Analyzing the Distributional Impact of Reforms: 
A Practitioner’s Guide to Pension, Health, Labor Market, Public Sector Downsizing, Taxation, Decentralization and Macroeconomic Modeling (Volume 2)

Forthcoming, June 2006

Aline Coudouel and Stefano Paternostro (Editors)

The analysis of the distributional impact of policy reforms on the well-being or welfare of different stakeholder groups, particularly on the poor and vulnerable, has an important role in the elaboration and implementation of poverty reduction strategies in developing countries. In recent years this type of work has been labeled as Poverty and Social Impact Analysis (PSIA) and is increasingly implemented to promote evidence-based policy choices and fosters debate on policy reform options.

While information is available on the general approach, techniques and tools for distributional analysis, each sector displays a series of specific characteristics. These have implications for the analysis of distributional impacts, including in terms of the types of impacts and transmission channels that warrant particular attention, the tools and techniques most appropriate, the data sources typically utilized, and the range of political economy factors most likely to affect the reform process.

Analyzing the Distributional Impact of Reforms is the second volume in a series, and covers six key areas of policy reform that are likely to have significant effects on distribution and poverty: pension, health, labor market, public sector downsizing, taxation, and decentralization. It also provides a brief overview of the modeling approaches for macroeconomic shocks and policies.

This volume is a companion to a first volume, Analyzing the Distributional Impact of Reforms, edited by Aline Coudouel and Stefano Paternostro (2005), which covered reforms in the areas of trade, monetary and exchange rate policy, utility provision, agricultural markets, land policy, and education.

Each chapter is organized around the different transmission channels through which policy reforms can be expected to affect the population. The chapters provide an overview of the typical direction and magnitude of the expected impacts; the implementation mechanisms through which reforms are typically carried out; the stakeholders who are likely to be affected by the reform, positively or negatively, or who are likely to affect the reform; and the methodologies typically used to analyze the distributional impact. Each chapter illustrates these points with examples, applications, references, sources and a bibliography.
Three levels of analysis are outlined in this chapter that offer a potentially tractable means of mapping out Poverty and Social Impact Analysis (PSIA) for decentralization given the institutional characteristics of a decentralization, the probable mechanisms of impact, and the likely available sources of information. In the first instance, the level and distribution of public resources across places is a focus. At the second stage, the analysis concerns the distribution of public resources across people, such as the poor and non-poor, given the prevailing institutional and governance arrangements within places. Finally, the chapter highlights attempts to investigate impacts on local governance and public service delivery, that is, how effectively public resources are translated into public services.

OVERVIEW

The distributional impact of decentralization, notably on the poor, ultimately depends on the specific design and implementation in a given country context. The decentralization of public resources, officials, political power, and accountability affects both places and people. In theory and practice, the changes in the benefit incidence of public expenditures, services, and local governance that are associated with decentralization can make a specific group or even the majority better or worse off in aggregate. Given the ambiguity in the potential impacts, the application of PSIA

Special thanks to Emanuela Galasso, Markus Goldstein, and Jennie Litvack for comments. All errors are due to the author.
is especially pertinent for the variety of forms of decentralization likely to be encountered at the country level. Those pursuing distributional analyses of decentralization reforms will therefore have to determine an assessment methodology that identifies probable impact channels and tackles the typical data constraints confronted in quantitatively capturing effects on places and people at the subnational level.

There is an extensive theoretical literature on the potential advantages and disadvantages of decentralization. Decentralized decision making can bring governments closer to the people; overcome information asymmetries; enhance transparency and accountability; allow for a better matching of local preferences, especially when these are heterogeneous across places; make for more responsive government through interjurisdictional competition for investment and the hearts and minds of inhabitants and taxpayers by, for example, allowing for “voting with your feet”; take into account local innovation; and increase the legitimacy of the state, while incorporating previously marginalized stakeholders such as the poor, women, ethnic groups, or castes.

Decentralization may also be associated with significant risks. Local entities may underprovide particular services, immunizations, for example, because of the presence of externalities. Disparities in local revenue capacity may constrain public services, especially in poorer areas. Local capacity constraints may deteriorate the provision of public goods in needy areas; a lack of clarity concerning the roles and responsibilities of central and subnational entities may do likewise. Weak bottom-up accountability and political economy factors such as elite capture may marginalize particular stakeholders and make local expenditure decisions less pro-poor (see, for instance, Bardhan 2000, Bardhan and Mookherjee 2002).

The impact of decentralization on poverty may be direct by flowing from the targeting of fiscal transfers and expenditure disparities, for instance, or indirect, such as the impacts that decentralization may have on the quality of public services or economic growth (von Braun and Grote 2000). Despite the expanding literature assessing the general links between decentralization and poverty reduction (Bossuyt and Gould 2000), the overall results are mixed and inconclusive (Jütting, Corsi, and Stockmayer 2005; Jütting et al. 2004).

**Tab. 1**

Table 6.1 speculates on a number of benefits and risks of decentralization, grouping these by potential time horizons, for example, within three to five years or beyond. The actual importance and direction of these considerations will depend on the country context, design, motivations, and phasing in of the decentralization. Given the significant lags with which some of these potential developments are associated, this
chapter focuses, in the first instance, on short-term impacts, especially as these are associated with the distribution and use of public resources.

In practice, countries pursue broader decentralization reforms for a number of reasons. In reality rather than rhetoric, poverty reduction is rarely the primary driving force. Political factors such as democratization, state legitimacy, and center versus subnational power relations often predominate.

Given the diversity of these experiences and stated objectives, this chapter attempts to provide a framework for mapping out the distributional impacts of decentralization experiences and examines several applied assessments. The next section reviews operational examples of decentralization reform and sets out the main types and dimensions of decentralization. The subsequent section proposes a simple framework to distinguish between different stages of the “distributional chain” of decentralization. The following section discusses a number of key instruments applied mainly by the World Bank in conducting this type of analysis. The final section concludes.

**DIVERSITY IN DECENTRALIZATION**

It is useful to highlight the diversity in decentralization that occurs in and across countries and at the operational level. While the operational cases presented in this chapter focus on World Bank experiences, they reflect examples of projects and polices adopted by governments and donors.

---

**TABLE 6.1. Potential Links between Decentralization and the Poor**

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Short term</strong></td>
<td></td>
</tr>
<tr>
<td>Brings choices closer to the preferences of the people, including the poor and previously marginalized groups.</td>
<td>The possibility of local elite capture.</td>
</tr>
<tr>
<td>Potentially allows for greater transparency in the interregional and local allocation of public resources.</td>
<td>Greater disparities emerge in interregional transfers and fiscal capacity in the absence of fiscal equalization.</td>
</tr>
<tr>
<td>Allows for local innovation in responding to the needs of the poor.</td>
<td>Lack of clarity and awareness concerning roles and responsibilities may weaken top-down and bottom-up accountability mechanisms.</td>
</tr>
<tr>
<td><strong>Long term</strong></td>
<td></td>
</tr>
<tr>
<td>Promotes tax and policy competition across jurisdictions for mobile capital and people. Underpins long-term political reform.</td>
<td>Fragments economies of scale.</td>
</tr>
<tr>
<td></td>
<td>Fails to address or exacerbates disparities between lagging and advanced localities.</td>
</tr>
</tbody>
</table>

*Source: Compiled by the author.*
across the world equally well. Clarifying the types, dimensions, and extent of decentralization evident in a given country and operational context serves as a starting point for mapping the potential distributional channels of proposed or ongoing reforms.

**Decentralization: operational perspectives**

Within World Bank operational experience, decentralization reforms are widespread, but diverse. Over one quarter of development policy operations—135 of 511 approved in fiscal years 1995–2005—listed at least one condition with a decentralization theme. During that decade, task managers explicitly chose decentralization as a theme in almost 5 percent of cases of development policy lending and 9 percent of cases of investment lending (or 249 of 2,927 projects in the latter case).²

Closer inspection of World Bank development policy conditionality highlights the range of reforms embraced under decentralization. In fiscal year 2005, development policy conditionality was utilized in 18 countries.³ For the cases of Ghana and Mozambique, these focused on the adoption of a general legal framework for decentralization. In Pakistan, conditions called for passing on additional fiscal space to provinces and local governments. Conditionality in Mozambique argues for the implementation of participatory planning programs in a specific number of districts. Measures in Peru were designed to promote a more “participatory, transparent, and results oriented” decentralized monitoring and evaluation process. The first Senegal Poverty Reduction Support Credit called more specifically for resource allocation mechanisms to decentralized units based on poverty, health needs, and performance. A sectoral focus in Timor-Leste saw decentralization reforms centered on decentralized management at the school level. In contrast, proposed reforms in Burkina Faso and Mali focused on deconcentrated entities, that is, decentralized offices of the central government.

