1. Frameworks for central–local government relations and fiscal sustainability

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1.1 INTRODUCTION

Sustainable and inclusive growth in emerging Asian economies requires continued high levels of public sector investment in areas such as infrastructure, education, health, and social services. These responsibilities, especially with regard to infrastructure investment, need to be devolved increasingly to the regional government level. However, growth of sources of revenue and financing for local governments has not necessarily kept pace, forcing them, in some cases, to rely on unorthodox funding measures such as shadow banking, or else cutting spending below needed levels. Even if adequate funding is available, there need to be safeguards to ensure that debt levels are sustainable.

In this chapter, we review alternative models of the relationship between central and local governments, and provide an overview and assessment of different financing mechanisms for local governments, including tax revenues, central government transfers, bank loans, and bond issuance, with a focus on the context of emerging Asian economies. The chapter also reviews financing mechanisms for local governments and mechanisms for maintaining fiscal stability and sustainability at both the central and local government levels. Based upon the evidence on the decentralization process in Asia, we propose some policy implications for improving central–local government relations and fiscal sustainability.

1.2 OVERVIEW OF GOVERNMENT DECENTRALIZATION IN ASIA

1.2.1 Government Decentralization in Asia

It is hard to determine when the process of decentralization started in Asia, but it is widely agreed that, from the 1990s, the decentralization process gained momentum and that subnational governments have become the cornerstone of Asian economic development (White and Smoke, 2005). Extensive decentralization processes are under way throughout Asia, including the People's Republic of China (PRC), Cambodia, India, Indonesia, the Republic of Korea, and the Philippines.

Both structural and political forces have driven the decentralization process in Asia. While economic and demographic factors (i.e., structural factors) acted as a trigger for decentralization processes, powerful political forces 'precipitated and shaped it' (White and Smoke, 2005) in some countries, including Indonesia, Thailand, and the Philippines, and, to some extent, Viet Nam and the PRC (Nickson et al., 2008). After a long period of economic growth and rapid urbanization, pressures to provide services to a rapidly expanding and increasingly concentrated population are growing so fast that central governments cannot effectively and efficiently act as the major provider of basic services. As a result, central governments have had to empower local governments to share their burdens.[1]

1.2.2 Local Government Size and Complexity

The region also has a considerable variation in the number of tiers of local government and the average population covered by local governments. Some countries have two tiers (Indonesia, Japan, and Thailand); some such as the Philippines, the Republic of Korea, Viet Nam, and Pakistan have three tiers; while the PRC has four tiers. India has one tier in urban areas and at most three tiers in the rural areas (Nickson et al., 2008). Each country also puts priorities on different tiers of government. For example, to minimize the probability of provincial separatism, Indonesia has a system that favors sub-provincial governments. The Philippines has a multilayered system that diffuses subnational power among different jurisdictions (White and Smoke, 2005). Average population size in each territory for which a local government is responsible also varies widely, ranging from only 8,000 people in Thailand to more than 550,000 people in Indonesia (see Table 1.1).

Table 1.1 Basic development indicators and local government organization

Country	GDP per capita, current $ (2013)	Total population, million (2013)	Urbanization, % (2013)	Type of government	Type of state	Number of local governments*	Average size of local government**
PRC	6,992	1,357.38	53.2	Communist	Unitary	2,860	474,608
Indonesia	3,624	251.27	52.3	Republic	Unitary	450	558,374
India	1,455	1,279.50	32.0	Parliamentary Democracy	Federal	9,624	112,115
Japan	38,634	127.34	92.5	Constitutional Monarchy	Unitary	1,820	70,220
Korea, Rep. of	25,998	50.22	82.2	Republic	Unitary	230	209,010
Pakistan	1,275	181.19	37.9	Republic	Federal	396	384,091
Philippines	2,787	97.57	44.6	Republic	Unitary	1,621	51,300
Thailand	6,229	67.45	47.9	Constitutional Monarchy	Unitary	7,874	7,924
Viet Nam	1,909	89.71	32.3	Communist	Unitary	662	135,512

Notes:
GDP = gross domestic product; PRC = People's Republic of China.
* Data in 2004.
** Measured by population per local government unit.

Sources: World Bank World Databank (http://databank.worldbank.org/data/home.aspx) accessed 17 April 2016; Nickson et al. (2008).

1.2.3 Institutional Barriers

The decentralization process in Asian economies suffers from various institutional barriers that may impede the realization of benefits from such processes.

- *Legal frameworks for local government.* Asian countries' legal frameworks for local government vary widely. Except for the case of the PRC, where there is no formal legal framework for local government, all countries have a set of one or more laws that define the decentralization framework, and some of them, including India, the Republic of Korea, the Philippines, and Thailand, have a constitutional basis for subnational government. However, there is a wide gap between having a formal legal framework and implementing it. For example, although the PRC has no formal basis for local government, it is one of the most decentralized countries in the world (World Bank, 2002). On the other hand, in Thailand and Cambodia, implementation of laws regarding local government has been rather slow and incomplete (White and Smoke, 2005).
- *Inappropriately designed and implemented budget systems.* In the PRC and to some extent Viet Nam, due to weak information management systems, budget compilation usually does not cover all revenues and expenditures and is only an incremental feature (i.e., budget estimations are usually based on past levels, not on future needs). Furthermore, planning and budgeting processes are disconnected and poorly coordinated. In the PRC, for example, budgets are usually compiled around the last three months of the fiscal year, which is not enough time to have a comprehensive and detailed budget (ADB, 2014). In India, the budget process is not even generally operational (Bahl et al., 2005). This has caused various deficiencies in budget implementation such as delays and fragmentation, or poor management of cash flows and liabilities, accumulation of arrears, and revenue retention. Moreover, monitoring and accounting data are neither timely nor accurate. Auditing is typically weak and evaluation almost nonexistent (White and Smoke, 2005).
- *Weak fiscal management capacity.* While fiscal management capacities of local governments are of high quality in Japan and the Republic of Korea, they are rather weak in developing economies. In some developing countries, weak revenue management capacity causes local governments not fully to use their rights to collect their own taxes. At the other extreme, some local governments have abused their rights and have implemented too many taxes that

account for a small share of total revenues but have high administrative costs. Expenditure management is also weak. For example, many local governments in Indonesia and the Philippines do not fully spend their resources and have accumulated a large stock of fiscal reserves (see more in section 1.3.3).

- *Underdeveloped financial information management systems.* Many Asian economies do not have a standardized financial information management system to monitor and act in a timely manner to avoid fiscal risks at the local government level. An appropriate financial system should provide comprehensive, transparent, timely, and accurate information of local government finances. Moreover, the local governance finance information system should be a part of a national finance information system. Treasury Single Account (TSA), a system that captures all on-budget and off-budget flows, is not implemented in most developing Asian economies. In developed economies, TSA is viewed as a sound practice in modern public finance (ADB, 2014).
- *Strong influence of central government on local governments.* In principle, local governments should act as self-governing institutions. However, in most Asian economies, they operate under a legal framework defined by either the central government in countries with unitary systems such as the PRC, Indonesia, Japan, the Republic of Korea, the Philippines, Thailand, and Viet Nam, or provincial or state governments in countries with federal systems such as India and Pakistan. This hinders local governments' ability to ensure their national and local accountability. National accountability, or central oversight of local administrations, tends to be stronger but suffers from ambiguous and overlapped functional allocations between local and central governments; incomplete flows of information, especially from local governments to the central government; inadequate monitoring; and conflicts between the central and local governments over various aspects such as the pace, direction, and scope of decentralization (White and Smoke, 2005).
- *Local accountability* in many Asian economies remains problematic because the central governments still have rather strong power over local governments. For example, in Pakistan, local governments do not have any influence over grant-aid programs in their jurisdiction since such programs are determined by the provincial or national legislators. Similarly, in Thailand, the Ministry of the Interior could intervene to terminate or modify local policies if they believe that such policies contradict or threaten national policies or interests. Central governments also have strong influence over the number and

pay levels of local staff (White and Smoke, 2005). In the PRC, Viet Nam, and Pakistan, senior local government staff are appointed by the central government (Nickson et al., 2008).

1.3 EXPENDITURE ASSIGNMENTS

This section reviews and assesses different theoretical foundations for expenditure assignments and how expenditure functions are assigned in Asian economies.

1.3.1 Theoretical Foundations for Expenditure Assignments

According to Shah (2008), expenditure assignments should meet the following requirements: (i) efficient provision of public service; (ii) fiscal efficiency (i.e., minimizing the differential between imputed benefit from public services and tax burden); (iii) equal treatment of citizens across localities; (iv) effective redistribution; and (v) provision of quasi-private goods (such as health, education, or social insurance) and other principles such as economic stabilization and spending discretion. Following these principles should ensure an efficient and equitable delivery of public services. Seminal works by Musgrave (1959) and Oates (1972) provide the foundation for functional assignments. Musgrave suggested that the activities of government should be separated into three functions: macroeconomic stabilization, income redistribution, and resource allocation. Economic stabilization and income redistribution are ordinarily assigned to the central government, whereas local governments take responsibility for the resource allocation function.

The first fundamental step in the design of a system of intergovernmental fiscal relations should be a clear assignment of functional responsibilities among different levels of government (Martinez-Vazquez et al., 2006). One of the first sets of criteria for reassignment of functions and for coordination among the government ties was proposed by Wittmann (1973, as cited in Dafflon, 2006). This set of criteria has been adopted in Austria, Switzerland, and recently in transitional economies (Dafflon, 2006). This set of criteria can be categorized into three subgroups: (i) general policy criteria, (ii) financial and technical criteria, and (iii) efficiency criteria. General policy criteria involve the coherence of the local government's policies with other horizontal and vertical policies and the equality of access to comparable categories of public goods and services. Financial criteria are related to the balance between the assigned functions and the local governments' capacity to finance the budget out of their own revenue sources.

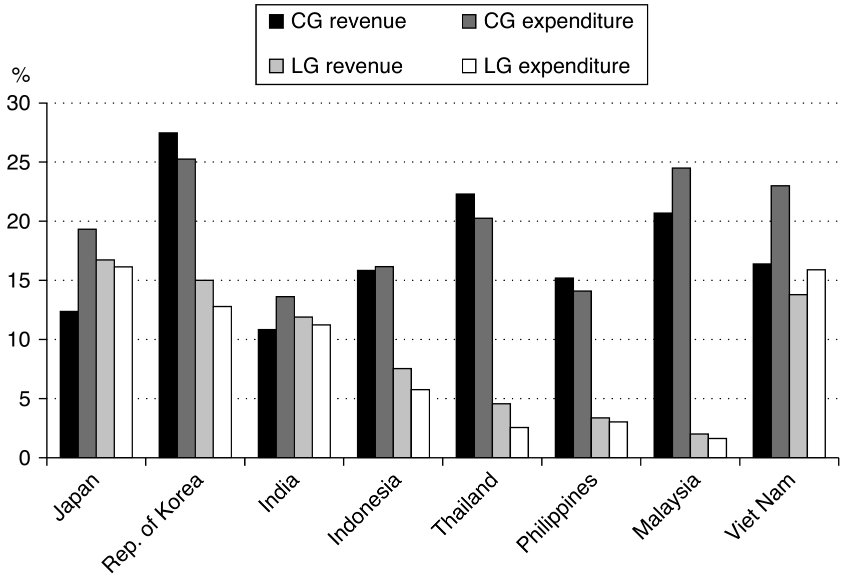
This implies that any reassignment of functions should not create further fiscal imbalances or, if imbalance is inevitable, it must be compensated through unconditional grants or revenue sharing with higher levels of government. Efficiency criteria correspond to those traditionally discussed in fiscal policy theory: economies of scale and geographical externalities.

Failure to have a clear and concrete assignment of expenditure responsibilities among the various governmental levels may lead to instability in intergovernmental relations and to inefficient provision of public services. Moreover, advances in technology and other aspects, together with changes in people's preferences, human capital, and relative endowments of the regions of a country, will cause what is considered the best assignment to change over time (Martinez-Vazquez et al., 2006).

1.3.2 Expenditure Assignments in Asia

There is a wide variation in expenditure assignment across Asian economies, both in terms of share of local government expenditure in total public expenditure and of the expenditure functions (see Figure 1.1 and Table 1.2). The share of local government expenditure in total government expenditure is rather high in some economies such as Japan (accounting for 58.3 percent of total public expenditure in 2012, including social welfare), the Republic of Korea (60 percent of consolidated public expenditure in 2010), the PRC (about 85 percent of recorded total public spending in 2010), India (about 66 percent of consolidated government spending in 2010), and Viet Nam (about 55.6 percent in 2012), whereas it is much lower in some others such as Indonesia (35 percent of total public expenditure in 2006), the Philippines (25 percent in 2005), and Thailand (26 percent in 2010). Using subnational government spending might give a misleading picture, however. A high level of spending carried out by local government does not always mean that the local government is the one who makes expenditure decisions. For example, in Viet Nam, although local government expenditure accounted for a large share of total public expenditure, before the State Budget Law took effect in 2004, the local governments essentially acted as the agents of the central government, which set the service levels and standards (Mountfield and Wong, 2005).

