About the Paper

Norio Usui writes that as the decentralization process witnessed across Asia and the Pacific region has become an irreversible trend, a growing number of Asian Development Bank projects and technical assistance involve components of delivering services at the subnational level. This paper summarizes key conceptual issues of decentralization, and discusses major routes for decentralization to improve public services and address problems in implementing decentralization. The paper argues that decentralization can work only when it strengthens local accountability and when national and local governments are linked with clear rules. A particular focus of the paper is on fiscal dimensions of accountability between national and local governments, and desirable features of fiscal decentralization.

About the Asian Development Bank

Asian Development Bank
6 ADB Avenue, Mandaluyong City
1550 Metro Manila, Philippines
www.adb.org/economics
ISSN: 1655-5236
Publication Stock No.

Printed in the Philippines

ADB

ERD Technical Note Series
ECONOMICS AND RESEARCH DEPARTMENT
No. 21
February 2007

Critical Issues of Fiscal Decentralization

Norio Usui

Asian Development Bank

ERD TECHNICAL NOTE NO. 21

CRITICAL ISSUES OF FISCAL DECENTRALIZATION

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FEBRUARY 2007

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February 2007
ISSN 1655-5236

FOREWORD

The ERD Technical Note Series deals with conceptual, analytical, or methodological issues relating to project/program economic analysis or statistical analysis. Papers in the Series are meant to enhance analytical rigor and quality in project/program preparation and economic evaluation, and improve statistical data and development indicators. ERD Technical Notes are prepared mainly, but not exclusively, by staff of the Economics and Research Department, their consultants, or resource persons primarily for internal use, but may be made available to interested external parties.

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ABSTRACT

Decentralization has become an important consideration in the Asian Development Bank's operations and policy dialogue with developing member countries. This paper provides a survey of key conceptual issues of decentralization. It discusses major routes for decentralization to improve public services, and problems a country could face in implementing decentralization. The paper argues that decentralization can work only when it strengthens local accountability and when national and local governments are linked with clear rules. The paper focuses on fiscal dimensions of accountability between national and local governments, and desirable features of fiscal decentralization. This paper is intended as a reference for staff involved in processing projects and programs and conducting policy dialogue under decentralized government systems, and supporting decentralization in developing member countries.

I. INTRODUCTION

Decentralization is now a global trend. In many countries, local governments are responsible for majority of public services and allocate a large part of spending on their delivery. Although different forces are at play—democratization, transition to market economies, ethnic and regional conflicts, economic crisis, and political maneuvering—one key motivation for decentralization is to improve public services delivery.

In many developing countries, decentralization has been a reaction to poor services delivery under centralized systems. Such systems—traditional top-down or supply-oriented services delivery—create a culture of rent seeking and tolerating failures in meeting citizens' needs. Corruption ensues where people could not monitor politicians and bureaucrats, and frustration grows with slow government responsiveness and lack of participation in decision making. By shifting to bottom-up or demand-oriented services delivery, decentralization aims to address these problems. Decentralization has now become a key part of the reform agenda in many countries (Ter-Minassian 1997; Litvack, Ahmad, and Bird 1998; Litvack and Sedden 1999; Ahmad and Tanzi 2002; Smoke and Kim 2003; World Bank 2005).

In general, decentralization can take three forms:

(i) *Political decentralization* occurs when political authority is transferred to local governments to give citizens and elected representatives decision-making power.

(ii) *Administrative decentralization* redistributes authority for planning, financing, and managing public functions among government levels. It is further divided into three types, according to the degree of transfer of power:

- (a) Deconcentration: the dispersion of authority within the national government to its local branches or administrative units.
- (b) Delegation: local governments act as agents for the national government, doing things on its behalf.
- (c) Devolution: full-scale transfer of responsibility, where implementation as well as decision-making authority is given to local governments.

(iii) *Fiscal decentralization* involves the transfer of decision making for fiscal revenue collection/generation, and spending to local governments.

Political, administrative, and fiscal decentralization vary in form, combination, and degree among countries, and within sectors in each country (Litvack and Seddon 1999). Some countries regard decentralization as no more than fiscal decentralization, while others consider it only as reform of local election systems. In some countries it implies full-scale transfer of responsibility, while in many other countries it means deconcentration or delegation in which some sectors and services remain under national government control.

Despite the promise of better services, decentralization in developing countries has produced mixed results and has not cured all the ills associated with the centralized service delivery. Moreover, it has also brought problems of its own in many cases. In some countries, for example, poor local government capacity for delivering services has lowered efficiency and effectiveness, and local elites have cornered the decision-making process. Decentralization has sometimes sacrificed scale economies in services and national government control over scarce fiscal resources; produced greater regional inequality and macroeconomic instability; and made policy coordination among levels of government more difficult. National and local governments have also clashed over what should be done even though each is aiming to serve its constituents.

Many developing member countries (DMCs) of the Asian Development Bank (ADB) have followed the global trend of decentralization. Early starters such as People's Republic of China, India, and Philippines were followed in the early 2000s by Indonesia and Pakistan with sweeping decentralization. Many DMCs of varying sizes, income levels, and political systems are now moving toward decentralization of some kind. Decentralization has therefore increasingly become an important issue to consider in ADB's operations and policy dialogue with DMC governments. Many ADB projects and technical assistance have been supporting decentralization in DMCs at different levels and in different ways, including formulation of overall decentralization policies and sectoral decentralization strategies, institutional strengthening for local services delivery in various sectors, and capacity building. Decentralization has important implications for a range of development topics relevant to ADB's operations, not only for public services delivery, but for poverty alleviation, anticorruption, governance, and macroeconomic stability.

Understanding decentralization is important not just for specialists in governance-related areas, but also for sector specialists tasked with processing projects and technical assistance. In designing operations in countries with decentralized government structures, the sector specialists need to consider local government capacities, local planning and budgeting practices, community or stakeholder involvement, functional demarcation, and fiscal arrangements between various levels of government. An ADB evaluation study on project implementation units highlighted the importance of aligning project implementation procedures with government structures for better capacity development in the recipient agencies (ADB 2005).

This paper provides a survey of key conceptual issues of decentralization, in particular fiscal decentralization. Section II examines arguments for and against decentralization using an accountability chain approach, which was discussed in the *World Development Report 2004* (World Bank 2003). Section III discusses key aspects of fiscal decentralization. The final section provides a summary of major conclusions.

Since each country has a different government structure, the terms "local governments" and "subnational governments" as used in this paper correspond to specific levels such as state, province, city, municipality, district, and village. Likewise, "national government" in some parts may refer to "state" or "province" in some countries.

II. ACCOUNTABILITY IN DECENTRALIZED SERVICE DELIVERY

Decentralization is expected to improve delivery of services, even though this may not be stated explicitly. However, shifting of responsibilities to local governments does not necessarily lead to better services. This section looks at two analytical aspects for assessing decentralization: (i) accountability at the local level, and (ii) accountability between the national and local government. It explains why decentralization can improve services, and why it often falls short.

