tangible asset owned and controlled by general government or a nonfinancial public corporation, and *contributes to the net worth of the consolidated units*.

However, as explained earlier, these transactions *do not have to be eliminated when consolidated statistics are only compiled for the aggregate “net acquisition of nonfinancial assets”*. But, for *both intra- and intersectoral consolidation, transactions in nonfinancial assets should be eliminated when gross acquisitions and disposals statistics are compiled* separately in order to calculate the net acquisition of nonfinancial assets—with or without consumption of fixed capital (see example in Table 5).

No consolidation is needed for other economic flows in or stocks of nonfinancial assets because the nonfinancial assets appear only in the balance sheet of one public sector unit and, by implication, so does any other economic flows in these assets.

Flows and stocks of financial assets and liabilities

As mentioned in para. 7.12 and 7.14 of the *GFSM 2001*, financial assets consist of financial claims, monetary gold, and Special Drawing Rights (SDRs) allocated by the IMF. Financial claims are assets that entitle one unit, the owner of the asset (i.e., the creditor) to receive one or more payments from a second unit, the debtor, according to the terms and conditions specified in a contract between the two units. When a financial claim is created, a liability of equal value is simultaneously incurred by the debtor as the counterpart of the financial asset. Thus, liabilities are obligations to provide economic benefits to the units holding the corresponding financial claims/assets.

Flows and stocks of financial assets and liabilities of nonfinancial public sector units should be eliminated in both intra- and intersectoral consolidation, as relevant. The following sections discuss the flows and stocks of financial assets (and liabilities) that have to be eliminated in intra- and intersectoral consolidation of nonfinancial public sector units, in likely order of importance.

Shares and other equity

Shares and other equity comprise all instruments and records acknowledging claims on the residual value of a corporation, after the claims of all creditors have been met. Flows and stocks of shares and other equity should be eliminated in ***in both intra- and intersectoral consolidation***, as relevant.

Several factors have to be kept in mind when determining the values of the flows and stocks of shares and other equity to be eliminated in consolidation. ***Although these issues should have been addressed in the earlier stages of the data compilation process***, it is important to note that:

- Transactions in shares and other equity between government and its public corporations, or among public corporations, should be identified correctly, and classified according to their economic substance, in line with the *GFSM 2001* methodology. For example, a large, one-off transfer (often called a “capital injection”) from government to a public corporation should be classified as an acquisition of equity (an increase in financial assets for government) in the public corporation, and not as a subsidy (expense) or capital transfer. Similarly, in the public corporations’ accounts, this transaction will show as an acquisition of equity by government (an increase in liabilities for the public corporation), and not as revenue.
- A transaction should have the same designation in both sets of statistics: For example, a transaction should not be recorded as a dividend in the government’s statistics and a withdrawal of equity in the public corporation’s statistics.

Loans

A loan is a financial instrument that is created when a creditor lends funds directly to a debtor and receives a nonnegotiable document as evidence of the asset. Examples of loans are mortgage loans, installment loans, hire-purchase credit, loans to finance trade credit and advances, repurchase agreements, financial assets and liabilities implicitly created by financial leases, and claims on or liabilities to the IMF in the form of loans.

Governments often make loans to public corporations, or one public corporation may extend a loan to another public corporation. In the earlier stages of the data compilation process, it is important that loan transactions between government and its public corporations, or between public corporations, are

correctly identified and classified according to their economic substance, in line with *GFSM 2001* methodology.³⁴

In the balance sheet, loans will normally be valued at ***nominal prices*** because they are not traded regularly on markets. Loans that have become marketable in secondary markets should be reclassified under securities other than shares and should be valued at market prices, or fair values, in the same manner as other types of securities other than shares.

For both ***intra- and intersectoral consolidation***, all direct loans transactions, other economic flows involving loans, as well as all stocks of loans between the relevant nonmonetary public sector units have to be eliminated.

Securities other than shares

Securities other than shares are negotiable financial instruments (e.g., bills, bonds, debentures, negotiable certificates of deposit, bankers' acceptances, loans that have become marketable de facto, etc.) serving as evidence that units have obligations to settle by means of providing cash, a financial instrument, or some other item of economic value. If the ***market values*** of securities other than shares are not available, such as for short-term discounted securities, they should be valued at ***issue price plus accrued but unpaid interest*** (nominal value). For coupon securities, the prices of similar securities that are traded should be used if the market values are not available. Deep-discounted and zero-coupon bonds are treated the same as other short-term discounted securities.

All acquisitions and disposals of government or nonfinancial public corporations securities by nonfinancial public sector units in direct transactions, for whatever reason, should also be eliminated in ***intra- and intersectoral consolidation***. Also, all ***other economic flows*** in securities other than shares as well as all ***holdings of securities other than shares*** (i.e., stocks) among public sector units, ***should be eliminated in both intra- and intersectoral consolidation***.

Existing 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.³⁵

³⁴ For example, when goods are required under a financial lease, a change of ownership from the lessor to the lessee is deemed to take place because all the risks and rewards of ownership have been, de facto, transferred to the lessee. This change of ownership is deemed to have been financed by the implicit creation of a loan (a financial asset for the lessor and a liability for the lessee).

³⁵ In cases where governments issue negotiable securities that sell in secondary markets, the debtor/creditor relationship between government and the holder of the security may change during the life of the security. For example, a central government bond may be sold originally to a bank and then subsequently sold by the bank to a nonfinancial public corporation. In consolidating the balance sheets of the general government and nonfinancial public corporations, it is necessary to eliminate the reciprocal financial position. However, no imputation is made for a transaction between the central government and the nonfinancial public corporation. The change in the debtor/creditor relationship is explained as a reclassification under other changes in the volume of assets. Thus, one would record two separate transactions (neither eliminated in consolidation because one of the parties is the private bank). In the balance sheet, nonfinancial public corporations' holdings of central government liabilities would be eliminated in the consolidation of stocks data. Central government liabilities to banks would record a negative other volume change (to recognize the sale of the securities by the bank), and an equal and positive other volume change in liabilities to nonfinancial public corporations would also be recorded (to recognize the acquisition of the securities by the nonfinancial public corporation).

Other accounts receivable/payable

Other accounts receivable/payable consist of trade credits and advances and miscellaneous other items (such as taxes, dividends, rent, wages and salaries, etc.) due to be received or paid. In principle, intra- and intersectoral flows and stock positions in other accounts receivable/payable have to be eliminated in consolidation when statistics for nonfinancial public corporations and the nonfinancial public sector are compiled. However, ***in practice it will most likely not be possible to eliminate these intra- and intersectoral transactions*** because of a lack of detail. This is true for flows and stock positions of accounts receivable/payable between individual nonfinancial public public corporations, or between the general government and nonfinancial public corporations. Therefore, ***it is not recommended to do intra- or intersectoral consolidation for other accounts receivable/payable*** when compiling nonfinancial public corporations or nonfinancial public sector statistics.