Investment lending relies on a variety of decentralized mechanisms to meet project objectives focused on different institutional levels and sectors. In fiscal year 2005, these included large-scale examples of community-driven development such as Indonesia’s Subdistricts (Kecamatan) Development Program and an operation in Benin; district-level capacity-building and good governance promotion, for example, Tanzania and Indonesia’s Governance Reform Initiative Programs; education projects such as those in Afghanistan, Bangladesh, and Democratic Republic of Congo; or health, for instance, in India, Lesotho, Malawi, and Vietnam.

Decentralization projects frequently only intervene in a subset of localities. For example, Rwanda’s Decentralization and Community
Development Program is directly engaged in about one-third of the country’s 106 districts with assistance for strengthened planning and implementation. As is common in many countries, Rwanda’s decentralization framework was nonetheless implemented on a nationwide basis. Project impact analysis would clearly not only be concerned with the extent to which additional financial resources benefit the covered districts, for example, relative to the existing fiscal resources or relative poverty rate of the localities in a national context. Another important issue would be whether improved outcomes such as the greater incidence of priority services for the poor are more evident over time in these localities relative to other, initially comparable districts.

The foregoing examples underscore the range of approaches required to assess this diverse set of reforms falling under the rubric of decentralization. In the first instance, the analysis must seek to specify the mechanisms through which decentralization might have distributional implications. Common examples include new interregional allocation criteria for resources, greater decentralized autonomy over front-line resource allocation and public investment or service delivery decisions, or changes in the institutions or groups participating in decisions made at the local level, such as the mandated representation of women and previously marginalized groups, newly selected or elected bodies, or facility-level decision-making bodies such as parent-teacher associations.

Types of decentralization

At the heart of all decentralization reforms lies the extension of some degree of autonomy for decision making over public resources, staff, and regulations that was previously centralized. Table 6.2 presents three principal types of decentralization: deconcentration, delegation, and devolution (Litvack, Ahmad, and Bird 1998). Deconcentration entails granting increased responsibilities to decentralized agencies. These may be decentralized agencies within a ministry, such as regional education offices, or territorial entities, such as provinces and provincial heads. Delegation entails the assignment of a particular function or program to a decentralized entity, for example, a poverty targeting program. Devolution is often considered the most far-reaching form of decentralization in that it assigns a degree of political autonomy and taxing powers to sub-national governments.

These types of decentralization also differ along fiscal, administrative, and political dimensions. The fiscal dimension encompasses the degree to which revenue-raising and spending authority is decentralized.
Administrative decentralization pertains to civil servants and may influence their distribution across space and their accountability. Political decentralization relates to the extent actual power and political accountability are passed along from the center. These three dimensions are clearly integrally related. For example, in the absence of fiscal and administrative decentralization, political decentralization is likely to have limited traction in practice.

On the revenue side, fiscal decentralization entails granting subnationals their own tax and nontax revenue sources or intergovernmental transfers. Own-source revenues require that subnational governments have some autonomy over rate-setting and the determination of tax effort (Ebel and Yilmaz 2001). Differences in effort may explain some of the differences in own-revenue collection; localities will invariably be subject to significant variations in fiscal capacity, for example, the obviously different potential for property tax collection in a large metropolitan area versus a rural hinterland. Typically, the expenditure assignments of a subnational government will exceed the revenues from that government’s own-source revenue base. The resulting vertical imbalances will confirm the need for fiscal transfers from higher or central levels of government.

Major distributional issues in this context relate to the amount of fiscal resources higher levels of government transfer (vertical sharing) and the modalities through which the higher levels of government distribute these resources across localities (horizontal sharing). Transfers

---

**TABLE 6.2. Types of Decentralization**

<table>
<thead>
<tr>
<th>Deconcentration</th>
<th>The dispersion of the responsibility for certain services to regional branch offices.</th>
<th>Accountability remains largely top-down within administration; many theoretical benefits of decentralization may be more limited, but risks may be lower.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delegation</td>
<td>The transfer of responsibility for decision making and the administration of public functions to local governments or semiautonomous organizations not wholly controlled by the central government, but ultimately accountable to it.</td>
<td>Assignment of a specific task or function may make use of greater local information and downward accountability, but decentralized entities are restricted in prioritizing across functions or across sectors.</td>
</tr>
<tr>
<td>Devolution</td>
<td>The authority for decision making, finance, and management is transferred to quasi-autonomous units of local government.</td>
<td>There is greater emphasis on bottom-up institutions of political autonomy.</td>
</tr>
</tbody>
</table>

*Source: Compiled by the author.*
may be based on the origin of the resource collection, for example, shared natural-resource revenues; they may be formula based; or they may be discretionary and ad hoc. Impact analysis in this context needs to assess whether needy areas receive more or fewer resources in absolute and relative terms. While needy might be defined based on criteria such as poverty as measured by a poverty headcount ratio, need would ideally incorporate some concept of the difference between expenditure needs and fiscal capacity, or the capacity to raise revenues at similar effort levels given a particular revenue base such as property. Subnational expenditure needs will, in turn, depend on prevailing expenditure assignments. For example, primary education is typically a prominent expenditure assignment in many countries. The literature provides substantial guidance on the optimal design of intergovernmental transfers (Bahl 1999; Bird and Smart 2002), including the design of allocation formulas. At the operational level, the challenge typically lies in providing workable measures of fiscal capacity and expenditure needs.

Administrative decentralization refers to arrangements concerning civil servants (Evans 2004). Along with fiscal resources, this may impact the spatial distribution of staff such as teachers and doctors and, hence, the access to staff by various groups, for example, urban or rural, remote or nonremote groups. In practice, attracting good civil servants and teachers to poor and remote regions is often a challenge in developing countries in any case (World Bank 2005b). The incentives provided may be affected by decentralization. The accountability relationship involved in the management of civil servants, for instance, the right by local governments to hire and fire or the right of central agencies to reassign across localities, may also be important not only in determining the ultimate distribution of civil servants, but also the effectiveness of the provision of services by civil servants.

Political decentralization involves the granting of decision-making autonomy to lower levels of government such as for resource allocations across sectoral priorities. This autonomy implies some form of local accountability mechanism. Electoral institutions and local representation are typically at the heart of the relevant decision-making processes. Beyond periodic voting, a range of other processes may be embraced, such as efforts to enhance citizen participation, including that of the poor, in the local budgeting process (Blair 2000). Often, important questions about the impact of decentralization will focus on how changes in political decentralization have affected local accountability given the fiscal and administrative decentralization arrangements, for example, by allowing a voice for a previously marginalized constituency.
While these various forms of decentralization often coexist in a single country or even in a single sector, the distinctions entail important differences in the nature of decentralized decision making and, by extension, the distributional impacts. Devolution is often understood as the most pronounced form of decentralization. It entails some sort of locally accountable entity, generally an elected one; the emphasis is on a greater degree of autonomy and accountability at a more local level. Such entities will be able to set priorities across a greater range of alternatives, for example, sectoral preferences between infrastructure and social expenditures, while, at the margin, depending on taxes from their own constituencies. In contrast, deconcentration and delegation imply a greater predominance of top-down accountability and, potentially, a more limited set of decentralized choices, such as delegation over a very narrow function. Devolution may guarantee (but not necessarily) greater scope for realizing some of the broader gains from more full-fledged decentralization. At the same time, devolution may be subject to greater risks from factors such as local capture owing to less stringent forms of top-down accountability.

The nature of decentralization may also be subject to important differences within a country, including urban and rural differences. Federal countries such as India manifest important differences in the degree of decentralization to local governments and communities across states. Asymmetric decentralization arrangements are important features in some countries, for example, Indonesia’s special autonomy provisions for the provinces of Aceh and Papua. Ladder approaches, whereby increased resourcing and autonomy are granted over time depending on the demonstrated development of capacity, may also generate differences in decentralization across localities. Examples include Cambodia’s early implementation of the *Seila* Commune Decentralization Program. While these types of asymmetrically phased decentralization approaches may have attractive features from the perspective of dealing with capacity differences across what are often very heterogeneous subnational entities, they may be difficult to sustain politically. Thus, in the context of political decentralization, it would be very difficult for a national government to withhold elections from some localities, but not others.

**Extent of decentralization**

International comparisons of decentralization have typically focused on the extent to which fiscal resources are managed by subnational entities. The International Monetary Fund’s Government Finance Statistics pro-
vide the widest international coverage on revenue and expenditure
decentralization measures (World Bank 2004a). These data refer to
funds that are devolved or delegated to state, provincial, and local gov-
ernments, but do not distinguish deconcentrated resources. Figure 6.1
presents regional averages for subnational shares of expenditures and
own-revenues. Expenditure shares are, on average, almost 30 percent in
observations on countries of the Organisation for Economic Co-operation
and Development. South Asia is represented only by India, with subna-
tional expenditure shares over 40 percent. Shares are significantly lower
in all other regions, notably Africa. Regrettably, data coverage is espe-
cially limited for developing countries, but nonetheless provides a useful
benchmark against which to assess other countries using supplementary
data. At an aggregate level, impact analysis of decentralization reforms
might assess the extent to which more or less resources are available to
subnational entities over time, for example, as part of an overall national
fiscal space.