The economic rationale for decentralization rests on the proposition that it can improve the efficiency of public services delivery. Local governments are better situated than the national government to ascertain citizens' preferences and service costs, and are therefore better at matching services to local needs (allocative efficiency), and at providing services at lower costs (production efficiency). The economic literature argues that political accountability can translate local information into better services. If people are dissatisfied with decisions of local politicians, they can vote them out of power (voice). If they do not like the package of local taxes and public services, they can move (exit, or vote with their feet). Mobile households vote with their feet and choose a region that better matches their preferences (Litvack, Ahmad, and Bird 1998).

The World Development Report 2004 provides a comprehensive analytical framework for accountability in public services delivery (Box 1). The starting point of this approach is to recognize the difference between market-based services provision and public services provision. In market transactions, a service provider is directly accountable to the client (or consumer): if the client does not like the service, the client can refuse to deal with the provider, and the provider that fails to satisfy its customers will go out of business. This power to discipline service providers is called client power or the short route of accountability. Public services, however, are often provided through the government, not the market. In these cases, service providers are not directly accountable to their customers.

Public services delivery involves two relationships of accountability. First, citizens pay taxes and influence politicians to satisfy their needs, and then hold politicians accountable for resource allocation. However, even if this voice chain works, services cannot improve unless politicians can hold service providers accountable. This accountability between politicians and service providers is called the compact chain. In public services delivery, the combination of voice and compact chains forms a relationship of accountability that links clients to service providers. This route is referred to as the long route of accountability. Service failures can be attributed to a breakdown in one or both of the links along the long route of accountability.

A. Local Accountability

The impact of decentralization on accountability at the local level depends on its degree. In deconcentration, impacts will be limited to the compact chain between the central ministries and organizations/frontline providers. Because deconcentrated services are managed by national ministries, it does not affect accountability at a local level. Under devolution, in contrast, the full-scale transfer of authority and responsibility impacts all parts of local accountability.

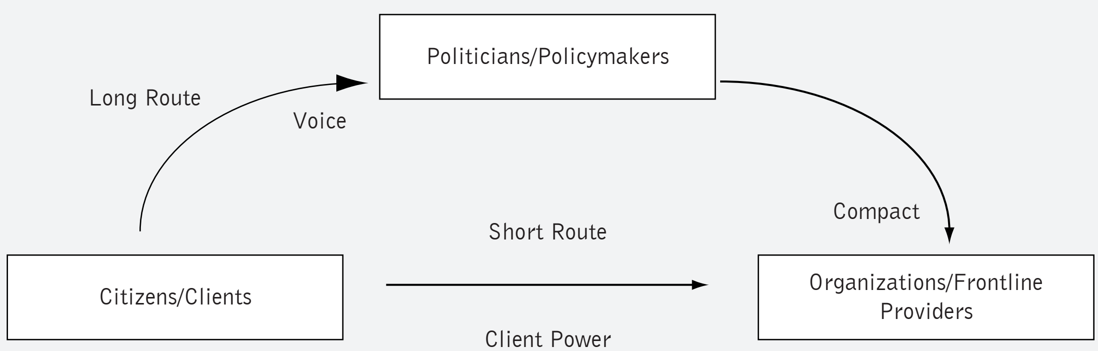
Box 1
Accountability Chains in Public Services Delivery

The accountability chain approach has three key actors in public services provision: (i) politicians/policymakers who make decisions on quantities, finances, and modes of service delivery; (ii) organizations/frontline providers such as ministries, departments, agencies, bureaus, and their frontline service providers; and (iii) citizens/clients who are customers of public services. All these actors are linked through accountability relationships: (i) *voice,* connecting citizens/clients to politicians/policymakers; (ii) *compact,* connecting politicians/policymakers to organizations/frontline providers; and (iii) *client power,* connecting citizens/clients to organizations/frontline providers.

In the service delivery triangle (framework) below, there are two routes, short and long, through which citizens/clients can hold organization/frontline providers accountable for service delivery. Citizens/clients can give mandates to politicians/policymakers to design services to respond to their needs. If politicians/policymakers cannot fulfill their mandates, this can result in an electoral or other political backlash (voice). In turn, politicians/policymakers exercise control over civil service management authorities to motivate organizations/frontline providers to serve for clients/citizens (compact). The combination of the *voice* and *compact chains* forms the *long route of accountability.*

The short route connects citizens/clients and frontline providers (client power) through a direct accountability relationship. It works if citizens/clients are given a choice among service providers, creating competition. Their participation in service provision will also strengthen *client power.*

Service Delivery Triangle



Better services require accountability among the actors. This approach helps clarify which accountability relationship is the key constraint for better services. Recent publications by ADB's Economics and Research Department (Bolt 2005, Reppelin-Hill 2005) emphasized the need for incorporating this approach into project design and implementation arrangements.

Source: World Bank (2003).

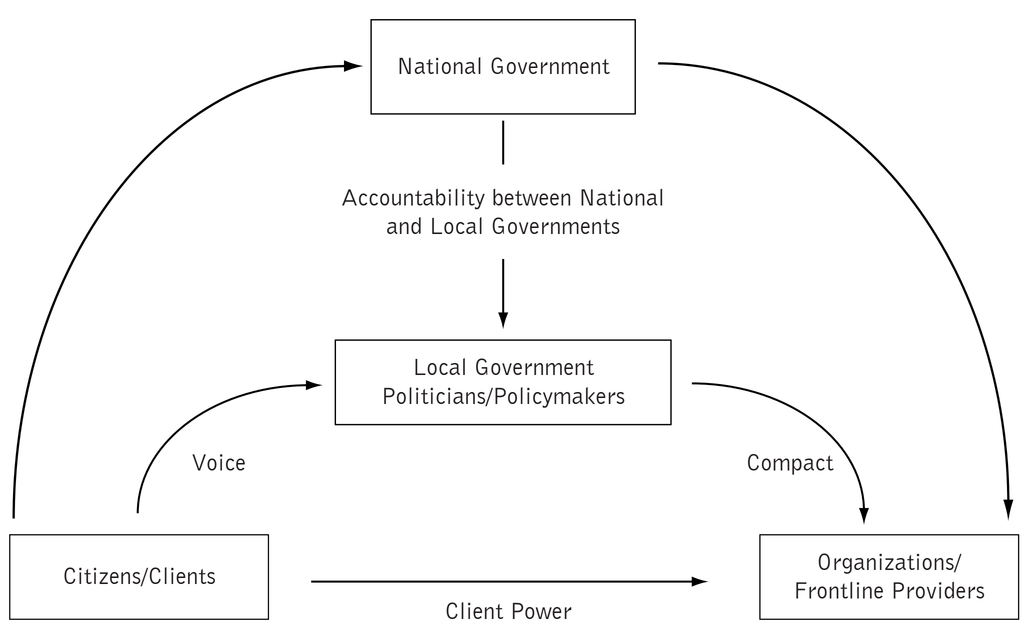
Compared with centralized systems, decentralization shortens accountability chains within a local government (Figure 1). The voice chain, which connects citizens with the national government under a centralized system, is replaced by a shorter chain with local politicians, which makes for easier monitoring and attribution of responsibility for changes in services. Likewise, the shorter compact chain connecting local politicians to service providers enables effective monitoring of services delivery, which can strengthen local accountability by shortening the voice and compact chains.