B. Practical Guidelines

In the preceding sections, the focus is largely on the conceptual issues relating to consolidation and identifying the major classes of transactions where consolidation may be necessary. The main point is that ***the accounts of all units to be consolidated should be analyzed in sufficient detail to identify where significant internal transactions may be taking place***. As noted in the paper on general government consolidation³⁶, ***all transactions that are to be consolidated should be identified in the accounting codes for transactions in the general government accounts, with the counterparty of the transaction clearly identified***. Source data on public corporations exist separately from the government accounting codes and charts of accounts. As advocated in Section III.A, , these data on public corporations' activities should be reported regularly to the GFS or public sector statistics compilers. In the public sector statistics compilation system, public sector accounting data should be linked (bridged) to the *GFSM 2001* codes, and the items to be eliminated in consolidation should be clearly identified.

Priorities in consolidation

The preceding section identified all flows and stocks that are likely to be eliminated in the consolidation of nonfinancial public sector statistics. However, ***practicality should be kept in mind*** and the decision about the level of detail employed in consolidation should be based on:

- the analytical and/or policy usefulness of the consolidated data; and
- the relative importance of the various types of flows or stocks.

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 areas of intra- and intersectoral consolidation of revenue and expense transactions***:³⁷

- dividends receivable/payable and withdrawals from income of quasi-corporations;
- subsidies receivable/payable; and

³⁶ See *Consolidation of the General Government Sector*, by Kevin W. O'Connor, with Ethan Weisman and Tobias Wickens, International Monetary Fund, November 2004.

³⁷ If the alternative approach is followed (see Appendix I), where no revenue and expense statistics are compiled for the consolidated nonfinancial public sector, the proposed revenue/expense items are only eliminated in intrasectoral consolidation when revenue and expense aggregates for the consolidated nonfinancial public corporations subsector (i.e., intrasectoral consolidation).

- current and capital transfers receivable/payable.

Only in cases where intra- and intersectoral current and capital transfers are known to be large, should efforts be made to identify and eliminate these transactions in consolidation.

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 areas of intra- and intersectoral consolidation of assets and liabilities:*

- ***For flows and stocks of nonfinancial assets:*** If only the aggregate “net acquisition of nonfinancial assets” is compiled (or used), there is no need for any consolidation. There is also no need for any consolidation of other economic flows in or stocks of nonfinancial assets. However, intra- and intersectoral consolidation is necessary when gross acquisitions and disposals data are compiled separately in order to calculate the net acquisition of nonfinancial assets (with or without consumption of fixed capital).
- ***For flows and stocks of financial assets and liabilities:***
 - shares and equity;
 - loans; and
 - securities other than shares.

In some cases, where transactions that should be eliminated in consolidation are known to exist, it may be impractical or infeasible to identify the data. However, the imperfection of consolidation relates mainly to the practical, rather than conceptual, difficulties that arise.

In principle, when a transaction to be consolidated is identified (say a loan from central government to a nonfinancial public corporation), it is expected that the corresponding receipt will be found in the accounts of the counterparty (in this case, the nonfinancial public corporation). However, when the nonfinancial public corporation’s accounts are reviewed, there may be no record of this loan, or the loan may be credited in a different period, or the loan receivable may have a different value from the loan payable, or it may be classified as something other than a loan. There are many reasons for such discrepancies, some of which are discussed below. ***Resolving these discrepancies*** may not only ***promote proper consolidation***, but will also ***improve the overall quality of the data***.

One of the principal accounting rules underlying the *GFSM 2001* system and the *1993 SNA* is that transactions ***take place simultaneously*** for both transactors, and the transaction should be ***identically valued*** by both transactors. These rules imply quadruple-entry accounting, that is, each unit will have a debit and credit entry, and these entries should all be of the same value. In addition, both parties should classify the transaction (or stock) in the same way. Variations from these standards give rise to many of the practical problems in consolidation of both transactions and balance sheet positions.

Differences in timing account for many consolidation problems. The time of recording will depend on whether this event is registered on a cash or accrual basis, as well as other practical characteristics concerning the source data. ***If there is clear evidence from one party that the transaction took place during a specific period, this information can be used to impute the transaction to the counterpart.*** For example, central government may record a loan to a nonfinancial public corporation at the end of an accounting period (because it operates on a cash basis), while the nonfinancial public corporation may not recognize it until the following period (because it operates on an accrual basis).

In the central government's books, the following cash transactions have been recorded: an increase in financial assets: loans and a decrease in financial assets: currency and deposits. To accrue this loan to the following period, the following transactions have to be imputed: a decrease in loans and an increase in accounts receivable, all in the current period. In the following period, when the loan accrues (as shown in the public corporations' books), an increase in financial assets: loans and a decrease in financial assets: accounts receivable are recorded in the government statistics.

	Current period	Imputation Current Period	Following period (Accrued)
Transactions in financial assets:			
Of which:			
Currency & deposits	-10		
Loans	+10	-10	+10
Accounts receivable		+10	-10

In this example, if the central government loan is known to accrue in the following period (as recorded by the nonfinancial public corporation), the counterpart may be recorded in the central government's data with a contra-entry in accounts receivable. This imputation will also improve the quality of the central government statistics.

Accounting discrepancies may give rise to consolidation problems. One side of the transaction may provide information in greater detail than the other, or one side may follow accrual principles while the other uses a cash basis. In such cases, two approaches may be followed. First, the detailed accounting records of public sector unit A may be examined to determine if more information on the breakdown of the transaction can be found. If this cannot be done readily, the detailed accounts of public sector unit B can be used to see if individual components of the transaction can be identified. The results from each approach can be assessed to determine which appears to be more reliable, and **the more reliable number can be used for both sides of the transaction**.

In certain cases, **differences in valuation** may arise. For example, a central government may provide a transfer-in-kind to a nonfinancial public corporation. The central government may record the goods at acquisition cost, while the public corporation may have a different valuation principle or simply may not have recorded the transfer-in-kind at all. Or, on its balance sheet, a public corporation may value its holdings of central government securities at market prices, while the central government values them at face values. Similarly, in the balance sheet, a public corporation may value its holdings of shares and other equity liabilities at market values, while in the general government's books the same holdings of shares and other equity (financial assets) are valued at book values. Foreign-currency denominated transactions and positions may also give rise to valuation differences, especially if different exchange rates are used by the parties involved. In all cases of discrepancies caused by valuation differences, the *GFSM 2001* system's valuation rules (*GFSM 2001*, paragraphs 3.73 and 7.22-30) should be applied to both sides of the transaction or stock. **If one side is following the GFSM 2001 system's rules, this valuation should be imputed to the other side.**

Other asymmetric recording also may cause consolidation problems. The two sides of a transaction may agree on timing and valuation but a clear match cannot be made. This may arise from classification differences in the two sets of accounts. The two sides might also have different perceptions of a transaction; for example, a donor public corporation may classify a transfer as capital, while the recipient public corporation views it as current. Or, one public corporation may show a payment from another public corporation as a dividend receivable (revenue) while the other show the transaction as a withdrawal of equity (financing). Transactions may also be recognized by one side and not the other. For example, a central government may forgive a nonfinancial public corporation's debt and record the amount correctly as a capital transfer, while the public corporation does not recognize any transaction to have taken place. **Analyzing and resolving these discrepancies from asymmetric**

recording can lead not only to improved consolidation, but also to improvements in the basic data compilation.

C. Rules of Thumb

Practical problems discussed above often lead to imprecise consolidation. Practical rules of thumb can provide useful and, often, necessary techniques for compilers.