Similarly, expenditure functions also vary widely in Asian economies. In most economies, local governments take full or partial responsibility for providing education, health, social welfare, infrastructure, and community development (see Table 1.2). Local governments in Indonesia and Thailand are assigned to carry out education and health services. In the Philippines, while provision of health services is a joint responsibility, education remains a central government responsibility. The PRC's local



Notes:
CG = central government; LG = local government.
Whereas Japan's CG share of expenditure in gross domestic product does not include social security, other countries' CG figures include social security expenditure.

Source: International Monetary Fund Government Fiscal Statistics Portal.

Figure 1.1 Central government and local government revenues and expenditures as percentage of gross domestic product (2006, 2010–2013)

governments, however, have to bear considerable expenditure responsibilities. They are responsible not only for providing education and health services but also for providing unemployment benefits and pensions, even at the lowest levels of government. These two spending items are rather inappropriate for local governments because they not only require a huge financial resource but also have a cyclical nature. Usually, the central government will either carry out, or share with local governments to carry out, these responsibilities (Mountfield and Wong, 2005).

Table 1.2 Subnational government functional assignments and expenditure shares

Country	Local government functions	Local government share of expenditure
Japan	Education, health, social welfare (basic social services), public investment	58.3% in 2012 for all levels (31.6% for subnational level, 26.7% for lower tier levels)
Korea, Republic of	Local administration; public services that enhance residents' welfare; local industrial development of agriculture and commerce; regional development and local environmental facilities; public services that promote education, sports, culture, and art; environmental protection, including pollution prevention; and local civil defense and fire protection.	45% in 2010 (17% for upper tier level, 28% for lower tier level); 15% of local education subsidy (under Local Government Education Act).
PRC	Broad legal division of responsibility between levels without disaggregation; in practice, multiple levels perform many functions concurrently.	85% in 2010.
India	Twenty-nine detailed functions to rural local bodies; another list of 18 detailed functions to urban local bodies.	66% for all levels in 2010.
Indonesia	Health, education, environment, and infrastructure, among numerous others; provinces were originally assigned mainly coordination and gap-filling roles.	About 35% for all levels in 2006 (7% for upper tier level, 28% for lower tier levels).
Philippines	Health (joint responsibility with central government), social services, environment, agriculture, public works, education, tourism, telecommunications, and housing.	About 25% (2005) (11% for upper tier level; 14% for lower tier levels).
Thailand	Infrastructure, quality of life, community and social order, planning and investment and promotion of trade and tourism, management of natural resources and the environment, and culture, values, and local wisdom; but slow progress on implementation.	About 26% for all levels; expected to increase (2010).

Table 1.2 (continued)

Country	Local government functions	Local government share of expenditure
Viet Nam	Main functions remain centralized but different levels share responsibilities in practice; subnational governments dominate in agriculture, forestry, irrigation, fisheries, power, water, education, and health.	About 55.6% for all levels in 2012.

Note: PRC = People's Republic of China.

Sources: Mountfield and Wong (2005); Lewis and Searle (2010); and some Asian national statistics.

1.3.3 Issues in Expenditure Assignments in Asia

Unclear and overlapping expenditure assignments

In many Asian economies, expenditure assignments are rather unclear and overlapping. Lack of legal documents clarifying the functions of local governments is also attributed to the unclear assignment of functions between local and central governments (Lewis and Searle, 2010). For example, in Indonesia, despite law revisions, there is a lack of clarity regarding central and local functions as well as inconsistencies between various laws (Nasution, Chapter 8 in this book). The same situation is found in the Philippines (Manasan, 2015). Meanwhile, in Thailand, local offices of the central government operate in parallel with local government, which makes the service delivery confused. In the PRC and Viet Nam, expenditure assignments are unclear due to the system of nested hierarchies of the administrative system. Under this system, the central government sets rules for provincial governments, but also sets rules for local government at the district level (Mountfield and Wong, 2005). The lack of clear functional assignments is also due to the resistance of the central government to sharing its authority with the provincial level as in Viet Nam, the PRC, and the Philippines (Mountfield and Wong, 2005). In the Republic of Korea, there is some lack of clarity in functional assignments, but the misassignment of functions also seems to be an issue since the central government owns the revenues while local governments execute the expenditure assignments (Lewis and Searle, 2010).

Increasing unfunded mandates

Unfunded mandates are also problems for local governments in Asian economies. For example, in the Philippines, local governments face a number of significant unfunded mandates including the salaries of local civil servants; the benefits of health sector employees; insurance premiums for impoverished residents; and financial support for many central government agencies operating in their jurisdiction such as policy, fire protection, and the courts (Lewis and Searle, 2010; Manasan, 2015). The situation is also a growing issue in Bangladesh, India, Japan, the Republic of Korea, and Pakistan (Martinez-Vazquez, 2011).

Limited spending autonomy

Local governments in Asian economies have limited autonomy in how to use their funds. Japan's central government determines spending levels and standards for services that local governments provide. In developing Asian economies, local governments often have been assigned many functional responsibilities, but they are not given the authority to decide sectoral spending allocations. This is partly because a large proportion of transfers from the central government is tied to specific sectors, functions, or services. For example, in Indonesia, 20 percent of the total local government budget should go to education (Nasution, Chapter 8 in this book). In the Philippines, the central government limits the amounts that local governments can spend on certain classes of expenditures (Manasan, 2015). They also set the minimum levels on particular types of spending, such as 20 percent of a transfer from central government must be set aside for development spending. In Thailand, all local government budgets must be approved by higher-level governments, which often insist on significant changes. Similarly, expenditures of lower-level local governments in the PRC and Viet Nam have to get approval from higher levels of government, and the central government can influence local spending by a number of mechanisms, including expenditure laws and regulations, spending mandates, and political controls.[2] In India, whereas the state governments are given complete authority over expenditures, local governments' spending autonomy is very restricted. Since many local governments in India are dependent on intergovernmental fiscal transfers, they could be viewed as implementing agencies of the states (Lewis and Searle, 2010).

Weak expenditure management

In some Asian economies such as Indonesia and the Philippines, local governments do not fully spend the resources to which they have access and have accumulated a large stock of fiscal reserves. Currently, local governments in Indonesia have fiscal reserves equal to 25 percent of annual local government expenditure, while those in the Philippines have 35–40 percent (Lewis and Searle, 2010).

1.4 REVENUE ASSIGNMENTS

To make fiscal decentralization produce sustainable net benefits, local governments must control their own sources of revenue. Local governments that lack independent sources of revenue can never truly enjoy fiscal autonomy, because they remain under the financial control of the central government. Therefore, important questions include which level of government should choose the taxes to be imposed at any level, the tax bases, tax rates, and which level should enforce and administer the various taxes. This is commonly referred to as the tax assignment problem.

1.4.1 Theoretical Foundations for Revenue Assignments

Several models, including the standard fiscal federalism model, leviathan model, and second fiscal federalism model, have recommendations for optimal tax assignments.

Based upon the argument that optimal tax assignment is strictly related to the normative optimal assignment of expenditure function to levels of governments, the standard fiscal federalism model advanced by Oates (1972) and Musgrave (1959) suggests the following rules for tax assignments between central and local governments: (i) lower levels of governments should levy taxes on relative immobile bases or assets; (ii) they should levy taxes with a base that is evenly distributed among jurisdictions; and (iii) they should rely on taxes with a yield that is relatively stable in real terms. Accordingly, corporate income tax, natural resource taxes, personal income tax, and value-added tax (VAT) should be the responsibility of the central government, while local governments may impose taxes on land and property in addition to some user charges, and regional governments may impose retail sales taxes and a few excise taxes as well as surcharges on personal income or payroll taxes (i.e., piggyback tax).

The leviathan approach proposes an opposite view of the optimal tax assignment. According to this view, politicians and bureaucrats will act like leviathans. They would maximize their spending power by setting taxes to maximize total revenue from the private sector. This implies that local governments would be assigned broad tax bases to minimize tax evasion and tax erosion and/or impose higher rates on less elastic bases. To limit such leviathan behavior, Brennan and Buchanan (1980) proposed that tax competition among local governments should be encouraged.

Accordingly, local government taxes should then be imposed on mobile factors to trigger such competition. Tax competition provides efficiency gains by reducing the monopoly powers of government units.

However, both standard fiscal federalism and leviathan approaches are widely criticized (see, e.g., Ambrosanio and Bordignon, 2015). This has led to the emergence of the so-called second-generation fiscal federalism model (Oates, 2008), which strongly supports a significant degree of tax autonomy for local governments. First, local governments would be more likely and able to allocate and control their expenditures efficiently and effectively if they are allowed to control their own resources. This implies that the appropriate way to assign taxes depends on how spending responsibilities have been assigned. Second, local governments should be allowed to affect the volumes of revenues significantly at the margin through their own policy choices. And the best way to do this is for them to set their own tax rates.

Local government taxation assignments

Bahl and Bird (2008) proposed four principles to follow in assigning revenue to local government:

- Ideally, at least the local government in the richest jurisdiction would be able to raise adequate revenue to finance the services for its residents.
- Local government taxes should only be levied on the residents who will benefit from the services provided by local governments.
- Governments at all levels should bear clear public responsibility at the margin for financing expenditures for which they are politically responsible.
- Local government taxes should not unduly distort the allocation of resources.

The literature (e.g., Bird, 2010; Robotti and Dollery, 2008; and Ambrosanio and Bordignon, 2015) identified some candidates for local taxes as follows (see Table 1.3):

- *User charges.* User charges are suitable for all levels of local government and should be implemented whenever possible. The problem is that this type of revenue is not usually adequate to finance major expenditure responsibilities decentralized to local jurisdictions.
- *Property taxes.* Property taxes are often considered the most appropriate revenue source for local government. Their advantages include immobile tax bases and stable and predictable tax revenues, but

Table 1.3 Characteristics of local government taxes

Criteria	User charge	Property tax	Excises	Personal income tax	Payroll tax	Sales tax	Business tax
Government level	Sub-provincial/ local government	Sub-provincial/ local government	Provincial/ state level	Provincial/ state level	Provincial/ state level	Provincial/ state level	Sub-provincial/ local government and/or provincial/state level
Revenue adequacy	No	Yes	No	No	Yes (in industrial areas)	Yes	No
Payers vs. beneficiaries	Yes	Yes	No	No	Depending on employment pattern	Depending on mobility	Depending on design
Local accountability	Yes	Low	Low	Low (depending on the degree of rate discretion)	Yes	Yes	Low
Administrative cost	Moderate	High	Low	Not feasible	Moderate	Moderate	Sometimes high
Compliance cost	Low	Not high	Low	Moderate	Not high	Moderate	High
Potential for corruption	Moderate	Moderate	Low	High	Low	Moderate	High
Distortionary impact	Low	Moderate	Low	Moderate	Not high	No	High
Reducing disparities	No	No	No	No	No	No	No

Source: Bird (2010).

they also have difficulties, including how to determine the tax base, and estimating land and building values. This tax is also costly and difficult to administer, thus it is not suitable for small jurisdictions (Robotti and Dollery, 2008). Another issue relates to the low elasticity of this tax revenue with respect to nominal income (OECD, 2003).

- *Personal income taxes.* In some developed Asian economies, local governments can impose surtaxes on the national income tax base. The imposition of personal income tax at the local jurisdiction level can also be justified on a benefit basis: the local government could impose a flat rate tax for public services especially used by residents in jurisdictions. Because this tax is highly visible, it may promote local accountability (Robotti and Dollery, 2008). However, some potential problems include (i) uneven distribution of income tax bases so that poorer jurisdictions may not have adequate resources for financing a minimum standard of public services; (ii) mobile tax bases, which could create some distortions, including undesirable spillover effects; (iii) and inefficiency arising due to the vertical tax competition (Ambrosanio and Bordignon, 2015).
- *Business taxes.* The principle forms of business taxation that could be levied at the local level include corporate income tax, payroll tax, and turnover tax. They are generally not considered to be good sources of revenues because (i) it is difficult to determine the geographical source of income and profits, and (ii) it may distort the location of economic activities and resource allocation among jurisdictions. However, local governments can impose local business taxes if the investment is specific to the locality such that a firm cannot easily relocate (Feld and Schneider, 2001).
- *Consumption tax.* Among consumption taxes, excises are considered to be well suited for local governments, thanks to their ease of administration and minimum distortion effects (Ambrosanio and Bordignon, 2015). However, experience has shown that the revenue from excises accounts for a small share of local government revenues.
- *VAT*. It is argued that the VAT does not fit well for local governments due to high administrative and compliance costs, and problems arising from cross-jurisdictional trade and tax fraud, tax exporting, and transfer pricing. But the VAT could be suitable for local governments if it is reorganized, such as the dual VAT system (proposed by Bird and Gendron, 1998), viable integrated VAT (Keen and Smith, 1998), and compensating VAT (Varsano, 2000; McLure, 2000). Among those, the compensating VAT system was originally proposed for developing countries such as Brazil and India. Under this

system, sales to local purchasers (registered traders, households, and unregistered traders) would be subject to the local VAT, but sales to purchasers in other jurisdictions would be zero-rated for local VAT and subject instead to a compensating VAT. However, adopting this system requires the presence of both significant federal tax presence and a comprehensive and complex administration to guarantee appropriate clearing and avoid distortion of collection incentives.

