



IMF Working Paper

Recent Improvements to the *Government
Finance Statistics Yearbook* Database in
Response to Analytical Needs

Mike Seiferling

IMF Working Paper

Statistics Department

**Recent Improvements to the Government Finance Statistics
Yearbook Database in Response to Analytical Needs**

Prepared by Mike Seiferling

Authorized for distribution by Claudia Dziobek

January 2013

This Working Paper should not be reported as representing the views of the IMF.

The views expressed in this Working Paper are those of the author(s) and do not necessarily represent those of the IMF or IMF policy. Working Papers describe research in progress by the author(s) and are published to elicit comments and to further debate.

Abstract

The demand for high quality detailed public finance statistics covering a globally representative sample of countries has increased dramatically during the recent financial crisis. Due to the complexity of public finance statistics, however, such data tend to be either available in oversimplified high level aggregates and lacking in methodological transparency, or, available with a great level of detail and a unified methodological approach yet overly complicated to understand. The IMF's *Government Finance Statistics Yearbook (GFSY)* with data over an almost 40 year period for almost 140 countries is a valuable database but with a complex structure requiring some specialty knowledge that most data users do not have. The IMF's Statistics Department embarked on several initiatives to improve its accessibility. The purpose of this paper is to provide a non-technical overview of the methodology and advantages of the *GFSY* database and discussion of how the database is improving to better meet the needs of the user community.

JEL Classification Numbers: E15

Keywords: Government finance statistics

Author's E-Mail Address: MSeiferling@imf.org; statisticsquery@imf.org

Contents	Page
Abstract.....	1
I. Introduction	3
II. The Government Finance Statistics Yearbook Database: An Overview	3
A. Detailed Public Finance Data in a Systematic Accounting Framework	5
B. Decomposition of Government into Institutional Units and Consolidation.....	5
III. Recent Initiatives to Address User Concerns.....	7
A. Long Term Fiscal Trends.....	7
B. Within-Country Data Comparability: Accrual vs. Cash, and Monetary Unions	8
C. Filling Data Gaps	9
D. Research Projects, Communication and Collaboration with Users	10
Disaggregated data on government revenue (1972–2010)	10
Harmonizing IMF and other Related International Data Series	11
IV. Metadata	11
V. Accessing Government Finance Statistics in the IMF eLibrary	12
VI. Summary and Conclusion.....	12
 Figures	
1. The IMF’s Government Finance Statistics Yearbook Database: An Overview	4
2. The Institutional Structure of Government	6
3. The Expanded <i>GFSY</i> Database: Total Expenditure and Primary Balances	7
4. The Switch from Cash to Accrual Accounting	8
5. Central Government Revenue Compositions (as a percentage of GDP)	11
 Appendixes	
1. <i>GFSY</i> Detailed Revenue Statistics Data Availability 1972–2009*	14
2. Above- and Below-the-Line in Government Finance Statistics	18
References.....	18

I. INTRODUCTION¹

The recent financial crisis has highlighted the growing importance of sound fiscal policy for sustainable macroeconomic performance. Evaluating past and current fiscal performance requires high quality detailed and comparable data. One major challenge faced by the public finance research community is a scarcity of such data, especially for long time series needed to assess cyclical patterns for different countries or regions. The IMF *Government Finance Statistics Yearbook* database (*GFSY*) is a unique source of detailed fiscal data for a diverse group of countries but its complexity makes it difficult and tedious to work with.

Recognizing these challenges, the IMF Statistics Department is taking significant steps to improve the accessibility of these data. The purpose of this paper is to provide a non-technical overview of the advantages of *GFSY* and how the database is improving to better meet the needs of the user community.

Section II provides an overview of the data the *GFSY* has to offer for the sophisticated research community interested in a complete disaggregated picture of fiscal structures. The data include “above the line” (revenue, expenditure), “below the line” (how a surplus is invested or a deficit financed), and positions data (assets, liabilities). Section III describes recent initiatives to address user concerns; mainly the complexity of the current framework, within-country comparability, and data gaps, which make the database difficult to work with. Section IV addresses improvements to the metadata structure of the *GFSY*. Section V describes access to fiscal data in the IMF’s e-library (<http://elibrary-data.imf.org>) and Section VI draws conclusions.

