Measuring Decentralization and the Local Public Sector: A Survey of Current Methodologies

Faigy Abdelhak, Jihyun Chung, Jingqiang Du and Valerie Stevens

IDG Working Paper No. 2012-01

March 2012
Measuring Decentralization and the Local Public Sector: A Survey of Current Methodologies

Faigy Abdelhak, Jihyun Chung, Jingqiang Du and Valerie Stevens

March 2012

Abstract

This short note provides an overview of the current and previous attempts to systematically measure—and collect data on—the scope and nature of (political, administrative, and fiscal) decentralization in countries around the world. Despite the considerable quantity of scholarship devoted to the investigation of the causes and effects of decentralization, the current efforts to collect data on the various aspects of decentralization and local governance have not given rise to a single authoritative methodology. In addition, coverage of the existing data collection efforts across developing and transition countries is poor. Despite the fact that about half of the developing and transition countries around the world interact with the people through non-devolved approaches, none of the current efforts to measure local public sector finances considers any non-devolved decentralized financing mechanisms, such as deconcentration or delegation. This void in the data with regard to decentralization provides policy makers and the research community with a considerably incomplete patchwork of information regarding decentralization, rather than resulting in a single, consistent, and robust dataset regarding the depth and breadth of decentralization in countries around the world.
Measuring Decentralization and the Local Public Sector: A Survey of Current Methodologies

Faigy Abdelhak, Jihyun Chung, Jingqiang Du, and Valerie Stevens

March 2012

1. Introduction

Decentralization is a concept that is not easy to define, and perhaps even harder to measure (Treisman, 2002; Boex and Simatupang, 2010). A number of quantitative and qualitative measures have been used in attempts to reliably measure the level of (political, administrative, and—especially—fiscal) decentralization across countries. Multilateral development agencies have been particularly active in the collection of data that might provide some insight into public sector activities below the central government level.

While the tools developed to date are useful to an extent, they suffer from a number of weaknesses, including poor coverage and poor comparability. Our understanding of the causes and effects of decentralization in developing countries has been considerably limited as a result of the absence of a single global dataset that has applies a consistent methodology and provides sound, consistent, and comparable information about the political, institutional and fiscal nature of the state and local governments around the world. Even the International Monetary Fund’s (IMF) Government Finance Statistics—one of the most-used data sources for measuring (fiscal) decentralization—provides quite limited coverage across developing economies. In fact, the list of 67 countries for which subnational maps of government were recently prepared by the IMF (2011) contains only 4 Asian countries, 3 African countries, and 2 countries in the Middle East and North Africa (MENA) region.

In addition to these coverage concerns, the existing decentralization measures further fall short when the understanding of decentralization is broadened to include the activities of more than just devolved sub-central government entities. In about half the developing countries around the world, key public services are delivered in a deconcentrated manner, where the local public sector is formed by subnational departments (or territorial units) of the state administration which report upward but are tasked to deliver public services at the local level (Boex 2011). In contrast to devolved finances, information on deconcentrated expenditures is often not collected by international financial institutions or development agencies. The IMF (2001) implies that an important reason for this is that devolved financial data are generally produced in the ordinary course of operations for legally separate subnational entities, and it is much simpler to collect this readily-available information instead of developing norms and methodologies to define what
constitutes subnational deconcentrated expenditures. Country case studies that are prepared in order to study the institutional and fiscal characteristics of countries that rely on non-devolved approaches to decentralization are often so laborious that it would be difficult to reproduce their results across a broad sample of countries.

This short note provides an overview of the current and previous attempts to systematically measure—and collect data on—the scope and nature of decentralization in countries around the world. Despite the quantity of scholarship devoted to the investigation on the causes and effects of decentralization, the current methodologies and data collection efforts provide policy makers and the research community with a patchwork of information regarding decentralization, rather than providing a single, consistent, and robust dataset regarding the depth and breadth of decentralization in countries around the world. A better understanding of the strengths and weaknesses of these current efforts should be helpful in informing future attempts to collect a more comprehensive data set on local public sector institutions and finances.


In most public sectors around the world, somewhere between a quarter and half of all public sector expenditures take place below the central government level. Indeed, most pro-poor public services are delivered by local entities (whether local administrative departments or local governments) that interact on a regular basis with the community. As such, knowing the size of the local public sector in a country and having a sound understanding of the role that the local public sector plays in the delivery of public services and infrastructure is fundamental in achieving inclusive social and economic development.