![Subnational Expenditure and Revenue Shares](image)

**FIGURE 6.1 Subnational Expenditure and Revenue Shares**

- **Percent**
  - 50
  - 45
  - 40
  - 35
  - 30
  - 25
  - 20
  - 15
  - 10
  - 5
  - 0

- **Subnational share of expenditures**
- **Subnational Share of Revenues**

- **Source:** Government Finance Statistics Database, International Monetary Fund (2004, latest available country observations).
- **Note:** The figures in parentheses indicate the number of countries in the sample.
In all regions, subnational expenditures are greater than revenues. These vertical imbalances—defined as the difference between own-revenue capacity and prevailing expenditures—give rise to intergovernmental transfers. Within countries, vertical imbalances may be especially large for poorer or rural localities, highlighting the need to assess the degree of horizontal difference across localities within a country.

Critically, the data of the International Monetary Fund do not reveal the degree of autonomy subnational governments have over revenues or expenditures. Even if state, provincial, or local governments are assigned a tax base such as property, the governments may be restricted in the degree to which they can exploit this revenue source (Ebel and Yilmaz 2001). Higher levels of government may significantly restrict the allocations of subnational governments, for instance, by earmarking or other administrative measures, thus narrowing the extent of decentralization (and comparability) across countries.

A scoring exercise by Ndegwa (2002) suggests that, in most African countries, the actual amount of fiscal and administrative decentralization is low. While political decentralization expanded rapidly through a wave of democracy movements in the 1980s and 1990s, denoted by the existence of elected local governments, this has not been matched by corresponding increases in fiscal and administrative decentralization. Very rarely do subnational governments control more than 5 percent of their total expenditures, let alone their revenues.

The international evidence suggests that central government control over public resources remains predominant in most developing countries. Given this centralized control over public resources, care must be taken not to attach excessive weight to the ability of decentralized expenditures to contribute to aggregate poverty reduction. Nonetheless, decentralized decision making may be growing in significance for those public expenditures that are especially important for the poor, such as social sector spending, equalization transfers, and social funds. Thus, a clear understanding of the scope of a particular decentralization reform should set the stage for assessing the potential distributional impacts.

**ASSESSING DISTRIBUTIONAL IMPACTS OF DECENTRALIZATION**

Fig. 2 Figure 6.2 presents a simple framework to help map distributional impacts. In the first instance, the framework is concerned with capturing the distribution of public resources across decentralized places and people. This distribution can be interpreted as the targeting of decentralized resources, particularly if these are derived from central transfers. In addition to mea-
suring the ultimate distributional patterns quantitatively at these levels, such an analysis typically seeks to understand the factors that appear to be driving progressive or regressive distributions, for example, the identification of the characteristics of individual localities, including the use of proxies to gauge factors that would increase the likelihood of capture.

The fiscal analysis of people and places is primarily concerned with public resources as an input that may or may not translate into better service delivery. Another level of analysis involves trying to assess changes in the quality of public services owing to decentralization. Do poor people get more of the services they want or need at a higher standard because of the decentralization reform such as in basic health or education service delivery? Better local governance can be seen as an intermediate input for service delivery outcomes. Within given fiscal resources, are accountability arrangements so established that services are properly provided? However, improvements in local governance may also themselves be a focus of analysis. Thus, decentralization may increase or decrease the sorts of corruption that have a disproportionate impact on poor households or small firms. The empowerment effects of decentralization, such as those resulting from the existence of reformed or new political institutions, may be especially promising for the poor.

**Distributional impacts across places**

Decentralization reforms may alter the level and distribution of transfers from central or other higher levels of government. In the case of devolution, changes in the local own-source revenue base may also be
important, especially if the fiscal capacity to raise resources differs significantly across localities. For example, the assignment of a property tax will have different implications for urban and for rural areas.\textsuperscript{6} In many developing countries, donor flows to subnational governments may be quite substantial. These flows are often not captured by central transfers and may even be off budget. The distributional analysis of decentralized resources may therefore be faced with serious obstacles to comprehensiveness. In the case of Rwanda, for instance, differences in direct donor allocations across districts can dwarf the corresponding differences in formal channels of allocation.

An important element in fiscal analysis across places is the focus on actual allocations to localities versus budgeted or notional allocations. The introduction of more transparent, formula-based criteria may reduce the use of fiscal transfers for political patronage (see, for example, Diaz-Cayeros, Magaloni, and Weingast 2003 on the historical case of Mexico). Indonesia’s 2001 “big bang” decentralization affected the criteria by which intragovernmental fiscal transfers were allocated. While the reforms introduced a new formula, legacy allocations and existing civil service salaries remained important driving forces behind the actual fiscal distributions, leading to significant errors in targeting, depending on which benchmark formula one believes to be “ideal” (see Box 6.1).

**BOX 6.1 Assessing Fiscal Equalization: The Case of Indonesia**

Starting in 2001, Indonesia devolved almost a third of public expenditure to subnational governments, notably its 434 districts (kabupaten, kota) and, to a lesser degree, 32 provinces. Regions depend heavily on central government transfers to finance the gap between their limited own-source revenue base and prevailing expenditure levels. Transfers consist of a general-purpose transfer or general block grant (dana alokasi umum, DAU); natural-resource revenue sharing (sumber daya alam), for example, from oil and gas; property taxes; and income; a special autonomy grant for the easternmost province of Papua; and a minor special-grant facility. Disparities in own-source revenues and revenue sharing mean that Indonesia’s districts enjoy significantly different levels of fiscal resources on a per capita basis (Hofman et al. 2005; World Bank 2003a).

At the start of devolution in 2001, DAU allocations were made based largely on existing establishment costs. These were estimated using the sum of the previous transfers for the deconcentrated structures and staff that had been handed over to local governments, as well as the prevailing capital transfers to local governments. Over time, policy makers envisioned moving more steadily toward a transparent, formula-based allocation system through the decentralization reforms. A new formula sought to distribute a national pool of DAU resources (now 26.5 percent of national resources) based on a fiscal-gap formula. This formula incorporates indicators of fiscal capacity and expenditure needs as measured by
population, area, poverty, cost, Human Development Index, and so on. The fiscal-capacity measures rely on own-source revenues that are predicted based on a regression analysis of the relationship between district gross domestic product and taxes. Opting for actual collections would have penalized local revenue-collection efforts since higher results for the fiscal-capacity measures would have led to less in transfers.

In any case, the actual allocations deviate in practice from the “ideal,” formula-based allocations. Figure 6.3 highlights this mistargeting in allocations across places that was found in practice for the 2006 DAU, which totals about $14.6 billion.

Figure 6.4 recasts this deviation by ranking the ratios of actual to formula-based DAU allocations for Indonesia’s 434 districts. The left part of the distribution is underresourced because of the formula, whereas the right side is overresourced by up to 34 times. This method is more revealing than simply assessing correlations with local poverty indicators or after-transfer variations in per capita total revenues, that is, per capita own-source revenue, natural-resource revenue sharing, DAU, and the minor special-grant facility. It provides an explicit statement of a benchmark distribution of the actual and formula-based allocations, thereby supplying direct insights on the winners and losers created by the deviation (Hofman et al. 2005). In this example, about 12 percent (or $1.8 billion) was misallocated.

The misallocation can also be summarized through a poverty-gap-type measure that weights the degree to which localities are underresourced. The greater the resulting figure (for
example, the changes in actual allocations against formula allocations over time), the more regressive is the impact.

Clearly, the design of this formula benchmark distribution may be open to criticism. Some experts may see poverty as the preferred proxy for expenditure needs. For any country context, the appropriate specification of the transfer should be guided by the assignment of roles and responsibilities, for example, social sector or infrastructure needs, and the available data. Hence, an important exercise in assessing the importance of a design is to simulate the sensitivity of the measure of the fiscal-resource gap to the choice of different horizontal allocation benchmarks.

**FIGURE 6.4** Ratio of Actual to Formula-Based DAU, 2006

Before-and-after comparisons of fiscal allocations across places are often complicated by the lack of comparable data, especially in transitions from central to more decentralized arrangements. For example, a large part of Indonesia’s deconcentrated expenditures in the case highlighted above were transferred to devolved structures in 2001. However, data on the spatial incidence of deconcentrated expenditures and the remaining central government expenditures before and after decentralization are only partially available. The fiscal recording systems of the central government simply did not produce geographically disaggregated data in line with
the new subnational jurisdictions. From this perspective, one of the benefits of a decentralized system may be that it increases transparency concerning the spatial incidence of fiscal resources (assuming all subnational governments provide reports for national-level comparisons).