Decentralization may also strengthen client power by facilitating citizen participation in services delivery. Citizen participation, such as through health-board and parent–teacher associations, can tighten this chain through interactions with service providers.

Nonetheless, although decentralization can strengthen accountability to improve services, three problems cast doubt on the extent of improvements in the context of most developing countries.

The first problem is weak local political accountability. For the voice and exit options to work, citizens should be able to gauge a government's performance and vote it out, and to move to other regions as a last resort. Fragmented societies cannot motivate politicians to improve services, since a local vote is based on narrowly defined identities. Information on local policies and activities is limited even within a region, and poor infrastructure, legal frameworks, and poverty limit mobility. Politicians may not consider the societywide costs and benefits of their decisions, and this tendency is exaggerated by clientelism, where politicians give services in return for political support. Local decisions can also be captured by the local elite (Keefer and Khemani 2005). Some studies on

Figure 1
Accountability Chains in Decentralized Contexts



poverty reduction have highlighted the importance of addressing political aspects of poverty and governance in attempting at improving services delivery (Craig and Porter 2006).

The second problem is the lack of local capacities for delivering services, which can make decentralization ineffective and even undesirable in developing countries. In countries that have initiated decentralization after working for a long time under centralized systems, local governments usually have limited experience in administrative and financial management (Box 2).

BOX 2
LOCAL CAPACITY: A "CHICKEN AND EGG" DILEMMA

Weak local capacity is another source of poor services, with weaknesses appearing in areas including planning, budgeting, budget implementation, accounting, auditing, and civil service management. Considering the prevailing local capacity weaknesses, it has been recommended to policymakers that the degree of decentralization, in particular expenditure responsibilities, should be determined in line with local capacity. The rule that function should follow capacity defines this sequence.

It is also important to consider regional variations. Some local governments have more capacity than others, particularly urban governments compared to rural ones. This situation can lead to asymmetric decentralization, where the degree of decentralization varies depending on local capacity. Once decentralization has started, the national government should play a key role in building local capacities.

There are two views on local capacity building. The traditional view regards local capacity as a prerequisite for decentralization, and stresses the need for top-down provision of training opportunities. However, a new view stresses that decentralization itself can create opportunity for local capacity development through a learning-by-doing effect. In the traditional view, a lack of local capacity can be used to justify "half-baked" decentralization, which hinders its development. In essence, weak local capacity threatens the effectiveness of decentralization, as local capacity cannot be developed without decentralization, a "chicken and egg" dilemma (Litvack and Sedden 1999).

Both views highlight vital points. In practice, however, ambitious decentralization that goes far beyond local capacity constraints should be avoided.

The third problem is the misalignment of local authorities. A wide range of authorities must be in place to ensure effective local decisions. However, it is not always easy to find a working case where political, administrative, and fiscal authorities are well aligned. Some countries devolve decision making power without providing finances. Other countries decentralize finance without ensuring local accountability through political decentralization. The national government often retains civil service management authority, and issues a long list of services delivery mandates that leaves little room for local decision making (Litvack, Ahmad, and Bird 1998; Bahl 1999; World Bank 2003; Bahl and Martinez-Vazquez 2005).

B. Accountability between National and Local Governments

In strengthening local accountability, decentralization creates its own problems by introducing a new accountability relationship between the national and local governments. This relationship has three key aspects—administrative, fiscal, and regulatory. In each of these aspects, the national and local governments should be linked with clear rules (Ahmad, Devarajan, Khemani, and Shah

2005). There must be a clear functional demarcation between levels of government to clarify who is responsible for what services. Once services delivery is delegated to local governments, revenue authorities should also be assigned to local governments. With clearly demarcated functions and adequate revenues, local governments can deliver services to the people. The national government needs to oversee local government operations to avoid service disruptions.

Weak accountability between national and local governments not only could lead to failures in services delivery, it may even risk macroeconomic destabilization. In this context, three problems are widely noted. Heading the list is macroeconomic management. Decentralization may make it difficult to implement stabilization policies and in extreme cases may lead to economic crises. Some countries experienced macro imbalances when tax bases were decentralized without a clear assignment of expenditure responsibilities. Others ran into macroeconomic difficulty because subnational governments accrued unsustainable debts and had to be bailed out by the national government. Argentina in the 1980s provides a typical example.

The second problem has to do with interregional equity. Large regional disparities in capacity for undertaking fiscal measures for revenue mobilization are typical in many developing countries. If the national government, with the greatest capacity for interregional distribution of resources, does not make adequate efforts to improve resource flows to poor regions, decentralization could further increase disparities.

The third problem is that benefits of some local services could spill over to other regions. Services such as environmental management, health care, education, and transportation could also benefit residents outside a region who have not contributed to the costs of the provision of these services. Without national-level intervention, individual local governments may not have adequate incentive to provide services that cannot be contained within its area of responsibility. Delegation of decision making to local levels can also risk a lack of coordination among levels of government. Local preferences may not necessarily coincide with national priorities, and decentralized services delivery may not ensure provision of a basic minimum service across the country.

Although these problems cast a shadow over the effectiveness of decentralization, they more likely reflect weak incentives stemming from poor design rather than factors inherent to decentralization itself. For example, one study provides evidence that properly designed decentralization has a positive impact on macroeconomic management (Ebel and Yilmaz 1999). Incentive-compatible rules must be built between the national and local governments to avoid problems. Fiscal arrangements between levels of government are important to reach allocative efficiency, macroeconomic stability, distributional equity, and policy coordination.

The discussion in this section suggests that it is only by understanding accountability relationships within local government and between national and local governments that we can comprehend why decentralization can, and sometimes cannot, lead to better services. Decentralization works only when it strengthens local accountability and when national and local governments are linked by clear rules.

III. KEY ISSUES IN DESIGNING AND ASSESSING FISCAL DECENTRALIZATION

This section focuses on the fiscal dimensions of national and local accountability, and discusses how the design of fiscal decentralization can alter its impact. Fiscal arrangements between the national and local governments affect the incentives local governments face and, thereby, the outcome. Fiscal decentralization has three important components: (i) revenue assignments and expenditure responsibilities, (ii) grants, and (iii) subnational borrowing. Each requires sound design.

A. Revenue Assignments and Expenditure Responsibilities

Expenditure responsibilities at each level of government should be defined as clearly as possible to improve accountability and avoid duplication. In many countries, however, expenditure responsibilities are often not clearly defined. Local responsibilities must be defined by function, not by sector. Even within a sector, some functions are best managed by the national government while others are best done by local governments. For instance, responsibility for primary education can be divided into subfunctions: financing (local); curriculum setting (national); teacher certification (national); and staff hiring, firing, and wage determination (local). Vague expenditure responsibilities leave people unsure of who is responsible for what, and impair local accountability. Unclear demarcation also causes confusion at the local level, and creates conflict between various levels of government. National ministries could use the vague demarcation as an excuse to retain power over devolved services.

Local governments should have sufficient revenues to meet their expenditures, doing so through a balanced combination of local taxes and grants from the higher-level government. This might sound simple, but finding the revenue-expenditure balance in practice is hard. In some cases, the national governments delegate expenditure responsibilities simply to unload expenditures, without providing the revenues to compensate. That gap then undermines local accountability because local governments can blame poor services on a shortage of funds; or it can make control of local spending difficult because local governments can easily excuse overspending and press for more grants and loans. If revenues exceed expenditures, local revenue collection efforts may decline. To deal with this problem, expenditure assignments should come first, followed by revenue assignments.

