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DECENTRALIZATION AND PUBLIC SERVICE DELIVERY IN ASIA

Giorgio Brosio

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Decentralization and Public Service Delivery in Asia

Giorgio Brosio
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ABSTRACT

This paper assesses how decentralization can contribute, if proper political and fiscal institutions are present, to improving service delivery in Asia. In other words, decentralization is an opportunity and a challenge at the same time. The paper presents the salient characteristics of decentralized government in Asia and then focuses on the analysis of critical issues leading to “partial decentralization” that is common to most models. Consideration is also given to the emerging challenges common to most Asian systems. Finally, the paper addresses the issue of decentralization in the education sector. This is a crucial sector in terms of costliness and of impact on national growth and individual opportunities, where, however, the outcomes of decentralization are difficult to assess.

Keywords: decentralization, service delivery, fiscal federalism

JEL Classification: H77, H75

I. INTRODUCTION

Asian countries present almost any conceivable model of decentralized governance. Countries range from de jure federal systems (such as India and Pakistan), to de facto quasi-federal systems (People's Republic of China [PRC], although there are objections to this classification), regional systems of governance (Indonesia, Japan, and the Philippines), unitary systems (Republic of Korea), and finally partly (Thailand) or mostly deconcentrated systems (Cambodia and Viet Nam). Countries also show huge variation in the usual indicators of fiscal decentralization, such as the share of subnational expenditure in total general government expenditure. According to this indicator, the PRC appears as the most decentralized country in the world with more than 70% of general government expenditure made at the subnational level, while Nepal with barely 9% appears to be among the least decentralized.

India and the PRC are almost a world apart in terms of analysis and evaluation of intergovernmental relations. Each Indian state and each Chinese province is so big that they have thousands of lower level units under them and each of them has developed (formally in India as the Panchayati Raj reform and less formally in the PRC) a distinct system of intergovernmental relations that is impossible to evaluate in a single paper.

Decentralization attempts—and intents—pervade almost every Asian country. However, processes with far-reaching goals are still in the initial stage, or are proceeding at a very low speed. This is the case of Cambodia, Thailand, and Viet Nam, where the intent of reform is to replace deconcentration with political decentralization. Only a few processes started in the last 2 decades have been almost completed (Indonesia and Japan). Decentralization is like a pendulum; there are frequent cases in which governments reconsider the merits of the devolution of power and assign some responsibilities to the center (as in the Philippines).

The prevailing pattern seems to be based on piecemeal reform applying to distinct components of decentralized governance. Very recent reform in Japan has focused on strengthening subnational tax autonomy. In India, the introduction of value-added tax (VAT) can also operate in this direction. There are also some centripetal moves, such as the partial recentralization of education in the PRC or the suppression of elected local councils in Pakistan since 2008.¹

There is at least one Asian case (Japan), where, following the various reforms, the institutions of decentralized governance are now complying with practically all the requirements suggested by the theory and good practices.

It is possible that the opportunities in terms of better service provision are not yet fully exploited by local officials. Only analysis of effective outcomes could confirm the expectations. A very recent survey of empirical literature on service delivery in Asia (Ghuman and Singh 2013) shows inconclusive results. After careful selection, the analysis focused on 32 studies that consider the main aspects of decentralization, such as access to services, efficiency in provision, and improvement of quality. Out of 32 sample studies, the analysis shows that in 13 studies the impact of decentralization on public service delivery is positive. In 11 studies, the impact of decentralization is reported to be

¹ In Pakistan, the Musharraf administration proceeded toward a devolution of functions in favor of local governments around the same time as Indonesia. This was more a way of avoiding the provinces, which were also centers of civilian political power. This devolution was reversed with the return to democratic rule in 2008, and a new constitutional amendment (18th Amendment) devolved full local functions to provinces in 2010. However, inadequate attention was paid to either financing or implementation capacities—and many of the functions appear to have become unfunded mandates with a continuing deterioration in the standards of public service delivery and outcomes.

negative; 8 studies have revealed mixed results. This is not surprising. At the same time, the use of different methodologies in the studies reviewed does not allow strong general conclusions.

The theory and good practices can suggest how to extract the best results from decentralized governance, but they cannot ensure its superiority over other governance modes. Sometimes, reaping the benefits of decentralization may be hindered by lack of capacity at the local level. Building capacity is often neglected by governments.

Many challenges facing decentralized governance in Asia—such as the region’s proneness to natural disasters or the expanded availability of natural resources—are common to other regions of the world. Some challenges have a peculiar intensity in Asia, such as the need to create subnational tax autonomy in a region that traditionally relies on a relatively low tax burden. For some challenges, the literature provides consolidated suggestions; for others, evaluation and suggestions are still tentative.

These considerations shape the structure of this paper that starts with a methodological section focused on definition and approach. Section III presents the salient characteristics of decentralized government in Asia and section IV is devoted to the analysis of critical issues leading to “partial decentralization” common to most models. The rather large section V concerns the emerging challenges. Section VI presents a few solutions to emerging structural problems of intergovernmental relations, such as asymmetric federalism and contracting.

Section VII provides an empirical analysis of decentralization in the education sector. In fact, education could provide a convenient ground for the analysis of the effective outcomes of decentralization. There are, however, enormous limitations in the availability of the information needed to conduct meaningful cross-country comparisons.

A common denominator of the analysis in the paper is the stress on the fact that improvements in outcomes, especially in terms of service delivery, do not depend on the intensity of decentralization policies, but rather on their quality, meaning above all their capacity to promote local accountability.

II. PROBLEMS OF DEFINITION AND APPROACH

A. Definition

For analytical purposes, this paper considers decentralization as the *transfer of decision-making authority to governments situated below the national government*. The focus is on decision-making power and not necessarily on transfer from higher levels to lower levels of government of resources to spend, or to collect, as normally implied by the literature on decentralization.