Numerous efforts have been made over time to gain a better understanding of (fiscal) decentralization and the local public sector. Some of these efforts have exclusively focused on fiscal aspects of decentralization, which are relatively easily quantifiable. Despite a widespread recognition of its inadequacy, the most common measure of decentralization in the relevant literature is the share of public spending that takes place at the subnational level, based on the government finance statistics collected by the IMF. In addition, several efforts have been pursued to capture the institutional or qualitative dimensions of decentralization. The Global Observatory on Local Democracy (GOLD) pursued by United Cities and Local Governments (UCLG) is an example of such an effort. Still other efforts have sought to capture both the quantitative as well as the qualitative aspects of decentralization, such as the OECD’s Fiscal Decentralization Database and the World Bank’s Fiscal Decentralization Indicators.

The main features of these four methodologies are compared in table 1 and discussed in greater detail in the remainder of this section.
Table 1. Measuring Decentralization: A Comparison of Methodologies

<table>
<thead>
<tr>
<th>Resource</th>
<th>Purpose</th>
<th>Quantitative or Qualitative?</th>
<th>Data Source</th>
<th>Dimensions</th>
<th>Number of Countries</th>
<th>Unique features</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMF GFS</td>
<td>Collection of government financial data for statistics and fiscal analysis.</td>
<td>Primarily quantitative</td>
<td>Public government records</td>
<td>Fiscal and administrative data for central, state &amp; local government levels and public corporations.</td>
<td>Over 130</td>
<td>Largest government financial database</td>
</tr>
<tr>
<td>World Bank Fiscal Decentralization Indicators</td>
<td>Assembly of a broad data set specifically focused on measuring decentralization across a large sample of countries.</td>
<td>Both</td>
<td>Quantitative: IMF GFS</td>
<td>Quantitative: Revenue and expenditure shares, reliance on intergovernmental transfers Qualitative: Fiscal and administrative</td>
<td>Quantitative: Over 130 Qualitative: Variable depending on metric, up to 68</td>
<td>Breadth of data</td>
</tr>
<tr>
<td>OECD Fiscal Decentralization Database</td>
<td>Clarify the balance between national control and local autonomy, and the use of fiscal allocation.</td>
<td>Both</td>
<td>Quantitative &amp; qualitative: Survey data from existing OECD databases and country respondents.</td>
<td>Revenue and expenditure shares, intergovernmental fiscal relations.</td>
<td>Up to 16</td>
<td>Detailed qualitative surveys on intergovernmental transfer relationships</td>
</tr>
<tr>
<td>UCLG Indicators on Decentralization</td>
<td>Capture the reality of local governments as reported by experts and local and regional authorities.</td>
<td>Mainly qualitative</td>
<td>Qualitative surveys data of expert panels and local and regional government officials.</td>
<td>Fiscal, political and administrative, as well as intergovernmental relations.</td>
<td>Over 100 countries planned for inclusion.</td>
<td>Use of composite indicators</td>
</tr>
</tbody>
</table>
2.1 The IMF’s Government Finance Statistics

The IMF’s Government Finance Statistics database (GFS) is a set of government revenue and expenditure data updated annually and covering over 130 countries. The primary objective of the IMF GFS is to serve as a source of broad macroeconomic and financial data that helps to compare and understand a country’s fiscal policies and its macro-economic and fiscal performance (IMF 2001). It is the largest source of global government financial information and is used by a large number of organizations and researchers as source data for inter-country comparisons of public finances. The IMF GFS Manual that guides the preparation of annual yearbook provides guidelines for compilers of government finance statistics, fiscal analysts, and other users of fiscal data in order to ensure consistency across countries, and creates a comprehensive conceptual and accounting framework that is suitable for analyzing and evaluating fiscal policy, particularly the performance of the government and broader public sectors of any country.