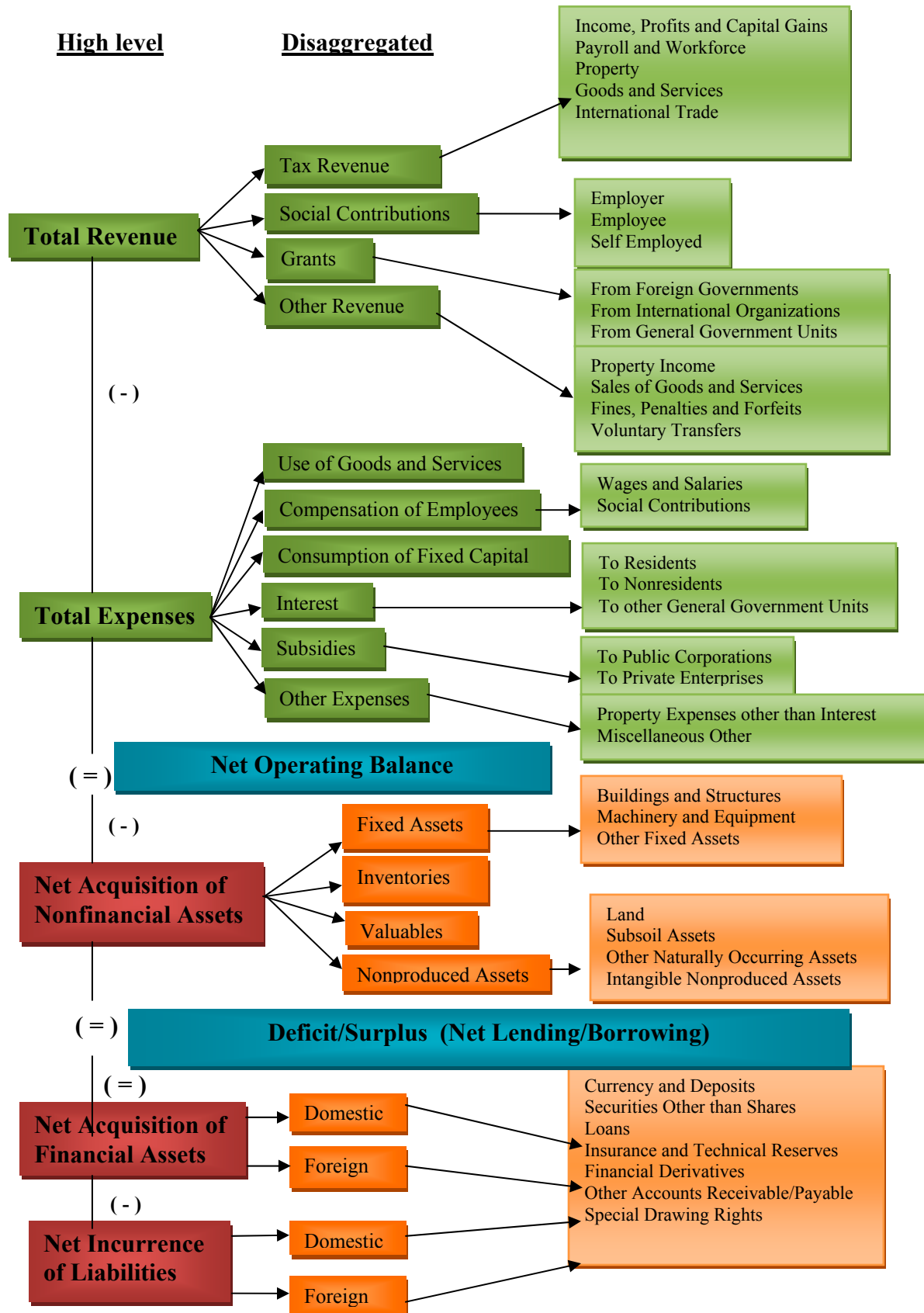
II. THE GOVERNMENT FINANCE STATISTICS YEARBOOK DATABASE: AN OVERVIEW

The collection and dissemination of detailed fiscal statistics (Figure 1 provides an overview) requires methodological foresight and a well defined terminology regarding the coverage of institutional units and the data series. In this respect, the *GFSY* database follows the *Government Finance Statistics Manual 2001* (*GFSM 2001*), which is based on the international ‘gold standard’ in macroeconomic accounting, the *System of National Accounts 2008* (*2008 SNA*). These manuals provide an in-depth methodological framework with detailed technical description of concepts to achieve a high level of comparability of data across a diverse range of countries.

The *GFSY* database is structured along these concepts and this permits users to link data across macroeconomic datasets (GDP and price data, monetary, and balance of payments data) as in the IMF’s *International Financial Statistics* database. The *GFSY* has data on detailed

¹ The author would like to thank Robert Dippelsman, Claudia Dziobek, Thomas Elkjaer, Robert Heath, Phebbly Kufa, André Mialou, and René Piche for helpful suggestions.

Figure 1. The IMF's Government Finance Statistics Yearbook Database: An Overview



global public finance structures over an almost 40 year period for almost 140 countries, and, therefore a unique asset for researchers who are interested in either short or long term trends in public finance for a large and comparable sample of countries worldwide.²

A. Detailed Public Finance Data in a Systematic Accounting Framework

On the left hand side of Figure 1 are the high level aggregates. Items such as total revenue and total expenses are included in many databases for example in the World Economic Outlook (WEO) database. The more detailed, disaggregated breakdowns, however, are a unique feature of the *GFSY* database. Items ‘below the line’ on how a surplus is invested or a deficit is financed can be found in some specialized databases but these are limited to a region (e.g. Europe in Eurostat databases) or limited to advanced countries (e.g. OECD countries).³ The *GFSY* database includes a broader set of countries although not all countries report the full information which makes the database challenging to use. In addition, the *GFSY* presents data on stock positions (assets and liabilities) with breakdowns similar to those shown in Figure 1 for transactions in assets and liabilities.

The *GFSY* presents the data according to the Classification of Functions of Government data (*COFOG*) also available through the IMF’s e-library (<http://elibrary-data.imf.org>). This classification refers to main expenditure activities such as health, education, defense, economic affairs, public order and safety, recreation and culture, environment and social protection and general public services.