For instance, the devolution of the responsibility of paying teachers’ salaries—which the literature usually considers an example of fiscal decentralization, because it shifts expenditure from a higher to a lower level of government—cannot be considered a manifestation of education decentralization, no matter the size of the amounts involved, if hiring (and firing) of teachers and the determination of their salary scales are still done at the central level. Also, the transfer of a very productive tax to subnational governments—another example of fiscal decentralization—does not make a system more decentralized, if the beneficiary governments have no discretionary power to adjust the collections to their needs. To continue with the examples, the Republic of Korea appears

very decentralized according to its present classification of expenditure that merges local with educational expenditure, which is managed by local education boards, showing that 60% of total general government expenditure is now subnational. One has to question, however, whether the inclusion of education is correct, given the mixed character of education boards (Kim 2011).

Box 1: Decentralizing Decision Making in Education

A recent work by the Organisation for Economic Co-operation and Development (OECD) shows the importance of using variables related to the decision-making power assigned to levels of government, rather than fiscal variables (Fredriksen 2013). The intent of the work is to assess the impact of decentralization on educational outcomes, measured by students' scores in Programme for International Student Assessment (PISA) tests. Two sets of indicators of decentralization are used. The first one includes indicators referring to level of government (central, intermediate, local, and schools), to which decisions relevant for education are assigned. Examples are management of personnel, planning of activities, and use of resources (OECD 2012). The second set includes the typical fiscal indicators, such as the share of expenditure made by, or of revenue assigned to, subnational governments. The results are quite interesting. First, decentralization increases investment for education and, to a lesser extent, also current expenditure. This may be a welcome result. However, there is a very weak relationship between increased investment and recurrent expenditure and student scores. More precisely, the correlation is positive but not significant, meaning that spending more is not enough. Second, there is a strong, positive, and significant relationship between student scores and the devolution of decision-making autonomy both to subnational governments and/or to schools. Third, student scores are even higher when autonomy for subnational governments is combined with autonomy for schools, as in the case of Japan, to name an example in Asia.

Sources: Fredriksen (2013); OECD (2012).

This definition also helps to tackle another problem linked to the distinction between decentralization and deconcentration. Decentralized governance is usually associated with the popular election of local officials, and the process leading to it—labeled as “political decentralization”²—is contrasted in the literature with deconcentrated governance, where central government officials operating at local agencies are assigned with discretionary decision-making power. Popular elections potentially give political officials more legitimacy than the transfer of powers inside bureaucracies and are expected to make the officials more accountable to their electorate. However, it would be wrong to directly contrast decentralization with deconcentration and withdraw from the analysis the cases in which deconcentration is occurring. This would imply, as an eloquent example, excluding from consideration most of the education reforms focused on the strengthening of school-based management that are the mainstay of Asian reforms.

B. Criteria for Evaluation of Decentralized Governance

There are two main evaluation approaches. The first one looks at the institutions in place and their potential to reach the goals assigned to decentralization. The second is empirical and looks at effective outcomes. Evaluation is performed in multiple ways depending on the goals assigned to decentralization processes. On the one hand, for the leaders of ethnic minorities, autonomous decision-making power is the only and ultimate goal of decentralization. On the other, individual members of these minorities are likely to be more concerned about their well-being, as are general citizens. Their expectations are for better and cheaper access to services and for adaptation to their preferences. National government finance ministers look preferably at the budget impact of

² See Annex Box for various definitions of decentralization.

decentralization: successful decentralization processes should bring in a reduced pressure on the national finances.

The basic instrument of applied economics (total – consumer + producer – surplus) and its variations provide a fairly adequate measure of the impact on individuals of changes in policies, reflecting efficient use of resources. In this approach, decentralization processes, or systems, are expected to lead to higher levels of service provision with no increase of cost; or, alternatively, to bring about lower-cost service provision—leading to the need of less revenue—with the same level of service provision. They are also expected to lead to some combination of the two, allowing for a larger total surplus. Higher levels refer to both quantity and quality and, being subjective, evaluation includes adaptation of service provision to local references, which is the major traditional expected gain from decentralization. Changes in surplus are unequally distributed, requiring the use of a social welfare function for evaluation.

Evaluation of institutions. Enhancement of surplus through decentralization requires that the proper incentives are in place. More precisely, it requires that institutional, political, and fiscal arrangements provide the relevant stakeholders with the incentives to behave efficiently, i.e., to focus on increasing the surplus.

To verify the existence and functioning of these incentives, this paper will make use of the concept of partial decentralization. Partial decentralization derives from a mismatch between devolution of functions and devolution of finance to the disadvantage of the latter and can be extended (Ahmad et al. 2006) to reflect all the situations in which the basic ingredients of an accountable system of subnational governance are missing, either because of improper structuring of decentralized institutional arrangements or, as is frequently the case, because their workings are compromised by a concomitant reform.

This happens when the central government or another level of government implements a policy that intersects or contradicts with the workings of decentralized arrangements. Concomitant reform, which is frequently overlooked in the literature, reduces accountability of local elected politicians, which in turn becomes the cause of weak budget constraint, little influence over allocation of resources, and other evils (see section IV.)

Evaluation of outcomes. The empirical literature tries to overcome the multiplicity of evaluation concerns by singling out the dominant goal of decentralization. This may be growth, investment in infrastructure, convergence of service provision, or some other goal. Although these goals can be operationalized for analytical purposes, they represent hybrid approaches to decentralization processes, transferring to the decentralization context concepts derived from other perspectives and policies that may not properly reflect the intents of decentralization. For example, the quest for higher growth has characterized a distinct stage of decentralization in the PRC, but is not the most common justification of decentralization.