Bird (1999) proposed a local low-rate VAT levied on the basis of income rather than consumption to replace other local taxes imposed on business. He argued that this tax would be less distorting than local profits and capital taxes, more neutral, and more stable than the usual corporation income tax. Some countries such as Italy and Germany have introduced forms of this tax to provide subnational governments with additional own revenues to finance local public expenditure (Bird, 1999).

1.4.2 Revenue Assignments in Asia

Tax revenues are more decentralized in more developed economies in the region, including Japan, the Republic of Korea, and, to some extent, the PRC. In Japan, local governments at different levels collected about 40 percent of total tax revenues in 2007 while own-source revenues accounted for one-third of total revenues of both prefectures and municipalities. In 2011, local governments in the Republic of Korea raised about 35 percent of national public revenue, and own-source revenues accounted for 60 percent of total local government revenues. In the PRC, local governments collect about 40 percent of total national tax revenues.

However, tax revenues are much more centralized in other Asian developing economies. In India, revenues raised by state and local governments account for about 33 percent of total consolidated public revenue, of which local governments could only raise 10 percent of total state and local government revenues. Indonesia's local government revenues are only about 8 percent to total public revenues. The corresponding figures are 10 percent in the Philippines, 15 percent in Thailand, and about 45 percent in Viet Nam.

There is a wide variation in the types of taxes that central governments assigned to local governments (see Table 1.4). In Japan, local taxes include enterprise, consumption, and personal income taxes, but the most important local taxes are the residential and nonresidential property taxes.[3] Similarly, the property, consumption, and income taxes are the three most important taxes for local governments in the Republic of Korea (of which the property taxes account for 50 percent of total local tax revenues).

Table 1.4 Own-source revenue assignments

Country	User charge	Property tax	Excise tax	Personal income tax	General sales tax	Business tax
Japan	Yes (on education, health care, social welfare)	Yes (tax on ownership or use of landholding, property acquisition, fixed assets)	Yes (tax on ownership or use of light motor vehicles, automobile acquisition, tobacco, mineral products, light oil delivery)	Yes (inhabitant tax)	Yes (wide range of specific taxes)	Yes (mostly from corporate net income)
Korea, Republic of	Yes (in the form of local education tax)	Yes (property acquisition tax, property tax)	Yes (e.g., tobacco tax; automobile tax, including fuel tax; tobacco tax; leisure tax)	Yes (resident tax)	Yes (local consumption tax)	Yes (local income tax)
India	Yes	Yes (only at the SG level, lower level LGs shared with SG)	Yes (only at the SG level, lower level LGs shared with SG)	Yes	Yes	Yes
PRC	No (but 'informal' or 'illegal' local extra-budgetary fees)	Yes	No (but having taxes on vehicle and vessel use)	No (albeit PIT is assigned to SNGs, LGs act as collecting agent)	No (but revenue sharing with CG)	Yes (business tax on gross receipts, an enterprise income tax, and other surcharges and surtaxes)

Table 1.4 (continued)

Country	User charge	Property tax	Excise tax	Personal income tax	General sales tax	Business tax
Indonesia	Yes (rather numerous)	Being introduced	Yes (on motor vehicles and fuel, minerals)	No (albeit PIT is assigned to SNGs, LGs act as collecting agent)	No	Yes (but limited to a few sectors)
Philippines	Yes (rather numerous)	Yes (rates set by SNGs subject to a maximum)	No	Not exactly, though the community tax is in the form of a poll tax.	No	Yes (relatively large revenue source)
Thailand	Yes (transportation, public utilities, and markets)	No (except for the land development tax and house and land tax, with the rate set by CG)	No	No	No (but revenue sharing with CG)	Yes (but limited sectors and business-type)
Viet Nam	Yes	No (only some taxes on land and housing and transfer of land use rights)	No	No (but revenue sharing with CG)	No (revenue sharing with CG)	Yes (just beginning)

Note: CG = central government, LG = local government, PIT = personal income tax, PRC = People's Republic of China, SG = state government, SNG = subnational government.

Sources: Lewis and Searle (2010); Mochida (2006); ADB (2014); Manasan (2015); Nasution (Chapter 8 in this book).

In other economies, the various types of property taxes (such as land-use taxes or land-development taxes) are the most important sources of revenues. Local governments in Thailand, the Philippines, and, recently, Indonesia are assigned some business taxes (Lewis and Searle, 2010).

1.4.3 Issues for Revenue Assignments in Asia

Mismatches between expenditure responsibilities and resource capacities

Most Asian developing economies face mismatches between expenditure and resource capacities. In India, most municipal governments generally operate under severe fiscal constraints. Due to limited own sources of revenues, local governments, except some large urban local governments, do not have adequate resources to provide their assigned services (Oommen, 2008). The situation in the PRC is slightly different. After the 1994 fiscal reform, local governments became more resource-constrained since their responsibilities remain the same while intergovernmental transfers cannot offset the losses caused by the more centralized revenue system. The inadequacy of resources and responsibilities is greater at the lower level of governments. In Indonesia, skewedness in the distribution of resources across local governments implies that some local governments have insufficient resources with which to discharge their functions (Hofman and Cordeiro Guerra, 2005).

Few sources of tax revenue

Most central governments in Asian economies assign property taxes to local governments. However, they are either permitted only on a very narrow base (such as unused land in Cambodia) or subject to maximum rates set by the central government (such as in the PRC and the Philippines). Also, property values may not be regularly updated and tend to be much lower than market values (for example, in Viet Nam, the government property value is 50 to 100 percent of the market value, especially in urbanizing areas). Meanwhile, only a few economies assign some business taxes to local governments and modest excises and fees, including those on motor fuel in Indonesia, vehicle and vessel use in the PRC, and public transportation in Thailand. With regard to other major taxes, except for Japan and the Republic of Korea, most local governments in Asian economies are not permitted to collect personal income taxes or general sales taxes, although they could be potentially large sources of finance for local governments (White and Smoke, 2005).

Low level of revenue autonomy

Not only do local governments have a limited number of taxes, but their tax autonomy is also limited. Local governments in Japan and the Republic of

Korea have reasonable controls over most taxes assigned to them, although the central governments define the tax base and tax range. Local governments in Japan are also allowed to create their own taxes, but very few of them utilize this autonomy (Lewis and Searle, 2010). Similar to the cases of Japan and the Republic of Korea, the central government of Indonesia defines tax bases and allows local governments to have some flexibility in setting tax rates. This, however, is rather limited due to the ceiling rates imposed by the central government. In the Philippines, local governments are allowed to have some taxes of their own, but local governments could only make changes to these taxes every three years. In other economies such as Viet Nam, Thailand, and Malaysia, local governments do not have tax discretion, except for some charges and fees (Lewis and Searle, 2010). The situation is similar in the PRC and some federal states such as India and Pakistan, although the provincial and state governments in these economies are given more tax autonomy (Martinez-Vazquez, 2011).

Incentive problems in revenue assignments

Low levels of revenue autonomy can cause incentive problems in raising revenue. For example, in the PRC and Viet Nam, the lack of formal revenue assignments creates unpredictability and reduces accountability. Furthermore, in the PRC, due to their size, most provinces assign revenues to lower levels of government, and then leave each layer to work out arrangements with the one below it. This may cause uncertainty about revenues at the lower levels. In the Philippines and Indonesia, the transfer of significant shares of tax collection from the provincial to sub-provincial levels may reduce provincial incentives for collecting their own revenues (Taliercio, 2005).[4] Incentive problems may arise in developed economies such as the Republic of Korea, where local tax authorities seem to make insufficient use of the control they have over the rates of their assigned taxes. This, according to Lee (2006), could be due to the disincentives imposed by the transfer system.

Weak tax administration at the local government level

In many economies such as India, local governments do not fully utilize their taxing powers. In India, local government officials explained that if they use optional taxes under their authority, councils and/or citizens would be reluctant to pay. The same situation is seen in the Philippines where the many local officials do not use the tax authority that is available to them. Meanwhile, at the other extreme, some jurisdictions collect many nuisance taxes and thus tax administration cost efficiency is low (Manasan, 2015).

1.5 INTERGOVERNMENTAL TRANSFER MECHANISMS

1.5.1 Theoretical Foundations for Transfer Mechanisms

Generally, intergovernmental transfers are a necessary complement to decentralization. They not only are the means for decentralization to be realized but also can correct some adverse effects caused by decentralization. Transfers are viewed as fulfilling three main purposes: (i) to finance the vertical fiscal gap between expenditure and revenue-raising responsibilities; (ii) to ensure horizontal balance due to differences in fiscal capacities among jurisdictions; and (iii) to allow the central government to monitor the execution of local government programs. Therefore, two factors affect the design of intergovernmental fiscal transfers: (i) the consequences of decentralization, and (ii) the central government's degree of oversight over local governments' decision making.

Instruments of intergovernmental fiscal transfer

Intergovernmental transfers or grants can be broadly classified into two categories: unconditional and conditional transfers.

- Unconditional transfers (i.e., general-purpose transfers) are a type of general budget support without any conditions for getting the transfer. Such transfers are intended to preserve local autonomy and enhance interjurisdictional equity. Formula-based general-purpose transfers are very common. Theoretically, unconditional transfers have only income effects (Shah, 2007).
- Conditional transfers (specific-purpose transfers) are intended to provide incentives for governments to undertake specific programs or activities. Conditional transfers could be either input-based transfers (i.e., transfers for a specific type of expenditure such as capital expenditures or operating expenditures), or output-based transfers (i.e., transfers that require attainment of certain results in service delivery). Input-based conditionality is often intrusive and unproductive, whereas output-based conditionality can advance grantors' objectives while preserving local autonomy. Conditional transfers have not only income effects but also substitution effects (Shah, 2007).

Principles for designing fiscal transfers

The design of intergovernmental fiscal transfer has implications for fiscal sustainability. Barrios and Martínez-López (Chapter 4 in this book) show that the indebtedness of jurisdictions with different fiscal capacities is affected by expected revenues redistributed through intergovernmental transfers. Thus, the design of intergovernmental fiscal transfers should take into account (i) the size of the pool available for distribution; (ii) the basis for distributing transfers; and (iii) the conditionality attached to transfers. Moreover, based upon the experience in Latin America, Martinez-Vazquez and Sepulveda (2012) suggested that the design of transfers should follow these principles:

- ensure flexible use of transfers by local governments so that spending decisions can reflect regional differences in demand patterns,
- enable periodical adjustment to changing socioeconomic circumstances,
- ensure stability in the flow of resources, and
- minimize the volatility of transfers due to economic or political reasons.

Fiscal transfer objectives and instruments to achieve those objectives

Bridging vertical fiscal gaps Vertical fiscal gaps occur because of (i) inappropriate assignments of responsibilities; (ii) centralization of taxing powers; (iii) tax competition among jurisdictions; and (iv) lack of tax room at the local levels due to heavy tax burdens imposed by the central government. Vertical fiscal gaps could be solved by various policies such as the reassignment of responsibilities, further tax decentralization or tax abatement, and tax-base sharing (by allowing local governments to levy surcharge on a given tax). Fiscal transfer instruments, such as revenue sharing and/or unconditional formula-based transfers, should be adopted only as second-best measures since they tend to weaken local government's accountability to local taxpayers.

Revenue sharing is a type of unconditional transfer. The central government shares a predetermined ratio of its revenues to local governments. This is a relatively simple way to provide a reasonably secure and growing amount of revenues to local governments. However, it leaves no discretion to the jurisdictions in terms of revenue raising, even at the margin. The absence of such discretion detracts from fiscal and political accountability (Boadway and Shah, 2009).