A review of the evolution of intragovernmental fiscal systems for eight countries in the process of accession to the European Union finds that most have moved to more transparent formula-based allocations. This represents an advance over the predominance of nontransparent and discretionary allocations during the communist era. Beyond the apparent redistributional aspects of intergovernmental transfers, it is important to bear in mind the potential incentive effects for economic growth and revenue mobilization. While the European Union–8’s new allocations significantly reduce disparities across localities relative to the extent to which revenues are collected in an area, the equalization may actually be excessive from the perspective of economic efficiency (Dillinger 2005). Poor design in intragovernmental fiscal transfers may also have very detrimental effects on own-source revenue mobilization. Thus, Russia’s system of ad hoc grants penalized regions that raised more own-resources (Zhuravskaya 2000).

Understanding the amount of resources that actually arrives at the local level is an often neglected element of distributional analysis. Rwanda’s common development fund provides, in principle, each of the country’s 106 districts with an equal allocation for infrastructure projects such as in markets. The disbursement of these funds, however, relies on the preparation of an adequate proposal and on progress in project implementation, including processes such as procurement. Data for 2004 suggest that actual disbursements ranged from no disbursement to full disbursement against the basic allocation. This has raised concerns that poorer, lower-capacity districts may be experiencing regressive allocations.

There may be any number of reasons why allocated fiscal resources may not actually arrive at the decentralized level. Reinikka and Svensson (2004) examined variations in the degree of leakage in fiscal transfers to schools in Uganda. Leakages were defined as the difference between the amounts schools were supposed to receive, that is, capitation grants, and the amounts they actually received. The authors found that poorer schools suffered from greater leakages, potentially because of their more limited bargaining power vis-à-vis districts.

**Distributional impacts across places and people**

The distributional incidence of public resources within places depends on the way lower-level institutions such as local governments allocate...
these resources in terms of types of programs and services, for example, and what this implies for the ultimate distributional incidence across different beneficiaries such as poor and non-poor households or persons by gender, by ethnicity, by caste, and so on.

Distributional outcomes based on the way fiscal resources are allocated at the local level in a decentralized context will depend on the degree of autonomy and accountability and the associated capacity at the various institutional tiers. The amount of autonomy will determine the amount of discretion a given level of the state will have in targeting public resources. Are local decision makers only able to select from a limited menu of projects? Can they make broad choices concerning activities and implicit or explicit beneficiaries given available resources? The capacity and accountability effectively to allocate decentralized resources may differ not only vertically across levels of government, for example, between central and local governments, but also horizontally (urban or rural, small or large, and so on); that is, are agents at any given tier both willing and able to make choices that benefit the poor? Do local governments have the capacity, including sufficient information, to identify poor beneficiaries effectively and implement activities to help them?

The theoretical literature suggests that the degree and impact of central versus local capture are ambiguous (Bardhan and Mookherjee 2000, 2005). A key challenge facing distributional analysis therefore is to assess whether prevailing institutional arrangements tend to favor or threaten desirable distribution outcomes such as pro-poor allocations across localities. For any given context, it will be important to provide a more stylized assessment of the local governance mechanisms and characteristics that might affect distributional outcomes. Are decision-making processes sufficiently inclusive of stakeholders at the local level such as the rich or poor, landed or landless, literate or illiterate, woman or men, minorities, particular ethnic and caste groups? Are the incentives such that decision makers would act in accordance with broadbased or narrow distributional outcomes (for example, elite capture)?

An increasing number of quantitative analyses of decentralized decision making seek to link observed outcomes with local characteristics in terms of poverty targeting or the choice of certain projects. To varying degrees, these characteristics serve as either indirect or direct proxies for local arrangements mediating distributional decisions. Thus, high degrees of inequality or ethnic polarization could undermine more broadbased or pro-poor distributional outcomes at the decentralized level. Consequently, distributional analysis should, ideally, provide an inventory of the risks of capture in a given context. The analysis should also seek to encapsulate the
salient differences across places in a given context such as the composition of the population and its characteristics, resource endowments, and social traditions vis-à-vis stakeholders such as women. These differences are not static, and decentralization will not simply affect fiscal allocations; at one and the same time, decentralization may transform underlying decision-making processes, institutions, and the behavior of key stakeholders. Any decentralization analysis will therefore confront a number of simultaneous, overlapping processes. Nonetheless, an important dimension of the assessment of first-order effects would be the focus on how given decentralized mechanisms or reforms impact the targeting of fiscal resources.

Galasso and Ravallion (2005) provide a good example of two-stage targeting analysis in the context of Bangladesh’s Food for Education Program. The central government delegated to communities the responsibility for allocating program transfers across people. It was assumed that these levels would have better information for identifying the poor. Whether actual allocations might be undermined by inadequate accountability, for example, program capture by local elites, is an open question. The central program office allocates across the communities. Its information partly relies on national statistical sources for aggregate poverty indicators on given localities, but the accountability is also open to doubt because of, for instance, the political pressure to favor particular constituencies in allocations.

The study finds that decentralized targeting within villages is pro-poor, but that targeting can be more or less effective given particular community characteristics such as inequalities in land holdings. In comparison, the central level performs comparatively badly in its allocations across communities when its contributions targeting the poor are decomposed. This suggests that, at least in this case, the accountability for pro-poor targeting appears to be more effective at the local level rather than the central level.

Findings from Bolivia indicate not only that previously marginalized localities have received more resources under decentralization, but that the structure of expenditures has tended to be more reflective of local priorities. The approach has relied on linking the sectoral structure of expenditures to the performance of proxies for expenditure needs based on a number of socioeconomic indicators across localities (Faguet 2004).

Evidence from decentralized social investment funds in Ecuador suggests that inequality—a proxy for local capture—both reduces the likelihood places will receive funds, but also affects the types of investment priorities of localities (Arauja et al. 2005). A simple choice seems to influence more general distinctions in the types of projects selected by
localities, notably, private goods benefiting primarily the poor, such as latrines, versus public goods benefiting also the more well off, such as schools and community infrastructure. Higher inequality tends to reduce the likelihood that communities will chose the pro-poor latrines. Whereas the evidence does not offer a fuller account of the way inequality may act as a proxy for less progressive forms of local governance, such analytical distinctions between types of goods according to their distributional incidence and the local conditions may be useful for analyses in other contexts.

Studies of fiscal equalization are typically concerned with the allocation of transfers across places. Since own-source revenue assignments are typically insufficient to meet all assigned expenditure needs even among the wealthiest, such as in urban localities, central transfers will usually be required. Fiscal equalization is often analyzed on the basis of whether more central government resources are destined for poorer localities. A common question is: do transfers reduce the per capita disparities in the combined revenues available to local governments? However, per capita equalization is often not the best benchmark for equalization (see Box 6.1, Hofman et al. 2005).

The nature of center-subnational relations can be highly instructive regarding the potential outcomes of decentralization. Evidence that a national government is strongly disposed toward encouraging better outcomes at the subnational level is often an important sign of potential success (for instance, as revealed by a proactive commitment to monitoring and evaluation). The choice of types of intragovernmental transfers and poverty targeting designs, whether based on poverty or political patronage, for instance, is also often indicative. Institutionally, the incentives set by particular sorts of decentralization act to discipline subnational and central governments in very different ways (Blanchard and Shleifer 2000; Quian and Weingast 1995). Such comparative conclusions are naturally subject to debate, but do hint at the value of mapping out the apparent motivations of central government and the principal incentives a decentralized system offers to subnational entities.

A better understanding of the political economy of decentralized decision making can help map out the likely dynamics for ensuring distributional outcomes. Efforts to arrive at a stylized model of decision making can bring more focus on those interest groups that would be key in driving local decision making and those that may be marginalized. For example, in Indian villages, relevant groups might emerge around landed and landless constituencies (Foster and Rosenzweig 2002). Even in the absence of more detailed expenditure benefit-incidence data, these types
of analyses can yield hypotheses about the distributional dynamics behind certain expenditure patterns, for instance, irrigation versus other public goods such as road construction.

**Decentralized governance and service delivery**

A final level of distributional analysis focuses on the impact of decentralization on local governance and public service delivery. Prevailing conditions of governance at the local level may have significant implications in terms of whether public resources are used regressively at the local level. Consequently, if local governance appears to be ineffective, this may signal that public resources are subject to poor decentralized distribution through local capture, theft, and so on. This section attempts to unbundle potentially relevant local governance issues, including the potential impacts on decentralized service delivery.

The accountability triangle described in *World Development Report 2004* (World Bank 2003b) provides a useful framework for mapping out the potential weaknesses and strengths in local governance that may, in turn, have an impact on distributional outcomes and service delivery (Figure 6.5). Key links in the accountability triangle include *voice* (how citizens relate to politicians and policy makers at the national, state, and local levels), *client power* (how citizens as clients of service delivery relate to providers within a given sector), and *compact* (how politicians and policy makers relate to public and private providers).

![The Accountability Triangle](source: World Bank 2003b)
These drive the effectiveness of public service delivery (see Ahmad et al. 2005; World Bank 2003b).