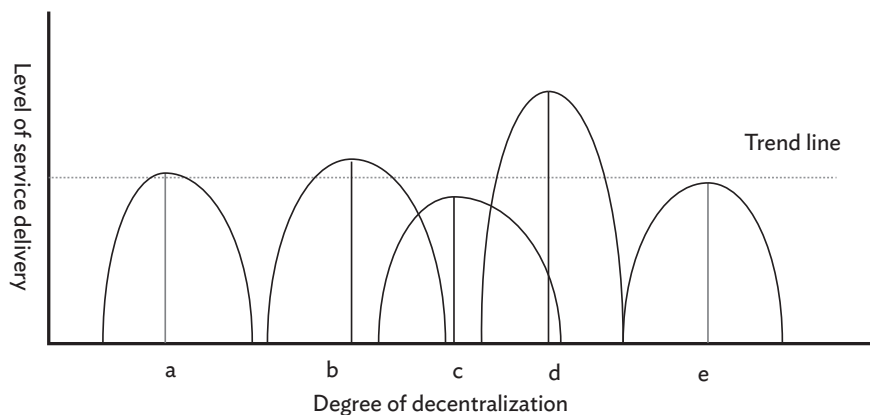
Intensity of decentralization and level of service provision. The analytical and empirical literature on fiscal federalism tends to strictly correlate higher decentralization with improved levels of service delivery. Although there is ground to expect—and we do in fact frequently observe—that decentralization helps improve service delivery, this does not mean that there exists a close and invariable relationship between the two phenomena, implying that the higher the intensity of decentralization the better the expected level of service delivery. In other words, the relationship between decentralization and

service delivery, or other expected outcomes of decentralization, such as growth, is not global, but rather local (Salmon 2013). Box 2 illustrates this issue in more detail.

Box 2: Intensity of Decentralization and Service Delivery

Figure B1.1 (and inspired by Salmon [2012], with reference to the relationship between decentralization and growth) illustrates the argument that it is incorrect to expect that the more countries decentralize, the better their level of service delivery will become. This is because service delivery has other determinants than decentralization and because the overall local context impacts on the effectiveness of decentralization. The horizontal axis of the figure shows the degree of decentralization and the vertical axis the level of service delivery. The five inverted U-shaped curves refer to five hypothetical countries and show the relationship between the level of decentralization and that of service delivery in the country. The idea behind the shape of the curves is that there is an optimal level of decentralization that is not necessarily the highest attainable, but that is determined by the political and institutional context of each country. For example, in relatively homogenous countries, such as Cambodia or Viet Nam, the level of decentralization that ensures the best outcomes in terms of service delivery could be relatively low, e.g., corresponding to the introduction of a single local layer (point *a* in the figure). In countries with deep ethnic or cultural differences between regions, a higher level of decentralization would be more effective, e.g., corresponding to the introduction of a regional system with a large devolution of powers, or to a federal system (points *d* and *e* in the figure). Given the importance of the overall context, it is also quite possible that two countries with different levels of decentralization have similar levels of service provision. This would be the case, in the figure, of countries such as *b* and *c*. Points *i* and *n* situated at the intersection of their U-shaped curves show that a similar level of service delivery can be reached with two distinct levels of decentralization. As a matter of fact, country *c* has two different levels of decentralization with similar levels of service provision.

Box 2 Figure: Relationship between Level of Decentralization and Level of Service Delivery



Source: See the reference to Salmon (2013).

The last message of the figure is that even small changes in the intensity of decentralization can bring about substantial gains in service delivery. This implies that a country is generally sensitive to decentralization reforms. This could be the case in the figure of country *d*, which has a relatively slim U-shaped curve. For example, the introduction of even a soft version of school-based management in the Philippines seems to have led to fairly appreciable gains in school outcomes (see Box 10 of this paper).

This consideration has far-reaching implications for decentralization strategies and policies. First, the institutional and sociopolitical context of a country can require a big bang approach to decentralization to produce appreciable gains. This could be the case of highly divided societies, such as Sri Lanka and possibly Nepal, for which federalization may appear the most effective option. In

other countries with substantial homogeneity across regions, even a small transformation in overall intergovernmental relations, such as the transformation from a deconcentrated system to a unitary lowly decentralized system, can be quite effective in terms of obtaining results. This could be the case in Asia of Cambodia and Viet Nam. Second, not all the regions of the same country need to be involved to the same extent in the decentralization process. This process can take place at variable speed giving rise to asymmetric arrangements (as explored in subsection VI.A and Box 8). Third, in all countries, even small steps, i.e., circumscribed changes in some specific areas of intergovernmental relations, can produce appreciable results (see Box 11 with reference to the increase in school autonomy in the Philippines).

III. SALIENT CHARACTERISTICS OF RECENT DECENTRALIZATION PROCESSES IN ASIA

On a comparative basis, Asian reforms share common traits with the rest of the world, but also have distinct traits. Among common traits, the passage from autocratic/dictatorial systems to democracy is frequently behind decentralization (Cambodia, Indonesia, the Philippines, Thailand, and Viet Nam). However, the response has been very different, ranging from almost pure deconcentration to outright regionalization.

The creation of a regional system is the salient characteristic of the most far-reaching decentralization reforms (Indonesia, Japan, and the Philippines). This is in line with most international experience and has a clear rationale: typical local functions are already assigned to local governments in almost all systems. When countries want to proceed with further decentralization, they need to transfer down the so-called wide area functions, such as most tasks in the areas of education and health. These functions impact spatially on relatively large jurisdictions, such as the regional ones.

Another common factor driving decentralization is the quest for efficiency, most evidently in Japan. Efficiency is also a driving force behind decentralizing reforms in the education sector, as most Asian countries have a clear perception of the needed and/or positive impact of better educational outcomes on growth.