B. Decomposition of Government into Institutional Units and Consolidation

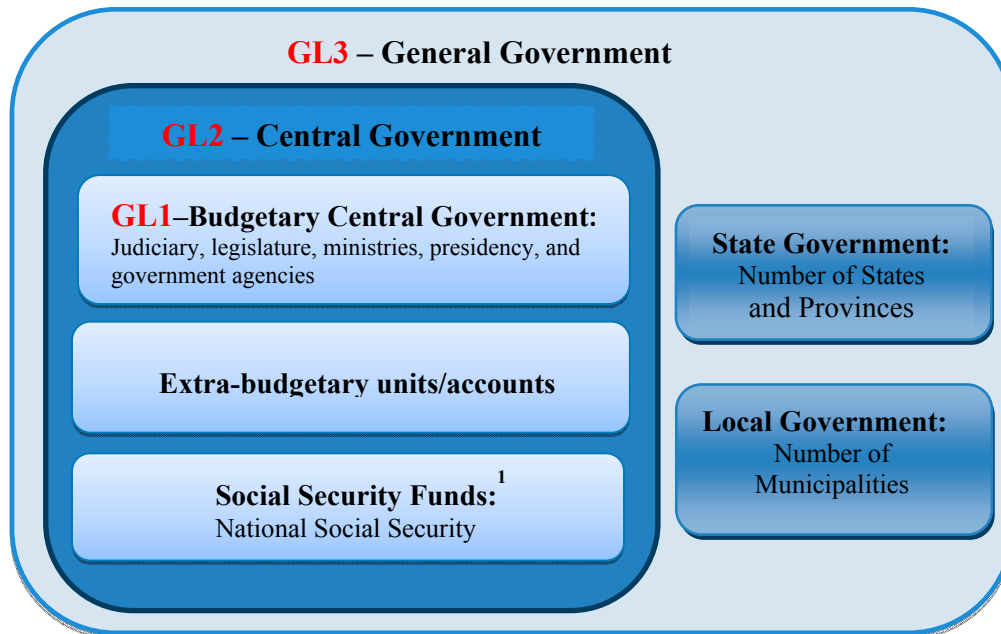
Another advantage of the *GFSY* database is the explicit decomposition of ‘government’ into institutional units (Figure 2). A relevant example of how this decomposition is useful for research would be the recent increased interest regarding the role of local governments and the decentralization of public finance (i.e. shift in fiscal authority from central to state and local governments). Researchers are often unaware that the statistical manuals for macroeconomic statistics, such as the *2008 SNA* and *GFSM 2001* include explicit definitions of the ‘layers’ of government and that these can be used for fiscal analysis.

Unfortunately, most well-used datasets fail to specify the coverage of these institutional units and, instead report a mixture based on data availability. The *GFSY* includes institutional tables with detailed information about the institutions comprising each government and the data are structured to permit analysis by groups of institutions. Admittedly, the *GFSY* does not include data for each level of government for each country. Nevertheless, it permits

² The IMF Statistics Department maintains this database and conducts training courses for compilers of these statistics on the statistical framework and data compilation issues and engages actively with the compilers during the annual data collection process.

³ Appendix 1 provides an overview of available data by country and Appendix 2 explains the notion of “above- and below-the-line” in Government Finance Statistics.

Figure 2. The Institutional Structure of Government



(Source: *Government Finance Statistics Manual (2001)*)

sophisticated users to construct datasets that proxy the highest level of government. For example, a researcher wanting to create the largest possible dataset may prioritize general government (GL3) data, followed by central government (GL2) data where general government cannot be obtained, followed by budgetary central government data (GL1) where central and general government data cannot be obtained. As can be seen in Dziobek, Gutierrez Mangas and Kufa (2011) and Dippelsman, Dziobek and Gutierrez-Mangas (2012), for some countries, significant differences emerge regarding a country's fiscal position depending on what institutional unit is being examined. However, constructing such datasets requires significant knowledge of the statistical concepts).

Figure 2 is a schematic view of the institutional structure of government according to statistical methodology. The broad definition of government is GL3 comprising the central government as well as various subsectors. A particularly relevant distinction between institutional units for fiscal economists is the separation of central, state and local government, which in some cases may have very different functions. Central governments (GL2 in Figure 2) are those controlled by a single central authority which extends over the entire territory. State, or regional, governments are separate institutional units from central government controlled by state/provincial/regional authorities with control over a geographical sub-section of the territory independent of the central government. Local governments form separate institutional units whose fiscal, legislative, and executive authority extends over the smallest geographical area distinguished for administrative purposes.

When aggregating these data, the *GFSY* uses a technique called consolidation to avoid double counting. This means that moving from a disaggregated level to a broader aggregate, the data

are not simply added but, rather, intra-government finances are netted out. However, netting out such intra-governmental relations also implies a loss of information and, therefore, data on each level of government are most helpful to arrive at a complete picture of a government's finances.

In other words, for analytical purposes, data on each of these levels are relevant not just data on the highest aggregate. However, by the same token, this adds to the complexity of the database as the user will need to specify the level of government and select a second best when data for the desired level are not available. For example, a number of countries publish data only on GL1; others provide data only on GL2 and a relatively smaller number of countries have data on all three levels.

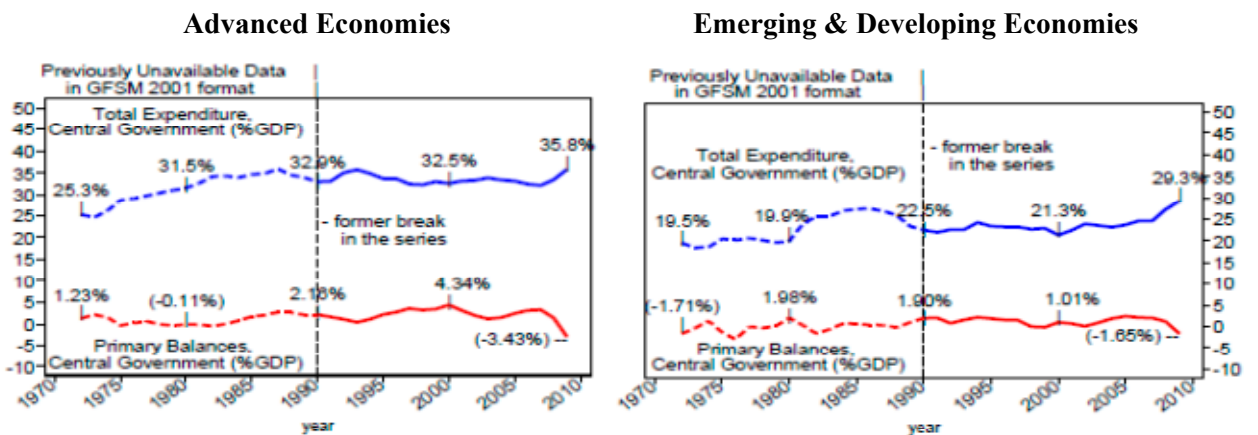
III. RECENT INITIATIVES TO ADDRESS USER CONCERNS

A. Long Term Fiscal Trends

In response to frequent requests from users, the IMF Statistics Department launched a project in 2010 to link the historical government finance statistics database (1972–1989) to the current one which previously went back only to 1990. The break in the series resulted when the *Government Finance Statistics Manual 2001 (GFSM 2001)* framework was adopted and the database was revised only back to 1990 mainly due to resource constraints.