Decentralization is likely to shift the onus of accountability in terms of voice between citizens and local policy makers and change the compact between central and subnational governments (such as through greater fiscal decentralization in the case of devolution and delegation) and decentralized providers (in the case of deconcentration, for instance). Compacts will be strongly affected by the nature of fiscal and administrative decentralization, for example, how localities are financed and staffed. Decentralization, including greater autonomy for front-line providers, will also have the potential of strengthening client power if citizens hold local providers more directly to account such as by targeting their feedback at specific providers or choosing alternative providers. While a range of accountability mechanisms may be formally established, different constellations of these mechanisms may actually exist in a given context (Blair 2000). Hence, attention also needs to be paid to the functioning of informal institutions.

A variety of voice mechanisms may influence the actions of local policy makers, including taxing and spending priorities, and the extent to which these policy makers are compelled to transform public resources into outcomes that benefit local households. Key questions concerning the quality of voice mechanisms might include the following: Can the selection of local policy makers be made to hinge on the responsiveness of the policy makers to broadbased political demands? Are decision-making bodies representative of all local groups? Are more direct forms of oversight, such as participatory budgeting, established and effective?

Distributional impacts depend on the scope of decentralized decision making. Following wide-ranging devolutions, local policy makers may be able to sway the preferences of stakeholders across a broad set of priorities, including education versus infrastructure, hiring more staff versus spending more on buildings, less versus more taxes, and so on. In the context of delegated programs, the choices may be more limited, for example, the identification of the individual beneficiaries of a cash-transfer poverty program. Decision making about local facilities will be limited to a specific sector or function, such as the rates or opening hours for particular services. The nature of the compacts between central and local officials and between officials and providers, public or private, at various levels will determine the spectrum of the choices.

The inability of voters to hold local leaders to account through the ballot box undermines the effectiveness of electoral voice mechanisms in ensuring the delivery of goods to meet broadbased needs. If politicians
cannot or do not fulfill promises and if they cannot be made to do so, if, for instance, they will not pursue measures that strengthen local education so as to benefit all residents, then elections may merely breed patronage and clientelism, and politicians may secure control over the public sector by providing narrow spoils to limited constituencies, such as their own tribes (Keefer and Khemani 2003). The contrasts in the Indian states of Kerala and Uttar Pradesh highlight the importance of differences in public action. While they share similar income levels, Kerala achieves significantly better results in health and education indicators because public choices support spending substantially larger amounts of public resources to attain this outcome.

A comparative study of decentralization in the Philippines and in Uganda suggests that apparent bottom-up accountability may be quite weak in practice (Azfar, Kähkönen, and Meagher 2001). Survey evidence indicates that citizens in both countries relied heavily on community leaders rather than on the media for information on local politics and on corruption, potentially heightening the risk of local capture. A series of governance and decentralization surveys in Indonesia combined surveys and studies on households, facilities, and governance with the specific objective of revealing community- and district-level disparities in autonomy, accountability, and service delivery. The surveys found significant differences in how well informed citizens were about leaders at various levels of government, as well as in the perceptions of citizens concerning local corruption and capture (Hofman and Kaiser 2005; World Bank 2005c).

Informal accountability arrangements may act as a substitute for formal mechanisms of electoral voice. Tsai (2005) examines the conditions that might make local governments in China more responsive to local community needs. She finds some support for the notion that the presence of encompassing social groups, temple groups, for example, combined with the participation of embedded local officials, is associated with better outcomes on such issues as the quality of local infrastructure. She finds that, under current circumstances, these informal arrangements in particular localities are a passable substitute for the sort of accountability that might be expected from elections. Her paper cautions, however, that these informal arrangements may not represent a sustainable, broad-based institutional foundation for local accountability in China. Moreover, she found such arrangements effective in less than a fifth of the villages she surveyed.

Recent contributions have focused on designing decentralized institutions to enhance policy responsiveness to marginalized groups. The
designs include the mandated representation of women and the castes often found in South Asia. Evidence from India suggests that mandated representation does increase spending on goods and initiatives likely to benefit the targeted groups, such as special programs or reserved employment. Besley et al. (2004) find some evidence that the mandated representation of a pradhan (village head) in India impacts the types of expenditures that are prioritized in local decision making.

The greater participation engendered by decentralization through the empowerment of local institutions or the specifically mandated representation of previously uninvolved or marginalized groups may not always translate into more equitable resource allocations and more responsive service delivery. The opportunity of increased participation may initially raise expectations, but prove difficult to sustain over time especially because the opportunity costs are high and the apparent returns low. Consequently, greater participation may give a boost to voice and client-power mechanisms, but, for these to be sustainable and produce tangible outcomes, the corresponding compact arrangements, including sufficient financing and staffing at the local and front-line levels, must be established.

No matter what the nature of the prevailing relationships are between key actors in a decentralization process, it is important to bear in mind that these are likely to evolve over time. Decentralization may initially be largely a top-down affair, with the central government determining the new fiscal targeting mechanisms. Gradually, however, subnational governments may strengthen their bargaining positions vis-à-vis the central government, for example, through subnational government organizations. Subnational governments may thus begin to play a far greater role in the way national fiscal resources are distributed.

Local revenue collection can contribute to the generation of public resources, but, potentially more importantly, it can help enhance local accountability (Raich 2005). While a greater reliance on the local tax base may increase interregional disparities in fiscal capacity, linking the spending choices of local officials more directly to the local tax effort through rate setting, for instance, may strengthen the voice relationships. Citizens who are taxed or charged fees for general or specific services may be more attentive to how and how well resources are used. A fundamental problem in many developing countries, however, is that the local revenue base is often quite limited, and higher levels of government are reluctant to yield a larger revenue base to subnational governments.

The effectiveness of different local accountability mechanisms in reducing corruption is often doubtful. An investigation of community
projects in Indonesia sought to assess the impact on corruption of a threat of stricter auditing and compare this to the impact of measures designed to stimulate greater community participation (Olken 2004). Audits can be interpreted in this context as a form of top-down compact accountability, whereas participation puts the emphasis on bottom-up voice accountability. The study sought to generate a hard measure of corruption based on engineering assessments of community road projects. The analysis suggested that audits were more effective at reducing corruption, while greater participation merely shifted the expenditure composition to areas where leakages could be more readily masked. This type of analysis does not assess decentralization per se, but it is indicative of the type of institutional mechanisms that may influence outcomes in a decentralized context.

A study in Cambodia showed that changes in the compact with respect to health facilities improve performance. The study found that districts that had contracted out to nongovernmental organizations performed better than those retaining traditional compacts relying on government facilities (Bhushan, Keller, and Schwartz 2002). Citizen score cards provide one mechanism for enhancing client feedback on schools and clinics (World Bank 2004b). Randomized experiments gauging the impact of this feedback on facility-level performance can be used to assess this accountability mechanism.

An outcome-focused distributional analysis of decentralization needs to be clear about the dimensions of service delivery that are of interest and relevant. Public service delivery is, by its very nature, multidimensional in terms of quantity, quality, structure, cost, and so on. Does decentralization enhance access by improving, for example, proximity to a school or providing clean water? Does it enhance dimensions such as responsiveness? Are the “right” services being provided? Is service delivery conditioned on informal payments? Has decentralization affected the standard of service delivery? How well are teachers now teaching? Distributional analysis will also need to be concerned with the benefit incidence of these various dimensions. Does decentralization mean the poor are receiving more goods that are important for their welfare, such as basic infrastructure or vaccines, and at a lower price? Does it mean the poor are getting more of the goods that are important to them such as latrines versus sports facilities?

Given that trends in service delivery are subject to a number of concurrent developments, including changes in fiscal allocations and institutional reforms that alter the prevailing accountability constellation for service delivery, it is difficult to establish the causal relationships that are
due to decentralization. Formal impact evaluation typically requires the identification of a treatment group and a control group (Minkel 2005). Decentralization is generally national in scope. Politically, it is very difficult to devolve voting rights and resources to one set of localities, but not others. Projects often face substantial hurdles in randomizing intervention districts. In practice, formal impact evaluation within decentralization projects is complicated by the fact that the selection criteria for intervention locations are typically not random or clear cut. Regional clustering to economize coordination costs, a history of previous interventions, or an individual locality’s proven success or willingness to participate in reform tend to predominate. Moreover, the impacts of such projects may only emerge over time.

Using test scores as an outcome variable in a study on education in Argentina, Galiani, Gertler, and Schargrodsky (2005) find that richer and better administered schools benefit from decentralization, while the impact on poorer schools with less administrative capacity is negative. The fact that not all schools were decentralized at the same time provided an identification strategy in the study that was unique in many ways. While decentralization may increase the overall performance of service delivery in terms of access and quality, it may also exacerbate geographic inequalities. The Argentina education study suggests that, in the absence of countervailing policy measures, decentralization may widen disparities between more advanced and less advanced regions. Granting greater autonomy over own-source fiscal resources will likely increase fiscal disparities in the absence of equalization measures. Increased autonomy may allow high-capacity, well-governed localities to forge ahead, while low-capacity and poorly governed districts risk falling behind. Consequently, decentralization may initially trigger some divergence in outcomes relative to initial conditions across key socioeconomic indicators (Kaiser, Pattinasarany, and Schulze 2006).

