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October 24, 2000

To: Members of the Executive Board

From: The Secretary

Subject: **Issues in Fiscal Accounting**

Attached for the information of Executive Directors is a paper on issues in fiscal accounting. Some conclusions appear on pages 32–34.

Ms. Cheasty (ext. 38706) is available to answer technical or factual questions relating to this paper from October 27, 2000 onward.

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INTERNATIONAL MONETARY FUND

Issues in Fiscal Accounting

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(In consultation with the Statistics Department)

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I. INTRODUCTION

1. This paper responds to queries from Executive Directors about how Fund staff present the fiscal accounts in several countries, and what was perceived as divergent treatment across countries. Issues raised included the appropriateness of including public enterprises and the central bank in measures of the fiscal position; problems of integrating cash-based government accounts with accounts kept by some institutions on an accrual basis; the cross-country comparability of the Fund's fiscal statistics, given differences in coverage and accounting practice; and appropriate concepts of the impact of the public sector on demand.

2. The queries are part of a more general refocusing of attention on fiscal accounts. Deficiencies in the quality and coverage of fiscal data are seen as weakening both the Fund's surveillance role and its fiduciary responsibility to monitor programs supported by use of Fund resources. The Code of Good Practices on Fiscal Transparency[1] has emphasized the need for clarity in the financial dimensions of government activity. More generally, there has been widespread dissatisfaction within the profession about how government is measured.[2] Hence, Fund staff have collaborated with other institutions to reform the system of Government Finance Statistics (GFS), with a view to aligning it better with other statistical systems and making the analytical framework sounder. This work is ongoing, and not all issues have been resolved; we expect to publish the new GFS Manual by mid-2001.

3. The paper is not intended to duplicate either of these initiatives. In responding to Directors' queries, it addresses some of the principal problems that confront Fund economists in their effort to assess the impact of fiscal policy. In so doing, it highlights the complexities and nontransparencies in many countries' fiscal accounts, and explains the strategies used by Fund economists to arrive at a comprehensive picture of the fiscal position and interpret its impact appropriately. It also comments on the role of the new GFS system in addressing some of the shortcomings bedeviling current statistics.

4. There are four substantive sections and a summary-conclusion in the paper. The first section discusses the **coverage of the fiscal sector** in Fund country documents—whether the statistics presented capture appropriately the scope and impact of government activity. The second discusses the **accounting basis of government**—whether government's *cash* operations provide an adequate measure of its activities and impact, and how to interpret these vis-à-vis the operations of public enterprises and the central bank, which tend to be measured on an *accrual* basis. Both sections review the comparability of the approach taken in different regions. The third discusses the interpretation of available statistics for measuring **the impact**

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[1] From now on, referred to as the Transparency Code; see also the companion Manual on Fiscal Transparency.

[2] For instance, "There is substantial room for improvement in public budgeting practice, including movement toward accrual accounting, improved accounting for public assets and liabilities (a public balance sheet), accurate accounting for a variety of off-budget guarantee and subsidy arrangements, and inclusion of future entitlement commitments. Of course, each of these changes is fraught with conceptual and informational problems of its own." Haveman (1994), page 110.

of the public sector, while the fourth describes some of the key features of **the new GFS system** (in very summary form).

II. The Coverage of Government

5. **The question of why public enterprises are included in some countries' fiscal tables but not in others' raises the more general issue of what fiscal statistics ought to cover.** This section lays out the analytical rationale for choice of coverage, looks at country statistics in practice, and comments on points of contention. It then discusses the relationship of public enterprises and the central bank to government, as well as, briefly, other components of the public sector.

A. The Analytical Goals of Statistical Coverage

6. **The primary goal of Fund fiscal statistics is to contribute to an assessment of fiscal policy**—with a view to evaluating its macroeconomic consequences (impact on aggregate demand, the balance of payments, sustainability, etc.). Since fiscal policy is carried out via government operations, it should be measured by tallying up all of these. Ideally, government operations would be carried out only in the budgets of national and subnational governments (general government). General government statistics are the EU and OECD norm for a "reasonably comprehensive" measure of fiscal policy. And the Transparency Code specifies that "the government sector *should* correspond to the general government."[3] **But in practice, in probably the majority of countries, some government operations also take place outside the budgetary framework**—in extrabudgetary funds (including public social insurance schemes), through public enterprises, and by publicly owned banks.[4] The boxes dispersed throughout the paper discuss various examples.

7. Government operations outside general government tend to be less transparent and create problems for fiscal analysis. As the Manual on Fiscal Transparency points out, the budget "may capture only a small proportion of total fiscal transactions,"[5] with the result that statistics which cover only the core government (or "Treasury operations," or "the budgetary accounts") run the risk of leading to an inaccurate assessment of government's impact on the economy and poorly targeted remedial action (see paragraph 19 below). **To get a more accurate picture, Fund economists try to identify significant off-budget government**

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[3] Transparency Manual, paragraph 1.1.1, emphasis added. In other words, for fiscal activity to be transparent, it should take place within general government and not elsewhere in the public sector. However, the Manual notes that, to the extent that public financial and nonfinancial institutions carry out activities of a fiscal character, aspects of the Code must be applied more broadly (paragraph 19).

[4] This is one reason why public finance textbooks tend to use the terms "state," "government," and "public sector" interchangeably. Rather than identifying government by institutions, public finance theory sees the allocation of resources by state power as the defining characteristic of the state/government/public sector, while the private sector relies on the market to allocate resources. Government operations are all nonmarket allocations of resources by use of state power—taxing, consumption, investment, transfers, and subsidies—no matter where in the economy they take place. See, for instance, Hansen (1958, page 31), and Blinder and Solow (1974, page 4).

[5] Transparency Manual, paragraph 30.

operations and incorporate them into the government operations table. This is one reason why Fund fiscal tables cover different institutions in different countries—the goal is to make as much fiscal activity as possible transparent.[6]

8. Perhaps even more importantly in the Fund environment, there is also a strategic reason for taking an analytical rather than institutional approach. If the Fund were to define its coverage of government as necessarily being limited to the core institutions, any pressure to tighten fiscal policy (say, through the imposition of fiscal conditionality) would create incentives for countries to move government operations outside the core; this happens occasionally in program countries. Hence **it would be important that, no matter where a given fiscal activity is situated, it would be captured in Fund program analysis.**

Box 1. The Statistics Surveyed in this Paper

All of the commentary on Fund statistics in this paper refers to the fiscal tables in documents used for Fund operations. Specifically, **the information was compiled using the staff report or RED for each country which was issued closest to end-1998**. These contain the statistics used for Fund analysis of a country's fiscal policy and identification of remedial fiscal measures. Two distinctions should be drawn:

- **They are not necessarily the fiscal aggregates on which conditionality is imposed.** For instance, data may be available for the public sector but not quickly enough to be used for program review; in this case, conditionality might cover central government only (though, as discussed in Section II.C, there are drawbacks to such a practice).

- **They are not necessarily consistent with Government Finance Statistics Yearbook (GFSY).** Statistics reported for GFSY purposes typically have the broader coverage of "general government," because they include all identified government institutions (even those whose statistics come far too late to influence current policies and which are therefore omitted from operational measures used in Fund policy discussions), but a narrower coverage than the public sector, since GFSY reporting requirements do not extend to public enterprises or publicly owned banks. Moreover, as discussed in Section III, statistics used in Fund operations are often no longer fully on a cash basis, while GFSY statistics are purely cash.

B. The Actual Coverage of Government in Fund Documents

9. An implication of the above is that, since countries use different institutions to carry out government operations, **Fund fiscal statistics can differ in *institutional* coverage from country to country but still measure the same *analytical* fiscal policy variables** (e.g., the net resource need of the state, total taxation, etc.). A priori at least, the cross-country differences in fiscal coverage described below are not necessarily inconsistent with full capture

[6] Since there are several types of "Fund fiscal statistics," Box 1 specifies the data evaluated in this paper.

of all the transactions which make up fiscal policy—and therefore, with full fiscal accountability.

10. **In *practice*, however, the coverage used in Fund documents differs so much across regions that it is unlikely to be explained by regional differences in fiscal institutions.** Table 1 shows the scope of coverage in member countries. Applying the OECD/EU norm, **coverage is "reasonably comprehensive" or better in the Advanced Economies (broadly the OECD), Countries in Transition, and Western Hemisphere (WHD) countries, but much more limited in Africa, Asia, and the Middle East.**[7]

11. Specifically, **all WHD countries and all Advanced Economies other than Korea and Singapore provide at least information on general government, as do 80 percent of transition countries**.

12. **All WHD countries except Suriname go *beyond* general government to measure the nonfinancial public sector**—that is, their Fund fiscal tables include the operations of public enterprises. **In contrast, elsewhere the Fund monitors the nonfinancial public sector only in seven OECD countries[8] and Bulgaria.** The usual explanation for the regional disparity is that WHD countries have sometimes used public enterprises to carry out fiscal policy, while OECD public enterprises are reasonably responsive to market forces. This, however, may not be a good explanation. Measures taken by EU governments to meet the Maastricht deficit and debt criteria included actions such as moving spending off-budget, use of public agencies and enterprises for revenue or spending, various methods of shifting outlays to the future or bringing revenues forward, asset revaluations, and accounting reforms that affected the timing at which certain receipts were recorded (see Annex Box 1).

13. A more probable reason for the coverage difference is that more WHD countries than OECD countries have had stabilization programs—during which it has been necessary to identify all sources of fiscal imbalance.

14. **Nearly half of WHD countries also do some level of contemporaneous consolidation of central bank operations with those of the government. Elsewhere, only Hungary, Turkey, and the Philippines do such an exercise, though the Fund's tables for a number of transition countries include *some* quasi-fiscal operations.** Other OECD countries (and countries in the rest of the world for which information was available) reflect the central bank's quasi-fiscal activity by recording its profit transfer to the budget; this typically occurs the year *after* the quasi-fiscal activities took place. Again, the difference between practice in WHD countries and the rest of the world has historical roots: central bank losses due to multiple exchange rate systems, directed lending, and other quasi-fiscal activities

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[7] The paper follows the country groupings in the WEO. Hence, "Western Hemisphere countries" exclude the United States and Canada.