Horizontal fiscal equalization Fiscal equalization transfers are instruments to deal with horizontal fiscal equity concerns. Transfers from the central government to local governments can eliminate regional differentials in net fiscal benefits (i.e., the imputed benefits from public spending minus the tax burden) arising from decentralization. To eliminate differential net fiscal benefits, the central government should design a comprehensive fiscal equalization program that equalizes fiscal capacity (the ability of local governments to raise revenues from their own tax bases using national average tax rates) to a national average standard level and provides compensation for differential expenditure needs and costs due to inherent cost disabilities (but not due to different policies implemented at the local government level). In principle, a properly designed fiscal equalization transfer program corrects distortions that may cause fiscally induced migration by equalizing net fiscal benefits across jurisdictions. A reasonable estimate of the costs and benefits of providing public services in various jurisdictions is essential to measure net fiscal benefits. Measures of differential revenue-raising abilities and the needs and costs of providing public services in different jurisdictions must be developed. Equalization of net fiscal benefits could then be attempted by adopting a standard of equalization and establishing the means of financing the needed transfers.

A number of countries, including Australia, Canada, the PRC, Denmark, and Indonesia, have introduced fiscal equalization programs. However, there is a lot of variation among countries in terms of legal foundation (i.e., constitution-based or law-based), type of program (paternal program or fraternal program[5]), types of contribution to the common pool (formula-based or arbitrary), and method of equalization. Overall, experience suggests that (i) having an explicit standard regarding the total pool and the allocation among recipient units will ensure transparency and accountability in such programs, and (ii) fiscal need compensation should be carried out through specific-purpose transfers (Shah, 2007). Table 1.5 summarizes the characteristics of different kinds of transfer programs.

Setting national minimum standard and ensuring national unity The central government can use conditional nonmatching grants to local governments to deal with under-provision of public services that have redistributive purposes such as education, health, or social welfare, and/or restricted access to such services by the poor and the old, who are those most in need. This type of transfer can also be used to deal with infrastructure deficiencies in poorer jurisdictions to strengthen national unity. The conditions for this transfer may not only be the specific use of grant funds, but also attainment of standards in quality, access, and level of services. Input-based grants fail to create such an accountability environment.

Benefit spillover compensation Due to a lack of proper incentives, local governments are reluctant to provide adequate services that may benefit other jurisdictions' citizens. A system of open-ended matching transfers

Table 1.5 Formula-based equalization transfers

Types of transfer	General characteristics	Remarks
Transfer based on equal per capita allocation	Simplest system; requiring only information about population	Suitable for countries at an early stage in their intergovernmental arrangements Does not takes into account other factors such as income per capita
Formula based on general indicators of expenditure needs	Include other indicators such as poverty incidence, area, population density, and infant mortality	It is hard to link the factors with reasons for spending or transfer.
Formulas based on specific indicators of expenditure needs	More complex; using distinct indicators of needs for each local expenditure responsibility	Avoids using factors under the direct control of subnational governments; requires more information
Formulas based only on fiscal capacity	Transfer based on differences in fiscal capacity	Use of the potential rather than actual addresses the problem of incentives; this formula assumes that each province has the same per capita expenditure needs
Formulas that consider both expenditure needs and fiscal capacity	Most general approach to equalization systems; relies not only on needs but also on the ability to provide for these own resource revenues	This equalization formula is used in an increasing number of countries such as Australia, the People's Republic of China, Japan, and the Republic of Korea. They can be complex and require a considerable amount of information

Source: Adapted from Boadway (2015).

based on expenditures will provide incentives to increase expenditures. Because the extent of the spillover is usually difficult to measure, the matching rate will be somewhat arbitrary. However, such transfers have not been implemented in developing countries.

Aligning local priorities with national priorities To induce local governments to follow the priorities set by the central government, the latter can provide open-ended matching transfers with matching rates that vary inversely with the recipient's fiscal capacity. Use of ad hoc grants is inadvisable since ad hoc grants are unlikely to result in behavioral responses that are consistent with the grantor's objectives.

Infrastructure deficiencies and macroeconomic stability The central government can use fiscal transfers to achieve cyclical stabilization in jurisdictions. Unconditional transfers could increase during the downturn periods to encourage local expenditures and reduce when the economy is in an upswing.

Table 1.6 presents justifications for intergovernmental fiscal transfers and alternative policies.

1.5.2 Intergovernmental Fiscal Transfers in Asian Economies

Within a country, there are large differences among jurisdictions in terms of natural endowments, economic opportunities, and levels of development. In such an environment, fiscal decentralization could lead to a large horizontal fiscal imbalance, because of both different revenue potentials and costs of delivering services. In the PRC, for instance, own revenues per capita of the richest province are 15 times those of the poorest region. These disparities are even higher in Indonesia, the Philippines, and Viet Nam, and much higher at the sub-provincial level (Hofman and Cordeiro Guerra, 2005; Nasution, Chapter 8 in this book; Manasan, 2015). Equalization grants from the central government are the instrument to mitigate these imbalances.

Local governments in Asian economies are heavily dependent on transfers and revenue sharing from the central government, even in developed economies such as Japan and the Republic of Korea. While local governments in Japan and the Republic of Korea receive nearly 40 percent of their revenues from intergovernmental fiscal transfers, the dependence of local governments on intergovernmental fiscal transfers is heavier in developing economies. Intergovernmental fiscal transfers (both from the central government and state governments in federal states) account for nearly 60 to 66 percent of local government revenues in the PRC, 90 percent in India, 90 percent in Indonesia, 70 percent in the Philippines, 85 percent in Thailand, and about half in Viet Nam. Table 1.7 presents the relative importance of different types of intergovernmental fiscal transfers.

There are multiple transfers from central governments to local governments in Asia, and the size of each type in total transfers is different from country to country. However, most of the Asian economies use equalization

Table 1.6 Justifications for intergovernmental fiscal transfers and alternative policies

Justifications	Types of grant	Alternative policies
1. Vertical fiscal gap		
a. Gap between functions and resources	General lump-sum grant (or specific grants with amounts calculated according to needs); no bailout	New assignment of functions/resources; fiscal decentralization or tax sharing
b. Budget deficit		New assignment of function or tax sharing
c. Excessive central tax rate		
d. Small or weak local tax base		Fiscal decentralization or tax sharing
e. Limited or few tax revenues	General lump-sum grants	Material tax harmonization
2. Spillover effect	Open-ended specific matching grants; no closed-ended matching grants	Reorganization of territorial structure to establish a correspondence between institutional and functional dimensions
3. Equitable access to social services	Specific lump-sum grants	
4. Minimum standards/Merit goods/National priorities		
a. Minimum standard to facilitate production factor mobility/to defend the interest of minorities	Conditional nonmatching output-based grants	
b. Imposition of the center's social priorities	Open-ended matching grants	
5. Horizontal fiscal gaps		
a. Inequitable distribution of natural resources	General lump-sum grants (sharing, redistribution)	
b. Gaps in financial capacity		
c. Differences in costs/needs, opportunities to generate an economy of scale, for demographic, topographic, socioeconomic reasons	Specific matching grants (correction or compensation)	New assignment of functions/resources, intergovernmental collaboration

Table 1.6 (continued)

Justifications	Types of grant	Alternative policies
6. Macroeconomic policies		
a. Stabilization (encouraging or discouraging local spending)	For encouraging local spending: specific lump-sum grants (incentives)	Encourage private sector participation
b. Regional development	Sectoral grants (incentives and supports)	Help establishing framework conditions; regional policies to encourage development of private sectors; support for new activities

Source: Adapted from Dafflon and Madies (2011).

Table 1.7 Intergovernmental fiscal transfers as a revenue source of local government

Country	Share of transfers in total local revenues (%)	Relative importance of type of transfer		
		Revenue sharing	General purpose	Special purpose
Japan	40	High	Low	Medium
Korea, Republic of	40	High	Low	Medium
PRC	60–66	High	Low	Low
India	90	Medium	Low	High
Indonesia	90	Medium	High	Low
Philippines	70	Low	High	Low
Thailand	85	Low	Low	High
Viet Nam	50	High	Medium	Medium

Note: PRC = People's Republic of China.

Source: Lewis and Searle (2010).

grant systems to address horizontal fiscal imbalances (see Table 1.8). These systems rely on formulas to determine distribution, and some of them use formulas to determine the resource pools. The revenue capacities and the expenditure needs of local governments are taken into account in

Table 1.8 Intergovernmental transfer and equalization grants in selected Asian economies

	PRC	Indonesia	Philippines	Thailand	Viet Nam
Equalization Principles	16 poorest provinces received an ad hoc grant; formula for calculating equalization grant introduced but not implemented	All provinces receive a formula-based equalizing grant (25% of CG revenues after revenue sharing)	All provinces receive a fixed share of CG tax revenues (equal to 40% of 3-year average internal tax collections)	Equalizing grants allocated in an ad hoc manner to provincial-level governments; a formula is used to calculate grants for lower level of governments	Grants allocated to provinces with shortage of revenues; a formula is used to calculate the required expenditure needs and revenue capacity
Main Features	Formula for expenditure needs and revenue capacity based on provincial GDP, student/teacher ratio, no. of civil servants, and population density	Plays a major role in central–local intergovernmental transfers; expenditure needs estimated as function of population, poverty, land area, and construction cost index; revenue capacity estimated as standardized own revenues plus share of tax revenues and 75% of natural resources revenues	Makes up 94%–97% of total transfers; provinces (23% of total decentralization funds), cities (23%), municipalities (34%), and barangays (20%); formula is based on population, land area, and equal sharing	At subnational level: 95% of total devolving functions; at lower level, allocations are based on equal share (25%), population (30%), area (5%), local revenues (excluding grants), and specific grants received (20%)	LG expenditure needs minus total revenues from 100% decentralization taxes and fees and shared tax revenues (between CG and LG)

Equalizing or Not	Weak (limited resources devoted for ad hoc grants)	Medium (imperfections in the formula)	Medium; 40% is not enough in light of rapid urbanization in the country	Weak (lack of transparency in allocations; leads to self-interested politics and delays in allocation decisions)	Weak
Other Programs with Equalizing Charac-teristics	Other unconditional transfers (such as tax rebates, and gap-filling transfers) and hundreds of earmarked grants. But lack of mechanisms to ensure effective use	Special allocations (but small, accounting for 3%)	None	Programs such as education and development projects	National target programs

Note: CG = central government, GDP = gross domestic product, LG = local government, PRC = People's Republic of China.

Sources: Hofman and Cordeiro Guerra (2005); ADB (2014); Manasan (2015); Nasution (Chapter 8 in this book).

some economies (e.g., the PRC, Indonesia, and Viet Nam), whereas only expenditure needs are considered in some others such as Thailand and the Philippines (Hofman and Cordeiro Guerra, 2005).

Some Asian economies use performance-based transfers (e.g., incentives or innovative transfer mechanisms). Japan incorporates some incentives into its transfer system. As fiscal capacity declines, the central government increases the amount of grants as an incentive for local tax collection efforts. In addition, there are some special-purpose grants acting as performance incentives but the mechanisms of such grants are rather unclear (Lewis and Searle, 2010). Similarly, the Republic of Korea also dedicates special-purpose grants to stimulate certain kinds of spending and incentive mechanisms for own-source revenues. The PRC has some types of incentives for economic development in various provinces. These incentives, however, are somewhat ad hoc and may cause competition among provinces. The PRC central government has offered special privileges and incentives to local governments, but such privileges lack institutionalized supervision (Lan and Chen, 2010). In India, many states have integrated performance incentives into revenue-sharing schemes for local governments to encourage revenue collection efforts, service management, and so forth. However, it is argued that this system seems to reward past behavior rather than encourage future performance (Lewis and Searle, 2010). These kinds of incentives were also implemented in Indonesia, where the central government allocated 10 percent of the national property tax to local governments based on their previous year's tax collection performance. However, this system has been discontinued (Martinez-Vazquez, 2011; Nasution, Chapter 8 in this book). The Philippines also experimented with performance-based transfers. However, there is some evidence that larger transfers provide a disincentive to local tax efforts, especially in the early stage of decentralization (Lewis and Searle, 2010; Manasan, 2015). Thailand and Viet Nam, on the other hand, have not explicitly incorporated performance-based grants into their intergovernmental fiscal transfers.

1.5.3 Issues Regarding Transfers in Asia

Poor design of equalization grant systems

In Asian developing economies, equalization grants usually are not well designed. For example, in the PRC, the distribution of equalization grants is complex, nontransparent, and ad hoc (Bahl and Martinez-Vazquez, 2006). This ad hoc feature has tended to widen the fiscal disparities as only 3 percent of total central transfers went to the 16 poorest provinces. In many cases, equalizing grants in the PRC are actually de-equalizing (ADB, 2014). The situation is similar in India, where transfers from state governments to local government are usually ad hoc (Oommen, 2008).