Decentralization also requires taxing power at the local level to link benefits (services) and costs (taxes). Citizens who pay taxes directly to the local government are more likely to hold local politicians and bureaucrats accountable. Weak or nonexistent local taxing power thus weakens the voice chain from the client/citizen side, and cuts incentives to strengthen the compact relationship. Dependence on national grants, meanwhile, weakens local revenue-generation efforts and can lead to fiscal mismanagement.

Assigning local taxing power is not easy, however. Aside from weak capacity for tax administration, local governments are also hampered in efforts to raise revenues by the openness of their economies. Because economic activity is potentially mobile across the regions, if such factors as corporate incomes are taxed, businesses (and the local tax base) may relocate. Regional taxes on mobile factors may also distort interregional trade. Economic theory suggests therefore that taxes on immobile and equally distributed factors be assigned to local governments (Shah

1994, Ter-Minassian 1997). The best examples would include taxes on land, real estate, and motor vehicle registration. However, taxes on such immobile factors rarely meet local funding needs.

Even if revenue potential is limited, local government should have its own tax base and the right to adjust rates to make local taxes visible to citizens. In arranging local tax authority, nuisance taxes should be avoided (Box 3). One practical approach would be to provide local governments with a list of tax options and let them choose, with the right to adjust tax rates (within ceilings).

Box 3
Indonesia: Proliferation of Nuisance Taxes

Indonesia's tax system is effectively still centralized. Even after the "big bang" decentralization of 2001, provincial and local governments remain highly dependent on national grants, and local governments collect just around 10% of revenues from their own sources.

Law 34/2000 was issued to strengthen regional taxing power. In addition to assigning specified taxes, the law allows regions to create new taxes, which require national government approval. They must meet criteria including immobility of tax bases, social justification, nonoverlapping with national taxes, high revenue potential, and nondistortion. However, it is hard to find suitable taxes to meet the criteria. Further, as the law allowed for a negative (open list) approach and since regional officials generally did not understand the criteria well, nuisance taxes and charges have proliferated.

A national government's assessment system, meanwhile, has made the situation even worse: a region should submit a tax proposal within 15 days of the regional parliament's approval, and the national government must finalize the assessment within one month. If the assessment is not finished within the period, the proposed tax is automatically effective. One estimate indicates that by the end of fiscal year (FY) 2001, regions imposed almost 1,000 new taxes. An estimated 60% of the new taxes became effective without national government's assessment (Lewis 2003). The national government has embarked on periodic reviews and revoked over 470 taxes and charges over 1999 through mid-2005. Yet, there is still a plethora of such levies.

Major nuisance taxes include taxes on interregional trade such as "inter-island agricultural commodity trade tax" (districts in West Nusa Tenggara province) and "import tax of goats" (Bogor district). In late 2005, the government submitted draft amendments to Law 34/2004, which aims to move toward a "positive list" of taxes that can help expand the local tax base and address the proliferation of nuisance taxes. Scheduled for deliberation by Parliament in early 2007, the law may also clarify local tax authority with regard to property taxes.

Sources: Lewis (2003) and World Bank (2005).

B. Grants

Regardless of what revenues local governments raise by themselves, grant funds from higher-level governments constitute an important source of local revenues. Grants have three objectives. In most countries, the national government retains the major tax bases, leaving insufficient revenue sources to local governments. Grants are needed to bridge the gap between expenditure responsibilities and local revenues (vertical fiscal imbalances). Many developing countries have large fiscal disparities among regions because of variations in resource endowments and economic concentration. In such countries, grants are needed to reduce regional fiscal inequality (horizontal fiscal imbalances).

In addition to improving both vertical and horizontal fiscal balances, grants play an important role in realizing the national government's objectives. As noted, where benefits spill over into neighboring regions, local governments would undersupply services. Local expenditure decisions may not ensure adequate resource allocations for nationally prioritized services such as education and health. Given the local budgeting authority, the national government needs to intervene in local spending choices for coordinated resource allocations. Grants work as fiscal incentives for local governments to increase spending for national-level objectives.

Grants can be broadly classified into two types: general purpose (unconditional) grants and specific purpose (conditional) grants. General purpose grants do not restrict the use of funds, give full flexibility to local governments, and add resources without changing relative prices of services. General purpose grants can mitigate vertical and horizontal fiscal imbalances. Specific purpose grants, meanwhile, can be used only for objectives specified by the national government, which uses this type of grant to induce higher local spending on national objectives. Policymakers need to set a clear purpose for each grant because the proper form of grant depends on its objective (Shah 1994, Schroeder and Smoke 2003).

1. General Purpose (Unconditional) Grants

There are two key dimensions in grant design: (i) how to determine total grant size, and (ii) how to allocate the total grant amount among local governments. The total size dimension has to do with vertical fiscal balances, and the distribution dimension has to do with horizontal fiscal balances (Bahl 1999). This part reviews major approaches to grant design adopted in decentralized countries and clarifies pros and cons of each approach. In addition, this part discusses delayed grant disbursement and political interventions into the grant distribution, since these are problems that are widely observed in many developing countries.

(i) *Total Grant Size.* In determining the total grant size, stability is important for local planning, budgeting, and fiscal management, while flexibility is necessary for macro management by the national government. The size of the total grant can be determined in three basic ways:

(a) Annual budget decisions: This approach can give maximum flexibility for the national government to consider national fiscal conditions in determining the total grant size. However, it can create uncertainty in fund availability for local governments, making them vulnerable to economic fluctuations and vagaries of political negotiations.

(b) Define the total grant size as a fixed portion of total national revenues: Similar systems are used for major taxes, where the total revenue from the major taxes is pooled and distributed to regions without reflecting the region of derivation. Although the national government can lose some control over fiscal policy for macroeconomic stability, it can give an increased degree of certainty in fund availability for local governments. This approach can also ensure a growing source of revenues for local governments if the pool for grants is tied with buoyant national revenues.

(c) Revenue sharing: This means that all or some parts of national revenues collected in the geographical jurisdiction of a particular local government are returned to the local government. In this case, the total size of a grant cannot be specified, and a predetermined share of each national tax or nontax revenue is allocated to local governments on either residence or origin basis. Revenue sharing is simple to administer and feasible even given weak local tax administration. One problem with revenue sharing is inequity. Revenue sharing makes horizontal fiscal imbalances worse because richer local governments with larger tax bases have more revenues. The problem with inequity is serious if the sharing arrangement is applied to natural resource revenues, because resources are usually concentrated in a few regions. Natural resource revenues, however, are sometimes shared for political reasons.

In some countries, subnational governments collect national taxes and the collected revenues are shared with different levels of government. This reduces local revenue generation efforts (Box 4). If the sharing arrangement is applied for some locally collected taxes and others are fully retained by local governments, it concentrates local collection efforts on taxes that they can retain with less effort given to the sharing taxes (World Bank 2000). It is thus suggested by economic theory that such tax-by-tax sharing should be avoided.