[8] Australia, Austria, France, Greece, Italy, New Zealand, and Turkey.

Table 1. IMF Member Countries: Coverage of the Public Sector, 1998

	Advanced Economies	Countries in Transition	Africa	Asia	Middle East	Western Hemisphere
			(Number of countries)			
Nonfinancial public sector + central bank	1	--	--	1	1	15
Nonfinancial public sector	3	--	1	6	--	17
General government, central bank	2	1	--	--	--	--
General government 1/	18	23	3	4	4	1
Central government, social security, extrabudgetary funds 2/	--	1	1	--	1	--
Central government, social security, central bank 2/	--	1	1	--	--	--
Central government, social security 2/	--	1	4	--	1	--
Central government, extrabudgetary funds and central bank	--	--	--	--	--	--
Central government, extrabudgetary funds and special accounts	--	--	1	--	--	--
Central government, extrabudgetary funds	--	--	--	1	1	--
Central government, special accounts	1	--	13	2	2	--
Central government, special accounts, central bank	--	--	--	--	--	--
Central government, central bank	--	--	--	--	--	--
Central government	1	1	22	11	6	--
Central government, w/o foreign-financed projects	--	--	5	--	--	--
Total	**26**	**28**	**51**	**25**	**16**	**33**
			(Percent of regional total)			
Nonfinancial public sector + central bank	4	--	--	4	6	45
Nonfinancial public sector	12	--	2	24	--	52
General government, central bank	8	4	--	--	--	--
General government 1/	69	82	6	16	25	3
Central government, social security, extrabudgetary funds 2/	--	4	2	--	6	--
Central government, social security, central bank 2/	--	4	2	--	--	--
Central government, social security 2/	--	4	8	--	6	--
Central government, extrabudgetary funds and central bank	--	--	--	--	--	--
Central government, extrabudgetary funds and special accounts	--	--	2	--	--	--
Central government, extrabudgetary funds	--	--	--	4	6	--
Central government, special accounts	4	--	25	8	13	--
Central government, special accounts, central bank	--	--	--	--	--	--
Central government, central bank	--	--	--	--	--	--
Central government	4	4	43	44	38	--
Central government, w/o foreign-financed projects	--	--	10	--	--	--
Total	**100**	**100**	**100**	**100**	**100**	**100**

Sources: IMF, various REDs; and Fund staff.

1/ General government comprises central government, subnational government, social security, extrabudgetary funds, and special accounts, if these exist.

2/ May include special accounts where applicable.

have (to the extent we know) been far more significant in Latin American countries than in the OECD—where central bank independence has been more established for longer.[9]

15. The difference in the scope of fiscal policy measurement between the OECD, non-OECD Europe and the western hemisphere, and the rest of the world (Africa, Asia, and the Middle East) is quite striking. **In the rest of the world, Fund tables for around half of the countries record fiscal policy only to the extent that it is executed by budgetary central government.** The inclusion of special accounts in the definition of central government raises this number to 78 percent of African countries, 52 percent of Asian countries, and 51 percent of Middle Eastern countries.[10] This means that these countries understate the size of government (scope of fiscal operations), and possibly distort the measurement of their fiscal stance,[11] to the extent that fiscal activities are carried out by subnational governments, the social security system, extrabudgetary funds, public enterprises, or the central bank.

16. Of course, some countries do not have subnational governments or significant social security systems. This information is difficult to pin down, but **a survey of countries which report only central government numbers in Fund papers suggests that practically all of them have other government branches/agencies.**[12] For instance, in Africa, 21 countries have substantive local governments but do not report their operations to the Fund. (On the other hand, the available evidence suggests that subnational government operations in most African countries are much smaller than elsewhere.)

17. The question of spending from extrabudgetary sources is more problematic. The facts that so few country tables show such funds/accounts and that there are relatively few references to the existence of unmeasured off-budget spending could be taken as implying that, by now, governments have succeeded in channeling spending through the budget. It may unfortunately be more likely that, if a government does not report all public spending, Fund economists usually will not be able to determine the missing portion.

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[9] Asian countries undertaking bank restructuring have not begun to measure central bank activity contemporaneously, though such exercises tend to be linked to large quasi-fiscal costs. However, the understatement of fiscal activity may not be severe, since governments have typically used government bonds rather than central bank paper to bail out banks—meaning that the cost is being borne by government rather than the central bank and (to the extent the bond issue is recognized as a fiscal transaction) is recorded transparently.

[10] Special accounts (when classified appropriately—something which is problematic) usually cover the day-to-day financial operations of government. They might include, for instance, revenue and expenditure items awaiting verification and classification, the petty cash balance, within-year advances, holding accounts, etc. A knowledge of movements in these gives a fuller coverage of government operations and can be useful for signaling liquidity problems and the like. The traditional French budget system recorded them exhaustively, since accounts were kept in a full Treasury balance sheet (rather than, say, in a ledger, as was the British custom). For this reason, French African countries tend to have a more developed record of fiscal transactions than do countries with other colonial histories.

[11] The deficit would be unaffected if these activities were fully funded by the central government.

[12] The existence of other components of government was checked by referring to GFSY metadata, which give information on the structure of government for countries which report, including those parts of government for which they do not provide data.

C. Handling Shortcomings in Fiscal Coverage

18. One implication of the variations in institutional coverage described above is the need for caution in making cross-country comparisons of the size of governments or of their fiscal balances. There are additional important reasons to accord a high priority to the compilation and presentation of information on the operations of all institutions big enough to have a sizable influence on fiscal policy.

19. **The lack of sufficiently comprehensive fiscal statistics can lead to suboptimal fiscal policy.** It may cause policymakers to seek stabilization by making cuts in areas where government activity is relatively desirable, if they cannot see where the real fiscal pressure is coming from. Or it may lead to a perception that government has shrunk, when in fact fiscal activity has just been moved off-budget.

20. There is evidence that **defining the coverage of government too narrowly (most importantly, setting fiscal conditionality on too narrow a base) creates incentives for nontransparent government action**—for instance, moving subsidies from the budget into public enterprises, or transferring to the budget borrowed funds from the unmonitored public sector. This has been a common type of fiscal misreporting. The problem often goes beyond one of transparency and becomes one of permanent damage to vulnerable institutions, when the government has difficulties in repaying this type of credit.

21. **The broader the coverage of government, the less likely that hidden or unknown payments will surface as an unwelcome surprise.** This is because what is contingent to central government may be noncontingent to a broader definition of government. Some liabilities which ultimately devolve to the central government start life as losses or bad policies in other parts of the public sector. Unsustainable policies whose costs can be detected relatively early in public enterprises or banks include administered prices, directed lending, unfinanced mandates, financial repression, decapitalization via taxation on too wide a base, borrowing at rates not justified by market performance, multiple exchange rates, and so on.

22. On the other hand, substantive objections have been raised to broadening the scope of the definition of government in Fund documents.

23. **National policymakers sometimes argue for a narrow definition of government in Fund programs because they have little control over subnational governments, agencies, or public enterprises.** In consequence, the national government can promote stabilization or sustainability only by offsetting the actions of the uncontrolled parts. However, even in this case, to gauge fiscal policy needs, policymakers need to *see* the impact of all parts of government. Transparent accounting will at least identify the source of the pressure and the size of the possible distortion imposed on the central government budget and the private sector.

24. A second consideration is that **there is a trade-off between the timeliness of statistics and the possible coverage of government**. Trying to measure or manage fiscal

policy over too short a time interval is inadvisable, since the lack of information severely restricts the possible choices of policy instrument in Fund programs. Programs often focus on central government because not enough information is available to address problems elsewhere, or it comes with too great a lag to be useful for setting policy. The recent acceleration of turn-around time for Fund programs, and higher frequency of reviews, have unavoidably reduced the information set that can be used in a program—and hence the set of policy instruments available for implementing reforms. For instance, in countries with monthly reviews, the imposition of conditionality on general government is generally not operationally feasible.[13] And, for instance, the need for rapid response precluded any effort to monitor public enterprises or banks in Asian crisis countries.

25. The GFS database provides for a fully comprehensive coverage of general government (in countries which report). The fact that comprehensiveness and accuracy (e.g., reconciliation) are their top priorities explains why GFSY statistics usually become available with too long a lag to be used regularly in Fund operations. However, they can help preclude misreporting or more general inaccurate diagnoses of fiscal problems if operational Fund tables are periodically checked against them to see what and how big the differences are.

26. It should be acknowledged that even when full information is available, the coverage of the public sector does not always provide an accurate measure of fiscal policy. **It may not be possible to separate the fiscal activities from other transactions of an institution carrying out a mix of private and public functions.** As a rule, quasi-fiscal activities are difficult to quantify, and attempts to do so are contentious. This is often the case for public enterprises, in which taxes and subsidies tend not to be transparent. For instance, a public monopoly may be efficient in production but not meet market criteria for profit maximization if its output prices are kept artificially low, if potential profits are transferred to employees in the form of above-market wages or excessive employment, if activities are cross-subsidized, or if enterprise deposits are used to keep shaky banks liquid.

27. In cases where fiscal policy is hard to disentangle from market activity, **it may be necessary to include all (sizable) agencies where fiscal policy is conducted**, even if that means that some market operations will be recorded as well. It is often possible to filter out indirectly the approximate impact of market operations—for instance, by including only the net operating balance of public enterprises in the fiscal accounts. However, comprehensive coverage will allow the impact of each agency on the public sector's finances to be identified, and will point the way to needed reforms.