Inflexible equalization schemes

In some Asian economies, equalization schemes have remained unchanged for a long time and have lagged behind the speed of urbanization in those economies. For example, in the Philippines, local governments receive 40 percent of internal revenue allocation since its decentralization inception, but this rate is too low relative to the rapid urbanization observed in the country (Manasan, 2015). The same situation is observed in Indonesia (Hofman and Cordeiro Guerra, 2005; Nasution, Chapter 8 in this book).

Flypaper effect

The so-called 'flypaper effect' refers to the tendency of local governments to spend revenues from increases in grants rather than reduce local taxes commensurately. Bessho (Chapter 9 in this book) finds evidence of the flypaper effect in Japan. Specifically, his estimation work shows that an increase in grants-in-aid adheres strongly to government investment, with nearly all of a permanent increase in grants resulting in a permanent increase in government investment. Fan and Wan (Chapter 6 in this book) also find that a 1 percent increase in earmarked transfers was associated with a 5 percent increase in local spending on infrastructure in the PRC, but lump-sum transfers did not have an effect.

1.6 LOCAL GOVERNMENT DEBT FINANCING

Local government borrowing can be a significant source of revenue for local governments, especially when revenue assignments and fiscal intergovernmental transfers do not meet the expenditure assignments and local investment needs.

1.6.1 Local Government Debt Financing Instruments

There are two major types of debt instruments available to finance local government capital expenditures: commercial loans and bonds.

Loans are provided by a financial institution (e.g., commercial bank) directly to the local government. Access to commercial loans is less complicated (and cheaper) than bond issuance since the credit analysis could be performed directly by the lender. However, commercial loans usually have short maturity and high interest rates, and thus are not suitable for large and long-lived capital investment projects. This implies that commercial loans are more suitable for small and medium-sized jurisdictions where the demand for large and long-lived capital investments is usually lower than in larger jurisdictions.

Bonds are issued by local governments either directly or via financial intermediaries (e.g., funds, banks) to institutional or individual investors. The administrative and time costs for bond issuance are usually high. However, compared with commercial loans, bonds usually have lower interest rates and longer maturity and thus are more suitable for larger investment projects in large municipalities. There are two types of bonds: general obligation bonds and revenue bonds. General obligation bonds are used to finance public goods investments such as roads, bridges, public parks, and are secured by the local government's overall revenue stream. Revenue bonds do not depend on the general taxing power of local government but only on the stream of revenues generated by the specific project.

A number of conditions need to be met to take advantage of bond issuance. First, local government finances should undergo rigorous creditworthiness assessments by independent credit rating agencies. This requires disclosure of independently audited public financial accounts, thus strengthening the role of markets in fiscal monitoring and surveillance. Second, a subnational bond market should be developed as a part of a subnational credit supply system. Development of this market will help local governments have a more sustainable and stable source of finance, but also allows the wider participations of institutional investors. To do so, a set of security regulations, including regulations on credit rating agencies, broker-dealers, underwriters, and auditors, should be in place and such regulations should be similar across sovereign, sub-sovereign, and corporate bonds (Liu, 2010). Transparency and governance standards are among the most important factors determining the success of such markets (ADB, 2014).

Local government financing of infrastructure projects and other public services may be enhanced by using public–private partnerships (PPPs) to attract private funding and management of such projects. Experiences from economies where PPPs are actively used show that PPP projects are usually faster to complete, more cost-effective, and have higher quality (Burger and Hawkesworth, 2013). Another advantage of PPPs is the risk sharing between the public and private sectors, which reduces risks for local government budgets. However, such transactions tend to be complex and difficult to manage. To implement PPPs successfully, profitable components attractive to private investors need to be carved out, and project components and risks need to be allocated to those who are best able to manage them. Also, local governments need the managerial capacity to successfully implement PPPs.

1.6.2 Subnational Borrowing in Asia

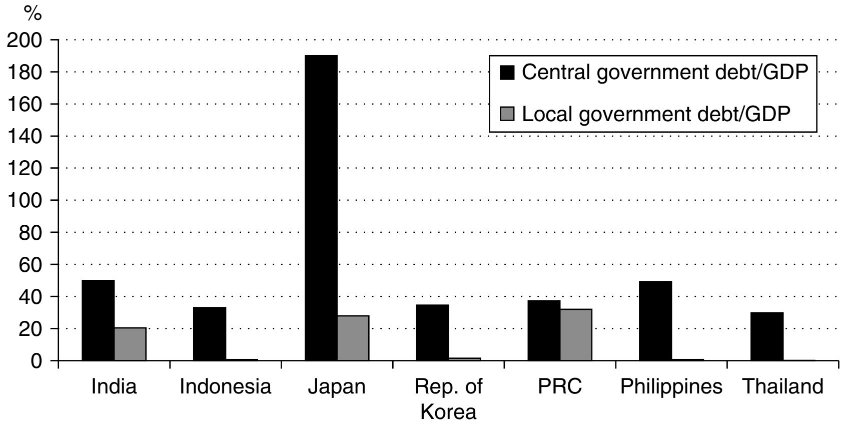
Except for local governments in the PRC and district-level governments in Viet Nam, all tiers of local governments in Asian economies are permitted to borrow from various financial sources, including the central government's funds, commercial banks and other financial institutions, and bond issuance. Each country has its own control systems including 'prior consultation' mechanisms, and quota systems, or restrictions on the purposes of borrowing. In Japan, the PRC, and, to some extent, India, local government borrowing is rather large, but in most other Asian economies including the Republic of Korea, it is small.

In Japan, local governments are legally allowed to borrow from commercial banks and to issue bonds. Issuing domestic bonds has become more common. However, local governments have to consult with the central government prior to such issuance, which helps the central government to keep some control over their borrowing. Recently, Japan's central government has committed to shifting from administrative controls on borrowing to a system based more on fiscal rules and market disciplines (Lewis and Searle, 2010). Local government debt is large. Figure 1.2 shows that, in 2011, the outstanding debt of Japan's local government was about 27.9 percent of gross domestic product (GDP), the second-highest level among Organisation for Economic Co-operation and Development economies (OECD, 2013).

Similar to Japan, local governments in the Republic of Korea also are allowed to borrow from commercial banks or public loans funds, or to issue bonds for capital spending and funds necessary for recovering from natural disasters. However, in the Republic of Korea, local governments mostly borrow from the central government's public loan funds, and recently from 'regional development funds' operated by the upper level of local governments. The Korean central government also replaced its strict 'permission system' on local borrowing with a new 'quota' system. However, the Korean local governments' total outstanding debt was low, accounting for only about 1.5 percent of GDP in 2012 (OECD, 2013).

Although PRC local governments are not allowed to borrow under the current law, many do. They borrow directly from commercial banks and other financial institutions or indirectly through local-government-owned trust and investment corporations. These loans are backed by either fixed assets (e.g., land) or implicit government guarantees. Due to 'illegal' borrowing, it is difficult to have accurate estimates of local government debt, which makes debt management difficult.[6]

In India, subnational governments are also able to borrow from the central government, donors (with central government guarantees), public



Notes:
GDP = gross domestic product, PRC = People's Republic of China.
Year of data: PRC: central government, 2013 and local government, end of June 2013; Japan: 2011; Republic of Korea: 2012; India: 2012/2013; Philippines, Thailand, and Indonesia: 2013.

Sources: Government of India (2015); International Monetary Fund (2015); OECD (2013); ADB (2014); Bank of Thailand (2016); and Philippine Bureau of Local Government Finance (2016).

Figure 1.2 Central government debt/gross domestic product and local government debt/gross domestic product in some Asian economies (%)

and private financial institutions, and capital markets. Many subnational governments, especially urban local governments, have borrowed. In India, total outstanding debts of local government reached 20.4 percent of GDP in 2013.

In Indonesia and the Philippines, local governments are allowed to borrow for capital investment from government sources, private financial institutions, and bond markets. However, local government borrowing in both economies is limited, and is mostly from the central governments or from international donors with the central governments' guarantees. According to Nasution (Chapter 8 in this book) and Manasan (2015), the total outstanding debts of local governments in Indonesia and the Philippines are less than 1 percent of their GDP.

Thailand's lower levels of local government (i.e., municipalities and subdistricts) can only borrow if the higher-level government approves. They can use the debt finance for local capital expenditure. In practice, local government borrowing is very limited. Government transfers, lending from international financial institutions, and local fiscal reserves are still the major sources of finance for local infrastructure development (Lewis and Searle, 2010).

In general, local governments in Asian economies rarely use PPPs to finance infrastructure investment. According to the ADB (2014), in the PRC, this source of funds accounts for only about 1 percent of public investment, much lower than the share of PPPs in public investment observed in countries that actively use PPPs (about 10 to 15 percent of public investment).

1.6.3 Issues in Local Government Borrowing in Asia

Obstacles to local government borrowing

In developed economies including Japan and the Republic of Korea, local government bonds are the standard means of financing local budget deficits (ADB, 2014). However, among developing Asian economies, local government borrowing is rather small except in the PRC, although there is a growing demand for finance to fund infrastructure investment and provide social services. This is partly because a lack of reliable financial data at the lower local government level, restricted borrowing authority, and lack of ex post insolvency policy undermine the creditworthiness of local governments and ultimately make them unattractive to financial institutions (White and Smoke, 2005). Meanwhile, the lack of secondary markets for local government bonds hinders the participation of institutional investors, thus bond issuance is limited (Manasan, 2015). There are also restrictions on the minimum credit rating of bonds that investors such as pension funds and insurance companies can buy.

Excessive local government borrowing

At the other extreme, the high borrowing rates of local governments in Japan and the PRC have raised the question of the sustainability of local government debts in these economies, especially in the case of the PRC, where local governments are not legally allowed to borrow from the financial institutions. This issue is discussed further in section 1.7.

Limited use of public–private partnerships

As mentioned earlier, the share of PPPs in government spending is very low, only about 1 percent on average in Asia. This reflects many difficulties in developing attractive projects, accurately estimating costs and benefits, allocating risks, and responding to changing and unforeseen circumstances. The capacity of government officials to manage such projects is also a significant constraint.

Inappropriate borrowing

The problem in India is that most local government borrowing appears to finance current expenditure, not capital expenditure (Lewis and Searle, 2010). Also, most local government borrowing in the PRC is from the commercial banks, accounting for about 80 percent of total borrowing. This leads to the problem of maturity mismatch, as borrowing from commercial banks is mostly short term (nearly half needs to be repaid in three to five years), while most of the borrowing is for capital expenditure, the debt of which, in principle, will take much longer to be repaid. Das (Chapter 11 in this book) also finds that, in India, state governments tend to use revenue increases to finance current spending rather than investment, so that the positive impact of public investment spending on growth and indebtedness tends to be limited.

1.7 FISCAL RISKS AND MECHANISMS TO MAINTAIN LOCAL GOVERNMENT FINANCIAL STABILITY

Except for Japan and the PRC (and India in the 1990s), local government fiscal risks are relatively small because of strict regulation of their borrowing by the central government. However, the trend of decentralization, coupled with the increasing demand for financial resources to adequately match expenditure assignments and infrastructure demands and limited revenue discretion, ultimately is likely to lead the central governments of Asian economies to give more autonomy to local governments to access capital markets. This section reviews fiscal sustainability issues for local governments in Asian economies and the mechanisms for maintaining fiscal stability and sustainability at the local government level.

1.7.1 Fiscal Sustainability at the Local Government Level

Fiscal sustainability at the local government level is defined in various ways. The International Public Sector Accounting Standards Board (IPSASB) defines local government's fiscal sustainability as the ability of a jurisdiction to provide its assigned services and meet its commitments in the short, medium, and long run (IPSASB, 2008). Therefore, fiscal sustainability has three dimensions: fiscal capacity, service capacity, and vulnerability. Meanwhile, in their report on Australian Local Fiscal Sustainability, PricewaterhouseCoopers (PWC) defines fiscal sustainability as a council's ability to manage 'expected financial requirements and financial risks and shocks over the long term without the use of disruptive revenue and expenditure measures' (PWC, 2006: 95 as cited in Dollery and Grant, 2011: 38). More simply than IPSASB or PWC, Chapman (2008: 115) defined fiscal sustainability as 'the long-run capability of a government to consistently meet its financial responsibilities'. He also suggested that fiscal sustainability is affected by three types of pressures: cyclical, structural, and intergovernmental.

However, according to Dollery and Grant (2011), the abovementioned definitions do not take into account societal and environmental objectives and functions of governments. Hagist and Vatter (2009) provide a more comprehensive definition by highlighting the importance of demographic changes and population mobility. They argued that it is inappropriate to focus only on fiscal gaps or debt without taking into account the future economic strength of the debtor. Therefore, a jurisdiction's budget is defined to be fiscally sustainable if (i) it allows the government to maintain its current level of provision of public goods/services without changes in taxes and other revenues, and (ii) the ratio of a jurisdiction's public equity (net assets) to its 'production potential'[7] is constant over time.