Box 4
People's Republic of China: Tax Sharing and Declining Revenues

The fiscal system of the People's Republic of China is highly decentralized, with subnational governments making up more than 70% of public spending. A revenue sharing system was started in 1980 to give subnational governments incentives for mobilizing revenue. Businesses were supposed to pay taxes to a specific level of government based on their subordinations. Subnational revenues exceeding target expenditures were transferred to the national government, and shortfalls were financed by the national government.

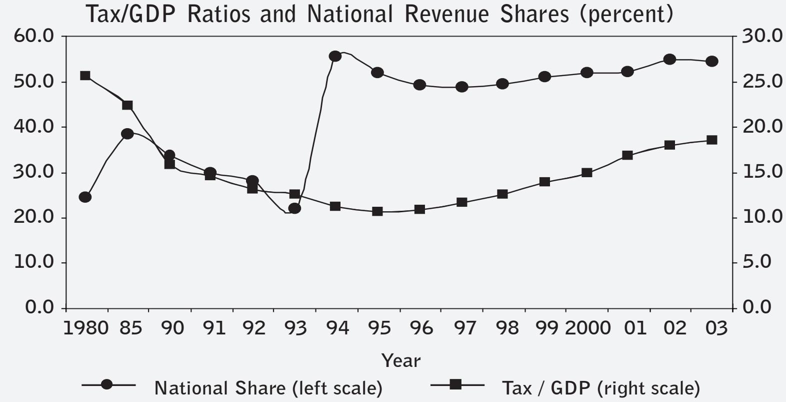
In 1988, the country initiated the "contracting system", in which each province negotiated a fixed-tax quota with the national government. Subnational governments retained revenues above the quota. Although ability to keep revenues above the quota was expected to give a revenue collection incentive, some subnational governments tried to divert their revenues to extra-budgets to escape from the revenue sharing. Some also colluded with local enterprises to hide their profits from taxation. The tax/gross domestic product (GDP) ratio fell to 13% in 1993 from 22% in 1985, and the national revenue share dropped to 22% from 38%. Extra budgets reached 40% of total subnational revenues, which exaggerated ineffective fund usage since they were spent outside formal budgets without proper prioritization.

continued next page

Box 4. continued.

Drastic reforms were initiated in 1994. A key feature of the 1994 reform was the establishment of national tax administration offices to collect both national and shared taxes. Local governments were allowed to establish their tax collection agencies only for their assigned taxes. The contract system was replaced with a new revenue sharing system which assigned taxes to particular levels of government. With the reforms, the national revenue share jumped to more than 50%, and the tax/GDP ratio recovered gradually.

Tax/GDP Ratios and National Revenue Shares (percent)



(ii) *Grant Distribution:* Once the total size of a grant has been decided, the next step is to determine how to allocate the funds among local governments to improve horizontal fiscal balances. Discretionary or negotiated grants, which are used in some countries, are not transparent and certain. Any good allocation is based on a formula. Fiscal needs and fiscal capacity are the key elements of most formulas. There are several types of formulas:

(a) Fiscal needs-based formula: allocates grants to reflect regional differences in expenditure needs. Local governments with larger fiscal needs can get larger grants. Grant allocation on an equal per-capita basis is of this type. This is the most common approach in developing countries, but one problem is that it neglects disparities in local fiscal capacity (Box 5). The formula can be equitable only when local governments are not allowed to raise revenues or when local tax bases are the same across regions.

(b) Fiscal capacity-based formula: This tries to provide more money to local governments with weaker capacity to raise taxes. This formula considers only the equalization of fiscal capacities, and ignores the difference in expenditure needs across regions. Few developing countries use this approach because of the absence of significant local tax autonomy.

(c) Fiscal gap-based formula: This considers both fiscal needs and fiscal capacities. Local governments with larger fiscal gaps, defined as a difference between fiscal capacity and fiscal needs, can get larger grants. If fiscal capacity is larger than fiscal needs, such regions usually cannot get funds. This is the most desirable approach to creating regional equity, if there are large variations both in fiscal needs and fiscal capacity.

Box 5
Philippines: IRA Allocation Formula

The Local Government Code 1991 defines aspects of decentralization in the Philippines. The Internal Revenue Allotment (IRA) is the principal form of central grants. Annual allocation of the IRA follows a three-step formula. First, total internal tax revenues of the national government, which includes taxes on income and other levies imposed by the Bureau of Internal Revenue, is divided into national (60%) and local shares (40 %). Second, the local share is allocated to each level of local governments (provinces: 23 %; cities: 23%; municipalities: 34%; *barangays*: 20%). Third, the share of each level is allocated to individual governments based on population (50%), area (25%), and equal sharing (25%).

The division of total local shares among different levels of local governments lacks an assessment of relative fiscal needs and fiscal capacity. The IRA allocation system does not equalize regions because the distribution formula includes no indicator for regional variation in fiscal capacities. This causes fiscal difficulties and development problems in some poor regions. No restriction is imposed on local governments on the use of IRA funds except for a requirement that 20% be spent on development activities. Most of the IRA funds are used to finance local personnel expenses, which tend to crowd out other spending (ADB and World Bank 2005).

The average per capita IRA in provinces and municipalities is less than half of that in cities. While shares of the IRA in provincial and municipal revenues were more than 70%, the dependency of cities on IRA in their revenues was only 40% (1999). The large gap is attributed to higher revenue capacity of cities because of the concentration of taxable economic activities. The allocation bias toward cities has led to increasing conversions of municipalities into cities (Capuno 2003). The number of cities has gone up from 66 in 1992 to 117 in 2005, and many municipalities are still applying for city status.

Sources: Capuno (2003), ADB and World Bank (2005).

Once a formula is selected, the next question is how to estimate fiscal need and fiscal capacity. Each estimation method, which is discussed in the following section, has both pros and cons. In general, more comprehensive methods demand more data. In many countries, data constraints force the government to use relatively simple methods with few variables. There are two approaches in estimating fiscal needs. The most common in developing countries is to use proxies such as population, land area, and a poverty index. Although this method is simple, it is difficult to check how well the variables approximate fiscal needs. When many proxies are used, it is hard to find the right weight for each variable.

A more comprehensive approach divides local expenditures into many different categories, and estimates fiscal need for each category. This is calculated as the cost of delivering the service at a standard level, range, and quality determined by the national government (minimum service standard). Total fiscal need is the sum of the estimated needs for all the categories. This approach requires substantial information about a large number of factors such as minimum service standards and their unit costs. Although this approach can generate more reliable estimates of fiscal needs, much of the information may not be available in many developing countries.

In many developing countries, lump-sum or equal-share allocation and payroll-linked allocation are widely used. Lump-sum allocation gives a certain equal amount to all local governments on the ground that each has a minimum expenditure need. Payroll-linked allocation tries to guarantee local salary payments by separating personnel expenses from other fiscal needs.