Certain rules may be followed to determine: (i) if there are flows and stocks to be consolidated; (ii) whether or not to measure them based on their magnitude and cost of collection; and (iii) which unit may be considered to have the most reliable records. Nonetheless, circumstances in each country vary, and the rules that are chosen must be based on country-specific circumstances. Some suggestions for *general rules of thumb and the sequence for analysis* follow.³⁸

1. All consolidation exercises must begin with an analysis of the accounts involved to determine if there are flows or stocks internal to the unit(s) to be consolidated. This will depend on knowledge of the relationships among the units. Do some units own shares in other units? Do they pay dividends or withdrawals of income from quasi-corporations? Do some units pay interest to other(s)?
2. Once these relationships are established, it must be determined if the intra- and/or intersectoral transactions or stocks can be measured or estimated, and whether the amounts will be large in terms of analytical importance.
3. If the amounts are likely to be significant, are they large enough to justify the effort to collect the data and other information for consolidation purposes? Judgment must be applied here, but the rule is always that 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.
4. The “one-side” rule of thumb is commonly used. If there is convincing evidence from one of the transactors that a transaction took place or a stock exist in the balance sheet, it should 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 or stocks cannot be directly identified, it will be necessary to ensure that the records for that unit are properly modified.
5. The top-down principle may also be used as a rule of thumb. One can often rely on the originator of a transaction to have more reliable accounting records.
6. For flows and stocks of 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, but, with the recent emphasis on proper debt recording, the debtor unit in some circumstances 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 of which are acquired by, say, the public corporations, 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 public corporations.

³⁸ Successful consolidation will depend on the accuracy achieved in the preparation and derivation of the general government and nonfinancial public corporations’ data, which will be addressed in a separate note.

D. Illustrating the Consolidation of Nonfinancial Public Corporations and Nonfinancial Public Sector Statistics

Appendix II shows examples of the consolidation of nonfinancial public corporations and nonfinancial public sector statistics, respectively. The examples cover the Statement of Operations, the Statement of Sources and Uses of Cash, and the Balance Sheet.

An Alternative Approach to the Consolidation of Revenue and Expense Transactions for the Nonfinancial Public Sector

The main text of this paper recommends to compile revenue and expense statistics for the consolidated nonfinancial public sector. An alternative approach is ***not to compile revenue and expense statistics for the consolidated nonfinancial public sector***.³⁹

When compiling statistics for the nonfinancial public sector, the statistics of general government and nonfinancial public corporations are combined. However, it may be argued that the objectives, functions, and behavior of public corporations differ from general government units in one fundamental aspect: public corporations are primarily ***market producers*** (i.e., providing goods and services to the market) that finance their productive activities by charging economically significant prices (market prices), while general government units are primarily ***nonmarket producers*** (charging nonmarket prices or providing goods and services for free) and financing their productive activities through taxation or transfers.

Therefore, the combination of market and nonmarket operations in the measurement of operational transactions⁴⁰ of the nonfinancial public sector raises problems that are not encountered in measuring government alone or a grouping of public corporations alone. These problems arise in the selection of categories whose meanings are parallel (and meaningful) for both market and nonmarket producers. Similar difficulties do not arise when compiling balance sheet data for market and nonmarket producers.

The main difficulties in combining statistics for operations that are different in nature are avoided in the Statement of Operations for the ***nonfinancial public sector*** by ***not focusing on consolidated revenue and expense, but on balancing items and aggregates have essentially parallel meanings in government and its corporations***. Therefore, the focus should be on the net/gross operating balance, net acquisition of nonfinancial assets, net lending/borrowing, and financing operations (net acquisition of financial assets and net incurrence of liabilities). In the Statement of Sources and Uses of Cash, the focus should be on the net cash inflow from operating activities (balancing item), net cash outflow from investments in nonfinancial assets, cash surplus/deficit, and the detailed cash flows from financing activities.

Thus, according to the alternative approach, a combined (consolidated) presentation of revenue and expense for the nonfinancial public sector is not considered analytically useful—these aggregates should be presented separately for general government and nonfinancial public corporations. The following arguments can be made against compiling consolidated nonfinancial public sector revenue and expense statistics:

- Most (if not all) components of revenue and expense will have limited economic meaning for the nonfinancial public sector because, as mentioned, this subsector of the public sector constitutes a mixture of market and nonmarket producers.

³⁹ When for the consolidated nonfinancial public ***corporations*** subsector are compiled, revenue and expense transactions for the subsector are still compiled (and consolidated) under this alternative approach.


⁴⁰ In the *GFSM 2001* accrual transactions are recorded in the Statement of Operations and the underlying cash flows in the Statement of Sources and Uses of Cash.

- If consolidated nonfinancial public sector revenue and expense aggregates were to be compiled, all revenue and expense transactions between government and its public corporations will have to be eliminated to avoid double-counting (“consolidation”). However, the elimination of transactions such as purchases of goods and services by government from public corporations may not be desirable or analytically meaningful—in fact, it might not even practically possible because of lack of such details.
- Combining only the net results of nonfinancial public corporations’ revenue and expense with government revenues (if surpluses) and expenses (if deficits) is of limited value, since flows to the corporation and from the corporation are already included in the government revenue (e.g., dividends) and expense (e.g., subsidies) data.

Therefore, in the alternative approach the following aggregates and balances should be compiled (compared with Table 4):

	General Government Sector	Nonfinancial Public Corporations Subsector	Consolidated Nonfinancial Public Sector
STATEMENT OF OPERATIONS			
Revenue	X	X	
Expense	X	X	
Net/gross operating balance	X	X	X
Net acquisition of nonfinancial assets	X	X	X
Net lending/borrowing	X	X	X
Net acquisition of financial assets	X	X	X
Net incurrence of liabilities	X	X	X
STATEMENT OF SOURCES AND USES OF CASH			
Cash receipts from operating activities	X	X	
Cash payments for operating activities	X	X	
Net cash inflow from operating activities	X	X	X
Net cash outflow from investments in nonfinancial assets	X	X	X
Cash surplus/deficit	X	X	X
Net acquisition of financial assets other than cash	X	X	X
Net incurrence of liabilities	X	X	X
Net cash inflow from financing activities	X	X	X
Net change in the stock of cash	X	X	X

X = compile data

 = Do not compile

APPENDIX II

Illustrating the Consolidation of Nonfinancial Public Corporations and the Consolidation of Nonfinancial Public Sector Statistics

The following examples follow the practical guidelines provided in Section IV.B of this paper. For simplicity, several assumptions were made, including:

- There are only three nonfinancial public corporations, and one of them is a quasi-corporation.
- There are no transactions in kind or imputed transactions.

The statistics cover the consolidated general government and all three nonfinancial public corporations of Country X. Transactions with financial public corporations are included to illustrate that they are *not* consolidated when nonfinancial public corporations or nonfinancial public sector statistics are compiled. For simplicity, the classification of total financial assets and total liabilities by instrument (GFSM 2001 codes 320* and 330*) were omitted from the tables.