Decentralization may also have effects on interregional growth and investment patterns and on firms. Granting greater policy leverage to subnational governments may induce them to pursue policies aimed at attracting mobile investment, including in the area of taxation. Alternatively, because of local conditions, subnational governments may initially veer towards predatory behavior against incumbent firms. If bureaucrats at the central and decentralized levels are engaged in corruption in, for example, the issuance of licenses, then, if no effective disciplining mechanisms are instituted, this may significantly raise the costs of doing business for firms and negatively impact investment, such as during Russia’s post-communist transition and decentralization (Shleifer and Vishny 1993).
If it is well designed, decentralization can generate incentives for innovation and better subnational performance. Policy design needs to foster these developments, while mitigating some of the risks, including through equalizing measures. Local outcomes are likely to be subject to significant lags. Hence, applied distributional analysis of decentralization will need to focus equally on ex post assessments. Providing an appraisal of distributional mechanisms and priority indicators is critical to setting out a forward-looking monitoring and evaluation strategy that can then feed back into policy design.

Finally, ongoing power or bureaucratic struggles between central and decentralized actors may compromise the quality of the compact and erode the efficacy of potential voice and client power. In situations where the roles and responsibilities of local officials and politicians are poorly defined, accountability may be blurred, and officials may be unwilling or unable to respond effectively. Overcoming these institutional constraints may therefore also represent an important ingredient in improving the distributional impact of decentralization.10

APPLIED METHODS AND INSTRUMENTS

Practitioners of the distributional analysis of decentralization will typically be confronted with significant information, data, time, and resource constraints. Box 6.2 presents a checklist of key sets of questions and types of evidence that are critical in setting out such analysis. Obviously, the more well defined a decentralization reform and the more focused the associated analysis, the more likely it is that the analysis will yield the direction and magnitude of the distributional impacts.

A number of instruments and methodologies offer valuable entry points for applied analysis (Table 6.3). Existing analytical reports often yield a significant stock of information to inform a prospective distributional analysis of decentralization. However, targeted primary qualitative and quantitative information collection and analysis will still frequently be necessary. Given that the impacts of decentralization are frequently subject to significant lags or are indirect, an important facet of the analysis should also be the identification of prospective baseline data for future rounds of impact assessment.

Public expenditure reviews have helped analyze the aggregate level, composition, and operational efficiency of public expenditures (Pradhan 1996). Country public expenditure reviews can help set the context for decentralized expenditures, including those derived from local own-source revenues, which are typically not covered in central government...
### BOX 6.2 Checklist for Distributional Impact Analysis of Decentralization

- What is the nature of the decentralization reform being assessed: devolution, delegation, deconcentration? What are the fiscal, administrative, and political dimensions, or combinations thereof? Are subnational governments given the ability to raise their own revenues and prioritize across services? Has decision making over the local allocation of a specific program, such as transfers to the poor, been delegated to local entities?
- Through which mechanisms will the reform have the most immediate or pronounced distributional impacts? The introduction of new fiscal allocation criteria? Are new institutions and processes of decision making changing distributional outcomes through local elections, mandated representation, participation and accountability mechanisms in budget planning, implementation, or evaluation, and so on?
- What is the main level of decentralized analysis: state governments, local governments, communities, special-purpose districts in health care or education, committees?
- What are the primary subnational institutions and jurisdictions affected by the decentralization: counties, communes, *woredas* (districts), facilities, or committees?
- Which impacts of decentralization are likely to be observable in the short term? Changes in fiscal allocations that may be observed on a year-to-year basis? Which impacts will be subject to significant lags? Changes in service delivery and institutions such as capture in local governments?
- Which data are available to determine changes in the incidence of fiscal flows across people and places? Are revenue and expenditure data available only for devolved expenditures or specific programs? Are spatially disaggregated, deconcentrated expenditure data also available?
- Are data on the characteristics of relevant places and people available such as poverty mapping data and local administrative data?
- Are assessments available of the prevailing accountability relationships such as are mapped in the *World Development Report 2004* accountability triangle (World Bank 2003b)? Does accountability condition the distribution of decentralized public resources or service delivery? Do decision-making arrangements at the subnational level appear to favor progressive or regressive distributional outcomes?
- How sensitive is the central government concerning the distributional implications of decentralization? Does the government care strongly about assuring positive distributional outcomes through targeting decisions or other measures?
- Are there winners and losers from the decentralization process in the central bureaucracy who may impact how decentralization is implemented? Will central agencies that are perceived to be losing power, prestige, and resources attempt to derail the decentralization reforms?
- Which key decentralized service delivery outcome indicators should be the focus of the distributional analysis? Local access to basic education or health care among the poor? Satisfaction with services?
- Is there evidence that the voice and client power of citizens have been enhanced? Broadly, is decentralization leading to an increase in empowerment? Do local elections seem to be providing politicians and officials with incentives for providing more public goods and better services, especially to the poor?
- Are baseline and other monitoring and evaluation indicators in place for future analysis?
TABLE 6.3. Core World Bank Instruments for Impact Analysis on Decentralization

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Issues addressed</th>
<th>Key data and data issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public expenditure review</td>
<td>Degree to which revenues and expenditures are decentralized.</td>
<td>Sufficient availability of disaggregated fiscal data across places and people; timely data on both budgeted and realized figures.</td>
</tr>
<tr>
<td></td>
<td>Incidence of revenue sources and expenditures across places and people.</td>
<td></td>
</tr>
<tr>
<td>Public expenditure tracking survey</td>
<td>Extent to which resources such as higher level transfers actually reach the front line, for example, places. Identification of links in this expenditure chain that appear to be prone to leakage.</td>
<td>Mapping all relevant institutional levels and allocation processes in the expenditure chain; significant range of “leakage” phenomena.</td>
</tr>
<tr>
<td>Poverty mapping</td>
<td>Provide more disaggregated measures of poverty across places.</td>
<td>Data-intensive effort that requires a combination of census and household-survey data, often with significant delays in availability.</td>
</tr>
<tr>
<td>Quantitative service delivery survey</td>
<td>Measures of service delivery outcomes, including user perspectives, and delivery processes, for instance, provider accountability.</td>
<td>Survey design needs to cater for the local context and sector-specific issues such as the modes of provision and establish direct causality between outcomes and decentralization reforms.</td>
</tr>
<tr>
<td>Institutional and governance review</td>
<td>Assessment of key driving forces behind and constraints on decentralization, including political constraints. Institutional design issues.</td>
<td>Qualitative and quantitative assessments of key stakeholders and prevailing accountability relationships, as well as a better understanding of reform bottlenecks (for example, stalled decentralization) and operational responses.</td>
</tr>
</tbody>
</table>

Source: Compiled by the author.

budgets. These reviews can provide a good starting point for benchmarking the extent of aggregate decentralized public resource allocations, as well as changes brought on by decentralization policies. Relevant information might be collected on the level of and changes in devolved and delegated expenditures, such as the share of gross domestic product and the share of total public expenditures, and on the levels of and changes in the composition of devolved and delegated revenues, such as the share of own-source revenues, shared revenues, and general and earmarked transfers, as well on the composition of decentralized expenditures, for example, on the social sectors versus infrastructure. Ideally, this aggregate perspective would also lead to an assessment of the levels of and trends in
interregional disparities. Similar information on the level and structure of and interregional variations and changes in deconcentrated expenditures may supply important distributional insights into decentralization. In many cases, however, these figures may be subsumed in the central government fiscal accounts and may therefore be difficult to disaggregate.

A number of public expenditure reviews have focused on decentralization and related subnational issues. The analysis of fiscal disparities across subnational jurisdictions, including local governments, will require nationally representative data on local own-source revenues and transfers from the central level. During Indonesia’s 2001 big bang decentralization, transfers and an expanded revenue base, including shares in natural-resource revenue, were granted to district governments (kabupaten, kota). There were significant fiscal disparities in these 336 places in the wake of the decentralization (World Bank 2003a).11 It was not possible to assess changes in the incidence of public expenditures or the impacts of these changes in terms of service delivery at the local level following decentralization owing to the absence of predecentralization data on deconcentrated and central government expenditures across places. However, a selection of provincial case studies has provided insights into interregional differences in capacity and the prevailing disparities arising in practice during the implementation of decentralization.