This project led to the conversion of high-level fiscal data for 86 countries from 1972 to the present for revenue, expense and transactions in nonfinancial/financial assets and liabilities covering central, state, and local government. These can now be accessed on the *Government Finance Statistics CD-ROM* (from the September 2011 edition onward) as well as online on the IMF eLibrary Data site (<http://elibrary-data.imf.org>).

Figure 3. The Expanded GFSY Database: Total Expenditure and Primary Balances (as a percentage of GDP)



*Source: Government Finance Statistics Yearbook

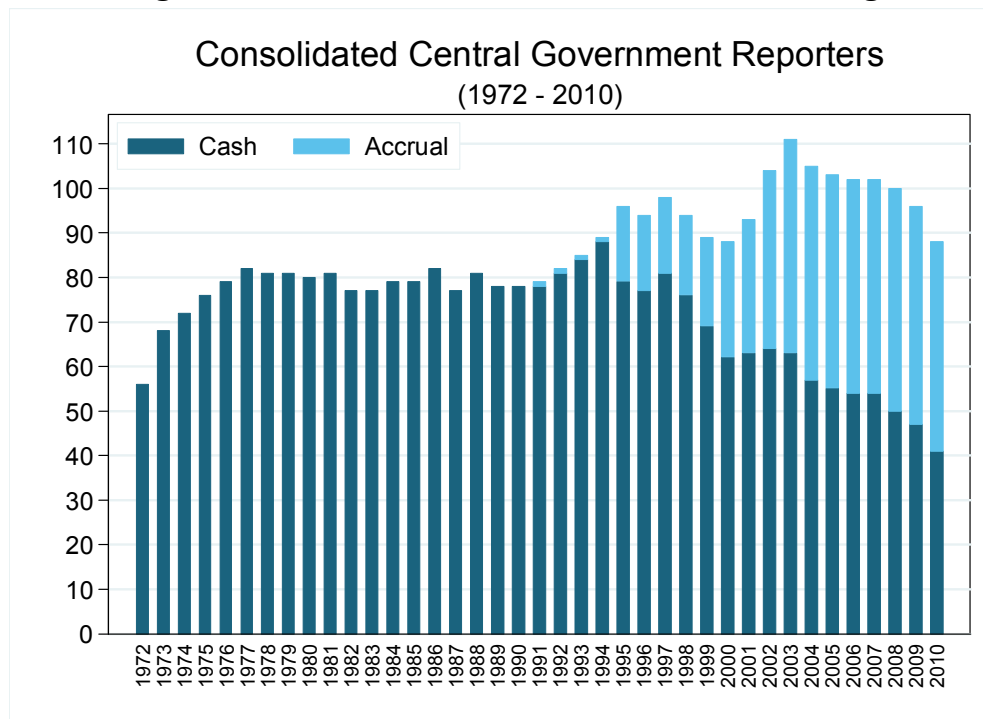
The significant increase in comparable statistics can be seen in Figure 3 which depicts the “before and after” availability of data for central government expenditures and primary balances (as a percentage of GDP).

The series that have been linked comprise the major aggregates, their main components and balances in the format of the *GFSM 2001 Statement of Sources and Uses of Cash* (Cash Statement). Some research has begun to present these detailed expense data in the functional classification of expenditures (*COFOG*) showing government spending for example on health and education over the period of 1972 to the present. Going forward, the conversion of positions data (mainly public debt) would be desirable.

B. Within-Country Data Comparability: Accrual vs. Cash, and Monetary Unions

The *GFSM 2001* introduced accrual based statistics (operations statements) in addition to cash statements. Accrual accounting records transactions when changes in economic value are recognized. Cash statistics record transactions when cash is exchanged. For example, when a country receives a donation in kind (e.g. food aid) its value would be recorded as revenue in an accrual system while in a cash accounting system it would not be recorded since there is no cash transaction. While cash data remain relevant to understand fiscal liquidity positions, a significant number of countries are now reporting accrual based statistics which are important for understanding a government’s fiscal stance as well. Some countries switched to only reporting accrual based statistics mainly due to limited resources. Figure 4 shows this trend from 1972 to 2010 with accrual reporting countries becoming more predominant.

Figure 4. The Switch from Cash to Accrual Accounting



Source: IMF Government Finance Statistics Yearbook

For researchers who are interested in cross-sectional time series (CSTS) analysis, the switch to accrual accounting leads to a question of comparability. Where only one accounting method is chosen, the sample size for cash data significantly diminishes from the mid 1990's (dark blue and lower portion of the bar chart), while confining the data to accrual data would limit the time frame of the analysis and significantly limit the number of countries in the sample (light blue portion of the bar chart). Although there does not exist a technically sophisticated method for converting cash data to accrual (or vice versa), for practical purposes, it is acceptable to merge these data for most series and include a dummy variable in parametric analysis to control for any systematic differences that may exist. In the context, cash data could be seen as a proxy for accrual which would allow researchers to econometrically evaluate all of the available data over long time periods (dark and light blue portions of the bar charts).

A second issue which complicates dynamic analysis of government performance is the formation of monetary unions where national currencies are replaced by supranational ones. The *GFSY* data are shown in national currency and when a new currency is adopted, a break in the series occurs. The most prominent example of this is the formation of the European Monetary Union which caused a break in the series for these countries. This means public finance data for these countries were split into two series with the 1972–1999 period in national currencies and the 1999–present period in euros (for original member countries). With this, empirical analysis of fiscal trends over the entire 1972–2010 period became a tedious task.