Accommodation of regional demands for autonomy (or independence) based on cultural or other differences has recently become a driving force behind decentralization. This is the case of Sri Lanka and Nepal, and could be in the future the case of Myanmar. In Indonesia and the Philippines, the regionalization process was largely driven by the need to prevent the strengthening of the centrifugal pressures present in these large and diverse countries.

Coming to distinct characteristics of Asia, the first is the context of rapid economic growth that has in the recent past pervaded most Asian countries. Growth (that some scholars also attribute to decentralization) has many impacts. It creates larger tax bases facilitating the financing of subnational governments. If growth is associated with more income inequality, however, it creates an additional challenge to decentralization, increasing the inequality potential associated with larger autonomy. This is of peculiar importance in Asia where social protection systems are frequently incomplete, when not missing.

Table 1: Basic Structure of Decentralized Government in Asia

Countries and Estimated Population (million)	States/Provinces/ Prefecture	Local/Municipalities	Share of State/Provincial Local on Total Exp.	Share of Local
Japan (128)	47	1,800	20%	40%
Republic of Korea (44)	16	232	20%	40%
People's Republic of China (1,354)	33	333 prefectures, 2,010 counties, a larger number of townships	20%	50%
India (1,200)	28 states, 7 union territories	Many thousands	33%	33%
Pakistan (180)	7	(Presently do not conform as elected local governments)	28%	5%
Cambodia (15)			19%	2%
Indonesia (237)	33	398 districts and 93 municipalities	40% in total	
Philippines	2 autonomous regions, 80 provinces	1,494 municipalities, 140 cities	11%	14%
Indonesia (237)	34 provinces of which 5 with a special status	451 districts	7%	28%
Thailand (67)	76 provinces	938 districts plus municipalities	26% (includes local governments)	

Sources: National statistics agencies of various countries and Lewis and Searle (2010).

The second characteristic is the spatial patterns of growth, also associated with rapid population growth. Asian countries are witnessing impressive urbanization with the surge of huge megacities absorbing a large share of the national population. Urbanization combined with megacities—urban corridors and city-regions—produces many impacts on decentralization. It requires specific innovative governance institutions, such as metropolitan governments, or the merging of city governments with wide area governments. Urbanization requires a huge investment for infrastructure to provide basic services and creates huge environmental externalities needing correction at the local level. Finally, it requires the assigning of adequate tax bases to cities to make them financially self-sufficient, allowing intergovernmental transfers to play a stronger equalization role with regard to the poorest rural areas.

Another distinct Asian characteristic is the overall generally small tax burden. There are structural reasons for low taxes on gross domestic product (GDP), such as the comparatively small role in Asia of personal income taxation. There are also specific structural reasons. For example, Malaysia, Pakistan, and Singapore have still to introduce VAT. A low tax burden is, at the same time, a liability and an asset for decentralization. It is a liability because the present day scarcity of fiscal resources is shifted to local government and because it brings tighter competition among levels of government. It is also an asset since a lot of fiscal resources are still untapped, providing more room for tax increases as long as governments and/or citizens are ready to accept that decentralization may lead to a larger public sector and to a higher fiscal burden.

Another salient feature impacting on decentralization is the tradition of a strong and/or authoritarian central government. This explains many traits such as (i) the slow path of reforms since central bureaucracies are reluctant to relinquish power; (ii) the widespread attachment to deconcentration; (iii) the continued guidance provided by central government; and (iv) the reliance on unfunded mandates.

IV. FOCUS ON PARTIAL DECENTRALIZATION

A. Assignment of Policies between Levels

As most of the literature on decentralization in Asia recognizes, assignments are broadly in line with the tenets of normative theory. Detection of detailed problematic features in the assignment of responsibilities, however, requires a case-by-case analysis of the legal texts in each country and their careful interpretation, which is beyond the reach of this paper. A few crosscutting issues in expenditure assignments are immediately evident and worth consideration.

The first issue refers to the frequent fuzziness of the assignments that is mostly a legacy of the former dominant role of central bureaucracies. In turn, fuzziness derives from the intersection of provisions between the general laws on decentralization, whose task is to list the functions assigned to each level, and the sector laws (e.g., education, health, and public works). For example, in the Republic of Korea—whose case is far from being unique—the Local Autonomy Act defines local and central functions. However, it also has a general proviso by which “the functions can be changed, if individual laws define local functions in a different way” (Kim 2004).

Another issue is the prevalence of concurrency of assignments rather than of separation. In the education sector, concurrency means, for example, that curricula for primary education and standards are centrally defined, teachers are managed at the regional level, and schools are built and maintained at the local level. There is a rationale for concurrency: each level of government is contributing in the areas in which it has a comparative advantage over the others, but concurrency creates huge problems for accountability. When outcomes are not satisfactory, is it because curricula are inadequate, because teachers are not well managed, or rather because schools are not built or are poorly maintained? Concurrency is a clear example of partial decentralization. It also reflects a propensity toward keeping systems centralized, since it typically implies keeping regulatory functions at the center, leading to a curtailment of the discretionary decision-making power of subnational governments. Increasing accountability hence demands, when possible, separation of assignments, such as primary schools to subnational governments and secondary schools to the central government.

A second issue is the persistence of the so-called agency-delegated functions, whereby the central government assigns functions to subnational governments without a specific legal framework regulating the transfer. This means the persistence of deconcentration, but more importantly a possible weakening of accountability, because of the lack of clarity about the level of government that is effectively responsible for the function. This is clearly a legacy of previous centralism, but its use for ensuring service provision must be minimized. One can easily imagine cases where the central government needs to operate through the subnational governments, even in a fully fledged decentralized system. These cases can properly be solved, as is increasingly done in the industrialized world, through contracting between levels of governments, rather than through authoritarian delegation. Contracting—which is illustrated in more detail in subsection VI.B—allows reaching

solutions tailored to each case and provides correct incentives to the contracting parts, being a non-forced solution.