Although fiscal sustainability at the local and national government levels shares some common features, such as both being subject to macroeconomic shocks or structural changes (including demographic change, urbanization trends, mobility of people and business, and changes in consumption patterns) and the pattern of intergovernmental relationships, according to Ianchovichina et al. (2007), fiscal sustainability at the local and national levels differs in several aspects:

- Local governments cannot issue their own currency, thus seigniorage does not have any role in local government finance.
- If the local government borrows mostly from public sources, local government finances would have less credit risk.
- Local government finance is not directly affected by foreign exchange risk if they are prohibited from borrowing from external sources without approval and guarantees from the central government. However, they may be indirectly affected through real interest rate shocks (as in the case of Mexico in 1994–1995).
- If local governments are small in terms of economic size, they cannot influence the interest rates on their borrowings.
- Local government's revenue discretion is usually limited, especially in developing countries, which means they face constraints in adjusting revenues to changed conditions.
- Local government fiscal sustainability could be affected by the central government's policies to the extent they influence their fiscal balances and economic growth.

1.7.2 Fiscal Risks at the Local Government Level

This section examines factors that affect the fiscal sustainability of local governments.

Macroeconomic shocks

Depending on their economic and financial structures, as well as various institutional characteristics, different countries are more or less vulnerable to, and impacted by, different types of macroeconomic shocks such as trade-related shocks, financial crises, and so forth.[8] These shocks could impact local government finances through a number of channels, including (i) significant fluctuations in own and shared revenues; (ii) potential changes in the systems of intergovernmental fiscal arrangements such as changes in revenue-sharing formulas and/or in fiscal rules or other borrowing controls; and (iii) sharp and abrupt changes in the availability of capital market financing when such financing is allowed. If such shocks are sufficiently large and long, they could threaten the fiscal sustainability of local governments.

Counter-crisis policy by central government

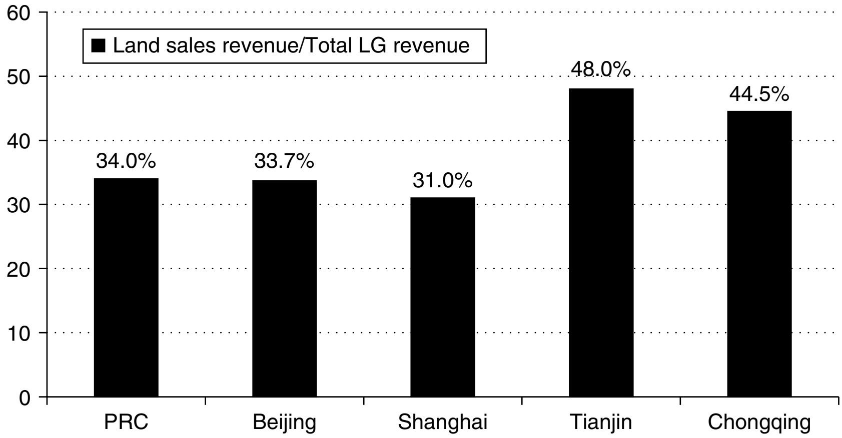
Counter-crisis policy by the central government could have long-term effects on local government fiscal positions. The recent global financial crisis of 2008–2009 is a good example. Before the global financial crisis, fiscal situations in many developing countries were quite stable, with public debt under control. The global financial crisis had negative effects on economic growth in almost all Asian economies. The central governments in Asian developing countries implemented various policy packages to stimulate their economies. Such stimulus packages, however, could potentially cause the fiscal position of local governments to become unsustainable. For example, in the PRC, the central government allowed local governments to issue bonds with a yearly quota of CNY200 billion in 2009, 2010, and 2011. Moreover, the central government also encouraged local governments to establish 'borrowing platforms'[9] to expand their investment financing. As a result, local governments borrowed as much as they could. In 2009, the total debt owed by local governments increased to 20.6 percent of GDP. Despite recent policy tightening over the financing through these platforms, the high level of debts may have longer-run impacts on local government finances.

Emergence of special-purpose vehicles and under-regulated shadow banking

Since the 1990s, many urban development investment corporations have been established in the PRC and in some other countries. In the PRC, by the end of 2011, there were 6,575 special-purpose vehicles (SPVs) at all levels of governments (Liu and Qiao, 2013). These SPVs play a vital role in the rapid transformation of cities in Asia. However, without well-developed regulatory frameworks and corporate governance structures, these types of firms contain significant fiscal risks for local governments. First, these SPVs' operations and financing are generally opaque and formal accountability is often weak (ADB, 2014). Although commercial banks still are the major financiers for SPVs in the PRC, accounting for about 70 percent of all borrowing of SPVs, the shares of funding from the shadow banking system, which consists of non-bank financial institutions, has recently increased (ADB, 2014). By the end of 2013, shadow banking was the third biggest source of finance, accounting for 10.3 percent of the CNY17.9 trillion balance of local government debts at the end of 2013 (Elliot et al., 2015). Although the shadow banking system in the PRC is not as large as in developed economies,[10] it is very risky because (i) it lacks a strong safety net, such as guaranteed deposit insurance or lender of last resort facilities from the central banks, and (ii) it also operates with a different and usually lower level of regulatory oversight.[11] Secondly, it is argued that the management competence of these firms is usually low, which, coupled with the generally weak credit analysis skills in banks, insurance and trust funds, and other financial institutions, will tend to hinder the performance of these firms. Thirdly, although most of the projects carried out by the SPVs are infrastructure projects such as roads, railways, and industrial park construction, only some of them could generate enough revenue to fully meet debt costs in the long term. Finally, if an SPV becomes insolvent, without a well-developed insolvency mechanism, the local government's finances will be heavily impacted.

Lending to state-owned enterprises

Although in many Asian economies a large number of state-owned enterprises (SOEs) have been partially privatized, financial institutions continue to provide them with preferential credits, especially to carry out projects identified as priorities by the central government. They also receive off-budget resources in the forms of deferred taxes or arrears accruals on debt services and other contractual payments. According to Sano (2014), by the end of June 2013, the debts of wholly SOEs and partially privatized SOEs in the PRC had reached CNY3.1 trillion, or 17.5 percent of total local government debt. This raises the question of whether the SOEs are functioning as an alternative financing route in place of SPVs. Given the limited governance capabilities of SOEs, the expansion of financing via SOEs could heighten the risk of insolvency for local governments.



Note: LG = local government, PRC = People's Republic of China.

Sources: *China Statistical Yearbook*; CICC Research Department (cited in Lu and Sun, 2013).

Figure 1.3 Land sales revenue as a share of local government revenue (%, 2009)

Land financing

Rapid urbanization and economic development in Asian economies have helped to turn land sales into a large source of funds for local governments. Country experiences show that land financing could increase fiscal risks because of (i) frequently incorrect estimates of the economic value of land; (ii) the volatility of capital budgets, especially during periods of economic stress; and (iii) the use of land as collateral for local government borrowing, especially in cases where insolvency mechanisms for local governments and local SPVs are not well developed. In the PRC, land-based financing amounted to two-thirds of local government expenditure in 2010 (ADB, 2014) and accounted for over 30 percent of revenues in a number of major cities (see Figure 1.3). Many local governments in the PRC have extensively used the revenues from land sales for repayment of previous debts. In 2013, income from transfer of land-use rights (i.e., land sales) was expected to be used for repayment of CNY3.5 trillion out of CNY9.4 trillion debt balance of 11 provincial-level entities, 316 cities, and 1,396 countries (Sano, 2014). Debt repayment could be hindered if income from land sales failed to increase as much as anticipated due to an economic slowdown. In many cases, land transactions are off-budget and off-balance-sheet. This could lead to misuse of public property by public officials and institutions. These considerations provide an incentive for local governments to act like a land monopolist.[12]

Softening budget constraints

Policy loopholes observed in a number of Asian economies have led local governments to seek additional sources of finance to supplement loans or grants from the central government. However, such additional borrowing is usually unchecked (Ianchovichina et al., 2007). In economies with a history of bailouts, Martinez-Vazquez and Vulovic (Chapter 5 in this book) find that primary balances on average are lower at both central and local governments. Thus, if the central government cannot commit to a no-bailout policy or cannot limit local government borrowing, local governments have incentives to run unsustainable deficits. Fiscal rules are discussed in section 1.7.3.

1.7.3 Managing Fiscal Risks

Local government fiscal risks can be managed through two channels: fiscal rules (i.e., ex ante regulations of borrowing and monitoring of the local government fiscal positions) and ex post insolvency mechanisms to deal with cases when local governments become insolvent. According to Liu and Pradelli (2012), ex ante fiscal rules and ex post insolvency mechanisms complement each other. Insolvency mechanisms increase the pain of circumventing ex ante fiscal rules for lenders and subnational borrowers, thereby enhancing the effectiveness of preventive rules. Without insolvency mechanisms, ex ante regulations could lead to excessive administrative control and game playing between the central and local governments. Overreliance on ex ante regulations could limit the role of markets in monitoring subnational borrowing and debt, however. Latin American and Asian experiences showed that local governments are more likely to tax and spend prudently if they are subject to hard budget constraints (Gooptu, 2005).

Ex ante regulations

Ex ante regulations specify the purpose, types, and procedures of local government borrowing that are allowed. A well-designed regulatory framework should satisfy several criteria: (i) transparency; (ii) penalties for excessive borrowing; (iii) local government access to own-source revenues; (iv) the separation of fiscal policy from monetary policy; and (v) local government accountability via the political process. There also needs to be scope for change, as circumstances and capabilities evolve.

Ex ante regulations can be classified into four broad categories: (i) market discipline; (ii) rule-based controls; (iii) administrative controls; and

(iv) cooperation between different levels of government (Ter-Minassian and Craig, 1997). Table 1.9 presents the main ideas, advantages, disadvantages, and preconditions for each type of regulation. It can be seen that market discipline and administrative controls are so extreme and demanding that they are usually not appropriate for developing economies. Martinez-Vazquez and Vulovic (Chapter 5 in this book) found that the cooperative approach has a positive effect on improving fiscal performance at both the central and local government levels even in the case of high levels of local government debts and high dependence of local government on intergovernmental transfers. However, this approach seems inapplicable to most developing countries, given the absence of the culture of cooperation and discipline required for its success. Thus, a rule-based approach seems to be the most appropriate approach for borrowing controls in Asian economies. This approach is able to combine the benefits of local government autonomy with the required limitations on local government behavior (Alm and Indrawati, 2004). It must be kept in mind, however, that Martinez-Vazquez and Vulovic (Chapter 5 in this book) find that none of the broad types of subnational borrowing regulations seem to have a distinct significant direct effect on the narrow definition of fiscal sustainability at the subnational level.

Rule-based approach

Motivation for rule-based approach to borrowing controls (fiscal rules) Fiscal rules are incentive schemes or mechanisms that introduce for a certain period (medium or long-term) constraints on the main fiscal variables (revenues, expenditures, new indebtedness) using quantitative limits) (Grembi and Manoel, 2012). Kopits (2001) argued that it is generally better to have subnational fiscal rules because they can help to curb subnational fiscal outcomes even in an institutional context with soft rule enforcement (Grembi et al., 2011).

Strategic considerations According to Liu and Pradelli (2012), designing fiscal rules should consider the following issues: (i) borrowing should be allowed only for long-term public capital investment; (ii) analyzing the overall fiscal space available for both national and local government entities; (iii) estimating financing development needs and the existing contingent liabilities; (iv) distinguishing local governments' general budget and SPV financing to monitor differentiated debt indicators; (v) developing analytical tools and models to estimate appropriate thresholds for debt indicators; and (vi) designing a broad fiscal architecture for policy coordination and surveillance. In addition, fiscal rules should be simple,

Table 1.9 Approaches of ex ante regulations

Approach	Market discipline	Administrative controls	Cooperative approach	Rule-based controls
Main ideas	• Market forces will ensure the manageable level of local government debt	• Central government uses administrative measures to control local governments' borrowing	• Limitations on local government borrowing are results of negotiation process between the central and local governments	• Central government sets fiscal rules for local government
Advantages	• Emphasis on self-control • Monitoring by credit rating agencies	• Potential central government control • Better terms and conditions • Useful for foreign borrowing	• Promote dialogue • Enhance responsibility of local government policy makers	• Transparent • Avoid bargaining
Disadvantages/ requirements/ preconditions	• Require comprehensive, timely, and reliable information • Suitable for economies with developed financial markets • No access to privileged financing • No previous history of bailouts • High primary balances (both at central and local government level)	• Ability of central government to effectively monitor and implement controls	• Constitutional underpinnings • Culture of fiscal of discipline • Suitable for economies with developed financial markets • Existence of institutions for cooperative decision making or strong bargaining position of central government	• Sound and credible rules (well-defined, transparent, and flexible) • Clear coverage and full information needed
Countries adopted	Canada, Australia	PRC, Viet Nam, Japan, United Kingdom	Argentina, Austria, Denmark, some EU countries	Brazil, Chile, United States, Spain

Note: EU = European Union, PRC = People's Republic of China.