28. It is sometimes argued that the specification and monitoring of a wide public sector may inappropriately constrain operations in parts of it (for instance, the social security system and public enterprise investment). **This does not, however, necessarily imply that any part of the public sector will be subject to more constraints just because fuller accounts are**

[13] The question of the design of fiscal conditionality will be addressed in more detail in a separate upcoming Board paper—in particular, the point that less than ideal coverage may be necessary in programs because of difficulties in monitoring all elements of the public sector.

available. The issue is one of appropriate programming, not of choice of coverage. Wider coverage should make it easier to see where pressures on aggregate demand are coming from. Then, if—for instance—public enterprise investment is higher priority than private investment, the full amount of financing for such investment can and should be built into the calculation of the ceiling on the public sector's use of resources and credit to the private sector reduced equivalently.[14]

29. **The question of whether to measure the broader public sector is often presented as a choice between a fully consolidated public sector and separate reports on the various components.** But, for countries which can monitor the full public sector, Fund practice is to present both.[15] Information on separate subsectors is important for diagnosing the sources of fiscal problems and for preserving the key distinction between general government and institutions outside it which carry out fiscal policy. Consolidation contributes a summary measure of the overall impact of fiscal policy and allows data quality to be checked. Its quasi-double-entry framework requires the reconciliation of transfers which agencies report having made to government with the transfers which government reports having taken from the agencies.[16]

D. Subnational Governments

30. The activities of subnational governments are usually considered intrinsic to a "reasonably comprehensive" measure of fiscal policy.[17] In many countries, they contribute a significant share to total government (the median is about one-third, as measured by consolidated expenditure and net lending—see Table 2) so that fiscal analysis which does not include them risks missing important developments. Moreover, excluding them (say, by putting performance criteria on central government only) creates incentives for program countries to delegate activities without corresponding financing, to meet program targets.

31. But Table 1 showed that, despite the importance of subnational governments, some 80 countries do not provide systematic information on them to the Fund. If subnational government activity were stable, if their own-financing capacity were negligible (revenue and ability to borrow), the absence of information on this level of government might matter less for policy analysis. However, this cannot be taken for granted. Annex Box 2 illustrates how, in the case of Russia, movements in fiscal variables at sub-federal levels significantly offset revenue and expenditure developments in central government. Hence, **monitoring local governments as part of general government is necessary if we are to ensure that adjustment is**

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[14] Or, to take the case of the current stand-by arrangement for Mexico, an adjuster allows public enterprises to spend as much as they like above program projections, as long as they can cover it by additional revenue (EBS/00/40, Box 3, page 39).

[15] For instance, the Honduran public sector accounts in SM/98/218 provide a good template.

[16] This discussion of consolidation is relevant to other public institutions as well.

[17] Other than by those who argue that if national policymakers cannot control them, there is no point in monitoring them.

Table 2. Subnational Spending as a Share of Total Government Spending

Country	Year of Data	Share of Total Spending	Country	Year of Data	Share of Total Spending
Albania	1998	19%	Kazakhstan	1998	34%
Argentina	1997	44%	Kenya	1992	4%
Australia	1998	51%	Latvia	1998	26%
Austria	1997	34%	Lithuania	1998	24%
Azerbaijan	1999	27%	Luxembourg	1997	16%
Belarus	1998	41%	Malaysia	1997	19%
Belgium	1997	12%	Mexico	1997	29%
Bolivia	1998	37%	Mongolia	1998	30%
Botswana	1994	3%	Netherlands	1997	27%
Brazil	1994	38%	Netherlands Antilles	1995	61%
Bulgaria	1998	21%	Nicaragua	1995	9%
Canada	1995	68%	Norway	1997	33%
Chile	1998	9%	Paraguay	1993	2%
Croatia	1999	13%	Peru	1998	21%
Czech Republic	1998	21%	Philippines	1992	10%
Denmark	1995	54%	Poland	1998	23%
Estonia	1998	22%	Portugal	1997	10%
Finland	1997	42%	Romania	1997	14%
France	1997	19%	Russia	1994	39%
Germany	1998	39%	Slovak Republic	1998	8%
Hungary	1998	25%	South Africa	1998	52%
Iceland	1997	29%	Spain	1996	37%
India	1996	50%	Sweden	1998	38%
Indonesia	1993	15%	Switzerland	1997	53%
Iran	1989	5%	Thailand	1997	9%
Ireland	1996	26%	United Kingdom	1998	26%
Israel	1996	15%	United States	1997	51%
Italy	1998	26%			
Mean (all countries)					**28%**

Source: International Monetary Fund, Government Finance Statistics Yearbook, 1999.

sustainable. If data are limited or subject to significant time-lags, separate monitoring at the subnational level would provide at least some control.

E. Public Enterprises

32. The case for including public enterprises in the coverage of the public sector is much less clear-cut than that for subnational governments, since they at times undertake private as well as public activities. But in many instances, **the differences between public and private enterprises are important enough to make a case for grouping the former with government rather than with private institutions**.

33. Specifically, public enterprises can have fiscal consequences that private enterprises do not because they are more likely to perform government operations (often very nontransparently). Since government is their owner or a shareholder, the enterprises have a direct effect on the public finances and are more likely to create contingent government liabilities. Moreover, inasmuch as they may be slower than private firms to respond to indirect instruments of demand management, they are more likely to crowd-out, create trade or exchange rate pressures, or depress the growth rate. In this circumstance, **the *size* of the public enterprise sector, as well as its financial position, matters for predicting responses to policy changes or shocks**. Finally, if a public enterprise is truly private/market-driven, government's ability to affect its resource allocation to meet program targets would be relatively limited, in which case little damage would be done to the enterprise by including it erroneously in the fiscal accounts (i.e., the type II error has a much lower cost).

34. A number of arguments are typically presented against consolidation of public enterprise accounts with those of general government. The most obvious is that public enterprises can act more like private sector firms than like government agencies. Conceptually, they should not be included in the fiscal accounts *if they operate on a wholly market basis*. **The issue is whether, with the government as an important shareholder, market discipline applies to them (including arms-length regulation) in the same way as it does to private firms. Equally, are they fully protected against government's using their resources**—particularly in cases where program conditionality would create incentives to circumvent spending limits by doing so?

35. It is sometimes argued that full reporting of public enterprise accounts is not needed, because government transfers to cover enterprises losses capture their quasi-fiscal impact.[18] However, **when a public enterprise makes losses, the subsidy element may be obscured for a long time because it can borrow abroad or domestically**; that is, the government does not always finance losses in the near term. Box 2 illustrates this, showing the important impact of Venezuela's state petroleum company on the public finances.

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[18] This is akin to the argument that including central bank profit transfers in budget revenue is sufficient to capture the quasi-fiscal activity of the bank; see Section II.E.

Box 2. Venezuela: The Contribution of the State Oil Company (PDVSA) to Government

Venezuela's state oil company is a good, if extreme, example of how significant public enterprises can be for supporting government activity, and how differently public enterprises can be used by government than can private firms.

- Since 1997, PDVSA has been transferring more than its overall surplus to government; that is, it has had to borrow to pay government. Private oil companies pay high tax rates, but not more than 100 percent of surplus. The tax rate above 100 percent can be seen as a broad proxy for the rate at which PDVSA is being decapitalized.

- In 1998, PDVSA financed nearly four-fifths of the public sector deficit, largely by borrowing abroad. This was official policy, since PDVSA had a better credit rating than the national government. However, as creditors began to assess the impact of government policy on PDVSA's balance sheet, PDVSA's rating was revised down.

(In percent of GDP)	1995	1996	1997	1998
Overall balance before payments to government 1/	6.9	16	11.7	2.4
Payments to government	7.4	11.4	13.3	7.6
"Tax rate"	*107%*	*71%*	*114%*	*317%*
Overall public sector financing	6.9	-7.2	-1.9	6.6
Borrowing by PDVSA	0.5	-4.6	1.7	5.2
% public sector deficit financed by PDVSA	7%	64%	n.a.	79%

Source: SM/99/184.

1/ To derive a true effective tax rate for PDVSA, the overall balance would have to be adjusted by subtracting capital spending and adding depreciation. The calculation here is equivalent to the actual effective rate only if capital spending is all replacement investment.

36. An important argument against including public enterprises in government operations is that **the fiscal treatment of investment spending makes the firms look less profitable than they are**. Fiscal accounting treats investment spending (both in the budget and in public enterprises) as fully expensed in one year rather than depreciated over the economic life of the investment. Hence, spending is higher than it would be under commercial accounting (assuming net investment is positive) and there is no recognition of the fact that the public sector gets an asset in exchange for its outlay.

37. The reason for this treatment is that the primary focus of fiscal accounting has been on demand management. Since **investment and current spending are broadly equivalent in their impact on aggregate demand and their financing needs**, no distinction is called for in measures of the deficit or borrowing requirements. Indeed, in the current Fund programming framework, the exclusion of investment spending from the deficit measure would create an important loophole (not least because consumption is so easily reclassified as investment and budgetary investment can so easily be carried out instead by public enterprises).

38. On the other hand, **it is clearly problematic to treat investment equivalently to consumption when analyzing sustainability**. The growing recognition of this shortcoming has led to the development of a more nuanced treatment of public investment as part of the new GFS framework (see Section V). Current and capital expenditure will be partitioned into two separate accounts, comparably to private sector practice. This will facilitate the analysis of two separate deficit indicators—with and without investment. Moreover, the shift to accrual accounting (see next section) and the associated introduction of concepts of depreciation, rate of return, etc. should eventually help ensure that fiscal consolidation does not come at the expense of growth-enhancing investment spending.

39. Other reservations are that by consolidating public enterprises in the fiscal accounts, policymakers may be more tempted to see public enterprises as entities that can be used to serve macro-fiscal objectives, thus intruding on their market operations. And, if public enterprises are included in the fiscal accounts, privatization may lead to the impression that the overall balance is shifting over time, though only the composition of the consolidated public sector has changed. These concerns point to the need for the type of nuanced presentation of accounts described in paragraph 29 if the full public sector is to be measured—one which permits the monitoring and analysis of separate subsectors as well.