A frequent feature—or even the interface of agency-delegated functions—is the presence of unfunded mandates,³ through which the central government requires its subnational units to provide a service, but does not remunerate them. The unfunded obligation impacts negatively on subnational finances. It frequently induces the mandated governments to incur debt with the consent of the national government.

B. Local Fiscal Autonomy

Subnational governments in Asia are assigned with typical subnational taxes, but the share of own taxes on total revenue is generally rather low. There is extended use, on frequently shaky legal grounds, of a variety of fees and charges that, although representing own revenues, are shaped in ways that (i) create obstacles to the smooth functioning of the domestic market, (ii) distort incentives, (iii) have an erratic incidence on the distribution of income, and (iv) create opportunities for corrupt practices.

Finding appropriate tax bases for the intermediate level of government is a major emerging challenge, whose solution is the focus of the quite detailed subsection V.B.

The third problem is reluctance, or timidity of subnational governments to make discretionary use of the tax instruments available to them. Fortunately, there are exceptions to this trend, as in the case of the Indian city of Bangalore (see Box 3), where steady commitment to improve the administration of the property tax, also by promoting citizens' cooperation, has brought substantial increases in collections and hence in the capacity of the city government to improve service delivery.

Creating own-source revenue handles is a major step to move away from partial decentralization. Own-source revenues at the margin are recognized as critical for establishing incentives for subnational governments to effectively provide services and manage spending efficiently (Ambrosiano and Bordignon 2006). Own-source revenues are also critical in establishing a hard budget constraint. However, ensuring that states and local governments have the incentives to use them depends on the design of the transfer system. If transfers are designed to meet deficits and gaps, there will be no incentive to use own-source revenue handles and manage spending efficiently.

³ Examples of unfunded mandates in the Philippines include the salary standardization law, the Magna Carta for Health Workers. Both legal texts impose on local governments to pay additional remunerations to their employees without compensation. Unfunded mandates include also the requirement for local government units to pay for the health insurance premiums of their indigent residents.

Box 3: Property Tax Reform in Bangalore: Engaging Taxpayers with Steady Commitment to Reform

The adequacy and quality of public services in Indian cities leave a lot to be desired. Collections of local taxes fall far short of what is needed to cover the costs of service delivery. In India, as in many countries, the property tax is a major fiscal instrument available to local governments for raising their own revenues, but is relatively underused and has limited buoyancy relative to the overall growth in economic activity. Administrative, regulatory, and technical shortfalls, weak administration, and strong political interests to limit expansion of tax base and enforcement of the tax explain this.

Following the 74th Constitutional Amendment Act of 1992, additional administrative and fiscal functions have been devolved to local authorities. Cities are now responsible for designing strategies to maintain and improve public services, and finding instruments to finance these activities in a sustainable manner. In response to growing revenue needs for financing infrastructure, public services, and other local amenities, many local governments have initiated reforms to improve the performance of their local fiscal tax handles, in particular the property tax (Lall and Deichmann 2006).

Bangalore's property tax reform (Ahluwalia 2011) offers one of the most encouraging examples. In April 2000, the Bangalore Municipal Council (BMC) introduced a self-declaration scheme, based on guidelines for assessment—using a simple and transparent formula which included the location of the property, its built-up area, type of construction, usage (residential or commercial), occupancy (with a rebate for own use), and age (for depreciation). The tax rate was 20% for residential property and 25% for nonresidential. Owner-occupied property received a 50% rebate. The tax assessed under the scheme would be in force for the following 5 years, thereby creating an environment of certainty for taxpayers. A total of 50 payment clinics were opened to assist taxpayers filing returns. A campaign was carried out for 45 days in newspapers that involved answering frequently asked questions about the self-declaration scheme so as to build taxpayer confidence.

The initial results were astonishingly good. Property tax collection shot up 33% in 2000–2001. There was an increase in the collection rate, in the number of properties on the tax roll, and in tax per property. However, growth in collections dropped sharply to 3.8% and 2.5% in the subsequent 2 years. The system needed to be supplemented by strong enforcement, random checks, and stringent recovery provisions. Such efforts in 2003–2004 and 2005–2006 yielded revenue growth of 15%–16% per annum. It was clear that buoyancy in revenue collection from property tax could only be ensured if property valuation is revised at regular intervals.

An area-based system for assessment of properties—known as the unit area value system according to which the city is divided into different zones with homogenous property values—was adopted in 2007 with effect from 2008/09. This reform was carried out with the active support of civil society and media. The new legislation also stipulates a mandatory random check of 15% of the returns filed each year and provides a penalty for false declaration. The tax paid by all taxpayers is uploaded on the city website and taxpayers can see how they have paid compared with their neighbors. This has a positive reinforcing effect on payments. In addition, collection registers are being computerized.

The results have been more than satisfactory. The number of properties covered greatly increased, and the amount of tax collected has increased by 2.5 times between 2007/08 and 2010/11.

Sources: Lall and Deichmann (2006), Ahluwalia (2011).

C. Structure of Subnational Taxes in a Sample of Asian Countries

The structure of local taxes in Japan largely obeys most of the precepts of the normative theory. Subnational governments have fairly equilibrated access to all major tax bases: personal and corporate income, consumption, and real property. This reduces to some extent spatial disparities and the risks of revenue falls deriving from asymmetrical shocks to the economy. For most of these taxes, Japanese subnational governments have some discretionary power to determine their rates. (As a matter of fact,

they enjoy, de jure, one of the largest discretionary powers within Organisation for Economic Co-operation and Development [OECD] countries.)