Sources: Adapted from Ter-Minassian and Craig (2007) and Martinez-Vazquez and Vulovic (Chapter 5 in this book).

transparent, coherent with the fiscal objectives, and harmonious with other public policy goals such as structural reforms (Kopits and Symansky, 1998). Moreover, Chakraborty (Chapter 3 in this book) argues that 'one size fits all' uniform rules may not be suitable since different jurisdictions operate at different levels of sustainable deficits, and thus imposing uniform rules may constrain capital spending in some jurisdictions. Furthermore, for successful adoption of fiscal rules, a clear definition of intergovernmental relationships and hard budget constraints is necessary (e.g., Kopits, 2001 and Ter-Minassian and Fedelino, 2007).

Identifying critical fiscal rules and thresholds Two primary issues need to be addressed (Liu, 2010). The first is to identify (the most) critical fiscal rules for assessing the fiscal sustainability of local government. Liu and Pradelli (2012) proposed a minimum set of five indicators to monitor debt and associated fiscal risks:

(i) The total local government debt-to-GDP ratio, to monitor the aggregate debt of all tiers of local government.
(ii) The debt-service-to-own-revenue ratio, applied uniformly to each individual local government general budget, to ensure financial capacity to service debt and provide incentives for own revenue collection.
(iii) A 'golden rule' (e.g., operating fiscal balance must be zero, preferably over the cycle) applied to both SPVs and local government budgets, to promote debt-financed infrastructure investment.
(iv) An infrastructure-sector-specific debt-to-revenue ratio (preferably revenue net of operating expenditures), applied to SPVs, requiring operations to be sufficiently profitable in cash terms to repay SPVs' debt obligations.
(v) The guarantees extended by subnational governments to SPVs and other local governments, which are a source of contingent liabilities.

In addition, local governments could be allowed to borrow in the capital market if they have undertaken fiscal and governance reforms and received a market-based or a similar system credit rating. All new borrowing should be in compliance with the debt limits (Liu and Pradelli, 2012).

The second issue is to determine the standard thresholds for each of these ratios. Determining fiscal sustainability at the local government level is a country-period-specific exercise, which depends on the growth rate, primary balance, interest rates, and the creditworthiness of the government. For example, countries with higher growth rates, lower interest rates, and conservative fiscal policies should have higher debt limits (Liu, 2010).[13]

Additional fiscal rules for SPVs In addition to the above indicators (iii) and (iv), Liu and Pradelli (2012) proposed some further regulations on SPVs' borrowing – that they should be set to take into account their nature and the services they provide. In addition, regulations can be imposed on lenders to contain the risks of non-performing loans from this sector. Lenders must set aside risk-adjusted capital reserves with higher reserves required for less creditworthy SPVs. If an SPV has a lower credit assessment, the required capital reserve could be raised to discourage lending to such SPV (Liu and Pradelli, 2012).

Midterm fiscal framework In some Latin America economies, to ensure that fiscal accounts move within a sustainable debt path and to better respond to shocks and cyclicality that affect local government finance, the ex ante regulatory framework also requires that local governments establish a midterm fiscal framework and a transparent budgetary process. The latter facilitates debates by executive and legislative branches on spending priorities, funding sources, and required fiscal adjustments (Liu and Waibel, 2011).

Fiscal transparency Another aspect of ex ante regulation is to carry out measures to ensure fiscal transparency. These measures include having an independent audit of subnational financial accounts, making periodic policy disclosures of key fiscal data, exposing hidden liabilities, and moving off-budget liabilities on budget. In India, several states have started to move off-budget liabilities onto the budget and have introduced a measure of consolidated fiscal deficit broader than the conventional fiscal deficit (Liu and Waibel, 2011).

Fiscal rules in Asia

A number of Asian economies have established fiscal rules as a tool to maintain fiscal discipline. The nature of these rules is summarized in Table 1.10. It is not always easy for countries to follow their rules, however. Of the four economies in Table 1.10, only Hong Kong, China has generally been successful in keeping to the rules, reflecting its generally strong fiscal conditions and low levels of expenditures.

Indonesia and Thailand have also established debt management offices to increase the efficiency of their fund-raising activities. The objectives of these offices (summarized in Table 1.11) can be seen primarily as ways to reduce the cost of government debt. However, they have only been established recently, and it is unclear to what extent they can actually contribute to lowering the amount of government debt. The Philippines has recently begun developing mechanisms to measure and monitor subnational

Table 1.10 Elements of fiscal rules in Asia

Economy	Expenditure rule	Revenue rule	Budget balance rule	Debt rule	Key elements of fiscal rules
Hong Kong, China			Yes		The budget should always display an operating surplus, i.e., an excess recurrent revenue over recurrent expenditure.
India			Yes*		Originally, the target was to reduce the fiscal deficit to 3% of GDP by 2008. The escape clause in the fiscal rule law (FRBMA) allows the government not to comply with the targets in exceptional circumstances 'as the central government may: Total central and local government debt specify'.
Indonesia			Yes	Yes	DR (since 2004) should not exceed 60% of GDP. BBR: The consolidated national and local government budget deficit is limited to 3% of GDP in any given year.
Japan	Yes		Yes		ER: The Fiscal Management Strategy in effect since 22 June 2010 introduced a Medium-term Fiscal Framework including an 'Overall Expenditure Limit' (the amount of the General Account Expenditure, excluding debt repayment and interest payment, should not exceed that of the previous fiscal year). BBR: The Fiscal Management Strategy introduced in 2010 (with effect of 2011) a pay-as-you go rule, which implies that any measure that involves increases in expenditure or decreases in revenue need to be compensated by permanent reductions in expenditures or permanent revenue-raising measures.

Notes:
BBR = budget balance rule, DR = debt rule, ER = expenditure rule, FRBMA = Fiscal Responsibility and Budget Management Act 2003, GDP = gross domestic product.
* Implemented by the Government of India until 2008.

Source: Budina et al. (2012).

Table 1.11 Role of debt management offices in emerging Asia

Country	Objectives
Indonesia	• Manage government debt portfolio in an effective, transparent, and accountable manner • Control debt issuance and procurement by maintaining a borrowing capacity that supports fiscal sustainability • Establish development financing independence by prioritizing domestic financial sources and developing an efficient and stable domestic market • Promote international cooperation in obtaining alternative financial sources as well as supporting regional financial market stability
Thailand	• Manage public debt to achieve low costs subject to acceptable risks • Develop the domestic bond market to be one of the three main pillars of the financial market • Evaluate and mobilize feasible funds to finance government's infrastructure products • Modernize technology to support the Public Debt Management Office's operations

Sources: Ministry of Finance of the Republic of Indonesia; the presentation of Mr. Widjanarko, Director, Directorate General of Debt Management at the 8th UNCTAD Debt Management Conference, Geneva, 14–16 November 2011; and Public Debt Management Office of Thailand (http://www.pdmo.go.th/en/about.php?m=about accessed on 15 February 2016).

liabilities, and the department intends to create an early warning system to identify impending local debt defaults.

Ex post insolvency mechanisms

Although ex ante regulations could mitigate the possibility of a fiscal crisis of local governments, insolvency could still occur, potentially due to mismanagement or external shocks that are beyond their controls. To complement the ex ante regulations, ex post regulation is designed to deal with an insolvent local government. If a local government becomes insolvent, negotiations with each creditor are costly, impracticable, and potentially harmful to the interests of other creditors, especially when the number of creditors is large, such as in the case of local government bond issues. Therefore, a collective framework for resolving debt claims is more appropriate. Moreover, a clear and transparent insolvency mechanism allows collective enforcement and facilitates efficient debt adjustment (Liu and Waibel, 2011).

A well-designed insolvency mechanism has multiple objectives: (i) enforcing hard budget constraints on local government; (ii) permitting an insolvent local government to maintain the provision of essential services; and (iii) restructuring local government debts and reorganizing debt management, restoring financial health and facilitating the ability of that government to reenter the capital market later. Designing an insolvency mechanism should take into account differences between public and private insolvency, choices between judicial or administrative approaches, and the operation of insolvency procedures (Liu and Waibel, 2011).

Public versus private bankruptcy The difference between public and private bankruptcy lies in the nature of services provided by public organizations. Even when government agencies become insolvent, the services they provide should be maintained. Moreover, many countries do not allow creditors to attach the assets of local governments as they do private sector assets. Additionally, local governments typically have some taxation power. Thus, the insolvency framework needs to balance incentives for the local governments to move out of bankruptcy and the need to repay creditors. In principle, the insolvency framework should take into account issues such as equitable sharing of adjustment costs, a limitation on the local government's ability to provide nonessential services, and a limitation on creditors' remedies, including the cancellation of debt (Liu and Waibel, 2011).

Judicial versus administrative approaches There are two major approaches to subnational insolvency: judicial and administrative approaches. Various hybrids also exist. Under judicial procedures, the courts make key decisions to guide the restructuring process, including when and how a municipal insolvency is triggered, the priority structure for allocating repayments to competing claims, and deciding which services should be continued. The advantage of this approach is that it minimizes political pressures. Administrative approaches usually allow a higher level of government to intervene in the entity concerned, temporarily taking direct political responsibility for many aspects of financial management.

Insolvency procedures An effective insolvency procedure contains three main elements: (i) definition of the insolvency trigger for the procedure; (ii) fiscal adjustment by the debtor to bring spending in line with revenues and borrowing in line with the capacity to service debt; and (iii) negotiations between the debtor and creditors to restructure debt obligations. Each country has its own legal definitions of procedural triggers for starting insolvency proceedings. For example, Hungary and the United States define insolvency as inability to pay; South Africa uses one set of triggers for serious financial problems and another for persistent material breach of financial commitments.

Debt restructuring lies at the heart of any bankruptcy framework. In administrative interventions, the higher level of government often restructures the local government's debt obligations into longer-term debt instruments. However, administrative procedures tend to lack the power to discharge debt. Insolvency laws attempt to balance creditor rights, the inability of a subnational entity to pay, and the continued need of the subnational governments to provide essential public services. It formalizes the relationship between creditors and the subnational debtors in financial distress. Insolvency laws preserve the legal order by superseding contractual violations with a new legal act. A procedure for local government insolvency recognizes that resolving financial distress through mechanisms guided by law is preferable to muddling through repeated, costly, and often unsuccessful negotiations.

Insolvency mechanisms in Asia

While some Asian economies have adopted ex ante measures to manage local government sustainability, except for Japan and, to some extent, the Republic of Korea, none of them has developed a comprehensive ex post insolvency mechanism. The Republic of Korea introduced local financial analysis and diagnosis (LFAD) in 2005 to guarantee soundness, efficiency, and accountability of local fiscal management. If a local government proves to be inefficient and unsound in its financial management, it is subject to a financial diagnosis and is required to devise a recovery plan in cooperation with the central government. Once the plan is executed, an evaluation of performance is carried out. However, the LFAD system could not provide a detailed procedure to deal with the insolvency of the local governments. In 2007, the Government of Japan enacted the 'Law Relating to the Financial Soundness of Local Governments'. This law requires local governments to publish their financial statistics. It also proposes procedures to enable local governments to decide on mechanisms to restore financial soundness as well as formulate plans aimed at promoting the sound management of public enterprises. The law also identifies administrative and financial measures for the implementation of such plans.

Need for capacity building

The decentralization process has placed substantial administrative and institutional burdens on local governments in most of the Asian economies. This is partly due to poor public financial management capacities in most of the Asian economies, except for Japan and the Republic of Korea.

Upgrading of public expenditure management needs to be accompanied by strengthening the capacity of local civil servants. Some measures could be adopted by Asian economies such as increasing cooperation with local regional universities to design special public financial management or rotating local government officials as in Japan. Furthermore, the central government could have measures to (i) consolidate and simplify the public financial management regulatory regimes for local governments; (ii) enhance training with regard to core regulatory requirements; (iii) provide incentives for local government officials to undertake professional study and training; and (iv) adopt new teaching technology through e-learning courses and opportunities (linked to professional accreditation) for local government officials.