The IMF GFS data is typically prepared by the Ministry of Finance of each IMF member country based on regularly prepared government accounting data and is collected based on each government’s standard accounting period. The GFS methodology recognizes three levels of government: central, regional and local. Depending on a country’s territorial-administrative structure, not all countries covered in the database have all three levels. The database further breaks down its focus on the public sector according to “institutional units.” An “institutional unit” is defined as an entity that can, on its own behalf, own assets, incur liabilities and engage in economic activities and transactions with other entities (IMF 2001). In addition to government entities, the IMF GFS recognizes that many government fiscal activities are conducted by public corporations, and that a complete analysis of public sector activities requires their inclusion.

The IMF GFS data can certainly be used to analyze the operations of a specific level of government (i.e. local government) and transactions between levels of government. However, since the Government Finance Statistics are compiled by central government officials who have direct access to central government finance data but often only have limited access to local government finance data, the IMF GFS Yearbook does not always present local government finance data for devolved countries. This is particularly true for many developing countries: the IMF GFS only provides subnational government finance data for about 20 developing countries out of a total of 129 countries for which fiscal data are reported.

In addition to the limited availability of local government finance data, the data contained in the IMF GFS database permits only a limited analysis of the state and local government finances and the extent of decentralization in particular countries. While the IMF GFS dataset allows for the computation of a basic expenditure decentralization ratios and indicates the total size of intergovernmental fiscal transfers, the limitations of the database’s budgetary classifications limits our ability to understand the details of each country’s unique decentralized governance structures and how spending actually occurs. For instance, no information is provided with regard to the degree of conditionality with which intergovernmental fiscal transfers are made, or
the degree of autonomy that local governments enjoy in making local spending decisions. Because the GFS dataset does not include information on the qualitative dimensions of (fiscal) decentralization, the IMF GFS dataset only reveals part of the decentralization story.

2.2 The OECD’s Efforts on Fiscal Design and Sub-Central Finances

The Organization for Economic Co-operation and Development (OECD) was established in 1961 by 20 industrialized countries with the mission to promote policies that will improve the economic and social well-being of people around the world. Recognizing the importance of the sub-central public sector, the OECD engaged in a series of studies which focused on the fiscal design of countries and the role of sub-national expenditures, revenues, and intergovernmental fiscal transfers. Over time, this focus on subnational fiscal issues resulted in the establishment of the OECD Network on Fiscal Relations across Levels of Government.

The main objective of the OECD Network on Fiscal Relations across Levels of Government is to provide analysis and statistical underpinnings on the relationship between central and sub-central government, and its impact on efficiency, equity, and macroeconomic stability, for both federal and unitary countries. The Network’s current program includes examining local and regional taxing powers, the size and design of intergovernmental transfers, fiscal equalization, budget autonomy of sub-central governments and the institutions to ensure fiscal discipline. Improving various public finance statistics and developing decentralization indicators complement the analytical and policy work.

One of the OECD’s key methodological vehicles is the Fiscal Design Survey. The Survey examines four main components of intergovernmental relations: subnational revenue, subnational expenditures, institutional framework, and fiscal relations. Thus, in contrast to the IMF’s methodology, this survey contains both qualitative and quantitative dimensions. The qualitative surveys include details on the structure of the intergovernmental transfer framework, as well as the level of local autonomy in spending such funds (OECD 2011 p.15). Questions are primarily concerned with how the money is granted, central government-imposed spending restraints, and the effect of these on political decisions and reform. The quantitative component is drawn mainly from OECD Revenue Statistics that track the distribution of revenue to local government entities. (OECD 2011 p.7).

The Fiscal Design Survey collects in-depth data from national and subnational governments that either collect taxes or receive portion of the tax revenue to use for government service delivery. Currently 16 countries are represented. The survey recognizes three levels of government: the central government (including all its departments and agencies), regional intermediate units of government that have some control of their own, and lastly, local governments who also have some control of their own over their territory or domain. In general, the OECD’s definition of a subnational entity is consistent with the IMF’s definition of the state and local governments, and therefore, excludes deconcentrated administrative units.
Based on the detailed Fiscal Design Surveys, the OECD has constructed a Fiscal Decentralization Database with data from OECD member countries (OECD, 2009). The information contained in this database is divided into three groups: basic indicators, intergovernmental transfers, and the revenue structure of government sectors. The basic indicators include the typical subnational revenue and expenditure shares. In addition, the indicators include lending, borrowing, expenditures, revenue, tax revenue, and user fees. The intergovernmental transfer data collected only includes transfers between levels of government and so it does not include sums transferred within levels of government (i.e., so-called “fraternal sharing”). The revenue structure of government sectors is relayed by recording the percentage of tax revenue and inter-governmental transfers amongst overall revenue.