In response, several international data providers converted pre-1999 national currency data using the irrevocable exchange rates, which were set up in preparation for the monetary union, and have the advantage of preserving internal dynamic comparability. The IMF Statistics Department has recently taken steps to relieve user confusion by converting data for all euro member countries using the irrevocable exchange rates, making this data comparable over the entire 1995–2010 period without any breaks. Efforts are currently underway (in 2012) to convert the series back to 1972 to create a consistent dynamic series covering the entire 1972–2010 period.

C. Filling Data Gaps

Another challenge for users of the *GFSY* database concerns missing observations. This is exacerbated by the non-randomness of these missing observations which makes list-wise deletion a sub-optimal solution. For example, developing and emerging economies, or countries experiencing periods of macroeconomic volatility or war, are much less likely to report financial statistics than advanced or stable economies. Because a missing cell contains no information at all, many fiscal economists have rectified missing data with what may be considered 'the least of all evils' by merging data from several sources with varying degree of institutional coverage and cross-national comparability. This technique highlights a difficult question faced by researchers: to what extent can a structurally comparable database with a large number of missing observations be merged with other datasets while maintaining sufficient integrity to derive meaningful analytical results?

Although data availability has increased significantly over the last 40 years major gaps remain especially on balance sheet data. The Statistics Department has begun to address this question with the hopes of addressing data gaps on the country-by-country basis within the *GFSM 2001* framework, the coming years. This initiative aims to steadily increase the availability of public finance data while ensuring cross-country comparability. A practical obstacle has been that data providers for government assets and liabilities are often in different institutions than those providing data on revenue or expense. Sometimes debt management offices provide data on key liabilities and asset management companies are able to deliver data on government financial asset and yet another agency may be responsible for data on nonfinancial assets. These difficulties in bringing the whole balance sheet together, however, reflect the decentralized approach to managing government finances found in many countries.

In 2010, the IMF Statistics Department together with the World Bank and in collaboration with other international organizations such as Eurostat and the OECD launched a new database on Public Debt as an online database. These data are structured so that they complement the *GFSY* data. <http://data.worldbank.org/data-catalog/quarterly-public-sector-debt>.

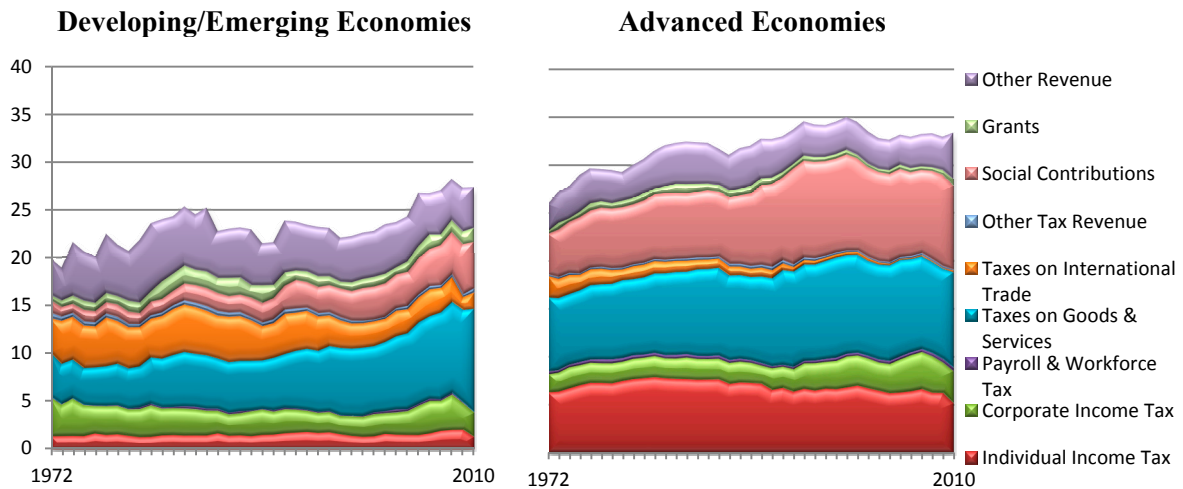
D. Research Projects, Communication and Collaboration with Users

Communication and collaboration with the user community has helped the Statistics Department achieve a greater understanding of the difficulties they face when working with government finance statistics. The department has embarked on several outreach projects to better address the needs of the user community, both within and outside of the IMF. The department has also launched a number of research projects to showcase the advantages of the *GFSY* database. Some of these are listed below under References. These have triggered more questions and inquiries from data users, creating more open exchange with users.

Disaggregated data on government revenue (1972–2010)

In 2011 responding to a request from the Fiscal Affairs Department within the IMF, the Statistics Department extended the conversion of high level aggregates to more detailed revenue statistics dating back to 1972 into a comparable *GFSM 2001* format. At the same time, economists also managed to fill a significant number of missing data using accounting rules and historical hard copy data available only on hard copy publications. The initiative led to a new and exciting addition of 86 countries with historical data to an already unique detailed database covering the 1990–2010 (see Appendix 1). An example of the converted detailed data is shown below in Figure 5 which plots the trend in revenue compositions in developing/emerging economies and advanced economies over a 40 year period.⁴

⁴ These data were subsequently used in the IMF Policy Paper *Revenue Mobilization in Developing Countries*. Fiscal Affairs Department (March 8, 2011).