40. In conclusion, from the perspective of safeguarding fiscal resources, a rule of thumb would be that **large public enterprises should be included in the fiscal accounts when government: taxes or subsidizes through them; crowds out the private sector through them (notably by paying above-market interest or wages); and accumulates debt or lends through them. It could be further contended that if government *retains* the possibility of doing so, this would also argue for inclusion.**

F. The Central Bank and Public Banks

41. The Transparency Manual states that quasi-fiscal activities "clearly need to be taken into account when assessing the overall fiscal position" (Manual, paragraph 36).[19] **Since the central bank can finance quasi-fiscal activities out of its own earnings, omitting it from the coverage of the public sector can distort the picture of the government's role.**[20] The existence of quasi-fiscal activities is not, however, always seen as a sufficient reason for consolidating the quasi-fiscal component of the central bank's accounts contemporaneously with government, since most (though far from all) central banks eventually transfer their profits to the budget, after any needed allocation to reserves. The more expensive the quasi-fiscal operations, the lower the profit transfer.[21] Hence, it is argued that their cost eventually shows up in the government's accounts.

42. The problem is that profit transfers are made some time after the activities affect the economy. When the central bank is truly independent, with stable and adequate reserves and small profits, this is probably a minor concern. But **when there is any possibility that profits or losses might be sizable, it becomes important to take account of the macro-impact *when it happens* rather than after the fact.**

43. Moreover, **when central banks are less than fully independent, it can be important to keep watch on how their "profits" are generated**. Governments can get disguised central bank financing by requiring a larger-than-justified transfer, or, less directly, by influencing the breakdown of central bank surplus between additions to reserves and distributed profits. Fiscal costs may also be borne via the central bank's operating expenses. (All of these are "safety valves" which give countries leeway in meeting measured fiscal targets.) In such cases, monitoring the central bank's overall operating position gives a lot more transparency.

44. Most critically, not all central banks are profitable. **When a central bank makes a loss, typically no transfer is made from the budget to restore its net worth.** This creates an analytical gap most appropriately closed by consolidating the bank with government:

- When the loss is a cash loss, it needs to be financed—which it is, through base money creation. Thus, **the impact of a central bank loss on aggregate demand is equivalent to that of a fiscal deficit financed by the central bank.**

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[19] For a definition and exhaustive discussion of quasi-fiscal activities, see Mackenzie and Stella (1996).

[20] This discussion is not intended to suggest that separate fiscal and central bank accounts are not also useful—for instance, to monitor central bank holdings of government paper.

[21] Quasi-fiscal activities include some clearly fiscal actions—giving subsidized credit to particular sectors, funding development schemes, bailing out banks or firms, or rediscounting bonds at subsidized interest rates—but also activities closer to monetary management which have an expected cost—the provision of foreign exchange at an overvalued rate, or exchange rate or loan guarantees. Central bank subsidies are probably less transparent than any other kind, since a large portion of them are granted by the central bank's accepting a lower than necessary return on its assets. More or less by definition, the quasi-fiscal activities affect the central bank's net worth (usually but not always its profit/loss).

- Conceptually, pure intermediation is costless. For sustainability, a central bank should not make losses on its core operations. Transparent accounting for losses is a useful tool for identifying the inappropriate practices and ensuring they get discontinued.[22]

45. It should be noted, though, that not all of the macroeconomic and financial problems that can arise from the operations of a central bank can be seen from its profit and loss account, or even its balance sheet. For instance, **the subsidy element in quasi-fiscal lending or equity injections to shore up failing banks** may be reflected in an overvaluation of central bank assets rather than a reduction in operating surplus. Likewise, **the subsidy imparted by a central bank guarantee** (for instance, where the central bank takes on the exchange risk) does not even show up in the balance sheet but is recorded (if at all) only in the "notes" attached to the central bank's accounts.[23]

46. The central bank is not the only source of quasi-fiscal costs. **State-owned financial institutions can be even more vulnerable to pressures from government** to provide interest subsidies or to direct lending to borrowers who would fail to get access to the market. (See Box 3 for an estimate of the possible fiscal cost of some quasi-fiscal operations in China.) However, with some exceptions (for instance, in Fund-supported programs with the Philippines in the 1980s), the difficulties in identifying their quasi-fiscal operations—by getting access to the balance sheets of state banks and breaking down their assets and liabilities by client—have made fiscal monitoring unrealistic. Hence, the only practical approach has been the second-best remedy of rule-based controls—regulations to limit directed lending, undue exposure to a single borrower, etc.

III. Cash versus Accrual: The Basis for Government Accounting

47. A second issue that vitally affects the quality of fiscal data is whether the accounts are presented on a cash or accrual basis. In the Fund, accounts are often mixed. **Many of the adjustments made by Fund economists to national data are aimed at incorporating accrual considerations that are not well-captured in cash accounts.** Directors raised some concern about this indirectly, by asking whether it is appropriate to add cash government accounts and accrual public enterprise accounts. This section discusses cash and accrual accounting practices, looks at country usage, and comments on the issues raised by mixed accounting.

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[22] If the central bank is not sufficiently independent from government to prevent its core operations being defined to include loss-making fiscal activities, then government should be required to compensate it in order to keep it sound. Some countries have established the convention that central bank losses are compensated by government paper, offset by a corresponding increase in credit to government.

[23] This paper does not go into the difficult questions of how best to treat guarantees and contingent assets/liabilities. While economists agree that their cost should be estimated and included in analytical assessments of expenditure, there is as yet no agreed methodology on how to value various state-dependent claims. Hence, the traditional treatment—their inclusion in footnotes to the fiscal table, or preferably in a fiscal vulnerability analysis—continues to be the most operational approach.

Box 3. Quasi-Fiscal Lending in China

Like other planned economies, China has used the banking system to carry out government policy, via directed lending. (This practice is being phased out, and notably the credit plan has been abolished.) Staff estimates illustrate how the inclusion of quasi-fiscal lending in the deficit measure changes the picture of fiscal policy in China.

- The state budget deficit has been moderate for most of the 1990s, and, while extra-budgetary funds exist, they (at least the authorized ones for which information is available) are generally in surplus.

- However, quasi-fiscal lending is estimated to amount to upward of 7 percent of GDP annually. Shown below are three scenarios illustrating the potential fiscal cost of the lending. For instance, on the conservative assumption that 80 percent of the lending is repaid or otherwise recoverable, the fiscal deficit including the lending widens to 5 percent of GDP or more. This broader measure, albeit imprecise, is a better indicator of the control of the state over resources and financing and the impact of the state on demand.

China: Broader Estimates of the Fiscal Deficit

(In percent of GDP)	1995	1996	1997	1998
State budget balance	-2.1	-1.5	-1.8	-3.0
Social Funds balance	0.2	0.3	0.2	...
Extrabudgetary funds (authorized) balance 1/	0.1	0.1	0.2	...
Quasi-fiscal activity through the banking system 2/				
Assuming 6% nonrecoverable ratio	1.0	1.1	1.0	0.9
Assuming 20% nonrecoverable ratio	3.4	3.7	3.4	3.1
Assuming 40% nonrecoverable ratio	6.7	7.4	6.9	6.3
Broader-based fiscal balance (20% nonrecoverable) 3/	-5.1	-4.8	-4.9	-6.2

Source: SM/99/167.

1/ SM/99/167 also signals the existence of unauthorized extrabudgetary fund activity, but does not cite data.

2/ Use of these figures may understate the deficit, since they may exclude capitalized interest on previous quasi-fiscal lending.

3/ Excludes social and extrabudgetary funds in 1998.

A. The Accounting Basis of Fund Fiscal Statistics

48. **Traditionally, governments have kept their accounts on a cash basis**; this is the basis applied in the 1986 (current) version of the GFS Manual. Including only cash revenues and expenditures in the deficit measure has the advantage of focusing the government's attention on its financing constraint, which has traditionally been viewed as its most binding priority.

49. **The problem is that governments have become less and less liquidity constrained in carrying out fiscal policy.** Specifically, they have become more adept at separating the time of a fiscal action from the time it is paid for, so that the cash records of the transaction do not capture the timing or size of the impact of the action on the economy. The Ugandan government's recent airplane acquisition was a good example of how a modern financial technique (the financial lease) could mask what was effectively a loan to finance a purchase.[24] Also, Annex Box 1 includes some examples from the European Union (EU) of cases where government cash deficits have been an inadequate measure of the underlying fiscal stance and its sustainability. Such issues would not have arisen in a system based on accrual accounting. The upshot of myriad cases of this type has been increasing dissatisfaction with cash accounting as the basis for assessing the impact of fiscal policy.

50. **In consequence, a worldwide shift is underway to resource-based accounting.**[25] From 1999 on, EU countries are required to report their deficits on an accrual basis for Maastricht purposes;[26] a number of other OECD countries have shifted to accrual accounting; and the new GFS framework will be accrual-based. Moreover, the Public Sector Committee of the International Federation of Accountants (IFAC) has developed standards for public sector accounting and reporting which will further enhance their comparability. Box 4 lists some of the benefits viewed as attaching to accrual accounting. The Fund has been following this trend in a piecemeal way, in the sense that most Fund fiscal tables have become "mixed," that is, they now contain adjustments which introduce quasi-accrual elements to the cash accounts. As described below, these were in most cases introduced to remedy what were seen as misrepresentations of underlying economic reality by the cash accounts.

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[24] See Newson, "Financial Leasing," pp. 467–82 in IMF (1991), for an exhaustive discussion of this issue.

[25] According to the draft new GFS Manual (paragraph 3.22), "With this basis . . . the effects of economic events are recorded in the period in which they occur, irrespective of whether cash was received or paid or was due to be received or paid."