The impact of special autonomy status and the fiscal windfalls deriving from special autonomy status and natural-resource revenues in Indonesia’s remote Papua province were the focus of a subsequent provincial public expenditure review (World Bank 2005d). The analysis found that, while the province was generally well treated and well endowed in fiscal terms, there were substantial differences across districts. Moreover, a relative abundance of fiscal resources did not appear to translate into better outcomes everywhere. Especially in remote districts, the effectiveness of service delivery was undermined because localities could not attract and retain key personnel such as doctors and trained teachers. This highlights the fact that decentralized distributional impacts depend on the level of resources available to localities, but also on the accountability and capacity constraints affecting resource use.

Public expenditure tracking surveys strive to produce detailed analyses of the extent to which public resources actually reach localities and front-line service delivery points. The methodology consists of mapping fiscal flows all the way to the front line, for example, to schools, and comparing actual receipts to planned receipts. By measuring flows across all levels of government, such analyses help identify key breaks in the public expenditure chain (Dehn, Reinikka, and Svensson 2003). An impor-
tant component of these surveys is often the simple measures of horizontal differences in the resources reaching front-line facilities across major areas of public finance, including wages, nonwage recurrent expenditure, and capital investment.

The first-ever public expenditure tracking survey conducted in Uganda (Reinikka and Svensson 2004) remains the most successful example of diagnosis and subsequent improvements in the expenditure chain for capitation grants aimed at schools. Surveys in over two dozen countries following on decentralization have typically confronted more complex and ambiguous fiscal flows in the health and education sectors (Kaiser and Kushnarova 2005). In a decentralized context, this method can be especially useful in clarifying the de facto institutional and structural origins, methods, and impacts of expenditure decisions at the intermediate levels and the extent to which these detract from benefit incidence at other levels.

The distribution of centrally allocated resources is administered via two mechanisms: deconcentrated branch offices of the central government, such as education sector offices, or local municipalities through transfers and other delegated financing pathways. An example of the latter is the Glass of Milk program in Peru. In that case, an expenditure tracking exercise found that funds were quickly being dissipated by lower-level decision making about onward disbursement and procurement. Using household-level survey data, the exercise was also able to estimate the extent of leakage attributable to beneficiary dilution (World Bank 2002a). Each expenditure channel manifested particular challenges in terms of fiscal leakage. The case highlights an issue running through the vast majority of public expenditure tracking surveys: decentralized leakage cannot always be attributed simply to theft. In many instances, resources may actually be reallocated at the local level for other purposes of unknown merit. Such reallocations may often be a symptom of chronic underfunding among local governments.

Data on the characteristics of poverty and the needs in expenditure both in places and among people are a key ingredient of the distributional analysis of decentralization. However, even if decentralized fiscal data across places are available, detailed socioeconomic data on localities are often not available. The sampling design of national surveys is typically such that they are not representative at the decentralized level. This makes it difficult to assess whether the poorest or richest places are benefiting from decentralization. Periodic census data provide one means of generating indicators for low levels of geographic disaggregation. Thus, poverty map approaches are being applied to leverage household-welfare
surveys and census data so that indicators can be generated at very low levels of spatial disaggregation, for example, communes in Madagascar (Demombynes et al. 2002). Such approaches are being used for geographic targeting in poverty programs or the ex post assessment of decentralized revenues.

Subnational fiscal data, poverty mapping data, and other socioecon-

omic data can be usefully combined to assess incidence across places. A distri-

butional analysis might begin with poverty indicators and simple correlation analysis, including, for instance, per capita transfers and total revenues. More systematic analysis might specify an ideal benchmark allocation based on multiple criteria such as projected fiscal capacity and poverty and compare this to actual allocation (see Box 6.1). Special care should be taken to ensure that data reflect actual allocation and are not subject to leakages relative to notional allocation assessed, for instance, by public expenditure tracking surveys.

Front-line service delivery surveys can provide important insights into decentralized outcomes. These have typically focused on basic health and education facilities, that is, schools and clinics. Absenteeism surveys, which usually consist of surprise visits to schools and clinics, may shed light on interregional differences in teacher and health worker attendance and the extent to which poor places and people are prone to this source of erosion in public service delivery. Facility surveys have found that, on average, 19 percent of teachers and 35 percent of health workers are absent at any given time in developing countries (Chaudhury et al. 2006). Evidence from India suggests that poorer states are more prone to absenteeism. Empirical studies have relied on a variety of methodologies, including specialized surveys. Ideally, the analysis would cover a sufficiently large sample of localities to provide some sense of the diversity of outcomes across localities.

Specialized surveys, including household and facility surveys, may also target dimensions of service delivery not usually found in standard household socioeconomic surveys, which normally provide evidence on basic service use and access, but not service quality. Such surveys might provide an indicative or even representative assessment of the strength of the various forms of accountability (voice, client power, and compact). Given the diversity in the dimensions of decentralized service delivery, distributional analysis that focuses on service delivery should strive to articulate the key variables of interest. These might include intermediate variables such as teacher absenteeism, local rates of access and enrollment, or outcome indicators on, for example, household-level incidence or satisfaction with service delivery.
A key decision in any distributional analysis of decentralization will revolve around whether to initiate a bespoke survey (an ad hoc survey tailored to specific needs) or whether data from, for instance, existing household surveys are sufficient. Given that subnational diversity is an important lens through which decentralized impacts might be assessed, surveys often face a small-area estimation problem. In order to cover a sufficient number of regions, the actual sample size of surveys within localities may be quite constrained so as to avoid prohibitive costs and long survey schedules. Thus, a sufficient number of poor people and poor households must be sampled within each locality if the differences in impacts across places (as defined in the checklist in Box 6.2) are to be adequately measured. Trade-offs stemming from this problem can typically be managed in a number of ways, must notably by trying to make national inferences based on a more limited subset of localities. Other methods may involve selecting localities based on some ex ante hypothesis about distributional impacts according to types of localities, such as by degree of ethnic diversity, rural-urban composition, and so on.

Institutional and governance reviews can serve as venues for describing the political economy of decentralization reforms (World Bank 2002b). An assessment of Pakistan’s 2000 devolution was focused on ascertaining the scope for action and incentives among nazims, or district leaders (ADB, DfID, and World Bank 2004). The assessment highlighted a number of areas for improvement, including the excesses of clientelism and the provision of narrow private goods by local councilors because of the prevailing political economy of the devolution. It relied on detailed case studies in six of over 100 districts across Pakistan’s four provinces, as well as the collection of a national fiscal database on districts. A variant of the accountability triangle served as a useful foundation for structuring the discussion (see Figure 6.5). However, the primary objective of the assessment was not to pursue a distributional analysis, but rather to provide a broader analysis for the early implementation of a newly instituted decentralization framework.

A range of quantitative and qualitative methods may be used to fathom local institutions and the way they function both formally and informally (DfID and World Bank 2005). Focus groups and more structured surveys are helpful in identifying key actors and groups and their respective accountability and power relationships. Thus, stakeholder analysis of a certain aspect of decentralized decision making can inform the way distributional decisions are made in a given context or, more broadly, the forces shaping an evolving decentralization project.
At one level, these methods may shed light on the relations between various central and subnational actors and determine how they are positioned vis-à-vis the decentralization reform. While certain agencies may act as champions for the reform, others, especially those central bureaucracies that may lose prestige or resources owing to the decentralization, may see few benefits. At the subnational level, this type of stakeholder analysis can provide a more nuanced assessment of the conditions under which local capture might endanger distributional outcomes, and it can suggest potential approaches for mitigating these risks by, for example, strengthening the transparency of particular decision-making processes.

The accountability triangle presented in Figure 6.5 is a useful guide on the types of indicators collected for distributional analysis. One class of indicators aims at assessing the actual degree of autonomy and responsibility of subnational entities within a particular area. While the functions of these entities may be formally decentralized in terms of, for instance, control over staffing decisions or local-level targeting, this may not always be the case in practice. Thus, a survey of health providers and local officials in Nigeria found that local governments rather than states were perceived to be responsible for basic health service delivery (Das Gupta, Gauri, and Khemani 2004; Khemani 2005). These sorts of measures can be especially valuable in contexts in which decentralized autonomy may vary both formally and informally within a country, as in the case of local government autonomy across states in India and Nigeria. The Indonesian governance and decentralization surveys asked about the primary responsibility across a set of functions, including hiring and firing, disciplinary actions, budgetary allocations, and drug purchases, in order to construct measures of decentralized responsibility and autonomy (World Bank 2005c). Measurement of these types of issues from multiple perspectives provides a useful cross-check on the validity of the statements of officials. Inconsistencies in the responses of various actors, such as central versus local government officials, can also supply useful insights into problems, including the lack of clarity in roles and responsibilities, that may be undermining accountability. Additional questions might focus on the apparent quality of compact and management. Thus, public expenditure tracking surveys can offer an indication of the extent to which financial allocations to decentralized entities are transparent and predictable.

Similarly, household surveys, citizen report cards, and user-group surveys among parent-teacher associations and other community groups can provide measures of the degree to which client power and voice mechanisms function at the local level. Questions might focus on the degree to
which local constituents are informed about the identity and actions of local decision makers and how local budgets are allocated and implemented. Additional questions might probe the degree to which citizens, including the poor, feel they actually influence decentralized decision-making processes.