Figure 5. Central Government Revenue Compositions (as a percentage of GDP)

Source: IMF Data Library (based on Government Finance Statistics)

Harmonizing IMF and other Related International Data Series

In 2011, the Statistics Department coordinated efforts with other international organizations collecting fiscal data with a view to reduce reporting burdens to countries. For example there is a similar (to some extent parallel) data collection exercise for certain annual government revenue data published in the *Government Finance Statistics Yearbook (GFSY)* and the *OECD Revenue Statistics*. The IMF and OECD explored the option of creating a common template for this data and both organizations successfully developed a harmonized tax revenue template that meets the needs of both organizations. This initiative makes revenue statistics comparable between both organizations and creates a common underlying methodological framework.

Similar collaborations are underway with other international organizations. For example the Inter-American Development Bank is developing a new database on state and local governments in Latin America and the Caribbean and it uses concepts and definitions in line with the *GFSM2001* and it imports major aggregates from the *GFSY* database.

The Statistics Department has developed collaboration with the Food and Agricultural Organization (FAO) whereby the databases are made compatible and prepopulated with the *GFSY* aggregate data. A similar initiative was launched with the World Health Organization (WHO). A related type of collaboration has been accomplished with the Commonwealth Secretariat and with UNCTAD. Both are providing debt recording and debt management software systems to about 80 of their member countries and they have embedded *GFSY* codes therein. This allows countries to download fiscal statistics in a format compatible with the *GFSY* database.

IV. METADATA

Metadata are (or should be) a cornerstone of statistical transparency but linking data and metadata in a user friendly way remains a challenge for most databases including the *GFSY*. The inclusion of country specific information on the institutional structure of governments

adds significant value and credibility to public finance data. The *Government Finance Statistics Yearbook* has always included the so-called Institutional Tables, as only made this information available in print format. The print format, however, is mainly used as a reference for the most recent data while statistical analysis uses the online data. Therefore most users were not even aware of these metadata. Moreover, it turned out that the institutional tables were not as well structured as it seemed. Some contained very detailed lists of government agencies while others did not.

To address the needs of data users, the Statistics Department first conducted some research on how the data and metadata could be combined and then, in 2012 launched a project to create a database on Institutional Structures. It is based on metadata provided by countries for publication in the *GFSY*. Given that similar efforts to map the institutions that comprise government sectors in Europe, a partnership was launched to assure consistency of these metadata. Specifically, the database contains information on the reporting entities, the basis of recording, and coverage on the subsectors of the general government, namely central, state and local government, extrabudgetary units and social security funds. The database will be launched first inside the IMF and then globally. The institutional structure of government will help users get an idea of how centralized or decentralized government finances are and how well the reported data cover the existing institutions.

V. ACCESSING GOVERNMENT FINANCE STATISTICS IN THE IMF eLIBRARY

Government Finance Statistics are also accessible on the IMF eLibrary Data (<http://elibrary-data.imf.org>) although not for the full time series. The site has been developed to provide users with tools to identify, select, and download data relevant to their research needs.

There are two main ways to access the data. Predefined data reports are available via drop-down menus at the top left of the eLibrary Data homepage. These data reports are designed by government finance experts in the IMF Statistics Department, and can be found by selecting the Government Finance Statistics item from the Data Source drop-down menu. They provide direct access to the most important aggregates and most frequently requested data.

The second main access mechanism is the “build your own query” feature. This tool allows researchers to narrow down their search to exactly the data they are looking for. The selection menus dynamically filter available selection items as users narrow their search, ensuring that the result will not be an empty data table. Subscribers can access the Government Finance Statistics “query builder” under the Query within a Dataset heading on the eLibrary Data homepage.

VI. SUMMARY AND CONCLUSION

The purpose of this paper was to provide a non-technical summary of the unique features contained in the *GFSY* database along with its flexibility for conducting analytical work. The availability of detailed public finance statistics under a unified methodological framework,

which explicitly define both, series, as well as institutional units, is becoming increasingly useful to a more sophisticated research community who want to go beyond high level aggregates. These features, however, come at the cost of having to work with intrinsically complex data structures that require a certain level of specialty knowledge. The above discussion reviewed some of the sources of these complexities and current initiatives to rectify user concerns regarding long term fiscal trends, within country comparability, and data gaps. Through greater communication and collaboration with users, the increased linkages between analytical demands and the unified methodological framework of the *Government Finance Statistics Yearbook* database will lead to more robust, reliable and precise recommendations for future fiscal policy.

APPENDIX I. *GFSY* DETAILED REVENUE STATISTICS DATA AVAILABILITY 1972–2009*

Country	Years Available **		Breaks	Reporting
	Cash	Accrual	in years available	Available Sectors
Advanced Economies				
Australia	1972-2009	1999-2009	None	LG, SG, CG, GG
Austria	1972-1999	1995-2009	None	LG, SG, CG, GG
Belgium	1972-1998	1995-2009	None	LG, CG
Canada	1974-2007	1991-2009	None	LG, SG, CG, GG
Cyprus	1972-1998	1995-2009	None	CG
Denmark	1972-2000	1995-2009	None	LG, CG, GG
Finland	1972-1998	1995-2009	None	LG*, CG
France	1972-1999	1995-2009	None	LG, CG, GG
Germany	1972-1998	1995-2009	None	LG, CG, GG
Greece	1972-1990	1995-2009	None	CG
Iceland	1972-1998	1998-2009	None	LG, CG, GG
Ireland	1972-1997	1995-2009	None	LG, CG, GG
Israel	1972-2009	2000-2009	None	LG, CG, GG
Italy	1973-1999	1995-2009	1976-79; 1988-89	LG*, CG
Japan	1972-1993	2006-2009	None	LG, CG, GG
Korea, Rep.	1972-2009	None	None	CG
Luxembourg	1972-1997	1999-2009	None	LG, CG, GG
Malta	1972-2004	2003-2009	1979	CG
Netherlands	1973-1997	1995-2009	None	LG, CG, GG
New Zealand	1972-1988	2001-2007	None	LG, CG, GG
Norway	1972-1999	2000-2009	None	LG, CG, GG
Portugal	1973-1996	1995-2009	None	LG, CG, GG
Singapore	1972-2009	None	None	CG
Spain	1972-1997	1995-2009	None	LG, SG, CG, GG
Sweden	1972-1999	1995-2009	None	LG, CG, GG
Switzerland	1972-2008	2008	None	LG, SG, CG, GG
United Kingdom	1972-1999	1995-2009	None	LG, CG, GG
United States	1972-2003	2001-2009	None	LG, SG, CG, GG
Emerging Economies				
Afghanistan	2006-2009	None	None	LG, CG, GG
Albania	1995-2004	None	1999-2001	LG, CG, GG
Argentina	1979-2004	2002-2004	None	SG, CG
Armenia	2003-2009	None	None	LG, CG, GG
Azerbaijan	1994-1999	None	None	LG, CG
Bahamas, The	1973-1989	None	1987	CG
Bahrain	1974-2005	None	None	CG
Bangladesh	2001-2009	None	None	CG
Barbados	1972-89; 2003-04	None	None	CG
Belarus	1992-2009	None	None	LG, CG, GG
Benin	1976-1979	None	None	CG
Bhutan	1982-2009	None	1987	CG
Bolivia	1985-2007	2002-2007	None	LG, SG, CG, GG
Brazil	1980-2009	2006-2008	1995-96	LG, SG, CG