Table A.1	Statement of Operations – Consolidated Nonfinancial Public Corporations Subsector
Table A.2	Statement of Operations – Consolidated Nonfinancial Public Sector
Table A.3	Statement of Sources and Uses of Cash – Consolidated Nonfinancial Public Corporations Subsector
Table A.4	Statement of Sources and Uses of Cash – Consolidated Nonfinancial Public Sector
Table A.5	Balance Sheet – Consolidated Nonfinancial Public Corporations Subsector
Table A.6	Balance Sheet – Consolidated Nonfinancial Public Sector

TABLE A.1
STATEMENT OF OPERATIONS
CONSOLIDATED NONFINANCIAL PUBLIC CORPORATIONS SUBSECTOR

Year ending December 31, 20xx

	Nonfinancial Public Corporations (NFPC)			Consolidation	Consolidated NFPC Sector 5=1+2+3+4
	A	B	C		
	1	2	3		
1 Revenue	1,450	909	610	-69	2,900
11 Taxes	0	0	0	0	0
12 Social contributions	0	0	0	0	0
13 Grants	0	0	0	0	0
14 Other revenue	1,450	909	610	-69	2,900
141 Property income	100	115	70	-59	226
1411 Interest	50	65	45	0	160
1412 Dividends	40	35	25	-59	41
<i>o/w From nonfinancial public corporations</i>	<i>30</i>	<i>29</i>	<i>0</i>	<i>-59</i>	<i>0</i>
<i>o/w From financial public corporations</i>	<i>0</i>	<i>6</i>	<i>0</i>	<i>0</i>	<i>6</i>
1413 Withdrawals of income from quasi-corporations	0	0	0	0	0
1414 Property income attributed to insurance policy holders	0	0	0	0	0
1415 Rent	10	15	0	0	25
142 Sales of goods and services	1,100	600	435	0	2,135
143 Fines, penalties, and forfeits	0	0	0	0	0
144 Voluntary transfers other than grants	250	194	95	-10	529
1441 Current	250	119	95	-10	454
<i>o/w From general government (subsidies)</i>	<i>250</i>	<i>105</i>	<i>70</i>	<i>0</i>	<i>425</i>
<i>o/w From nonfinancial public corporations</i>	<i>0</i>	<i>10</i>	<i>0</i>	<i>-10</i>	<i>0</i>
<i>o/w From financial public corporations</i>	<i>0</i>	<i>0</i>	<i>25</i>	<i>0</i>	<i>25</i>
1442 Capital	0	75	0	0	75
<i>o/w From general government</i>	<i>0</i>	<i>75</i>	<i>0</i>	<i>0</i>	<i>75</i>
145 Miscellaneous and unidentified revenue	0	0	10	0	10
2 Expense	1,113	787	472	-69	2,303
21 Compensation of employees	350	225	113	0	688
22 Use of goods and services	400	275	200	0	875
23 Consumption of fixed capital	120	88	54	0	262
24 Interest	70	77	47	0	194
25 Subsidies	0	0	0	0	0
26 Grants	0	0	0	0	0
27 Social benefits	0	0	0	0	0
28 Other expense	173	122	58	-69	284
281 Property expense other than interest	173	110	48	-59	272
2811 Dividends	140	110	0	-59	191
<i>o/w To general government</i>	<i>100</i>	<i>55</i>	<i>0</i>	<i>0</i>	<i>155</i>
<i>o/w To nonfinancial public corporations</i>	<i>29</i>	<i>30</i>	<i>0</i>	<i>-59</i>	<i>0</i>
<i>o/w To financial public corporations</i>	<i>3</i>	<i>5</i>	<i>0</i>	<i>0</i>	<i>8</i>
2812 Withdrawals of income from quasi-corporations	0	0	35	0	35
<i>o/w By general government</i>	<i>0</i>	<i>0</i>	<i>35</i>	<i>0</i>	<i>35</i>
2813 Property expense attributed to insurance policy holders	0	0	0	0	0
2814 Rent	33	0	13	0	46
282 Miscellaneous other expense	0	12	10	-10	12
2821 Current	0	12	10	-10	12
<i>o/w To nonfinancial public corporations</i>	<i>0</i>	<i>0</i>	<i>10</i>	<i>-10</i>	<i>0</i>
<i>o/w To financial public corporations</i>	<i>0</i>	<i>12</i>	<i>0</i>	<i>0</i>	<i>12</i>
2822 Capital	0	0	0	0	0
NOB Net operating balance	337	122	138	0	597
31 Net acquisition of nonfinancial assets	117	135	-58	0	194
NLB Net lending/borrowing	220	-13	196	0	403

TABLE A.1

STATEMENT OF OPERATIONS

CONSOLIDATED NONFINANCIAL PUBLIC CORPORATIONS SUBSECTOR (concluded)

Year ending December 31, 20xx

	Nonfinancial Public Corporations (NFPC)			Consolidation	Consolidated NFPC Sector 5=1+2+3-4
	A	B	C		
	1	2	3		
32 Net acquisition of financial assets	267	367	305	-164	775
321 Domestic	267	367	305	-164	775
3212 Currency and deposits	111	210	252	0	573
3213 Securities other than shares	33	41	0	-41	33
<i>o/w General government</i>	33	0	0	0	33
<i>o/w Nonfinancial public corporations</i>	0	41	0	-41	0
3214 Loans	19	0	51	-16	54
<i>o/w Nonfinancial public corporations</i>	0	0	16	-16	0
<i>o/w Financial public corporations</i>	0	0	28	0	28
3215 Shares and other equity	82	69	0	-107	44
<i>o/w Nonfinancial public corporations</i>	69	38	0	-107	0
<i>o/w Financial public corporations</i>	11	21	0	0	32
3216 Insurance technical reserves	0	0	0	0	0
3217 Financial derivatives	0	0	0	0	0
3218 Other accounts receivable	22	47	2	0	71
322 Foreign	0	0	0	0	0
3222 Currency and deposits	0	0	0	0	0
3223 Securities other than shares	0	0	0	0	0
3224 Loans	0	0	0	0	0
3225 Shares and other equity	0	0	0	0	0
3226 Insurance technical reserves	0	0	0	0	0
3227 Financial derivatives	0	0	0	0	0
3228 Other accounts receivable	0	0	0	0	0
323 Monetary gold and SDRs	0	0	0	0	0
33 Net incurrence of liabilities	47	380	109	-164	372
331 Domestic	410	324	109	-164	679
3312 Currency and deposits	0	0	0	0	0
3313 Securities other than shares	123	0	0	-41	82
<i>o/w Nonfinancial public corporations</i>	41	0	0	-41	0
3314 Loans	53	97	101	-16	235
<i>o/w General government</i>	37	49	17	0	103
<i>o/w Nonfinancial public corporations</i>	0	16	0	-16	0
<i>o/w Financial public corporations</i>	0	7	0	0	7
3315 Shares and other equity	200	214	0	-107	307
<i>o/w General government</i>	109	89	0	0	198
<i>o/w Nonfinancial public corporations</i>	38	69	0	-107	0
<i>o/w Financial public corporations</i>	22	42	0	0	64
3316 Insurance technical reserves	0	0	0	0	0
3317 Financial derivatives	0	0	0	0	0
3318 Other accounts payable	34	13	8	0	55
332 Foreign	-363	56	0	0	-307
3322 Currency and deposits	0	0	0	0	0
3323 Securities other than shares	0	0	0	0	0
3324 Loans	-363	56	0	0	-307
3325 Shares and other equity	0	0	0	0	0
3326 Insurance technical reserves	0	0	0	0	0
3327 Financial derivatives	0	0	0	0	0
3328 Other accounts payable	0	0	0	0	0