[26] Article 8(2) of Council Regulation (EC) no. 2223/96 (which requires that deficits be measured according to ESA95 from September 1999 on). However, a number of governments have difficulties with, or reservations about, introducing some accrual concepts (notably, to measure tax revenue). Hence, technical modifications to the new system are still taking place—see also Section V.

Box 4. The Benefits of Accrual Accounting—as Perceived by the U.K. Government

In Britain, a 1994 Green Paper on Resource Accounting and Budgeting in Government initiated the process of introducing accrual accounting to government departments. The Green Paper (paragraph 0.2) described the benefits as follows:

"For departments

- more accurate and relevant management information with which departments can cost the resources that they use, and match them with the outputs they deliver; and
- better informed decisions on the balance between current and capital expenditure, taking into account the opportunity cost of capital and its consumption over time.

For the public sector as a whole

- improvements in the way in which government conducts its public expenditure planning and control procedures at all levels;
- facilitating the development of cash control at a higher level than hitherto, whilst keeping tight control of public spending as a whole; and
- in line with other initiatives, contributing to the further development of a strategic approach to managing the Civil Service, in line with the principles of the Financial Management Initiative.

For the economy as a whole

- better information for formulating economic policy and preparing National Accounts on the value and use of fixed assets and capital consumption in the public sector; and
- the possibility of a reduction in the public sector's call on funds by promoting better use of resources."

B. The Actual Accounting Basis in Fund Government Tables

51. Table 3 shows that, in Fund documents, **all OECD countries except Netherlands, Switzerland, and Turkey present fiscal data on an accrual ("national accounts") basis.**[27] With the exceptions of New Zealand, Iceland, and Australia, which have actually made the shift to accrual accounting, they do so by adjusting their cash ("administrative") accounts for the main discrepancies between the two systems.[28] Typically these include the addition of payments due and noncash outlays, changes in accounts receivable, and timing adjustments, but not depreciation.[29]

52. **Many Latin American countries, and most African countries other than those whose accounting framework is derived from the English system, compile fiscal tables with expenditures shown on a "payments due" basis while revenues are recorded in cash.** This convention[30] acknowledges the fact that governments routinely use resources some time before paying for them. When "payment due" is recorded early enough in the life cycle of the expenditure—notably, at the commitments stage—the measure becomes a broadbrush approximation of accrual spending. Since cash expenditure is "anticipated" but revenues are not, the deficit recorded on this mixed basis provides the most conservative measure of government net use of resources.

53. While information is incomplete, **it is the norm for most other countries except transition economies to record at least their interest obligations on a payments-due basis, and add any (net) arrears build-up to their cash outlays to get a proxy for accrual spending.**[31] [32] Centrally planned economies never had a system which recorded outlays on a commitments basis, and more recently the use of sequestration to contain budget deficits created new disincentives against shifting to a more comprehensive measure of spending. Hence, while several of these countries now record arrears, the majority continue to measure government on a purely cash basis.

54. **An additional accrual adjustment made for some countries is the incorporation of transactions-in-kind.** The most usual example of this type of adjustment is grants-in-kind—typically food aid (but also, for instance, technical assistance). For countries which receive

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[27] Though they continue to provide GFSY data on a cash basis.

[28] It may be useful to point to the distinction between accounting systems and reporting. Most European countries continue to have cash *accounting* but are nonetheless required to *report* the deficit as if it were measured on an accrual basis.

[29] This comment is based on the inspection of several OECD countries' compilation tables. Whether it holds true for all countries has not been checked.

[30] Loosely termed "commitments accounting"—though the meaning of the term varies widely across countries (compare "gastos causados" and "engagements").

[31] There is a question whether Asian and Middle Eastern countries should be included in this category, since, typically, Fund economists have little possibility of verifying whether arrears exist.

[32] Since arrears are a subset of unpaid expenditures, the proxy tends to underestimate accrual spending more than the payments-due measure.

Table 3. IMF Member Countries: The Accounting Basis for the Budget, 1998

	Advanced Economies	Countries in Transition	Africa	Asia	Middle East	Western Hemisphere
			(Number of countries)			
1. Full accrual basis	23					
2. Full commitment basis	1	1	31	2	2	17
3. Revenue (cash), interest (commit.), other expenditures (cash), arrears	1	6	9	6	5	7
4. Revenue (cash), expenditures (cash), no arrears adjustment	1	21	11	17	9	9
Total	**26**	**28**	**51**	**25**	**16**	**33**
			(Percent of total)			
1. Full accrual basis	88					
2. Full commitment basis	4	4	61	8	13	52
3. Revenue (cash), interest (commit.), other expenditures (cash), arrears	4	21	18	24	31	21
4. Revenue (cash), expenditures (cash), no arrears adjustment	4	75	22	68	56	27
Total	**100**	**100**	**100**	**100**	**100**	**100**

Sources: IMF, various REDs; and Fund staff.

Note: The table records the way data are presented/reported in Fund documents. It does not record what type of accounting system is used. In particular, while basically all OECD countries report accrual-basis deficits, few have shifted to an accrual accounting system. Hence, while they are shown here "as if" reporting on a full accrual basis, further accounting reforms remain outstanding.

grants-in-kind,[33] Fund tables show their value on the revenue side as it is recorded in the balance of payments (which is on an accrual basis), adjusted for any delay in timing between their import and their receipt in the budget. Additional adjustments are made, mainly on the expenditure side, to show how the aid is used. Probably the most important transactions in-kind are the barter activities of governments in transition countries. However, Fund tables usually do not include them (somewhat anomalously, given that other accrual adjustments are made to reflect arrears, etc.[34]). For instance, in Russia, in-kind revenue is actually subtracted from total revenue to get the revenue aggregate used in the Fund program.

55. **A further adjustment commonly made in Fund tables is the classification of privatization receipts below the line.**[35] Such receipts were added to cash revenue in the 1986 GFS Manual. However, as privatization became more widespread, it became important to make the point to governments that the conversion of their assets into cash was not a sustainable basis for financing expenditure. Accounting conventions usually associated with accrual would show that privatization was simply an asset swap and that government's net worth had not increased (assuming away the efficiency gains which often follow privatization and any asset under-pricing). In a sample of 18 countries selected to be representative of a range of privatization experience, SM/99/316 found that 5 still include privatization receipts above the line (Bolivia, Czech Republic, Mexico, Mongolia, and Mozambique). Hence, their deficits are understated, compared with the Fund norm.

C. Amalgamating Cash and Accrual Accounts

56. Since government operations tables in Fund documents already contain a number of quasi-accrual elements, **the consolidation of accrual accounts from the public enterprise sector does not create qualitatively different problems**.

57. **Cash and accrual accounts can be acceptable *analytical* proxies for each other when the differences are identified, and can be adjusted for.** Fund tables which combine the accounts of entities prepared in two different ways almost never provide perfect financial accountability. But this has never been their aim: rather, Fund accounting focuses on combining available statistics to proxy economic variables (changes in aggregate demand, liquidity, sustainability, etc.). The usual Fund accrual adjustments were introduced to compensate for analytical shortcomings in cash data. For instance, the almost universal shift from cash interest records to measuring interest on a payment-due basis came in 1983–86, after the debt crisis, when the Fund responded to Paris Club needs by introducing explicit accounting for the contribution of debt relief to budget financing. The main requirement for mixed accounts to improve rather than invalidate analysis is that the analyst has adequate

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[33] GFSY (1998) reports Bolivia, Burundi, Dominican Republic, Estonia, Ethiopia, India, Malta, Mongolia, UAE, and Yemen as receiving them. This list probably omits some recipients.

[34] Ukraine is an exception.

[35] This is not actually a question of accrual versus cash accounting, but, obliquely, an issue of coverage—because the change in treatment represents an improvement in the completeness with which movements in government assets and liabilities are recorded.

information about all of the proxies being employed and can either adjust away inconsistencies or interpret them appropriately.

58. **Differences which are easy to adjust for include depreciation, timing (when the resources are used versus when they are paid for), changes in floating debt, and other explicit noncash income statement items.** Fund tables which consolidate public enterprises drop the noncash estimate of fixed capital consumption from the spending aggregate, and the change in accounts receivable from revenue.[36] For countries where the rest of government is on a purely cash basis (as opposed to the usual mixed basis), they also drop accounts payable. Though they are approximations, adjustments made for accounts receivable and payable are usually considered sufficient corrections for differences in the time of resource use and payment.

59. **The adjustment exercise in itself can be a useful part of the analysis,** because the information needed to move from cash to accrual itself often provides pointers for needed policy action—for example, to contain the level and change in arrears.

60. The description of Fund practices above may have the side effect of underlining the differences between Fund fiscal tables—whose main value is analytic and where accrual adjustments are mainly limited to those which are imperative to plug discovered loopholes/analytic inadequacies—and accounts in the private sector, where accrual conventions are sufficiently well-established to permit a level of financial audit which would be impossible for most governments to deliver. Put differently, while adding apples and oranges cannot be justified by the micro-accountant, the computation is useful if it helps the macro-economist to manage the fruit bowl. In the final analysis, moreover, the problem has now become temporary, since it will disappear when governments shift to accrual accounting.

D. Central Bank Accounting

61. Central bank accounting is usually, though not always, on an accrual basis. **For those countries that consolidate the central bank's quasi-fiscal activities with government, Fund economists adjust the bank's accounts to a cash basis.**[37] This is because the main analytical reason for the consolidation has been to capture the contribution of central bank loss-financing to "true" credit to government. Accrued but unrealized losses or gains, while important for assessing sustainability, do not have the same short-term effect, and to date have not been seen as useful in the demand-focused measure of the combined public sector deficit.[38]

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[36] If the analysis focused on sustainability (rather than demand management or financing issues), it would be more appropriate to keep these items in the tables and include estimates from general government as well. The new GFS framework will permit this.

[37] None of these countries currently present their government accounts on an accrual basis.