Fiscal capacity, defined as the ability of a local government to raise revenues from its own sources, can be measured in two ways. The first uses indicators such as regional gross domestic product (GDP) and personal income as proxies for local revenue capacity. The basic idea of this approach is that the level of economic activity and income determines local revenue potential. However, it has several weaknesses: the GDP indicator cannot capture the differing impact of regional economic structures on local revenues, and personal income cannot be proportional to fiscal capacity since it is only a part of revenue sources. The second way, the representative tax system, measures the fiscal capacity of a region by the revenue that could be raised if the local government taxed all standard tax bases using national-average rates. This approach is relevant if local governments have tax authority, but is not popular in developing countries because it requires detailed and accurate information about local tax bases.

Fiscal needs and capacities must be measured in *ex ante* terms, not *ex post*. *Ex post* needs and capacities depend on local government behavior, but *ex ante* ones are independent of local actions. If measured in *ex post* terms, local governments can influence fiscal needs and capacities. In this context, there are three widely noted problems. The first problem is how to measure fiscal needs using actual local expenditures. In this case, local governments consciously overspend since local deficits can be covered by national grants. Loose fiscal discipline tends to discourage revenue efforts and encourage inefficient and even wasteful spending. The second problem is how to link fiscal needs with actual local payrolls, which lowers local efforts at efficient civil service management by creating incentives to hire more staff, or at least not to dismiss redundant staff. The third problem can be found when fiscal capacity is measured with actual local revenues. Local revenue efforts are discouraged since higher revenues mobilization from local revenue sources can reduce grant amounts from the national government. This arrangement may also encourage local governments to shift their own revenues outside local budgets.

In addition to fiscal needs and fiscal capacity, some countries try to incorporate explicit measures of "local efforts" into formulas to give incentives for local revenue efforts and better service outcomes, for example, school enrollment rate. Although it is important to stimulate local efforts, measurement of local efforts is more complex than usually realized. For example, some use "actual" local revenues as an indicator of local revenue efforts. It clearly fails to consider different tax-base endowments across regions. Others measure tax efforts with per capita tax to income ratios. This ignores the fact that different structures in regional economies may have different effects on local revenues. As in measuring fiscal capacity, local tax efforts must be measured on the basis of revenue potential.

There is also an implicit assumption in allocating larger grants to local governments with better service outcomes: all local governments have adequate fiscal and administrative capacity to deliver services. If poor outcomes come from financing gaps and/or capacity constraints, the performance-based grant allocation further worsens service outcomes in poor performance areas. It is thus not always advisable to include explicit measures of local efforts, at least at the early stage of decentralization when the grant system has not yet solved the horizontal fiscal imbalance and when local administrative capabilities are still weak.

In developing countries there are two aspects to be checked in grant distributions. The first is fund disbursement. Budgeted grant amounts are often not allocated to local governments and, even when allocated, flows to local treasuries are with significant delays. The underfunding and delayed disbursement of grants undermine local accountability and make effective local planning, budgeting, and fiscal management difficult (Box 6). Although attention is paid to formula design, it is equally important to set up an accurate and timely disbursement system.

Box 6
Indonesia: Delayed Disbursements and Regional Budget Surpluses

A feature of local budgets after decentralization was that local governments (districts) enjoyed large national grants (a general purpose grant called DAU, sharing revenues, and specific matching grant called DAK); and large budget surpluses (about three times bigger), which reached 12.4% of local revenues in FY2001. The surpluses declined in FY2002, but were still high compared with the period before decentralization.

Provinces also recorded higher surpluses (21.4% of revenues). Before decentralization, many observers were concerned about insufficient grants to provinces, since DAU allocation was strongly biased toward local governments. The provincial share was set only at 10% of total DAU, and the remaining 90% for local governments. How could the larger surpluses be interpreted? Some may conclude that both provincial and local governments received more than enough revenues to meet their funding needs. This may provide justification for scaling down the national grants.

However, we need to consider lagged disbursements of sharing revenues. Sharing revenues, especially from natural resources, were allocated to regions at the end of the fiscal year. Both provincial and local governments carried over most of the revenues into the next fiscal year, resulting in the higher budget surpluses after decentralization

Source: Usui and Armida Alisjahbana (2003).

The second problem that many countries encounter in their grant allocations is political interventions. The possibility of political interventions is high when local revenues depend on grants, with local governments concentrating efforts on raising their grant share rather on increasing their own revenues. Although it is not easy to insulate grant allocations from political interventions, a simple and transparent formula can help avoid bargaining and lobbying by local governments.

Pakistan's case shows the difficulty of avoiding political influence. The country has a two-tiered grant system: the first tier is from the federal to provincial governments, the second from provincial to local governments. Each province sets its own formula for allocating grants to local governments. In designing the formula, provinces intend to send political messages to the federal government by stressing a factor that should be included in the federal formula from the provincial perspective (Box 7). Provincial formulas are designed for the political objectives without assessing local fiscal needs, much less fiscal capacity.

2. Specific Purpose (Conditional) Grants

Specific purpose grants are either matching or nonmatching. Matching grants, also called cost-sharing programs, require that funds be spent for specific objectives and that local governments prepare their own funds to match the grant funds. Nonmatching grants offer a given amount of funds for a particular objective, such as a national-level project.

Box 7
Pakistan: Political Economy of NFC and PFC Awards

In 2001, the government started a major devolution program, which included transferring responsibility for major services such as education and health to districts, and water and sanitation to *tehsil* municipal administrations.

Provincial revenues heavily depend on federal grants (on average, federal grants made up about 85% of provincial revenues in FY2003/2004). Revenue sharing is the dominant form of federal grants. The list of taxes to be shared, sharing rates, and allocation formula is determined at least once every 5 years by the National Finance Commission (NFC). The NFC award in 1997, which is the latest decision since the 2002 NFC failed to come to a consensus, adopted an allocation formula to provinces on the single criteria of population.

Since devolution, grant programs from provincial to local governments have been established through the provincial financial commissions (PFCs). Although provinces use indicators such as population, area, and economic underdevelopment as proxies for local fiscal needs, no careful assessment of local fiscal needs has been conducted. Further, all provinces fail to consider disparities in local fiscal capacity.

Weights Used in the PFC Awards

Weights (%)	Punjab FY05/06	Sindh FY04/05	Balochistan FY05/06	NWFP FY02/03
Population	70.0	50.0	50.0	45.0
Economic backwardness	30.0	17.5		22.5
Area			50.0	
Tax effort		7.5		
Sectoral performance (social sectors)		5.0		
Infrastructure deficiency				22.5
Hold harmless (to guarantee historical shares)		20.0		10.0
Total	100.0	100.0	100.0	100.0

Provinces have concentrated efforts to increase their shares in NFC awards. Each province emphasizes an indicator that can raise its share in federal grants. Sindh uses the tax collection element because it produces most of federal tax revenues; Balochistan stresses surface area because of its large geographical size; and the most crowded province, Punjab, gives a higher weight to population.

Specific purpose grants have three goals. First, specific purpose grants requiring local matching can give incentives to raise local spending on services with spillover effects, again, because local governments will undersupply services when service benefits spill over to other regions, resulting in suboptimal service provisions. Second, the national government needs to harmonize local services with national priorities. Local policy choices are less likely to reflect national priorities. Specific matching grants work as an incentive to increase local spending on nationally prioritized services. Third, specific purpose grants without local matching fund requirement also increase local spending for national objectives. However, this grant is used to attain minimum basic services across a country. When target services are a low priority for the local government, nonmatching grants ensure that local spending on services are at least equal to the grant amounts.