Local tax rates and bases are determined in Japan by the central government. However, the Local Tax Act defines the tax bases and standard tax rates for 11 out of 16 local taxes. Legally, local governments and councils can adjust their rates up to 50% above or below the standard rate.

In reality, Japanese subnational governments do not make much use of their own power to change tax rates because of the associated political burden. At the provincial level, only 4 of 16 jurisdictions had changed a tax rate from its standard rate as of 2004, and only 10 of the 250 lower level governments (Mochida 2008).

Moreover, subnational governments in Japan have the authority to introduce new taxes whose structure has to comply with some basic conditions (commerce clause, national interest, and reasonable burden). While Japanese subnational governments are quite reluctant to set tax rates, they are quite inclined to start new taxes—such as on industrial waste, hotel accommodation, and fishing permits—that generally have a low revenue potential and high collection costs.

In contrast to the limited use of flexible tax rates, granting of tax reductions and exemptions is considerable, amounting to around 10% of local tax revenue.

Tax assignments in the PRC are also broadly consistent with normative tenets (see Table 2). Major problems emerge, however. When the tax bases are shared between levels of government, this means that the concerned taxes are in fact centralized, as all their essential elements are defined centrally, while only the revenue is shared. Since this is the case in the PRC of the main taxes, subnational tax autonomy is curtailed.

Table 2: Tax Assignments in the People’s Republic of China: Sharing Rates

	Central	Subnational
Tariffs	100	0
Consumption Tax	100	0
Value-Added Tax	75	25
Business Tax	3	97
Stamp Tax on Security Exchange	97	3
Personal Income Tax	60	40
Company Income Tax	60	40
Resource Tax	0	100
Urban Maintenance and Development Tax	0	100
Urban Land Using Tax	0	100
Agriculture and Related Tax	0	100
Tax on Contracts	0	100
Vehicle Purchasing Tax	0	100
Tax on the Use of Arable Land	0	100

Source: Shen, Jin, and Zou (2012).

Furthermore, the tax rates applying to provincial taxes are set centrally, but provincial governments have an important impact on the amount of tax revenues raised within their jurisdictions, being in charge of administration and collection. In addition, provincial governments have a

considerable amount of discretion in granting tax reliefs, which is referred to as the policy of stimulating enterprises through tax expenditures and of attracting additional investment from all over the world.

Subnational governments in the PRC notoriously make extensive and/or excessive use of charges and fees, such as road tolls that discriminate against vehicles from other jurisdictions, which impact on the level playing field although they are quite productive in terms of revenue.

Local governments in the Republic of Korea are, quite correctly, assigned with the property tax, the tax on vehicles, the resident tax, and other minor taxes. Provinces are assigned with less productive taxes with the exception of the registration tax. While the Local Tax Act dictates the basic framework of local taxes, it allows local governments to determine the tax rates of 11 local taxes within certain limits (usually 50% below or above the standard rate determined in the Local Tax Act). Therefore, local governments have independent power to set their own local tax rates.

Assignments in the Philippines are generally consistent with the traditional criteria of economic efficiency, equity, and administrative feasibility. However, the majority of the productive tax bases are assigned to the national government and, among the local tax bases, only the real property tax and business tax have a substantial revenue potential. There are also limits to the power of local governments to set tax rates. They consist of specific floors and ceilings on tax rates and, in some cases, fixed rates on local taxes. Furthermore, local governments are allowed to adjust their tax rates only once every 5 years and by no more than 10%.

Cities are generally allowed to set higher tax rates compared to provinces and municipalities. The broader range of taxes and higher rates available to cities, coupled with the requirement for provinces and municipalities to share real property tax collections—typically a primary source of local revenues—results in wide disparities in local revenue mobilization between cities, on the one hand, and municipalities and provinces, on the other, which is not necessarily an evil, considering the concentration of expenditure needs in the big cities. However, it exacerbates the vertical fiscal imbalance for provinces, given their lack of access to business taxes, which only cities and municipalities can collect. This asks for effectively equalizing grants until adequate tax bases for provinces are secured.

The proliferation of charges, fees, and taxes with shaky legal grounds has been a characteristic of subnational revenue in Indonesia. In 2009 a new law on subnational taxes and charges was passed, bringing about major changes. The law defines the taxes and charges that subnational governments may raise and prohibits tapping additional revenue sources.

This “closed list” provision is meant to stop the previous proliferation of nuisance taxes and charges. According to the law, provincial taxes consist of the vehicle tax, the vehicle ownership transfer fee, the vehicle fuel tax, the surface water tax, and the cigarette tax, whereas municipal taxes include rural and urban property taxes, and land and building title acquisition fees and other minor taxes.

D. Intergovernmental Transfers

Being a complement to own revenues and shared taxes (and to borrowing), transfers are quite large in Asian countries, representing on average around two-thirds of total revenue.

The large share of transfers is not a problem per se, in the sense that where there are huge regional disparities in revenue capacity, transfers become a necessity to ensure uniformity of service provision across the various areas. Rather, what is at stake is their quality, i.e., their capacity to promote equity and efficiency. Both quests require a moderate use of specific and/or conditional transfers, whose large use in Asia becomes a good indicator of partial decentralization. The use of specific transfers is recommended only when urgent and important national priorities are at stake.

Table 3: Disparities in Provincial Revenues before and after Grants in a Sample of Asian Countries
(\$ per capita, latest available year)

	People's Republic of China		Indonesia		Philippines		Viet Nam	
Maximum	283.2	444.4	59.5	431.4	7.6	117.5	343.4	393.1
Minimum	18.1	42.8	3.8	39.8	0.2	4.2	6.5	25.1
Average	55.7	100.7	12.1	106.3	1.5	14.8	36.9	65.9
Standard deviation	54.8	83.1	11.6	78.9	1.4	13.3	61.1	65.2

Source: Hofman and Cordeiro Guerra (2005).