TABLE A.2
STATEMENT OF OPERATIONS
CONSOLIDATED NONFINANCIAL PUBLIC SECTOR

Year ending December 31, 20xx

	Consolidated General Government Sector	Consolidated Nonfinancial Public Corpora- tions Sector (see Table A.1)	Consolidation	Consolidated Nonfinancial Public Sector
	6	7	8	9=6+7+8
1 Revenue	7,864	2,900	-690	10,074
11 Taxes	4,705	0	0	4,705
12 Social contributions	467	0	0	467
13 Grants	720	0	0	720
14 Other revenue	1,972	2,900	-690	4,182
141 Property income	893	226	-190	929
1411 Interest	214	160	0	374
1412 Dividends	511	41	-155	397
<i>o/w From nonfinancial public corporations</i>	<i>155</i>	<i>0</i>	<i>-155</i>	<i>0</i>
<i>o/w From financial public corporations</i>	<i>290</i>	<i>6</i>	<i>0</i>	<i>296</i>
1413 Withdrawals of income from quasi-corporations	35	0	-35	0
<i>o/w From nonfinancial public corporations</i>	<i>35</i>	<i>0</i>	<i>-35</i>	<i>0</i>
1414 Property income attributed to insurance policy holders	0	0	0	0
1415 Rent	133	25	0	158
142 Sales of goods and services	855	2,135	0	2,990
143 Fines, penalties, and forfeits	63	0	0	63
144 Voluntary transfers other than grants	0	529	-500	29
1441 Current	0	454	-425	29
<i>o/w From general government (subsidies)</i>	<i>0</i>	<i>425</i>	<i>-425</i>	<i>0</i>
<i>o/w From nonfinancial public corporations</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>o/w From financial public corporations</i>	<i>0</i>	<i>25</i>	<i>0</i>	<i>25</i>
1442 Capital	0	75	-75	0
<i>o/w From general government</i>	<i>0</i>	<i>75</i>	<i>-75</i>	<i>0</i>
145 Miscellaneous and unidentified revenue	161	10	0	171
2 Expense	8,158	2,303	-690	9,771
21 Compensation of employees	2,555	688	0	3,243
22 Use of goods and services	2,106	875	0	2,981
23 Consumption of fixed capital	300	262	0	562
24 Interest	986	194	0	1,180
25 Subsidies	643	0	-425	218
<i>o/w To nonfinancial public corporations</i>	<i>425</i>	<i>0</i>	<i>-425</i>	<i>0</i>
<i>o/w To financial public corporations</i>	<i>218</i>	<i>0</i>	<i>0</i>	<i>218</i>
26 Grants	0	0	0	0
27 Social benefits	1,317	0	0	1,317
28 Other expense	251	284	-265	270
281 Property expense other than interest	0	272	-190	82
2811 Dividends	0	191	-155	36
<i>o/w To general government</i>	<i>0</i>	<i>155</i>	<i>-155</i>	<i>0</i>
<i>o/w To nonfinancial public corporations</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>o/w To financial public corporations</i>	<i>0</i>	<i>8</i>	<i>0</i>	<i>8</i>
2812 Withdrawals of income from quasi-corporations	0	35	-35	0
<i>o/w By general government</i>	<i>0</i>	<i>35</i>	<i>-35</i>	<i>0</i>
2813 Property expense attributed to insurance policy holders	0	0	0	0
2814 Rent	0	46	0	46
282 Miscellaneous other expense	251	12	-75	188
2821 Current	142	12	0	154
<i>o/w To nonfinancial public corporations</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>o/w To financial public corporations</i>	<i>0</i>	<i>12</i>	<i>0</i>	<i>12</i>
2822 Capital	109	0	-75	34
<i>o/w To nonfinancial public corporations</i>	<i>75</i>	<i>0</i>	<i>-75</i>	<i>0</i>
<i>o/w To financial public corporations</i>	<i>34</i>	<i>0</i>	<i>0</i>	<i>34</i>
NOB Net operating balance	-294	597	0	303
31 Net acquisition of nonfinancial assets	489	194	0	683
NLB Net lending/borrowing	-783	403	0	-380

TABLE A.2
STATEMENT OF OPERATIONS
CONSOLIDATED NONFINANCIAL PUBLIC SECTOR (concluded)

Year ending December 31, 20xx

	Consolidated General Government Sector	Consolidated Nonfinancial Public Corpora- tions Sector (see Table A.1)	Consolidation	Consolidated Nonfinancial Public Sector
	6	7	8	9=6+7+8
32 Net acquisition of financial assets	3,179	775	-334	3,620
321 Domestic	3,179	775	-334	3,620
3212 Currency and deposits	2,147	573	0	2,720
3213 Securities other than shares	0	33	-33	0
<i>o/w General government</i>	0	33	-33	0
<i>o/w Nonfinancial public corporations</i>	0	0	0	0
3214 Loans	209	54	-103	160
<i>o/w Nonfinancial public corporations</i>	103	0	-103	0
<i>o/w Financial public corporations</i>	57	28	0	85
3215 Shares and other equity	383	44	-198	229
<i>o/w Nonfinancial public corporations</i>	198	0	-198	0
<i>o/w Financial public corporations</i>	119	32	0	151
3216 Insurance technical reserves	0	0	0	0
3217 Financial derivatives	0	0	0	0
3218 Other accounts receivable	440	71	0	511
322 Foreign	0	0	0	0
3222 Currency and deposits	0	0	0	0
3223 Securities other than shares	0	0	0	0
3224 Loans	0	0	0	0
3225 Shares and other equity	0	0	0	0
3226 Insurance technical reserves	0	0	0	0
3227 Financial derivatives	0	0	0	0
3228 Other accounts receivable	0	0	0	0
323 Monetary gold and SDRs	0	0	0	0
33 Net incurrence of liabilities	3,962	372	-334	4,000
331 Domestic	2,425	679	-334	2,770
3312 Currency and deposits	0	0	0	0
3313 Securities other than shares	1,601	82	-33	1,650
<i>o/w Nonfinancial public corporations</i>	33	0	-33	0
<i>o/w Financial public corporations</i>	52	0	0	52
3314 Loans	175	235	-103	307
<i>o/w General government</i>	0	103	-103	0
<i>o/w Nonfinancial public corporations</i>	0	0	0	0
<i>o/w Financial public corporations</i>	0	7	0	7
3315 Shares and other equity	0	307	-198	109
<i>o/w General government</i>	0	198	-198	0
<i>o/w Nonfinancial public corporations</i>	0	0	0	0
<i>o/w Financial public corporations</i>	0	64	0	64
3316 Insurance technical reserves	0	0	0	0
3317 Financial derivatives	0	0	0	0
3318 Other accounts payable	649	55	0	704
332 Foreign	1,537	-307	0	1,230
3322 Currency and deposits	0	0	0	0
3323 Securities other than shares	0	0	0	0
3324 Loans	1,537	-307	0	1,230
3325 Shares and other equity	0	0	0	0
3326 Insurance technical reserves	0	0	0	0
3327 Financial derivatives	0	0	0	0
3328 Other accounts payable	0	0	0	0