[38] Recently, questions of sustainability are coming more to the fore. For instance (in hindsight), the unsustainability of Bank Indonesia's policies was more important than their demand impact. Hence, it would have taken monitoring on an accrual basis to identify its financial problems adequately.

62. As is the case for the public enterprise consolidation described above, the consolidation of central banks' quasi-fiscal activities with government requires decisions about which accounting items to drop or include. The most contentious question is whether **valuation gains/losses** should be reflected in government revenue/expenditure.

- In cash-based government accounting (the 1986 GFS Manual and ESA75), **realized valuation gains** were included (as nontax revenue), since they increase the government's cash resources without creating a liability.[39] However, Eurostat has revised the ESA to apply accrual criteria to classification issues which are not conceptually easy to handle in a cash system. On these criteria, already in 1997 Eurostat ruled that Belgium could not transfer the proceeds of gold sales to government to raise revenue.[40] [41]

- **Unrealized valuation gains** are excluded from revenue in both cash and accrual systems, on the grounds that they attract no new resources to the country and do not decrease claims on resources by those inside the country.[42] Thus, government expenditure financed by them would be equivalent to spending financed by printing money. Recent Eurostat rulings reflect this argument. For instance, Eurostat decreed that the proposed revaluation of gold reserves by Germany could not be used to augment revenue for Maastricht purposes in 1997.

IV. Assessing the Impact of Fiscal Policy

63. **Directors asked whether indicators of the fiscal deficit appropriately measure the macroeconomic impact of fiscal policy.** The previous sections discussed two necessary conditions for this to be the case: the coverage of the fiscal sector should include all relevant government institutions and the accounting basis should cover all fiscal transactions. This section focuses on the interpretation of different fiscal indicators and their comparability across countries.

64. A number of fiscal indicators have been used to assess the impact of fiscal policy on the economy.[43] In particular, fiscal policy affects both (i) aggregate demand, and (ii) the government's need to borrow, which in turn affects the dynamics of the government debt. The overall fiscal balance, which is typically the single budget number most readily available,

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[39] See, for instance, the GFS Manual (1986), page 126.

[40] The reason given was that the realization of a valuation gain does not change government net worth, since the gain was already inherent in the pre-existing asset before it was disposed of. See, for instance, the draft new GFS Manual, paragraph 9.20.

[41] Eurostat press release, February 1997.

[42] In the central bank's balance sheet, an increase in the national currency value of foreign assets requires an offsetting rise in a liability, normally an increase in the bank's reserve funds—which would virtually freeze the profit (GFS Manual, 1986, page 202).

[43] See Blejer and Cheasty (1991 and 1993).

is generally considered as the first indicator used for assessing both aspects of fiscal policy. However, it suffers from defects in each case.

65. **As an indicator of the impact of fiscal policy on aggregate demand, the overall balance can be misleading** to the extent that it is influenced by changes in revenue and expenditure items that do not have the usual contractionary or expansionary effect. For this reason, fiscal tables in Fund reports often include alternative indicators of the aggregate demand impact of fiscal policy. Most notable are the following.

- The **overall balance excluding grants**, which reflects the fact that grant-financed spending does not add to the overall deficit but does add to domestic demand to the extent that grants are not used entirely to pay for imports;

- The **non-oil balance**, which reflects the fact that receipts from the sale of oil (or other natural resources) do not reduce the purchasing power of the private sector, and thus permit higher aggregate demand to be financed;

- The **domestic balance,** which is a generalized form of the previous two measures; it excludes all income from abroad and payments abroad; and

- The **operational balance**, which excludes from the overall balance the component of interest payments that compensates lenders for inflation, since this does not add to aggregate demand.

66. There are also circumstances where it is appropriate to focus on an aggregate demand measure which is unaffected by the cycle, for example, as a means of gauging the impact of discretionary fiscal actions. In this case, some variant of the **structural or full employment balance** is used. This measure estimates the fiscal balance at potential GDP by adjusting revenue and expenditure to take account of their responsiveness to the difference between actual and potential GDP.

67. While **the overall balance** provides a measure of the government's net borrowing requirement, it **has certain shortcomings when it comes to analyzing government debt and debt dynamics**. Instead, the following indicators are commonly used.

- The **primary balance** and the **primary structural balance**, both of which are exclusive of interest payments and receipts, are ways of assessing the fiscal effort required to address unsustainable debt dynamics; and

- The **augmented balance**, which is calculated primarily by including government support to replenish assets (e.g., of weak banks) as expenditure and asset recovery as revenue. This indicator therefore measures the total change in government debt, and it could in principle be used to reflect the impact of any balance sheet transaction that is not normally incorporated in the overall balance.

68. Directors have expressed concern about the comparability of the fiscal policy advice given to countries based on different indicators. **However, a main purpose of the indicators described above is to make fiscal policy advice *more* comparable across countries.** Some indicators do this by adjusting the overall balance for the influence of revenue and expenditure items, such as foreign grants and the inflation component of the interest bill, which, if significant in a given country, can make the overall balance a misleading indicator of the demand impact of fiscal policy. Other indicators are used to isolate the fiscal policy problem that is of concern in a particular country, thus allowing a more even-handed assessment of fiscal policy across countries.

69. **Different fiscal indicators have nonetheless to be used carefully.** While it is appropriate to use different indicators in the interests of comparability and even-handedness, it is important that the methodology used in computing indicators be consistent across countries. This presents more of a challenge with some indicators than others, and especially with those where there is more discretion in making the necessary adjustments. This is the case, for example, with the structural balance, which requires an estimate of the potential GDP to which an economy can expand without experiencing inflationary or balance of payments pressures.

70. It is well known that estimates of potential GDP are subject to a wide margin of error (Scacciavillani and Swagel, 1999). In economies hit by significant shocks or undergoing substantial structural transformation (as in many program countries), estimating potential GDP is especially troublesome. The use of a mismeasured potential GDP will certainly cause structural balance estimates, and, to a lesser extent associated fiscal impulse estimates, to be an imperfect guide as to how much fiscal expansion or contraction is compatible with macroeconomic objectives. While this does not mean that the structural balance should not be used, it does imply that the information provided about the noncyclical component of fiscal policy has to be interpreted with care. The same is true when comparing the actual deficit with the no-policy-change deficit, which is another practice of Fund staff seeking to distinguish discretionary from nondiscretionary changes in fiscal stance.

71. In conclusion, there are many different indicators of the impact of fiscal policy, each suited to a particular purpose. In different countries, and at different times, attention should focus on those indicators best suited to the circumstances. Fund staff depend on their country specific knowledge to decide which indicators to include in reports, with a view to permitting judgments about fiscal policy for one country which can be compared with those made for other countries.

V. An Overview of the New GFS System

72. Directors' questions have rightly pointed to the gap between empirical fiscal analysis and what theory would recommend. **The new GFS system provides an integrated framework for tackling shortcomings discussed in previous sections.** This section describes it very summarily, and comments on how it changes the status quo.

73. A draft of the new *Government Finance Statistics Manual* comprising ten chapters and three appendices was distributed to member countries for comments in 1999 and has been posted for feedback on the IMF External Web Site. STA has received comments, which are now being considered; generally, the new GFS standard has been strongly supported by most of the countries that commented on it. It is expected that the revised draft which would result from this process will be discussed by an expert group toward the end of 2000, and the final version of the Manual will reflect those discussions. Current plans call for the publication of the new Manual in mid-2001.

74. The new GFS system extends and changes the 1986 GFS as follows:

- It shifts from cash to accrual accounting.

- Individual statistical variables have been aligned more closely with economic concepts. Notably, capital spending is no longer treated as an expense, but as the creation of a nonfinancial asset.

- These two adjustments broadly convert the government operations table into the equivalent of a public sector income statement of the type used by private firms.

- The previous framework—the government operations table—has been extended by adding full opening and closing government balance sheets and a statement of other economic flows (such as valuation changes); that is,

opening balance sheet of government	+	*government operations as listed in the 1986 GFS (but now on an accrual basis)*	+	*other economic flows*	=	*closing balance sheet of government*

- These changes, and others, harmonize the new GFS system more closely with the 1993 System of National Accounts (SNA). One such necessary change is a switch from a function-based definition of government to one built on institutional units.

75. As discussed in detail in Section III, from an economist's perspective, **a major aim of the shift to accrual accounting is to permit a more accurate gauge of the government's impact on the economy, particularly now that countries are becoming less liquidity-constrained**. Notably, spending will be recorded at the time the resources are used (i.e., when the demand pressure is felt), rather than when they are paid for.[44]

[44] One of the more contentious issues in the shift to accrual accounting is the fear that governments could overstate revenue by recording taxes accrued but unlikely to be collected. To address this concern, Eurostat

76. The **rapprochement of the treatment of capital spending with private sector accounting practice** should help ensure that fiscal consolidation does not come at the expense of growth-enhancing investment spending (for instance, by public enterprises).

77. **The conversion of the government operations table into something akin to an income statement will create incentives to analyze government analogously to a private firm, by looking at a number of indicators rather than relying unduly on "the" deficit measure.** As Table 4 shows, the proposed key summary indicators include: the impact of revenue and expenditure on government net worth;[45] the government's financing requirement (on an accrual basis); and the government's policy balance (the accrual version of the Fund's customary deficit measure—which includes what the Fund calls net lending[46] above the line). Other usual balances can also be derived, notably the primary balance and the cash balance, and more analytical indicators (such as the operational deficit and the deficit without grants) can be added in the same way as is done currently.

78. **The requirement that the government operations table (plus valuation changes and other such flows) be fully reconciled with the opening and closing balance sheets of government will remove much of the ambiguity about which transactions represent revenue/expenditure** (any government transaction that increases/reduces government net worth[47]—including the assumption of any new liability) and which are purely financial operations. It will permit comprehensive tracking of changes in debt and in government assets, and hence in debt service and government investment income. The ambiguity about how to value white elephant capital and bail-out bonds (neither of which generate assets commensurate to the resources invested in them) will still remain (hence the need to maintain the policy balance).