Both equity and efficiency require that equalization transfers are allocated on the basis of objective expenditure needs and fiscal capacity. Objective needs mean that they are not manageable by the beneficiary local governments. A clearly nonobjective need indicator is the number of local employees, or the amount of their salaries. Fiscal capacity, i.e., standardized revenue—the revenue that each distinct local government can raise by applying standard tax rates to its tax bases—is the correct way to ensure efficiency and equity in the allocation of transfers.

On these three counts (size of specific transfers, equalization, and stimulation of tax effort), Asian countries do not fare particularly well. Some are improving slightly, others are not. To give a few examples, despite the recent reforms, intergovernmental transfers in Japan remain mostly specific. However, the general non-conditional grant (local allocation tax, or LAT), being based on standardized revenue, encourages the local tax effort (although this is disputed in Ishida [2011]).

In the Republic of Korea, specific grants are as big as general unconditional grants, submitting local government decisions to the criteria elaborated by the central government. In addition, general non-conditional grants have little equalization impact as they are based mostly on population.

In India, general transfers from the federal government to the states pay almost no attention to fiscal capacity and do not provide adequate incentives to good fiscal conduct as they are also, partially, based on previous deficits.

With a few exceptions (e.g., Japan), the equalization impact of general transfers is small, as shown in Table 3. The difference between maximum and minimum per capita revenues at the intermediate level of government remains quite high after the allocation of the transfers and the coefficient of variation remains high as well.

Box 4: Trying to Increase Accountability with the Allocation of General Non-Conditional Transfers: Indonesia and Japan

Many Asian countries, including Indonesia and Japan, have recently tried to increase the accountability of local governments by reforming their system of allocation of intergovernmental transfers. Although well-intended, the reform of the Indonesian general purpose grant (or DAU) still has some major flaws, while the Japanese local allocation tax (LAT) is now close to the standards of a fully-fledged standard needs and fiscal capacity based transfer system aligned with the best international practice.

The allocation of the Indonesian DAU (Murniasih 2007; Brodjonegoro 2005) is based on the fiscal gap, i.e., the difference between expenditure needs and fiscal capacity. The needs are determined for each local government in a quite simplified way by weighting average expenditure at the local level with a few indicators, such as population, area, construction price index, inverse of the Human Development Indicator, and inverse of gross domestic product (GDP) per capita. The choice of these indicators complies with a basic requirement for ensuring accountability which specifies that indicators have to be outside of local government control. The fiscal capacity—in principle, what each local unit could collect by applying to its tax base the national average tax rate, hence asking of its citizens to contribute the average tax effort—is determined statistically by regressing local collections against regional GDP. (This indicator creates problems when used to determine the fiscal capacity of local governments, since GDP may show huge variations between municipalities of the same region.) However, the biggest problem with the DAU is that only 50% of the total amount of the transfer is presently allocated on the basis of the fiscal gap, the remaining 50% being allocated on the basis of salaries paid to local personnel (basic component). This is done to help local governments balance their budget, but it introduces a strong perverse incentive against accountability, the number of personnel being under their control. It is true that this share was equal to 80% in 2001 and has been steadily reduced since and needs to be eliminated. The elimination of the basic component is also required for equity, since this component clearly rewards the richest local jurisdictions that have in the past been able to hire a larger number of personnel and are still helped by the grant to pay for it.

Japan's general transfer, or LAT, comes very close to a fully-fledged expenditure needs and fiscal capacity based transfer system. The central government calculates the standard expenditure needs and standard revenue of each local government and pays the difference between the two (when positive).

The standard expenditure needs are the sum of the standard cost of each function, such as elementary schools, roads, bridges, and care of the elderly. The standard cost is determined for each function by multiplying the unit cost per input (e.g., 6,553,000 yen per teacher, 161,000 yen per kilometer of road, etc.) by the number of such inputs.

It has to be noted that the expenditure also includes the tax collection costs, with a mechanism that rewards those local governments that, over the years, have surpassed the national average in their collections.

The standard revenue is the sum of the revenue of all local taxes collected by the central government (here, there is no local tax effort to consider) plus the 75% of standardized revenue from own local taxes (those collected by the local governments). The standard revenue is calculated by applying to the tax base of each own tax the standard tax rate (equal to the national average tax rate) and a standard tax collection rate (STC), which is a measure of the tax effort—mainly based on increases in tax revenue weighted by the increase of their tax bases—made by each local government in recent years.

In principle, the structure of LAT should increase the efficiency of spending and increase fiscal accountability. However, two features could weaken the attainment of these aims. First, the number of teachers and of other inputs is determined locally and hence under the control of local government, not representing objective expenditure needs. However, the government tries to induce efficient behavior by rewarding those local governments that have succeeded in controlling the increase of inputs. The second feature is the use of STC: it aims at fostering the increase of local own tax revenues, but it ends up favoring local governments that have a more dynamic local economy, usually the richest ones, hence undermining somewhat the equity impact of the allocation of LAT.

Sources: Murniasih (2007); Brodjonegoro (2005).

E. Borrowing and the Hard Budget Constraint

Possibly, the very crucial condition for ensuring the long-term success of decentralization is the meeting of the hard budget constraint. If subnational governments can pass (part of) their burden to other governments, their accountability is jeopardized and the costs of decentralization could skyrocket.

Borrowing is extensively used at the subnational level in Asia, even for financing deficits (as in the case of India). In most cases, it is legally permitted. In other cases (as in the PRC, as illustrated in Box 5), local borrowing is not allowed, but used in practice through the cover of locally owned trusts, investment companies, and local utilities.