In comparison to the IMF’s Government Finance Statistics, the main innovation of the OECD Fiscal Design Surveys and subsequent efforts is that the qualitative, institutional dimensions of intergovernmental relations are a critical aspect of a well-functioning public sector. The downside of the more detailed and carefully constructed OECD methodology is the amount of time and human resources required to prepare Fiscal Design Surveys: while it may be possible to prepare these detailed profiles for OECD countries—which are highly advanced in terms of financial management systems and human resource capacity—it may not be feasible to prepare equally detailed profiles for less developed economies.

In addition, while the survey uses standardized questions, some of the survey responses are somewhat subjective and therefore it may be difficult to compare between countries in the survey (OECD 2011 p.5). As such, there is room in responses for greater objectivity (particularly in the institutional design and expenditure powers sections) that may make the data easier to compare between countries.

2.3 The World Bank’s Fiscal Decentralization Indicators

To facilitate the study of the effects of fiscal decentralization and provide comparative data across countries, the World Bank’s Poverty Reduction and Economic Management Network (PREM) has developed a relatively comprehensive set of quantitative and qualitative decentralization indicators. These Fiscal Decentralization Indicators are made available on the World Bank’s website.¹

For the quantitative fiscal decentralization indicators, the World Bank relies on data collected through IMF GFS to construct three main fiscal decentralization metrics, calculating the proportion of government expenditures and revenues attributable to subnational governments, as well as the resulting vertical imbalance (World Bank 2011). With regard to qualitative fiscal decentralization indicators, the World Bank presents four categories of qualitative measures of decentralization: the nature of expenditure assignments, revenue assignments, the institutional-regulatory framework for subnational borrowing, and the institutional characteristics of the transfer system from central to local governments (World Bank 2011).

¹ It should be noted that PREM is the process of revising its (Fiscal) Decentralization Indicators. See Vinuela 2012.
The World Bank’s quantitative and qualitative indicators are intended to provide information across countries on the fiscal, administrative and political dimensions of decentralization (World Bank 2010). They are constructed using secondary sources. Data to support the quantitative indicator ratios is drawn exclusively from the IMF GFS database. The qualitative indicators are drawn from a variety of existing studies conducted independently or by multilateral agencies, including the OECD and the Inter-American Development Bank.

The reliance on IMF GFS data for the World Bank’s quantitative indicators directly affects the usefulness of the database. All of the issues with relying on IMF GFS data noted in section 2.1 apply, including inaccuracies resulting from the omission of data for subnational bodies that may not meet the definition of “institutional unit,” and the limitations in classifying revenue sources and intergovernmental transfers. Without this information, subnational government expenditure and revenue ratios have less significance, and may omit data on significant delegated or deconcentrated subnational services that are not captured by the IMF GFS definitions.

The qualitative set of indicators compiled by the World Bank is not much more inclusive: data are available for between 30 and 68 countries, depending on the metric. The indicators themselves cover the expected fiscal categories, providing data on expenditure and revenue assignments, the capacity for subnational borrowing, and characteristics of intergovernmental transfers. By providing information on the breadth of public services provided at the subnational level, the qualitative indicators are a good baseline resource for understanding the fiscal decentralization picture in a reporting country.

At the same time, however, there are considerable limits to the use of the available qualitative indicators for in-depth study of decentralization, as the indicators limit themselves exclusively to the fiscal dimension of decentralization: little or no information is available regarding the political and administrative institutions guiding the operation of the local public sector. Furthermore, because the quantitative indicators are highly aggregated whereas the qualitative indicators seek to present a more nuanced institutional picture, the qualitative indicators are difficult to integrate with the quantitative data set.

2.4 The Global Observatory on Local Democracy and Decentralization (GOLD)

Established in 2004, United Cities and Local Governments (UCLG) is global advocacy organization that represents and defends the interests of local governments on the world stage. As its membership comprises 112 local government associations, UCLG seeks to be the united voice and world advocate of democratic local self-government, promoting its values, objectives and interests, through cooperation between local governments, and within the wider international community.