Matching grants are often criticized since they distort local priorities. These affect the relative price of public services. A national subsidy provided through a matching arrangement lowers the price of the service to others that cannot enjoy the national subsidy. This can distort the local budget in favor of the aided service and against other services that local citizens would have chosen. This distortion is an inevitable cost of trying to direct local spending.

A key problem in designing a matching grant is determining the matching rate. If the proportion of the total cost paid by the national government is too low, little local spending results. In contrast, if the national share is set too high, all local governments would apply for the grant and, as a result, many local governments would be driven away. In theory, the matching rate for each service should reflect the degree of national government's interest in the provision of that service—the size of spill-over effect or the degree of national priority.

However, a uniform matching rate that reflects the degree of the national government's interest could be inequitable, since richer local governments can raise matching funds more easily. The discrimination against poor regions can be avoided by applying varying matching rates with local fiscal capacity, e.g., higher national subsidies for poorer regions and vice versa. This can ensure access to matching grants for all local governments. Varying matching rates should not be confused with improving horizontal fiscal balances, which can be better pursued with general purpose grants. However, in many countries this ends up as the objective and poor local governments get more matching grants because they are poor, not because a higher matching rate (national share) is required to induce them to raise their spending on the aided service (Bird 1999).

Finding the right matching rate is not easy. The basic matching rate for each service must be set considering the size of the spill-over effects or level of national priority. The rate should be adjusted based on local fiscal capacity, and policymakers should adjust it by observing how well the existing rate produces the desired outcome. The right matching rate may only be found through trial and error.

A specific purpose grant is sometimes considered against the spirit of local autonomy, since it restricts the use of the funds. In some countries, several specific purpose grants exist. They are usually too detailed with rigid eligibility criteria, leaving little room for local decisions. For local autonomy, specific purpose grants should not dominate local finances. The argument against specific purpose grants, however, reflects the lack of understanding of their strategic role. Given local budgeting authority, the national government should make a strategic use of such grants to direct local expenditure to areas of national priority.

After decentralization, devolved functions should be locally financed. Higher-level governments, however, often retain their own projects in devolved sectors even after decentralization. These projects are conducted outside local budgets with no clear links to local development plans, and in extreme cases compete with locally planned projects. In principle, these projects should be restructured into decentralized fund channels: in most cases the proper channel is a specific purpose grant.

C. Subnational Borrowing

Subnational governments need access to credit to finance capital investments and to smoothen expenditure and revenue flows (liquidity purpose). Borrowing sources include the national government; public financial intermediaries (PFIs) including municipal development funds usually capitalized by the national government; bond issuance; and commercial banks. Countries that allow borrowing for liquidity purposes limit such borrowing only to short-term loans with maturity within the fiscal year.

Subnational borrowing for capital investments is a minor source of finance in most developing countries, since the national government regulates subnational borrowing to prevent overborrowing. A common approach is to restrain subnational borrowing to agreed and defined purposes and amounts, limiting debt service to a maximum percentage of own revenues, and requiring approval from the national government.

In most countries where capital markets are not well developed, borrowing sources are limited to the national government and PFIs. Although these sources certainly guarantee access to long-term credit, credit allocation may entail political factors leading to capital flows to unproductive investments for political objectives. Another disadvantage of intermediation by the PFIs is that outstanding debts become a contingent liability of the national government. In many countries, PFIs have remained captive instruments for on-lending funds provided by international institutions and national government and have not helped develop self-sustaining and market-based systems of local credit (Peterson 2000).

Direct access to capital markets provides a strong incentive for fiscal discipline at the subnational level through market-based transactions. However, moral hazard can be a major concern for direct borrowing from markets. If access to capital markets involves any implicit and explicit national guarantee (bailout), it can lead to overlending and overborrowing, and ultimately end up as unexpected national liabilities (Box 8). Subnational governments therefore must face a hard budget constraint, which implies that they take the final responsibility for financial consequences of their decisions. A hard budget constraint motivates responsible behavior by subnational governments and eliminates bailout conditions (Ebel and Yilmaz 1999).

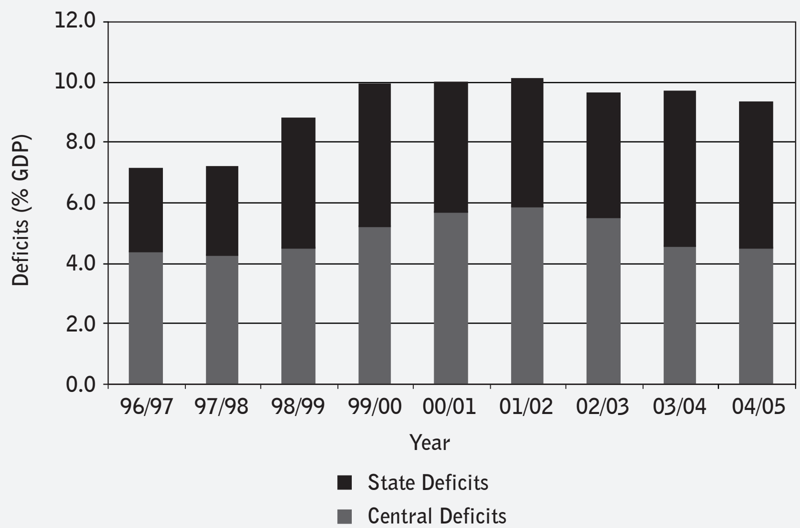
A well-designed regulatory framework is necessary to avoid the moral hazard problem. The national government should monitor local liabilities and repayment capacities regularly, and disclose the information. There should also be penalties for excessive borrowing. A common measure is to intercept national grants when local governments fail to meet repayments. Further, a bankruptcy rule is needed to enable services delivery even if local government bankruptcy should occur. In the long term, it is also important to strengthen local revenue sources that can be pledged as collateral. In the absence of a strong local revenue base, lenders might be led to think that any subnational borrowing would be backed by the national government (Litvack and Seddon 1999).

Box 8
India: National and State Borrowing for Deficit Financing

States can access domestic lending sources, but national government approval is needed if they have debts to the national government. All states are indebted to the national government, because national grants through the Finance Commission (for routine funds) and Planning Commission (for development funds) cannot solve vertical fiscal imbalances.

A large pool of domestic savings makes for easier state borrowing. State-owned commercial banks are required to hold a part of their assets in state securities. The National Small Savings Fund is also required to invest its net collections in state paper. States make use of guarantees, publicly owned enterprises, and financial institutions to soften budget constraints. To make the situation worse, the national government has regularly bailed out states through debt-relief schemes, undermining the states' incentive for prudent fiscal management. In FY2003/2004, states' deficits accounted for more than half of general government deficits.

National and State Fiscal Deficits



Sources: International Monetary Fund, 2005 Article IV Consultation with India.

To deal with the fiscal imbalance, the government issued the Fiscal Responsibility and Budget Management Law in 2003. However, the law targets only the national level. Fixing state fiscal problems is also a prerequisite for decentralization at lower level governments (*zilla*, *taluk*, and *gram panchayats*). Since each state has authority to design and implement its own decentralization program at lower level governments within the state, until the state can restore finances, lower level governments can expect continued underfunding of grant entitlements, and the state's resistance to assign more own-revenue sources to lower level governments.