79. From an auditing perspective, the re-situating of government in a balance sheet framework will for the first time create a closed system; that is, "everything will have to add up." Currently, government statistics cannot be reconciled in the same way as banking or enterprise accounts (even abstracting from the issue of "mixed accounts" discussed in Section III), because (a) they are only flow accounts—there is no balance sheet; and (b) even the flow accounts are incomplete—the other flows shown in paragraph 71 are usually not measured. Indeed, without the discipline of a balance sheet framework, it is difficult to know whether the statistics of different government institutions are prepared on the same basis (for instance, some—contrary to Fund practice—may include carry-overs from year to year,

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(which had to resolve the problem for Maastricht countries) has allowed countries to adopt a restrictive definition of accrual revenue (essentially, cash revenue adjusted for timing differences).

[45] Two balances are included, with and without depreciation—the latter acknowledging the fact that it will take some time for governments to become comfortable with measuring the cost of their consumption of capital.

[46] The Fund usage of the term "net lending" has to be abandoned, since the SNA uses "net lending/borrowing" to refer to the government's financing requirement.

[47] The draft new GFS Manual defines "transactions" to exclude "other economic flows" such as valuation changes.

Table 4.1. Government Operations Table

TRANSACTIONS AFFECTING NET WORTH

Revenue (transactions increasing net worth)
- Taxes
- Social contributions
- Grants
- Other revenue

Expense (transactions decreasing net worth)
- Compensation of employees
- Use of goods and services
- Interest
- Subsidies
- Grants
- Social benefits
- Other expense

Gross operating balance (revenue less expense other than consumption of fixed capital)
- Consumption of fixed capital expense

Net operating balance (gross operating balance less consumption of fixed capital)

TRANSACTIONS IN CAPITAL ASSETS

Net acquisition of capital assets (acquisitions less disposals and consumption of fixed capital)
- Fixed assets
- Change in inventories
- Valuables
- Nonproduced assets

Net lending/borrowing (a government's financing requirement-net operating balance less the net acquisition of capital assets)

TRANSACTIONS IN FINANCIAL ASSETS AND LIABILITIES (FINANCING)

Net acquisition of financial assets on a nonmarket basis (acquisitions less disposals)

Policy balance (net lending/borrowing less the net acquisition of financial assets on a nonmarket basis)

Net acquisition of financial assets for liquidity management (acquisitions less disposals)

Net incurrence of liabilities (incurrences less liquidations)
- Domestic
- Abroad

Table 4.2. Statement of Sources and Uses of Cash*

Revenue and expense transactions
- Revenue
- Expense
- ***Net cash received from current operations***

Transactions in capital assets
- Disposals of capital assets
- Acquisitions of capital assets
- ***Net cash received from transactions in capital assets***

Transactions in financial assets and liabilities
- Disposals of financial assets on a nonmarket basis
- Acquisitions of financial assets on a nonmarket basis
- Incurrences of liabilities and acquisitions of financial assets for liquidity management
- Liquidations of liabilities and acquisitions of financial assets for liquidity management
- ***Net cash received from financing transactions***

Net change in cash balance (net cash received from current operations, transactions in capital assets, and transactions in financial assets and liabilities)

Selected cash-accrual reconciliation items
- Change in taxes receivable
- Change in unpaid tax refunds
- Change in accounts payable, including with respect to transactions in capital assets
- In kind revenue and expense transactions
- In kind transactions in capital assets

* All transactions recorded in this statement, except for the reconciliation items, are cash transactions. Thus, for example, the amount indicated for revenue in this table will differ from the amount shown for revenue in Table 4.1 by the revenue accrued but not received in cash in the current period less the amount of cash received in the current period from revenue transactions recorded in previous periods.

and others not). The absence of adding-up constraints is one of the reasons why government auditing is such a difficult and undeveloped area.

80. **The requirement that the new GFS system be more closely aligned with the 1993 SNA restricts its formal coverage to the institutions of general government**—since the SNA groups all "productive units" together and classifies the monetary authority in the financial sector. However, the rapprochement of private and public sector accounting conventions and aggregates will make it easier to prepare additional data which consolidate public enterprises and the central bank with government, in countries where their fiscal activities are substantial enough to make that advisable. Moreover, in the long run, when governments maintain comprehensive balance sheets, these will include all public holdings in financial and *non*financial public enterprises.

81. At a more sweeping conceptual level, **the reason for introducing accrual accounting, capital depreciation, a government balance sheet, etc., is to provide accounts consistent with the fact that government behavior is determined (or needs to be determined) by its inter-temporal budget constraint**. Its behavior will not be sustainable if it reduces its net worth too much, either by borrowing or generating other liabilities (for instance, pension obligations).

82. **For most countries, the shift to accrual accounting will be a medium- to long-term project**, and in some cases major improvements in the quality of accounting practices (along the lines of the recommendations in the Transparency Manual) and an easing of resource-cost constraints will be needed before the change is feasible. Concerns have been raised about the transition from the old GFS to the new system, and particularly about whether statistics will become *less* comparable across countries if they make the change-over at different speeds. It is important to underline from the outset that, while the introduction of the new system will not necessarily cause countries with bad-quality statistics to upgrade them, it should at least not worsen the status quo.

83. **The new GFS framework will still include a cash-based table** (like private firms' cash-flow table), to ensure that countries continue to monitor and manage their cash effectively. For the typical Fund program country, where liquidity constraints remain important, the short-run focus is likely to remain on the cash accounts, though the introduction of the rest of the framework should begin to divert some emphasis to the costs of running up debt or selling national assets to finance deficits.

84. **This cash table will be supplemented with a comprehensive list of the adjustment items necessary to transform cash accounts to a proxy accrual basis (of the type mentioned in paragraph 57). It is envisaged that most countries will use this table in the short to medium term, as a bridging device** before they move to accrual accounting, and so that business can continue as usual as they get more comfortable with how the new concepts

relate to current fiscal variables.[48] As a by-product, the bridge table will also serve to make explicit what "accrual-concept" information is/is not available and thereby tabulate the differences relative to other countries' accounts.

VI. Some Conclusions

85. It is perhaps worth collecting in one place the pointers to best-practice that were (explicitly or implicitly) scattered through the paper. The extent to which these guidelines can be followed will, of course, depend on resource constraints—which may be onerous for those countries in which fiscal statistics are underdeveloped.

Coverage

- Even if policymakers control only a subset of government, they need to see the impact of all parts of government to permit them to gauge policy needs (paragraph 23).

- Thus, for a reasonably comprehensive picture of fiscal policy, efforts should be made to identify all government operations which take place outside the budget and take account of them in the government operations table (paragraph 7). The compilation of information on the operations of all institutions big enough to have a sizable influence on fiscal policy should be a high priority (paragraph 18).

- Trying to measure or manage fiscal policy over too short a time interval is inadvisable, since the lack of information severely restricts the possible choices of policy instrument in Fund programs (paragraph 24).

- Since statistical shortcomings (compared with a "reasonably comprehensive" picture) are quite serious in many countries, cross-country comparisons should be undertaken with caution (paragraph 18).

- In cases where fiscal policy is hard to disentangle from market activity, the fiscal presentation should include both a fully consolidated public sector and sub-tables on the various components. The consolidation provides an overall measure of fiscal policy and imposes adding-up constraints on intragovernmental transactions. The sub-tables preserve the analytical distinction between general government and other institutions which carry out fiscal policy (paragraphs 27–29).

Subnational governments

- The norm for coverage of government in OECD countries is (at least) general government. Other countries should be encouraged to meet that norm. The exclusion of

[48] To put the likely transition period in perspective, the globalization of SNA accounting took 30 years. However, STA is responding to a remarkable level of interest in accrual accounting across a diverse range of countries, so this transition may be significantly shorter.

subnational governments from fiscal aggregates used for policymaking creates incentives for belt-tightening fiscal managers to delegate activities to them without corresponding financing (paragraph 30).

Public enterprises

- When feasible and when resources permit, large public enterprises should be included in the fiscal accounts when government: taxes or subsidizes through them; crowds out the private sector through them; or accumulates debt through them. There is also a case for inclusion when government retains the possibility of doing any of the above (paragraph 40). It will rarely be possible to have a comprehensive coverage of the sector, and judgment will be needed as to which enterprises to monitor. The principal criterion is whether or not the public enterprise is operated on a wholly market basis (paragraph 33).

- An important argument against including public enterprises in government operations is that the fiscal treatment of investment spending makes the firms look less profitable than they are. For measuring demand, this treatment is justified, but, for measuring sustainability, an indicator which distinguishes between investment and consumption would be more powerful—and will be available in the new GFS framework (paragraph 38).

The central bank

- When there is any possibility that central bank profits or losses might be sizable, it becomes important to take account of their macro-impact contemporaneously rather than merely by eventual inclusion of the profit transfer in government revenue (paragraph 42).

- Moreover, to retain its independence, a central bank should not make losses. Transparent accounting for losses is a useful tool for identifying the inappropriate practices and ensuring they get discontinued (paragraph 44).

Accounting basis

- Cash accounting has become less satisfactory as a basis for measuring fiscal policy, as governments have become less and less liquidity-constrained. Hence, countries are moving toward resource-based accounting (paragraphs 49–50).

- Fund tables are already "mixed," in the sense that they include some adjustments to introduce accrual measures to the basic cash tables. Such accounting might not meet the standards of private sector accounting firms, but is designed to be appropriate for economic analysis. The main requirement for mixed accounts to be analytically sound is for the analyst to have adequate information about the proxies being used and to be

able to adjust away inconsistencies. The debate about the validity of these mixed accounts is a temporary one, since the new GFS framework will be on a full accrual basis (paragraphs 56–60).