TABLE A.3
STATEMENT OF SOURCES AND USES OF CASH
CONSOLIDATED NONFINANCIAL PUBLIC CORPORATIONS SUBSECTOR

Year ending December 31, 20xx

	Nonfinancial Public Corporations (NFPC)			Consolidation	Consolidated NFPC Sector 5=1+2+3+4
	A	B	C		
	1	2	3		
1 Cash receipts from operating activities	1,424	860	592	-75	2,801
11 Taxes	0	0	0	0	0
12 Social contributions	0	0	0	0	0
13 Grants	0	0	0	0	0
14 Other receipts	1,424	860	592	-75	2,801
141 Property income	98	116	54	-65	203
1411 Interest	46	62	29	0	137
1412 Dividends	42	39	25	-65	41
<i>o/w From nonfinancial public corporations</i>	<i>32</i>	<i>33</i>	<i>0</i>	<i>-65</i>	<i>0</i>
<i>o/w From financial public corporations</i>	<i>0</i>	<i>6</i>	<i>0</i>	<i>0</i>	<i>6</i>
1413 Withdrawals of income from quasi-corporations	0	0	0	0	0
1414 Property income attributed to insurance policy holders	0	0	0	0	0
1415 Rent	10	15	0	0	25
142 Sales of goods and services	1,100	600	435	0	2,135
143 Fines, penalties, and forfeits	0	0	0	0	0
144 Voluntary transfers other than grants	226	144	93	-10	453
1441 Current	226	74	93	-10	383
<i>o/w From general government (subsidies)</i>	<i>226</i>	<i>60</i>	<i>68</i>	<i>0</i>	<i>354</i>
<i>o/w From nonfinancial public corporations</i>	<i>0</i>	<i>10</i>	<i>0</i>	<i>-10</i>	<i>0</i>
<i>o/w From financial public corporations</i>	<i>0</i>	<i>0</i>	<i>25</i>	<i>0</i>	<i>25</i>
1442 Capital	0	70	0	0	70
<i>o/w From general government</i>	<i>0</i>	<i>70</i>	<i>0</i>	<i>0</i>	<i>70</i>
145 Miscellaneous and unidentified receipts	0	0	10	0	10
2 Cash payments for operating activities	903	641	412	-75	1,881
21 Compensation of employees	330	219	113	0	662
22 Purchases of goods and services	350	230	209	0	789
24 Interest	64	77	40	0	181
25 Subsidies	0	0	0	0	0
26 Grants	0	0	0	0	0
27 Social benefits	0	0	0	0	0
28 Other payments	159	115	50	-75	249
281 Property expense other than interest	159	101	40	-65	235
2811 Dividends	126	101	0	-65	162
<i>o/w To general government</i>	<i>86</i>	<i>53</i>	<i>0</i>	<i>0</i>	<i>139</i>
<i>o/w To nonfinancial public corporations</i>	<i>33</i>	<i>32</i>	<i>0</i>	<i>-65</i>	<i>0</i>
<i>o/w To financial public corporations</i>	<i>3</i>	<i>5</i>	<i>0</i>	<i>0</i>	<i>8</i>
2812 Withdrawals of income from quasi-corporations	0	0	27	0	27
<i>o/w By general government</i>	<i>0</i>	<i>0</i>	<i>27</i>	<i>0</i>	<i>27</i>
2813 Property expense attributed to insurance policy holders	0	0	0	0	0
2814 Rent	33	0	13	0	46
282 Miscellaneous other payments	0	14	10	-10	14
2821 Current	0	14	10	-10	14
<i>o/w To nonfinancial public corporations</i>	<i>0</i>	<i>0</i>	<i>10</i>	<i>-10</i>	<i>0</i>
<i>o/w To financial public corporations</i>	<i>0</i>	<i>14</i>	<i>0</i>	<i>0</i>	<i>14</i>
2822 Capital	0	0	0	0	0
CIO Net cash inflow from operating activities	521	219	180	0	920
31 Net cash outflow from investments in nonfinancial assets	287	268	-13	0	542
CSD Cash surplus/deficit	234	-49	193	0	378

TABLE A.3

STATEMENT OF SOURCES AND USES OF CASH

CONSOLIDATED NONFINANCIAL PUBLIC CORPORATIONS SUBSECTOR (concluded)

Year ending December 31, 20xx

	Nonfinancial Public Corporations (NFPC)			Consolidation	Consolidated NFPC Sector 5=1+2+3-4
	A	B	C		
	1	2	3		
32x Net acquisition of financial assets other than cash	130	108	35	-162	111
321x Domestic	130	108	35	-162	111
3213 Securities other than shares	33	39	0	-39	33
<i>o/w General government</i>	33	0	0	0	33
<i>o/w Nonfinancial public corporations</i>	0	39	0	-39	0
3214 Loans	15	0	35	-16	34
<i>o/w Nonfinancial public corporations</i>	0	0	16	-16	0
<i>o/w Financial public corporations</i>	0	0	12	0	12
3215 Shares and other equity	82	69	0	-107	44
<i>o/w Nonfinancial public corporations</i>	69	38	0	-107	0
<i>o/w Financial public corporations</i>	11	21	0	0	32
3216 Insurance technical reserves	0	0	0	0	0
3217 Financial derivatives	0	0	0	0	0
322x Foreign	0	0	0	0	0
3223 Securities other than shares	0	0	0	0	0
3224 Loans	0	0	0	0	0
3225 Shares and other equity	0	0	0	0	0
3226 Insurance technical reserves	0	0	0	0	0
3227 Financial derivatives	0	0	0	0	0
323 Monetary gold and SDRs	0	0	0	0	0
33 Net incurrence of liabilities	7	367	94	-162	306
331 Domestic	370	311	94	-162	613
3312 Currency and deposits	0	0	0	0	0
3313 Securities other than shares	121	0	0	-39	82
<i>o/w Nonfinancial public corporations</i>	39	0	0	-39	0
3314 Loans	49	97	94	-16	224
<i>o/w General government</i>	37	49	10	0	96
<i>o/w Nonfinancial public corporations</i>	0	16	0	-16	0
<i>o/w Financial public corporations</i>	0	7	0	0	7
3315 Shares and other equity	200	214	0	-107	307
<i>o/w General government</i>	109	89	0	0	198
<i>o/w Nonfinancial public corporations</i>	38	69	0	-107	0
<i>o/w Financial public corporations</i>	22	42	0	0	64
3316 Insurance technical reserves	0	0	0	0	0
3317 Financial derivatives	0	0	0	0	0
332 Foreign	-363	56	0	0	-307
3322 Currency and deposits	0	0	0	0	0
3323 Securities other than shares	0	0	0	0	0
3324 Loans	-363	56	0	0	-307
3325 Shares and other equity	0	0	0	0	0
3326 Insurance technical reserves	0	0	0	0	0
3327 Financial derivatives	0	0	0	0	0
NFA Net cash inflow from financing activities	-123	259	59	0	195
NCB Net change in the stock of cash	111	210	252	0	573