Bulgaria	1990-2009	None	None	LG, CG, GG
Burkina Faso	1973-1989	None	1982; 1988-89	CG
Burundi	1973-81 & 1991-99	None	None	CG
Cambodia		2002-2009	None	CG
Cameroon	1975-1994	None	1985-86	CG
Cape Verde	2005-2009	None	None	LG, CG, GG
Chile	1972-2009	2000-2009	None	LG, CG, GG
Colombia	1998-2003	2003 & 2008-09	2001-2002	CG
Congo, Rep.		2001-2005	None	CG
Costa Rica	1973-2007	2008-2009	None	CG
Cote D'Ivoire		2003-2009	None	CG
Croatia	1991-2009	None	None	CG
Dominican Republic	1972-2003	2004-2008	None	CG
Dem Rep Congo	1972-2002	None	None	CG
Egypt	1975-97 & 2002-09	None	1980	CG
El Salvador	1997-2009	2002-2009	None	LG, CG, GG
Estonia	1991-1998	None	None	CG
Georgia	1997-2009	None	None	CG
Guyana	1972-1985	None	None	CG
Haiti	1979-1987	None	None	CG
Honduras	1972-1981	2003-2009	None	CG
Hungary	1981-1999	1995-2009	None	LG, CG, GG
India	1974-2009	None	None	SG, CG
Indonesia	1972-2004	None	None	SG, CG
Iran	1972-2009	None	None	LG, CG, GG
Jamaica	1975-1985	None	1982	CG
Jordan	2008-2009	None	None	CG
Kazakhstan	1997-2009	None	None	CG
Kuwait	1972-2007	None	1975-1976	CG
Lesotho	1972-2008	None	1978-1986	CG
Liberia	1974-1988	None	None	CG
Lithuania	1991-2009	2001-2009	1992	CG
Madagascar		2000-2008	None	CG
Malaysia	1972-2001	None	None	CG
Maldives	1979-2009	None	None	CG
Mali	1975-1988	None	None	CG
Mauritius	1973-2009	2009	None	CG
Mexico	1972-2000	None	None	LG, SG, CG, GG
Moldova	1997-2009	None	2002	CG
Morocco	1972-1999	2002-2009	1996	CG
Myanmar	1973-2005	None	None	CG
Nepal	1972-2009	None	None	CG
Netherlands Antilles	1972-1995	None	None	LG, CG, GG
Nicaragua	1972-2001	None	1987	CG
Niger	1976-1980	None	None	CG
Pakistan	1973-2007	None	1987	CG
Panama	1973-2001	None	None	CG
Paraguay	2005-2009	None	None	CG
Peru	1972-2009	None	None	CG

Poland	1984-88; 1994-2009	2001-2009	<i>None</i>	LG, CG, GG
Romania	1980-2008	2002-2008	<i>None</i>	LG, CG, GG
Rwanda	1990-1992	None	<i>None</i>	CG
Seychelles	1985-2009	None	<i>None</i>	CG
Slovak Republic	1996-2009	2003-2009	<i>None</i>	LG, CG, GG
Slovenia	1992-2009	None	<i>None</i>	LG, CG, GG
South Africa	1972-2009	2000-2009	<i>None</i>	LG, SG, CG, GG
Syria	1972-1989	None	1982-1986	CG
Thailand	1972-2002	2003-2009	<i>None</i>	LG, CG, GG
Togo	1977-87	None	<i>None</i>	CG
Trinidad and Tobago	1993-95 & 2001-08	None	<i>None</i>	CG
Tunisia	1972-2009	None	<i>None</i>	CG
Turkey	1972-1998	2009	1982	CG
Ukraine	1999-2009		<i>None</i>	CG
Uruguay	1972-2009	None	<i>None</i>	CG
Vanuatu	1981-1999	None	1991-1995	CG
Venezuela	1972-2005	None	1987; 1989	CG
Zimbabwe	1976-1997	None	<i>None</i>	LG, CG, GG

- Shaded rows represent countries with a full continuous series

*- Note: Data availability refers to Consolidated Central Government. Data for General Government data are also available but mostly advanced economies

“Above- and Below-the-Line” in Government Finance Statistics

What do economists mean when they refer to the terms “above the line” and “below the line” in fiscal data? Most economists refer to the line as the overall fiscal balance (surplus or deficit). “Above the line” shows revenue and expenditure while “below the line” explains how deficits are financed or surpluses invested. Thus, in principle, the two concepts should yield identical outcomes. In practice, they can differ due to measurement issues.