Sources: Purfield (2004), World Bank (2004).

IV. SUMMARY AND CONCLUSIONS

As the decentralization process witnessed across Asia and the Pacific region has become an irreversible trend, a growing number of ADB projects and technical assistance involve components of delivering public services at the subnational level. However, although decentralization can improve services, it is not a panacea. This paper clarifies that decentralization leads to better services only when it strengthens local accountability, and when the national and local governments are linked with clearly established rules. Fiscal arrangements are an important part of national and local accountability. Key points are as follows:

(i) Autonomy should be given to local governments to make independent decisions for planning, budgeting, and fiscal management.

(ii) When determining expenditure responsibilities, local capacities need to be considered. Although local capacity can be improved in the process of decentralization, the assignment of responsibilities far beyond local capacity should be avoided.

(iii) Clearly defined expenditure responsibilities for each service helps avoid duplication.

(iv) Revenue assignment based on expenditure needs helps guarantee adequate revenue to meet expenditure responsibilities.

(v) Local governments need their own taxes with the right to adjust rates for local accountability, even if revenue generation is limited.

(vi) Providing a clear objective for each grant improves grant programs. Correction of vertical and horizontal fiscal imbalances should be through general purpose grants, while encouragement for local spending for national objectives should be through specific purpose grants.

(vii) Total size of general purpose grants can be set as a fixed portion of national revenues or major taxes. Allocation amounts should vary directly with fiscal needs and inversely with fiscal capacity. Although a formula-based allocation is better than ad hoc provisions, a formula needs careful design to motivate sound fiscal management and discourage inefficient practices. Poorly designed performance-based grant allocation widens horizontal fiscal imbalances and regional service gaps.

(viii) Derivation-based revenue sharing widens horizontal fiscal imbalances. Sharing locally collected taxes with higher level governments may reduce local revenue efforts.

(ix) Specific purpose grants are used to correct spill-over effects and attain national priorities at the local level. Matching rates reflecting the degree of spill-over effect or national priority should be adjusted for local fiscal capacity.

(x) Regions need to access long-term credits for capital investments. Institutional and regulatory frameworks help avoid political credit allocations and the moral hazard problem in capital markets. Subnational governments, which will face hard budget constraints, will have final responsibility for financial consequences of decisions.

The outcome of decentralization depends on design. Appropriate design and implementation of decentralization needs strong leadership at all levels, in particular at the national level, to push through difficult policy changes. Without national leadership, the decentralization process gets bogged down in conflicts among stakeholders (Bahl 1999, Bahl and Martinez-Vazquez 2005). Flexibility is needed to accommodate country-specific factors, since fiscal decentralization is only a part of a complex political, economic, and administrative system in a country.

REFERENCES

Ahmad E., and V. Tanzi, eds. 2002. *Managing Fiscal Decentralization.* London: Routledge.

Ahmad, J., S. Devarajan, S. Khemani, and S. Shah. 2005. Decentralization and Service Delivery. Policy Research Working Paper, World Bank, Washington, DC.

Asian Development Bank. 2005. *The Role of Project Implementation Units (Special Evaluation Study on the Role of Project Implementation Units).* Manila.

Asian Development Bank and World Bank. 2005. *Decentralization in the Philippines: Strengthening Local Government Finance & Resource Management in the Short Term.* Manila.

Bahl, R. 1999. "Implementation Rules for Fiscal Decentralization." *Public Budgeting and Finance* 19(2):59–75.

Bahl , R., and J. Martinez-Vazquez. 2005. "Sequencing Fiscal Decentralization." Andrew Young School of Public Studies, Georgia State University, Atlanta.

Bird, M. R. 1999. "Transfers and Incentives in Intergovernmental Fiscal Relations." Paper prepared for the ABCD-LAC Conference, June, World Bank, Valdivia.

Bolt, R. 2005. Improving the Relevance and Feasibility of Agriculture and Rural Development Operational Designs: How Economic Analyses Can Help. ERD Technical Note No. 12, Economics and Research Department, Asian Development Bank, Manila.

Capuno, J. J. 2003. "Philippines." In P. Smoke and Y. H. Kim, eds., *Intergovernmental Fiscal Transfers in Asia: Current Practice and Challenges for the Future.* Asian Development Bank, Manila.

Craig, D., and D. Porter. 2006. *Development Beyond Neoliberalism? The Poverty Reduction Paradigm.* London: Routledge.

Ebel, D. R., and S. Yilmaz. 1999. "Intergovernmental Relations: Issues in Public Policy." World Bank Institute and Asian Development Bank.

Keefer, P., and S. Khemani. 2005. "Democracy, Public Expenditures, and the Poor: Understanding Political Incentives for Providing Public Services." *World Bank Research Observer* 20(1):1–27.

Lewis, B. 2003. "Some Empirical Evidence on New Regional Taxes and Charges in Indonesia." Research Triangle Institute, North Carolina.

Litvack, J., and J. Seddon. 1999. Decentralization Briefing Notes. Working Paper, World Bank Institute, Washington, DC.

Litvack, J., J. Ahmad, and R. Bird. 1998. Rethinking Decentralization in Developing Countries. Sector Studies Series, World Bank, Washington, DC.

Peterson, G. 2000. Building Local Credit Systems. Municipal Finance Background Series, World Bank, Washington, DC.

Purfield, C. 2004. The Decentralization Dilemma in India. IMF Working Paper No. 04/32, International Monetary Fund, Washington, DC.

Reppelin-Hill, V. 2005. *Sector Diagnosis in Education: An Economic Retrospective.* Asian Development Bank. Manila.

Schroeder, L., and P. Smoke. 2003. "Intergovernmental Fiscal Transfers: Concepts, International Practice and Policy Issues." In P. Smoke and Y. H. Kim, eds., *Intergovernmental Fiscal Transfers in Asia: Current Practice and Challenges for the Future.* Asian Development Bank, Manila.

Shah, A. 1994. The Reform of Intergovernmental Fiscal Relations in Developing and Emerging Market Economies. Policy and Research Series, World Bank, Washington, DC.

Smoke, P., and Y. H. Kim, eds. 2003. *Intergovernmental Transfers in Asia: Current Practices and Challenges for the Future.* Asian Development Bank, Manila.

Ter-Minassian, T., ed. 1997. *Fiscal Federalism in Theory and Practice.* International Monetary Fund, Washington, DC.

Usui, N., and A. Alisjahbana. 2003. ''Local Development Planning and Budgeting in Decentralized Indonesia: Update.'' Paper prepared for the International Symposium on Indonesia's Decentralization Policy: Problems and Policy Directions, September, Jakarta.

World Bank. 2000. *China, Managing Public Expenditures for Better Results.* Country Economic Memorandum, World Bank, Washington, DC.

_______.2003. *World Development Report 2004: Making Services Work for Poor People.* Washington, DC: Oxford University Press for the World Bank.

_______.2004. *India: Fiscal Decentralization to Rural Governments.* World Bank, Washington, DC.

_______.2005. *East Asia Decentralize: Making Local Government Work.* World Bank, Washington, DC.

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