TABLE A.4
STATEMENT OF SOURCES AND USES OF CASH
CONSOLIDATED NONFINANCIAL PUBLIC SECTOR

Year ending December 31, 20xx

	Consolidated General Government Sector	Consolidated Nonfinancial Public Corpora- tions Sector (see Table A.3)	Consolidation	Consolidated Nonfinancial Public Sector
	6	7	8	9=6+7+8
1 Cash receipts from operating activities	7,410	2,801	-590	9,621
11 Taxes	4,280	0	0	4,280
12 Social contributions	449	0	0	449
13 Grants	731	0	0	731
14 Other receipts	1,950	2,801	-590	4,161
141 Property income	881	203	-166	918
1411 Interest	200	137	0	337
1412 Dividends	521	41	-139	423
<i>o/w From nonfinancial public corporations</i>	<i>139</i>	<i>0</i>	<i>-139</i>	<i>0</i>
<i>o/w From financial public corporations</i>	<i>290</i>	<i>6</i>	<i>0</i>	<i>296</i>
1413 Withdrawals of income from quasi-corporations	27	0	-27	0
<i>o/w From nonfinancial public corporations</i>	<i>27</i>	<i>0</i>	<i>-27</i>	<i>0</i>
1414 Property income attributed to insurance policy holders	0	0	0	0
1415 Rent	133	25	0	158
142 Sales of goods and services	855	2,135	0	2,990
143 Fines, penalties, and forfeits	63	0	0	63
144 Voluntary transfers other than grants	0	453	-424	29
1441 Current	0	383	-354	29
<i>o/w From general government (subsidies)</i>	<i>0</i>	<i>354</i>	<i>-354</i>	<i>0</i>
<i>o/w From nonfinancial public corporations</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>o/w From financial public corporations</i>	<i>0</i>	<i>25</i>	<i>0</i>	<i>25</i>
1442 Capital	0	70	-70	0
<i>o/w From general government</i>	<i>0</i>	<i>70</i>	<i>-70</i>	<i>0</i>
145 Miscellaneous and unidentified receipts	151	10	0	161
2 Cash payments for operating activities	7,436	1,881	-590	8,727
21 Compensation of employees	2,227	662	0	2,889
22 Purchases of goods and services	2,419	789	0	3,208
24 Interest	900	181	0	1,081
25 Subsidies	564	0	-354	210
<i>o/w To nonfinancial public corporations</i>	<i>354</i>	<i>0</i>	<i>-354</i>	<i>0</i>
<i>o/w To financial public corporations</i>	<i>210</i>	<i>0</i>	<i>0</i>	<i>210</i>
26 Grants	0	0	0	0
27 Social benefits	1,117	0	0	1,117
28 Other payments	209	249	-236	222
281 Property expense other than interest	0	235	-166	69
2811 Dividends	0	162	-139	23
<i>o/w To general government</i>	<i>0</i>	<i>139</i>	<i>-139</i>	<i>0</i>
<i>o/w To nonfinancial public corporations</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>o/w To financial public corporations</i>	<i>0</i>	<i>8</i>	<i>0</i>	<i>8</i>
2812 Withdrawals of income from quasi-corporations	0	27	-27	0
<i>o/w By general government</i>	<i>0</i>	<i>27</i>	<i>-27</i>	<i>0</i>
2813 Property expense attributed to insurance policy holders	0	0	0	0
2814 Rent	0	46	0	46
282 Miscellaneous other payments	209	14	-70	153
2821 Current	109	14	0	123
<i>o/w To nonfinancial public corporations</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>o/w To financial public corporations</i>	<i>0</i>	<i>14</i>	<i>0</i>	<i>14</i>
2822 Capital	100	0	-70	30
<i>o/w To nonfinancial public corporations</i>	<i>70</i>	<i>0</i>	<i>-70</i>	<i>0</i>
<i>o/w To financial public corporations</i>	<i>30</i>	<i>0</i>	<i>0</i>	<i>30</i>
CIO Net cash inflow from operating activities	-26	920	0	894
31 Net cash outflow from investments in nonfinancial assets	476	542	0	1,018
GSD Cash surplus/deficit	-502	378	0	-124

TABLE A.4
STATEMENT OF SOURCES AND USES OF CASH
CONSOLIDATED NONFINANCIAL PUBLIC SECTOR (concluded)

Year ending December 31, 20xx

	Consolidated General Government Sector	Consolidated Nonfinancial Public Corpora- tions Sector (see Table A.3)	Consolidation	Consolidated Nonfinancial Public Sector
	6	7	8	9=6+7+8
32x Net acquisition of financial assets other than cash	578	111	-327	362
321x Domestic	578	111	-327	362
3213 Securities other than shares	0	33	-33	0
<i>o/w General government</i>	0	33	-33	0
<i>o/w Nonfinancial public corporations</i>	0	0	0	0
3214 Loans	195	34	-96	133
<i>o/w Nonfinancial public corporations</i>	96	0	-96	0
<i>o/w Financial public corporations</i>	57	12	0	69
3215 Shares and other equity	383	44	-198	229
<i>o/w Nonfinancial public corporations</i>	198	0	-198	0
<i>o/w Financial public corporations</i>	119	32	0	151
3216 Insurance technical reserves	0	0	0	0
3217 Financial derivatives	0	0	0	0
322x Foreign	0	0	0	0
3223 Securities other than shares	0	0	0	0
3224 Loans	0	0	0	0
3225 Shares and other equity	0	0	0	0
3226 Insurance technical reserves	0	0	0	0
3227 Financial derivatives	0	0	0	0
323 Monetary gold and SDRs	0	0	0	0
33 Net incurrence of liabilities	3,227	306	-327	3,206
331 Domestic	1,731	613	-327	2,017
3312 Currency and deposits	0	0	0	0
3313 Securities other than shares	1,556	82	-33	1,605
<i>o/w Nonfinancial public corporations</i>	33	0	-33	0
<i>o/w Financial public corporations</i>	52	0	0	52
3314 Loans	175	224	-96	303
<i>o/w General government</i>	0	96	-96	0
<i>o/w Nonfinancial public corporations</i>	0	0	0	0
<i>o/w Financial public corporations</i>	0	7	0	7
3315 Shares and other equity	0	307	-198	109
<i>o/w General government</i>	0	198	-198	0
<i>o/w Nonfinancial public corporations</i>	0	0	0	0
<i>o/w Financial public corporations</i>	0	64	0	64
3316 Insurance technical reserves	0	0	0	0
3317 Financial derivatives	0	0	0	0
332 Foreign	1,496	-307	0	1,189
3322 Currency and deposits	0	0	0	0
3323 Securities other than shares	0	0	0	0
3324 Loans	1,496	-307	0	1,189
3325 Shares and other equity	0	0	0	0
3326 Insurance technical reserves	0	0	0	0
3327 Financial derivatives	0	0	0	0
NFA Net cash inflow from financing activities	2,649	195	0	2,844
NCB Net change in the stock of cash	2,147	573	0	2,720