While administrative data can supply useful information on such matters as local budget allocations, care must be taken that these are not subject to misreporting or bias. Thus, if local governments are compensated for enrollment numbers under a new decentralization reform, there may be clear incentives to overreport outcomes. Measures focused on the education or training of local staff may also provide proxies for local capacity, although such formal input measures may not necessarily be gauging actual capacity, especially if local absenteeism among the most skilled is a significant problem.

The geographic variation in distributional outcomes and the various potential constellations in the accountability and capacities underlying any given decentralization mean that a special effort should be made to leverage many sources of data for analysis. The combination of fiscal and poverty mapping data provides one promising avenue. The critical role played by differences in local accountability and capacity in shaping distributional outcomes suggests that pertinent information on both dimensions may prove especially fruitful. For example, the analysis on Uganda was able to link local-level information on leakages with the characteristics of poverty to show that, while the formal distribution of capitation grants was quite egalitarian, outcomes in practice were more regressive (Reinikka and Svensson 2004).

Since decentralization processes typically encompass a number of simultaneous changes, it is often quite difficult to make strong claims concerning causality. However, some proximate indicators of the factors associated with poor distributional outcomes can help identify potential areas for policy reform within a given context by, for instance, increasing the amount of transparency and information associated with the process. In the context of more overarching decentralization reforms through, say, devolution, understanding which agencies stand to win or lose in terms of power, prestige, resources, and so on may also help clarify the likely proponents or opponents of the proposed measures.

This chapter has highlighted that a growing number of analyses have attempted to gain a better empirical understanding of the distributional impacts of decentralization and the underlying driving forces as they emerged, for example, from the formal and informal functioning of local institutions and governance processes.
In fact, an assessment of 10 local governments in Ghana (ClayDord Consultancy Services 2004) appears to be the only formal PSIA of decentralization. The assessment finds that local governments were generally underresourced and characterized by low capacity. As is typical of many decentralization projects, the relationship between absorptive capacity and the additional fiscal resources actually granted by the central level was entangled in a chicken-and-egg type debate. The assessment also finds that the reliance on and knowledge about district-level governments by the public were often quite limited, though this conclusion was based on a limited number of respondents (250). The PSIA on Ghana represents a useful perspective on the state of devolution there. However, the assessment does not spell out the scope of Ghana’s decentralization, noting only that, in a major reform, the common fund of the district assemblies will receive or has already received 7.5 percent of national revenues. Ultimately, it is a more general assessment of the country’s decentralization reform, rather than an explicit distributional analysis.

Examples like this demonstrate that the distributional impacts of decentralization tend to be quite context specific. Greater clarity about the main dimensions and mechanisms being assessed under a PSIA as part of a decentralization reform might help strengthen international insights into comparable decentralization experiences and potential policy responses.

CONCLUSIONS

Decentralization can refer to a wide range of reforms. Examples span major changes in a country’s intragovernmental fiscal, administrative, and political arrangements, or they may be focused more simply on the introduction or reform of a cash-transfer program. In any case, it is important to determine the principal mechanisms through which the distributional impacts of the reforms occur. Building on such an applied framework, the analysis would ideally muster a realistic base of information to enable an empirical assessment. Inherent in decentralization is the expectation that the outcomes are diverse across subnational jurisdictions. Hence, studies should attempt to gather evidence from a sufficiently large number of localities to be representative and at least indicative of national patterns.

The limited record on PSIAs on decentralization suggests that future efforts need to provide a more explicit statement of the type of decentralization being assessed, the general magnitude of the public resources involved relative to overall public resources, and the effect of institutions
in mediating distributional impacts. A range of complementary quantitative and qualitative methodologies is available to address these issues. The accountability triangle presented in Figure 6.5 can provide a useful organizing framework. Such an approach should help sharpen the understanding of the ways local governance arrangements across countries and localities shape distributional outcomes.

The objective of this chapter is to examine approaches that focus on identifying and assessing the short-term distributional impacts of decentralization reforms, primarily through the channel of public expenditures. A growing literature has been concentrating on the medium- to long-term, direct and indirect impacts of decentralization, including the broader effects on democratic decentralization and empowerment. Some of the work has speculated on the impacts of decentralization on subnational growth, although the evidence is largely inconclusive (Martinez and McNab 2003). This chapter suggests that even the short-run evidence on decentralization is quite fragmented. One explanatory factor may be that decentralization projects are, by design and manner of implementation, quite diverse and difficult to compare. Another issue is that the methodologies for establishing the direction and magnitude of distributional impacts have been idiosyncratic. One research agenda might therefore involve promoting a more coherent understanding of the nature of decentralization and the application of consistent methodologies. At a minimum, this would contribute to more systematic insights into the impact of decentralization and a more compelling body of evidence on the first-order direction of the distributional implications.

Whereas changes in the allocation of fiscal inputs across peoples and places may be fairly rapid, the impacts in terms of local governance and public service delivery are likely to be subject to more significant lags and may even be negative. Consequently, it may be necessary to determine the proper timing for the assessment of particular impacts. In the case of many reforms, it may be simply “too early to tell.” Especially with a process as wide-ranging and complex as decentralization, special care must be taken not to arrive at hasty or incomplete judgments. Nonetheless, assessments should attempt to identify early trends (and warnings) and develop indicators on emerging benefits and risks. The systematic cataloging of best and worst practices—say, across a representative sample of districts, councils, or waredas—would provide a very useful complement to a distributional analysis focused on short-term factors.

Assessing the distributional impacts of decentralization will typically require a threshold level of subnational data. Even if these data are available at the start of the decentralization, reporting systems often run the
risk of deteriorating or even collapsing in the wake of decentralization. This may be aggravated by the fact that many central governments (and donors) are wont to demand more reporting by local entities. Such information is rarely used and, moreover, can overwhelm the capacity if not the willingness of localities to report. Agreement on a set of core decentralization monitoring and evaluation indicators, including, for example, a poverty reduction strategy that brings together government, donors, and other key stakeholders, will be an important step in moving from short-run assessments to sustainable, ongoing assessments. Consequently, the analysis of trends over time should be accompanied by critical investments in the collection of key baseline data and the tracking of indicators. Information does not flow only from the local level to the center, but useful information is also conveyed back to local governments, allowing for benchmarking across localities. This would enhance the incentives for quality reporting.

NOTES

1. For example, Bird et. al. (1995) suggest that decentralization was associated with a deterioration of public services during the initial stages of transition in Eastern and Central Europe. In China, decentralization was associated with increased regional disparities in the provision of health and education services (Wong and West 1995). In contrast, Faguet (2004) finds that decentralization in Bolivia benefited marginalized regions and made service delivery more responsive.

2. Data on World Bank operations have been compiled from the Business Warehouse, and complementary data on conditionality for development policy have been drawn from the Adjustment Lending Conditionality Implementation Database (World Bank 2005a).

3. Albania, Brazil, Burkina Faso, Cape Verde, Chad, Ethiopia, Ghana, India, Mali, Mozambique, Pakistan, Peru, Romania, Rwanda, Senegal, Sierra Leone, Timor-Leste, and Vietnam.

4. Rwanda embarked on a territorial reform in late 2005, consolidating existing districts to one-third the original number.

5. Privatization, not discussed here, could also be considered a form of market-based decentralization.

6. Another example would be in the case of greater facility autonomy, such as through the retention of user fees.

7. The measure is akin to a Foster–Greer–Thorbecke poverty-gap index in summarizing the deviations from ideal allocations (the Figure 6.3 ratio is 1) by those below 1 (Deaton 1997):

\[
\text{fiscal resource gap} = \frac{1}{N} \sum (1 - X_i)^2
\]
where $X_i \leq 1$, $i$ is the district, $X$ the ratio, and $N$ the total number of localities. The square implies a greater weight for outliers, but can be suitably increased or decreased.

8. The concepts of accountability and capacity are often overlapping in the sense that effective accountability (World Bank 2003b) implies capacity, for instance, the ability effectively to muster and utilize information. In practice, it is important to highlight the points where key capacity bottlenecks may be constraining more favorable distributional allocations and the transformation of resources into public services.

9. The study was able to leverage a unique set of circumstances. Any examination of the short-run distributional impacts of decentralization in a project or more general reform should exploit such fortuitous or intended variations across localities, for example, as part of a baseline with a two- to five-year forward-looking time horizon. When there are clear-cut rules that qualify one set of localities rather than another for a decentralization initiative, such as a poverty threshold or the receipt of a grant, one approach might be to identify comparable intervention and control localities along this demarcation.

10. At the operational level, the challenge is not simply to avoid creating unnecessary structures, but to leverage decentralized decision making into strengthened, more general voice, client power, and compact-management accountability in public sector institutions (Bhatia 2003).

11. The number of local governments was subsequently increased to 434.

**BIBLIOGRAPHY**