As part of its efforts to become a central source of information on local democracy and decentralization, UCLG launched its Global Observatory on Local Democracy and
Decentralization (GOLD) in 2006. GOLD is an effort to collect and shares information, knowledge, and best practices regarding local governance, democracy and decentralization.

To date, two global reports have been issued under the GOLD initiative: GOLD I in 2007 and GOLD II in 2010. GOLD I was intended to “provide a balanced view of the state of decentralization and local democracy in the world.” It surveyed selected countries from all regions in the world and covered the countries’ territorial structures; an overview of powers, management and finance; and local democracy. GOLD II focused on the issue of local government finance. It provided greater detail about issues such as local government structures, expenditure responsibilities, local revenue collections, and local debt. It identified challenges faced by local government under the background of global economic downturn and accelerated urbanization, and provided policy recommendations.

Based on its efforts, UCLG has prepared descriptive country profiles for dozens of countries around the world, in addition to preparing “Local Governments in the World: Basic Facts on 96 Selected Countries.” Although these basic profiles provide considerably better coverage across developing countries when compared to the other data sets, concerns have been raised about the robustness of the methodology used and the data collected by UCLG. In this regard, it should be noted that UCLG is a member-driven advocacy organization rather than an independent research institute.

Finally, consistent with its member-driven agenda, UCLG’s interest is (almost) exclusively on elected local governments, which, like the other decentralization data sets, explored above-seriously undermines its usefulness as a robust source of decentralization data. While UCLG’s efforts and experiences may usefully inform a more comprehensive approach to collecting data on local public sector finances and institutions, its focus on devolved countries makes it an incomplete tool for the study of decentralization in all of its forms.

2.5 Other efforts to measure decentralization and the local public sector

The discussion above highlights the four most comprehensive efforts to measure and quantify decentralization and local public sector finances and institutions around the world. In addition to these four major data collection efforts, numerous efforts have been made over the years to apply a standard methodology—either across a region or to a group of selected countries—in order to obtain a comparative picture of decentralization within a subset of countries. Such efforts can be grouped into three categories.

The first approach to measuring decentralization and capturing the dynamics of the local public sector is by preparing in-depth case studies that are guided by a standard methodology. Examples of such methodologies and studies include the review of fiscal decentralization and sub-national government finance in six African countries (Steffensen and Trollegaard 2000); the application of the assessment methodology contained in USAID’s (2009) Democratic Decentralization Programming Handbook, including the methodology’s application in a comparative assessment of decentralization in Africa (USAID 2010); as well as numerous in-depth country cases
prepared based on the diagnostic framework developed by Yilmaz et al. (2008), World Bank (2009) and Boex and Yilmaz (2010). The disadvantage of these longer case studies is that they are often not easily comparable, despite a shared underlying analytical framework.

A second approach to capture the dynamics of the local public sector in a more comparable manner is by preparing relatively short, descriptive Country Profiles. This is an approach followed by several organizations, including the Commonwealth Local Government Forum; the Forum of Federations; and by United Cities and Local Governments. Similarly, the UN Department of Social and Economic Affairs prepares Public Administration Country Profiles that typically cover both the central public sector as well as the local public sector. While comparability of the format is better, the level of detail and nuance that is possible in this format is reduced. A common concern is that many of these country profiles reflect the legal (de jure) situation in a country, without necessary reflecting the actual (de facto) conditions of the public sector below the central level.

A third approach to measuring decentralization and the dynamics of the local public sector is to focus on a more limited set of highly comparative—typically quantitative—indicators. This approach was followed by Ndegwa (2002) in his stocktaking of decentralization in Africa, by Dabla-Norris (2006) in exploring key aspects of the decentralization processes in transition economies; by Boex and Simatupang (2008); and more recently by Ivanyna and Shah (2012). In addition to limits on country availability of different indicators, an important constraint of this approach includes the difficulty to capture the full breadth and depth of the political, administrative and fiscal aspects of decentralization in a select number of variables. Since decentralization processes are difficult to capture in a quantitative manner, some of these approaches resort to a more subjective scoring of decentralization in order to achieve wider country coverage, or—by necessity—use indicators that are not universally applicable as sound measures of decentralization or subnational empowerment.