In terms of the *Government Finance Statistics Manual (GFSM) 2001* framework “the line” refers to the **net lending (+)/borrowing (-) balance**.

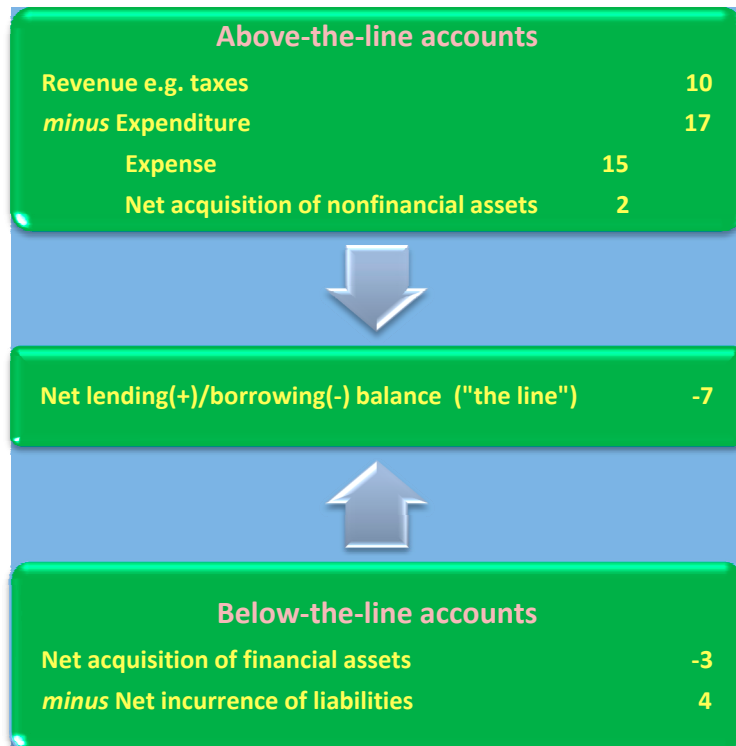
Revenue, expense, and net acquisition of nonfinancial assets (“above the line”) create this balance.

Net acquisition of financial assets and net incurrence of liabilities (“below the line”) explain how this balance is financed or invested.

Information for above the line items usually comes from budget execution reports. Below the line data are treasury transactions that have a correspondence with monetary statistics. Monetary statistics are generally more timely and easier to compile, reasons why they are often used to monitor policy, for example in IMF-supported programs.

“Above and below the line” terminology is referred to in various internationally recognized guidelines: (1) *The IMF Manual of Fiscal Transparency* paragraph 245 states: “The overall balance aims to identify those transactions of government that result in net borrowing from other economic sectors (and are “deficit or surplus creating” or “above the line”). Analysis of the size of the deficit or surplus and its components, as well as the sources of deficit financing (or “below-the-line” transactions), will also be relevant in assessing the implications of fiscal policy for the economy”; and (2) *The Balance of Payments and International Investment Position Manual (BPM6)* has a similar concept (paragraph 14.16): “the balance of current, capital, and financial accounts draws the line between the ways monetary authorities finance transactions (below the line) and other items (above the line).”

Above and Below the Line Transactions



Source: *Government Finance Statistics Manual 2001*

REFERENCES

- Dippelsman, R., Dziobek, C., and Gutierrez Mangas, C. (July 2012) *What Lies Beneath: The Statistical Definition of Public Sector Debt* (Washington: International Monetary Fund: SDN/12/09)
- Dziobek, C. and Jimenez de Lucio, A., and Chan, J., 2013. *Explicit Definitions of Government*, International Monetary Fund (forthcoming 2013).
- Dziobek et al., 2011, *The IMF's Government Finance Statistics Yearbook-Maps of Government for 74 Countries*, IMF Working Paper WP/11/127.
<http://www.imf.org/external/pubs/cat/longres.aspx?sk=24898>)
- Dziobek et al., 2011a, *Measuring Fiscal Decentralization-Exploring the IMF's Databases*, IMF Working Paper WP/11/126.
<http://www.imf.org/external/pubs/cat/longres.aspx?sk=24895>)
- International Monetary Fund, 1986, *A Manual on Government Finance Statistics*, (Washington: International Monetary Fund).
<http://www.imf.org/external/pubs/ft/gfs/manual/1986/eng/index.htm>)
- 2001, *Government Finance Statistics Manual*, second edition (*GFSM 2001*)
<http://www.imf.org/external/pubs/ft/gfs/manual/>)
- 2010, "Government Finance Statistics to Strengthen Fiscal Analysis,"
<http://www.imf.org/external/pp/longres.aspx?id=4431>)
- 2010a, *Government Finance Statistics Yearbook (GFSY)*
<http://elibrary-data.imf.org/FindDataReports.aspx?d=33061&e=170809>)
- 2011, Policy Paper *Revenue Mobilization in Developing Countries*. (March 8, 2011).
- 2011a, *Public Sector Debt Statistics: Guide for Compilers and Users*,
<http://www.tffs.org/PSDStoc.htm>).
- 2011b, *Government Finance Statistics: Compilation Guide for Developing Countries*
<http://www.imf.org/external/pubs/ft/gfs/manual/compil.pdf>
- 2013, *Quarterly Government Finance Statistics – for the General Government Sector – A Practical Guide* (Forthcoming online, 2013).

United Nations, 2008, *System of National Accounts* (New York: European Communities, International Monetary Fund, Organization for Economic Co-operation and Development, United Nations, and World Bank).
(<http://unstats.un.org/unsd/nationalaccount/sna2008.asp>)

Wickens, T. 2002. *Classification of GFSM 1986 Data to the GFSM 2001 Framework*. Government Finance Statistics Companion Material. International Monetary Fund (October 2002).