- When central banks are consolidated with government operations in Fund papers, their transactions are adjusted to a cash basis (paragraph 61). This is not a "rule" but a consequence of the desire to measure their impact on financing, liquidity, and aggregate demand. When sustainability is at issue, it is more appropriate to look at accrual accounts.

Assessing the impact of fiscal policy

- No single fiscal indicator can capture all of the information needed to manage fiscal policy, so it may be necessary to refer to several different deficit measures depending on the purpose of the analysis (the impact of government on demand, sustainability, the balance of payments, etc.) (paragraphs 65–67).

- The overall balance may not always be a good measure of government impact on aggregate demand, and may have to be adjusted to exclude revenues and expenditures which do not have the normal impact on demand (paragraph 65).

- Different indicators have different shortcomings, and the information they provide must be interpreted with care. For instance, cyclically-adjusted indicators depend on estimates of potential GDP, which can be subject to wide margins of error (paragraphs 69–70).

- Hence, country-specific knowledge is usually necessary to determine which indicators are appropriate, and permit judgments that bear comparison with the advice being given to other countries (paragraph 71).

The new GFS system

- The new GFS system will permit a more accurate gauge of the government's impact on the economy; align the treatment of government investment with private sector accounting; shift fiscal analysis away from undue reliance on "the" deficit; and facilitate more systematic evaluation of sustainability by focusing on the government's balance sheet. It will also make government statistics far more consistent with statistics in the rest of the economy, thereby facilitating the application of comparable standards of accounting and reporting (paragraphs 72–79).

- For these reasons, its adoption, at least as "best practice," should be given a high priority.

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Annex Box 1. Measures Taken by EU Governments that Helped Meet the Maastricht Deficit and Debt Criteria

There has been much debate about the methods used by EU countries to meet deficits and debt targets under the Maastricht criteria. To verify countries' compliance with the targets, Eurostat (1998) identified "new or exceptional measures affecting the 1997 data" and "the principal changes [in statistics] which occurred during the period." This Box pulls together those measures which were seen by commentators as unusual—including measures affecting only the 1997 deficit and measures taken in anticipation in previous years which led to a structural change in the deficit. Since Eurostat had responsibility for determining whether these measures were acceptable, and did so with reference to EU legislation of the day, no presumption is made here that these measures were inappropriate. However, in many cases the measurement of the deficit for 1997 fell short of what would be needed for a full picture of fiscal policy (as discussed in the text).

Coverage: movement of spending off-budget

Austria. ASFINAG has responsibility for highways—maintenance and tolls, etc. In 1997 it was reclassified as a corporation, thereby eliminating all of its impact on the deficit (no figure given for savings) and reducing 1997 government debt by 3.2 percent of GDP.

Germany. As of 1997, Germany changed the classification of the majority of hospitals from "general government" to "corporations." This improved the deficit by around 0.2 percent of GDP.

Coverage: use of public agencies or enterprises for revenue or spending

Germany. DASA (responsible for the Airbus program) repaid subsidies which it had received from the federal government in the 1980s, thereby improving the 1997 deficit by 0.04 percent of GDP. *France* had the same arrangement, with "significant repayments" in the mid-1990s (no figures given).

Greece. Greece set up a financial institution, DEKA, to be responsible for organizing the privatization of public enterprises. In 1997 Eurostat "expressed reservations about the treatment as nonfinancial transactions, with no impact on the government deficit, of any aid which the DEKA might have occasion to pay the public enterprises." For 2000–04, Greece plans to provide aid of on average 1.6 percent of GDP annually (see also the Concluding Remarks of the 1999 Article IV Consultation).

Portugal. Portugal reclassified the treatment of export insurance guaranteed by the state (see Spain). This reduced the 1995 deficit by 0.2 percent of GDP.

Spain. The transactions of the Spanish export credit insurance company (CESCE) were reclassified as nonfinancial (i.e., put above the line). This improved the 1997 deficit by almost 0.1 percent of GDP.

Intertemporal shifting: assumption of liabilities for future pensions

Austria. In 1997, in anticipation of its privatization (after 1998), the Postsparkasse (post office savings institution) was reclassified as a corporation. It paid the government 0.14 percent of GDP (thereby reducing the deficit) in compensation for government's agreement to continue paying the pensions of the civil servants still working in the company.

Denmark. In 1995, Danish Telecom paid the government a lump-sum capital transfer in return for the assumption by the state of retirement pensions of employees with civil servant status. This reduced the deficit by 0.1 percent of GDP.

France. After France Telecom was partly privatized, it paid the state a lump-sum to offset the loss of revenue from the unfunded pension scheme of civil servants employed by the enterprise. This reduced the 1997 deficit by almost 0.5 percent of GDP.

Portugal. The Banco Nacional Ultramarino (BNU) made an exceptional payment to the state in 1997 in compensation for the state's takeover of responsibility for the retirement pensions of BNU employees. This reduced the 1997 deficit by a little under 0.3 percent of GDP.

Sweden. When they changed status, the telecommunications and postal companies had to make a tax payment to the state of over 0.2 percent of GDP for taking over pension funds of employees. This was recorded in 1994, thereby reducing the deficit.

Intertemporal shifting: interest

Spain. The difference between the nominal and par value of short-term securities was reclassified as interest *at the time the securities were issued* rather than when the interest accrued. This raised the 1995 deficit and reduced those of 1996 (by 0.1 percent of GDP) and 1997 (by 0.7 percent of GDP).

Italy. Capitalized interest (*buoni postali*), which had previously been recorded on an accrual basis, was changed to be recorded at the time of the maturity of the bond. This reduced the central government deficit by 0.36 percent of GDP in 1996.

Sweden. Various corrections were made in 1997 to the treatment of interest, notably for "linear bonds" and treasury bills—thereby shifting the interest cost. The impact improved the 1997 deficit by 0.28 percent of GDP.

Intertemporal shifting: taxes

Italy. A tax due on wage funds was moved forward; it used to be due at time of withdrawal of savings, but was made partly due in 1997—which reduced the deficit by 0.34 percent of GDP.

Portugal. The deadline for VAT receipts was bought forward in 1996 but the extra receipts collected in 1996 were not counted until 1997. This caused the 1996 deficit to be higher by 0.36 percent of GDP (no figure is given for the impact of the extra receipts on the 1997 deficit).

Sweden. The deadline for VAT receipts was bought forward in 1996 but the extra receipts collected in 1996 were not counted until 1997. This caused the 1996 deficit to be higher by nearly 0.8 percent of GDP (no figure is given for the impact of the extra receipts on the 1997 deficit).

Intertemporal shifting: debt

Italy. Railway debt (*Ferrovie dello Stato*) was reclassified from enterprise debt to government debt in early 1997. This, accompanied by a capital injection from government to the railways in 1997 but no further issue of debt, had the impact of worsening past deficits and improving the 1997 deficit by 0.2 percent of GDP.

Luxembourg. The state had initially planned to take over the LUF 4.2 billion debt of the railway company, but deferred it to the following year. Eurostat noted that "a specific examination of these arrangements" would be needed.

Gold, revaluations, etc.

Belgium. The central bank paid the state 2.7 percent of GDP in 1996 and 0.01 percent of GDP in 1997 on account of the proceeds from sales of gold at the end of the 1980s and the beginning of the 1990s. These transactions reduced government debt correspondingly.

Accounting reforms: shift of social security to an accrual basis

Belgium. The authorities stopped deducting nonrecoverable payments from social security contributions (recorded on an accrual basis), but classified them elsewhere. This reduced the deficit by 0.02–0.03 percent of GDP.

Spain. In 1996, Spain changed the recording of its social contributions to an accrual basis, thereby reducing the deficit by 0.2 to 0.4 percent of GDP annually. When such records are put on an accrual basis, provision must be made for canceling contributions due but not collected. In 1997–98, Spain introduced a new method of write-off, which reduced the 1997 deficit by 0.28 percent of GDP.

Accounting reforms: swaps

Ireland. Changes in the treatment of interest and currency swaps (to include only net interest payments and to revalue foreign-currency debt at market rates) reduced Ireland's 1997 deficit by 0.4 percent of GDP and its debt by 1 percent of GDP in 1996 and again in 1997.

Austria. A change in the treatment of swaps (see Ireland) reduced the debt by an average of about 0.5 percent of GDP a year.

Accounting reforms: GDP

Belgium. Belgium revised its national accounts, with the result that GDP went up by around 1.6 percent (average 1996–98).

Greece. At the beginning of the 1990s, Greece undertook a major revision of its GDP statistics, leading to an increase of around 23 percent of GDP for the period 1988–96.

Spain. In 1997, Spain began to apply the European Commission's ruling on the treatment of subsidies in GDP. This, together with other changes initiated in 1992, raised GDP by an average of 0.7 percent for 1988–96.

Annex Box 2. The Importance of "Other" Government in Russia

Russia is a good example of why "other" governments besides the central government matter, for getting the fiscal story right.

- Since federal revenues had fallen to 11 percent of GDP by 1998, the conventional wisdom was that Russia could not collect taxes. However, revenues of the *enlarged* government still amounted to 32 percent of GDP, a relatively high ratio for a country with Russia's per capita GDP.

- Moreover, given the deep expenditure cuts in the federal government, there was a perception that Russia was adjusting to the decline. However, half of the apparent cuts were offset by an expansion of spending by other governments.

Russia—The Relative Adjustment Burdens of Federal and Other Governments

(In percent of GDP)	1992	1993	1994	1995	1996	1997	1998
Revenue							
Federal government	17	14	12	13	13	12	11
Nonfederal government	23	23	23	21	21	24	21
Expenditure							
Federal government	27	20	23	19	21	19	17
Nonfederal government	20	24	26	23	24	27	25
Amount of revenue decline 1992–98							
Federal government							-6
Nonfederal government							-2
Amount of expenditure adjustment 1992–98							
Federal government							-10
Nonfederal government							+5

Source: SM/99/178.