TABLE A.5
BALANCE SHEET
CONSOLIDATED NONFINANCIAL PUBLIC CORPORATIONS SUBSECTOR

Year ending December 31, 20xx

	Nonfinancial Public Corporations (NFPC)			Consolidation	Consolidated NFPC Sector
	A	B	C		
	1	2	3		
	4	5=1+2+3+4			
6 Net worth	774	950	526	0	2,250
61 Nonfinancial assets	2,460	1,626	652	0	4,738
611 Fixed assets	2,215	1,234	259	0	3,708
612 Inventories	-410	242	-35	0	-203
613 Valuables	0	7	0	0	7
614 Nonproduced assets	655	143	428	0	1,226
62 Financial assets	2,334	1,843	954	-1,048	4,083
621 Domestic	2,334	1,843	954	-1,048	4,083
6212 Currency and deposits	881	1,002	479	0	2,362
6213 Securities other than shares	354	256	0	-256	354
<i>o/w General government</i>	<i>354</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>354</i>
<i>o/w Nonfinancial public corporations</i>	<i>0</i>	<i>256</i>	<i>0</i>	<i>-256</i>	<i>0</i>
6214 Loans	190	0	444	-147	487
<i>o/w Nonfinancial public corporations</i>	<i>0</i>	<i>0</i>	<i>147</i>	<i>-147</i>	<i>0</i>
<i>o/w Financial public corporations</i>	<i>0</i>	<i>0</i>	<i>234</i>	<i>0</i>	<i>234</i>
6215 Shares and other equity	627	466	0	-645	448
<i>o/w Nonfinancial public corporations</i>	<i>410</i>	<i>235</i>	<i>0</i>	<i>-645</i>	<i>0</i>
<i>o/w Financial public corporations</i>	<i>183</i>	<i>199</i>	<i>0</i>	<i>0</i>	<i>382</i>
6216 Insurance technical reserves	0	0	0	0	0
6217 Financial derivatives	0	0	0	0	0
6218 Other accounts receivable	282	119	31	0	432
622 Foreign	0	0	0	0	0
6222 Currency and deposits	0	0	0	0	0
6223 Securities other than shares	0	0	0	0	0
6224 Loans	0	0	0	0	0
6225 Shares and other equity	0	0	0	0	0
6226 Insurance technical reserves	0	0	0	0	0
6227 Financial derivatives	0	0	0	0	0
6228 Other accounts receivable	0	0	0	0	0
623 Monetary gold and SDRs	0	0	0	0	0
63 Liabilities	4,020	2,519	1,080	-1,048	6,571
631 Domestic	2,513	2,206	1,080	-1,048	4,751
6312 Currency and deposits	0	0	0	0	0
6313 Securities other than shares	739	0	0	-256	483
<i>o/w Nonfinancial public corporations</i>	<i>256</i>	<i>0</i>	<i>0</i>	<i>-256</i>	<i>0</i>
6314 Loans	603	777	925	-147	2,158
<i>o/w General government</i>	<i>450</i>	<i>404</i>	<i>133</i>	<i>0</i>	<i>987</i>
<i>o/w Nonfinancial public corporations</i>	<i>0</i>	<i>147</i>	<i>0</i>	<i>-147</i>	<i>0</i>
<i>o/w Financial public corporations</i>	<i>0</i>	<i>73</i>	<i>0</i>	<i>0</i>	<i>73</i>
6315 Shares and other equity	946	1,243	0	-645	1,544
<i>o/w General government</i>	<i>552</i>	<i>620</i>	<i>0</i>	<i>0</i>	<i>1,172</i>
<i>o/w Nonfinancial public corporations</i>	<i>235</i>	<i>410</i>	<i>0</i>	<i>-645</i>	<i>0</i>
<i>o/w Financial public corporations</i>	<i>129</i>	<i>200</i>	<i>0</i>	<i>0</i>	<i>329</i>
6316 Insurance technical reserves	0	0	0	0	0
6317 Financial derivatives	0	0	0	0	0
6318 Other accounts payable	225	186	155	0	566
632 Foreign	1,507	313	0	0	1,820
6322 Currency and deposits	0	0	0	0	0
6323 Securities other than shares	0	0	0	0	0
6324 Loans	1,507	313	0	0	1,820
6325 Shares and other equity	0	0	0	0	0
6326 Insurance technical reserves	0	0	0	0	0
6327 Financial derivatives	0	0	0	0	0
6328 Other accounts payable	0	0	0	0	0

TABLE A.6
BALANCE SHEET

CONSOLIDATED NONFINANCIAL PUBLIC SECTOR

Year ending December 31, 20xx

	Consolidated General Government Sector	Consolidated Nonfinancial Public Corpora- tions Sector (see Table A.5)	Consolidation	Consolidated Nonfinancial Public Sector
	6	7	8	9=6+7+8
6 Net worth	3,803	2,250	0	6,053
61 Nonfinancial assets	11,368	4,738	0	16,106
611 Fixed assets	7,282	3,708	0	10,990
612 Inventories	1,431	-203	0	1,228
613 Valuables	52	7	0	59
614 Nonproduced assets	2,603	1,226	0	3,829
62 Financial assets	6,448	4,083	-2,513	8,018
621 Domestic	6,448	4,083	-2,513	8,018
6212 Currency and deposits	1,466	2,362	0	3,828
6213 Securities other than shares	0	354	-354	0
<i>o/w General government</i>	0	354	-354	0
<i>o/w Nonfinancial public corporations</i>	0	0	0	0
6214 Loans	1,305	487	-987	805
<i>o/w Nonfinancial public corporations</i>	987	0	-987	0
<i>o/w Financial public corporations</i>	307	234	0	541
6215 Shares and other equity	2,688	448	-1,172	1,964
<i>o/w Nonfinancial public corporations</i>	1,172	0	-1,172	0
<i>o/w Financial public corporations</i>	1,294	382	0	1,676
6216 Insurance technical reserves	0	0	0	0
6217 Financial derivatives	0	0	0	0
6218 Other accounts receivable	989	432	0	1,421
622 Foreign	0	0	0	0
6222 Currency and deposits	0	0	0	0
6223 Securities other than shares	0	0	0	0
6224 Loans	0	0	0	0
6225 Shares and other equity	0	0	0	0
6226 Insurance technical reserves	0	0	0	0
6227 Financial derivatives	0	0	0	0
6228 Other accounts receivable	0	0	0	0
623 Monetary gold and SDRs	0	0	0	0
63 Liabilities	14,013	6,571	-2,513	18,071
631 Domestic	10,407	4,751	-2,513	12,645
6312 Currency and deposits	0	0	0	0
6313 Securities other than shares	5,991	483	-354	6,120
<i>o/w Nonfinancial public corporations</i>	354	0	-354	0
<i>o/w Financial public corporations</i>	143	0	0	143
6314 Loans	1,864	2,158	-987	3,035
<i>o/w General government</i>	0	987	-987	0
<i>o/w Nonfinancial public corporations</i>	0	0	0	0
<i>o/w Financial public corporations</i>	0	73	0	73
6315 Shares and other equity	0	1,544	-1,172	372
<i>o/w General government</i>	0	1,172	-1,172	0
<i>o/w Nonfinancial public corporations</i>	0	0	0	0
<i>o/w Financial public corporations</i>	0	329	0	329
6316 Insurance technical reserves	0	0	0	0
6317 Financial derivatives	0	0	0	0
6318 Other accounts payable	2,552	566	0	3,118
632 Foreign	3,606	1,820	0	5,426
6322 Currency and deposits	0	0	0	0
6323 Securities other than shares	0	0	0	0
6324 Loans	3,606	1,820	0	5,426
6325 Shares and other equity	0	0	0	0
6326 Insurance technical reserves	0	0	0	0
6327 Financial derivatives	0	0	0	0
6328 Other accounts payable	0	0	0	0