3. Discussion

Each of the four main databases examined in this paper—as well as the other efforts to measure decentralization that have been highlighted—aim to provide some insight into the realities of government spending, revenues, and the provision of services at the local level. While each contains one or more important components for forming a robust understanding of the role of local public sector, none of the existing methodologies provide a complete approach for understanding the local public sector.

A weakness shared by all approaches is the exclusive focus on local government finances and local government institutions vis-à-vis other local bodies. Virtually without exception, the existing methodologies simply ignore the deconcentrated provision of public services, making it essentially impossible to compare the effectiveness of deconcentrated versus devolved systems.
Although the government finance statistics collected by the IMF have provided much of the empirical foundation for scholarly analysis of (fiscal) decentralization, the purpose of the GFS dataset is primarily to monitor fiscal balance in order to ensure macroeconomic stability. As such, the IMF cannot be faulted for the data set’s weaknesses as a source for information on local public sector finances. This point notwithstanding, because the GFS year book has limited coverage at the subnational level for developing countries (and provides only quantitative fiscal data), the usefulness of this database is limited for questions of decentralization. Quantitative financial data by its nature can only reflect the stocks and flows of finances across different government levels; it cannot provide us with information about the reality of local power and the fiscal autonomy of subnational units from the central government.

Given the limitations of the quantitative fiscal data, the World Bank and OECD made some progress towards the more effective measurement of decentralization in all of its dimensions by supplementing basic measures of fiscal decentralization with some qualitative measures of decentralization as well. For the OECD, however, the qualitative metrics still focus almost entirely on fiscal institutions. The World Bank has expanded its decentralization indicators to include a limited number of basic indicators of political decentralization. Neither of these methodologies takes on board issues of political or administrative discretion and accountability at the subnational level.

UCLG seems to have made the greatest strides in developing a set of qualitative questions that may actually provide some important information about the reality of subnational governance and decentralization, including political and administrative factors. However, its approach has both strengths and weaknesses. On the positive side, its reliance on its member local government associations for data collection purposes results in good data collection coverage—both in terms of country details as well as in terms of the number of countries covered. On the negative side, however, UCLG’s data collection approach limits the robustness of the resulting dataset, as its metrics are not always consistently defined, data is not always collected by relevant experts, and central quality assurance is almost impossible. Because all of UCLG’s data is collected by local officials who are members of UCLG (or by experts affiliated with or appointed by UCLG), there may further be some response bias towards UCLG’s main advocacy areas. Finally, the UCLG approach has not addressed local public sector activities that may occur outside of fully devolved local government entities, which again may be omitting an important area of decentralization.

4. Conclusions

None of the existing data collection efforts reviewed provides researchers, policymakers or development practitioners with a comprehensive set of metrics that describes the structure and functioning of the local public sector in a country in a comparative manner. The shortcomings of the existing approaches highlight the need for a new approach to decentralization data collection.

For any data source to provide meaningful information about the nature and level of decentralization in all countries, even those where formal devolution has not yet occurred, both
qualitative and quantitative indicators are necessary. Qualitative measures about the institutional functioning of the local public sector are critical, because much of the decentralization process is political and administrative in nature, and may not be accurately captured by measures of expenditures, revenues, and transfers alone. However, detailed qualitative fiscal information is also necessary: countries that have achieved political and administrative decentralization will not be able to improve front-line public services unless financial resources flow to the local level.

Based on previous and ongoing experiences, an ideal database on the nature of decentralization and the functioning of the local public sector would have the following features:

- The data collection methodology should include both quantitative and qualitative decentralization indicators. It should capture three main elements: (1) the basic organizational structure and governance of the (local) public sector; (2) the fiscal structure of the (local) public sector; and (3) qualitative measures of the (political, administrative and fiscal) institutions and processes at the subnational level.
- Whenever possible, an initiative collecting data on decentralization and the local public sector should rely on existing definitions and measures. For instance, indicators of the local public sector’s organizational and governance structures could draw on the indicators incorporated in GOLD I (UCLG 2008). The quantitative measurement of subnational expenditures, revenues and intergovernmental fiscal flows could use the IMF (2001) GFS classification system as its starting point. Qualitative indicators of subnational indicators may be usefully informed by World Bank (2009).
- In order to provide a comprehensive overview of the public sector below the central level, the data methodology would have to encompass not only the subnational activities of devolved local government entities, but also of deconcentrated subnational entities and other local public sector spending.
References