To facilitate public expenditure management at the local level, the capacity of civil servants in the central government should also be enhanced. For example, in the Philippines, such capacity-building programs have equipped civil servants in the central government with knowledge to support fiscal innovations by local governments.

1.8 CONCLUSIONS AND POLICY IMPLICATIONS

As discussed in sections 1.2 and 1.4, Asian developing economies have a long way to go in their process of fiscal decentralization.[14] Issues that Asian economies face include (i) unclear and overlapping expenditure assignments; (ii) mismatches between expenditure responsibility and revenue responsibility; (iii) mismatches between responsibilities and authority, reflecting limited discretion and power in both expenditure decisions and revenue-raising authority; (iv) rising horizontal fiscal imbalances; (v) increasing informality of fiscal activities; (vi) weak local capacity in carrying out their fiscal management responsibilities; and (vii) issues relating to local government borrowing. The underlying issue is that the central government is the agency that designs the relationship between the central and local governments in many Asian economies.

Moreover, the fiscal decentralization literature has identified a number of factors that can impact negatively on welfare gains from decentralization:

- local elites or powerful interest groups having a substantial scope to capture spending decisions;
- lack of transparency of local government operations, due to their poor public financial management systems;

- excessive fragmentation of local jurisdictions, which ultimately limits the benefits of economies of scale in certain types of spending (e.g., infrastructure);
- fuzzy assignments of spending responsibilities across levels of government; and/or the central government being excessively involved in local spending decisions; and
- inadequate intergovernmental transfer systems to compensate for mismatches in revenue-raising capacities and spending needs (related to, e.g., geographic or demographic factors) among jurisdictions.

Asian economies' fiscal decentralization processes contain all of the above-named factors that can have negative welfare effects. This implies that these economies need to tackle a number of issues to enable fiscal decentralization to improve their citizens' welfare.

1.8.1 Reassessing the Roles of Central Governments in the Decentralization Process

The central government plays an important role in managing decentralization. To make decentralization work, the central government should reassess its role in the process, including:

- creating a platform for the participation of all the relevant parties, including jurisdiction citizens in the decentralization process;
- assigning an adequately powerful agency to manage the decentralization process at all levels of government;
- playing an active role in raising the capacity of local governments;
- setting up mechanisms to hold local governments accountable in fulfilling their responsibilities; and
- avoiding micromanagement and reassertion of its authority.

1.8.2 Expenditure Assignments

Getting the relationship between the national and local governments right is pivotal for a successful decentralization process that supports fiscal stability. In most Asian developing economies, expenditure assignments may need to be reassessed. The roles of each level of government's expenditure responsibilities should be clearly stipulated, and there should not be overlapping assignments among levels of governments or among government agencies at the same level. Assignments should take into account the resources available to local governments, and unfunded mandates associated with social welfare services seen in many economies should be avoided.

1.8.3 Revenue Assignments

Resources should be matched to the extent possible with the functions that the central government has assigned to local governments.

- There are some potential sound and productive sources of revenue that the central governments in Asia could assign for local governments, including fuel and vehicles taxes; property taxes; payroll taxes; and surcharges on the central personal income tax, sales taxes, and business taxes. For property taxes, revaluation of property values should be done regularly to ensure that they reflect market values.
- Local governments should be permitted to establish their own taxes, within a flexible framework proposed by the central government. However, this should be accompanied by regulations to avoid a situation wherein local governments create a large number of nuisance taxes.
- Distortions caused by taxes should be carefully monitored and kept to a minimum.
- Allowing local governments to establish their own local taxes should be accompanied with improving their tax administration, including strengthening the capacity of such administration.
- There should be an adequate regulatory framework for adoption of public–private partnerships.

1.8.4 Intergovernmental Fiscal Transfers

Having a well-designed system of intergovernmental fiscal transfers is very important for realizing the benefits of decentralization in Asia. There are a number of actions that Asian economies should take to achieve this.

- The central governments of Asian economies should assess transfer mechanisms in relation to the equalization goals and priorities regarding income levels, fiscal capacity, expenditure needs, and per capita revenues.
- For economies that have adopted formula-based equalization grant calculations, those formulas should be updated regularly, not only to capture increasing expenditure needs but also changes in revenue capacity. The formulas should also be improved to increase their transparency and the predictability of revenues.
- Performance-based conditional grants should be adopted as an important instrument for intergovernmental transfers, but care should be taken to minimize negative incentive effects.

1.8.5 Fiscal Risks and Fiscal Sustainability

To mitigate fiscal risks, Asian economies should have strategies to better manage the borrowings of local governments and quasi-local government agencies. Asian economies should improve their local government financial information management systems and integrate them into the national finance information system.

Central governments in Asia should consider changing their current approach to controlling local government borrowings from the administrative control approach to either rule-based approaches (for developing economies) or a mixture of rule-based and market-based approaches (for economies with well-developed financial markets).

Budget constraints should be hardened. Central governments should commit to a no-bailout policy to discourage local governments from running unsustainable deficits. Some policies to harden budget constraints include (i) giving more expenditure and revenue-raising autonomy to local governments, and (ii) stopping unconditional bailouts of local governments that experience large fiscal deficits or fiscal crises.

Land financing should be limited in countries where land is used as the main form of financing for major infrastructure projects. In case land financing is used, land values should be evaluated at the beginning of the project, not after the project finishes.

Local government bond markets should be deepened, and the range of bonds should be expanded. This implies that Asian economies should further strengthen their bond market regulations and standardize reporting and monitoring frameworks. The credit analysis skills of civil servants and rating agencies should be improved.

Central governments in Asian economies could also require local governments to develop midterm fiscal frameworks and transparent budgetary processes. Ex ante fiscal rules should be embedded in such frameworks. Fiscal transparency at the local government level should also be improved. To better manage the borrowings of local governments and increase the efficiencies of funds raised, Asian economies could also establish debt management offices similar to those in Indonesia and Thailand.

So far, most Asian economies lack a mechanism to deal with insolvency of local governments. Three factors should be taken into account in designing an insolvency mechanism: (i) distinguishing between insolvency of local governments (and other quasi-local government agencies such as SPVs) and that of private firms; (ii) determining the approaches to deal with insolvency; and (iii) designing the insolvency procedures.

Besides designing ex ante regulations and ex post insolvency mechanisms, Asian economies could set up an early warning system. Having such a system could help to identify local governments with high fiscal risks, and enable them to take necessary actions to prevent fiscal crises. ADB (2014) proposed a core set of early warning indicators, including debt burden, ratio of debt to on-budget revenue, debt service ratio, debt dependency ratio, and share of short-term debt.

1.8.6 Capacity Building

Upgrading of public expenditure management needs to be accompanied by strengthening the capacity of local civil servants. Some measures could be adopted by Asian economies such as: (i) increasing cooperation with local regional universities to design special public financial management courses; (ii) rotating local government officials; (iii) consolidating and simplifying the public financial management regulatory regimes for local governments; (iv) enhancing training with regard to core regulatory requirements; (v) providing incentives for local government officials to undertake professional study and training; and (vi) adopting new teaching technologies for local government officials. The capacity of civil servants in the central government should also be enhanced.

NOTES

1. Indonesia and the Philippines adopted decentralization policies after the fall of authoritarian regimes (the Philippines' Marcos in 1986 and Indonesia's Suharto in 1997). Meanwhile, the dominance of the military in politics, coupled with pro-democracy movements, led to the development of decentralization frameworks. The PRC and Viet Nam embarked on decentralization in response to increasing demands by people for participation in development and for good governance at the local government level (White and Smoke, 2005).
2. But in practice, local governments in the PRC have different methods to overcome fiscal constraints, including use of off-budget solutions and 'inappropriate' use of loan funds. Moreover, they have freedom in using nontax revenues.
3. However, there is a duplication of tax bases between national tax and local taxes. For example, individual and corporate incomes and corporations are taxed at the national, prefecture, and municipal levels and private consumption is taxed at the national and prefectural levels (Aoki, 2008).
4. This trend, however, has not been seen recently (Manasan, 2015).
5. Paternal programs are ones in which higher levels of governments finance equalization at lower levels; fraternal programs are programs in which governments at the same level establish a common pool, to which rich jurisdictions contribute and from which poor jurisdictions draw.
6. While some sources estimate this figure to be about \$120 billion, of which one third is commercial borrowing, other sources argue that this figure could amount to \$1,700 billion with additional lending commitments of \$1,900 billion (i.e., more than 40 percent of GDP) (Lewis and Searle, 2010; Naito, 2015).
7. The jurisdiction's 'production potential' is directly related to the quality and quantity of the local labor force (Hagist and Vatter, 2009).

8. For example, trade-related shocks have had comparatively large impacts on countries with high degrees of export concentration; vulnerability to changes in the terms of trade; and dependence on tourism, emigrant remittances, and foreign direct investment. Meanwhile, sudden stops in capital flows have tended to affect more frequently and strongly countries relatively more dependent on external financing (i.e., with large current account or fiscal deficits, or large external debt refinancing needs); more dollarized; with inflexible exchange rate regimes; and with weaker financial systems (Fanelli and Jimenez, 2009).
9. 'Borrowing platforms' are entities, either a local-government-owned corporation or a public financial institution, which takes bank loans on behalf of the local government and which is backed by government guarantees, collateral such as land or other public property, or a legally secured future cash flow of the projects concerned (Fan and Lu, 2012). An SPV is also a type of borrowing platform.
10. According to Elliot, Kroeber, and Qian (2015), the size of shadow banking in the PRC was about CNY25 trillion, or 43 percent of GDP in 2013, much smaller than the size of the shadow banking in the United States, which was 150 percent of GDP.
11. Recently, the PRC authorities have issued a number of documents and guidance to strengthen the regulation of shadow banks, and to outline the framework and principles regulating how local governments raise, use, and repay their debts. The Ministry of Finance also approved a local debt swap scheme (Naito, 2015).
12. The PRC central government has recently recognized the risk of local governments caused by using land as collateral for borrowing, and required banks to provide loans to local governments at their current market value rather than at their projected value after the investment (Naito, 2015 and Sano, 2014).
13. For more details on analytical tools for monitoring subnational debt indicators and determining debt thresholds, see Liu and Pradelli (2012).
14. See Appendix Table 1A.1 for a summary of intergovernmental fiscal relationships in selected Asian economies.

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APPENDIX

Table 1A.1 Summary of intergovernmental systems in selected Asian economies

	Resource adequacy	Fiscal discretion	Performance incentives	Management capacity
Japan	LG current and capital resources adequate	Tax authority over rates and bases limited. Spending controlled to a large degree by CG through delegation of responsibility and mandates	CG uses incentives in block grants to encourage revenue effort. Some performance incentives incorporated into specific purpose grants	High-quality tax administration and expenditure management, within narrowly assigned responsibilities
Korea, Republic of	LG current and capital resources seem adequate. Recently increasing pressure due to additional demand for social welfare services	Authority over local tax bases and rates is limited. LGs have reasonable control over spending their own-source revenue, but other spending is controlled to a large degree by central government	Some incentive mechanisms to encourage better performance	Good quality tax administration although too little use of tax rate authority. Good expenditure management
People's Republic of China	LG resource constraints, increasingly problematic, especially at the lowest level of government	Limited formal fiscal discretion. Off-budget activity significant	Performance incentives focused on economic development	Good quality tax administration and expenditure management, albeit significant variation
India	Large urban LG resources reasonably adequate; small urban and rural LGs severely resource constrained	LGs have little fiscal discretion. States control local taxing and spending to a large extent	States have made significant use of incentives, but reward focus on past not future behavior	Weak tax administration and expenditure management

Indonesia	Some LGs have insufficient funds	LGs set tax rate under the centrally imposed ceilings; LGs have nearly complete discretion over spending	Used to use performance incentives, block transfers, but discontinued	LGs need to reinforce their tax administration and spending management. Large cash reserves
Philippines	Inadequate resources for many LGs, particularly municipalities	LGs set some tax rates but can make changes only every 3 years. CG influences LG spending; unfunded mandates rising	Explicit use of incentives limited to employment of transfer intercept in cases of nonrepayment of loans	LGs need to improve taxes and spending management. Significant cash reserves
Thailand	LGs resources need to be linked to responsibilities and the legislated amount of the shared tax transfer should reflect these responsibilities	Taxing discretion limited to minor charges/fees; spending heavily influenced by CGs	No experience with performance incentives	Using some measures to increase local efforts to improve taxes administration and expenditure management – such as tax system computerization and contracting out services
Viet Nam	LGs resource adequacy questi-onable; especially for development and maintenance of infrastructure	LGs have limited tax authority. Moderate discretion over management of service delivery	No experience with performance incentives	Tax administration completely centralized. Spending reasonably well managed, low wage bills

Note: LG = local government, CG = central government.

Source: Lewis and Searle (2010).