Box 5: Local Borrowing in the People's Republic of China: Opportunities and Risks

The People's Republic of China (PRC) has in recent decades invested 10% of its gross domestic product in infrastructure (Liu 2008). This is a growth-promoting policy that, at the same time, contributes to improving service delivery. Since the PRC is fiscally a highly decentralized country, with subnational expenditure reaching 70% of total public expenditure, subnational governments have built a dominant share of infrastructure, although also with central government help through grants. The PRC budget law forbids local borrowing in order to protect macro-fiscal stability. As a response, PRC subnational governments have resorted to the sale and leasing of their land holdings, either directly or through securitization, replacing one type of asset with another. This is economically efficient, if the infrastructure responds to social interest and has a return higher than land. For the rest, subnational governments have circumscribed the borrowing constraint by using their public-owned companies, especially their utilities, special purpose vehicles, and urban development corporations. The urban development corporations also issue bonds, guaranteed by the central government. Part of the investment activity has been conducted through public-private partnerships ensuring the participation of the private sector. All these instruments have allowed the construction of a huge stock of infrastructure and social housing, which is clearly a good policy. Sales and securitization of land have also led to the expansion of the land and housing market. On the other hand, if not adequately regulated these practices can cause serious problems for local finances and the finance sector,

First, land sale and leasing are one-time only operations. Second, development corporations take loans from public banks that are not frequently not sufficiently careful in assessing the risks of the loans and the efficiency of the project. Third, using special purpose vehicles creates off-budget liabilities, which are far from transparent and very difficult to monitor, requiring full consolidation of local government accounts with those of the many entities financially linked to them (Lall and Hofman 1995).

There are many examples of countries (e.g., Argentina and Brazil) where the accumulation of local debt in banks owned by the local government themselves has created unsustainable levels of debt accumulation that eventually brought local governments, and even the whole country (Argentina), to the verge of financial collapse.

Sources: Mainly Liu (2008), but see also Lall and Hofman (1995).

To avoid problems, borrowing has to be adequately disciplined. Discipline in budget and borrowing is based on a multiplicity of instruments, including better information systems, bankruptcy laws, wide access to tax bases, separate fiscal and financial systems, and market decentralization. The introduction of an adequate regulatory framework starts with transparency that can be ensured, first, by building better information systems, including standardized accounting procedures that force subnational governments to make public information on their liabilities and repayment capacity.

Clearly, better information does not eliminate questionable financial practices, if not supported by the introduction and the enforcement of penalties for violators. Explicit bankruptcy

procedures for local governments may also need to be legislated, leading to the dissolution of local councils and heads of the executive of those local governments that have committed a disciplinary infringement. Unfortunately, the central governments are reluctant to inflict harsh penalties, particularly to governments of large cities and regions, because of the political costs of such action. To avoid this dilemma, central governments can also legislate intermediate steps with a milder associated penalty schedule—such as setting debt thresholds that, if overstepped, will require central approval for future borrowing, or even cause the loss of borrowing powers altogether.

Such mechanisms have the advantage of allowing the continuation of delivery of basic services while management and financial restructuring can proceed.

The most effective instrument to avoid accumulation of debt and possible default is the building of a large local tax base, as frequently suggested in this paper. Taxes provide alternatives to borrowing, also because their revenue can be pledged as collateral and avoid the impression that local borrowing is implicitly backed by the central government.

Separation of fiscal and financial systems is also an important component of the design of intergovernmental systems. In Argentina, for example, the excessive financing of provincial governments' deficits by banks owned by the same provinces has brought both banks and provinces to bankruptcy.

A similar problem has been experienced in the PRC, where the weak revenue base of the center until the mid-1990s put political pressures on the People's Bank of China to offer credit to lower-level governments (Lall and Hofman 1995).

The design and implementation of fiscal rules for subnational governments, such as a ceiling on the debt stock, a ceiling on the share of current revenue that can be used for servicing the debt, or the use of straight rules on the growth of expenditure, can also contribute to the enforcement of fiscal discipline, if the same rules are well designed and enforced.

V. EMERGING CHALLENGES

A. Concomitant Reform: The Case of Conditional Cash Transfers

Conditional cash transfers (CCTs) are a relevant example of concomitant reform. These programs lay at the intersection of central and local policies: a central government policy or a program is implemented in combination with a decentralization process. This can impact (positively or negatively) the action of local governments. Hence, observed outcomes at the local level cannot be ascribed directly to local officials, putting in doubt the assessment of the merits of decentralization.

The basic premise of CCTs is that properly identified poor households receive a grant, as long as they meet certain conditions. The central government pays the grants, while the conditions usually refer to activities performed by local governments. *Progresa* in Mexico, later renamed *Oportunidades*, set the way for such programs. Whether a family received aid depended on meeting specific requirements, such as ensuring children attend school and family members receive preventive health care. These conditions were expected to exert a positive impact on the action of local governments by increasing attendance in schools and health centers and increasing the pressure from families to get better local service delivery. However, things turned out somewhat differently.

The Brazilian CCT in education *Bolsa Escola* provides a telling example (De Janvry, Finan, and Sadoulet 2007). When the program was fully centralized—i.e., selection of beneficiaries was also done centrally—it had a strong impact in reducing student dropout during the school year, securing a 7.8 percentage points improvement in complete year attendance. However, educational scores increased by a mere 0.8 percentage points, because the transfer helped retain students from poor families, less able or less motivated to study, who might otherwise have dropped out of school. Neither result could be ascribed to the action of Brazilian local governments.

Moreover, higher school attendance helped increase the chances of reelection of incumbent mayors, who in fact had no merits to claim. The problem is that, conscious of the fact that reelection would be facilitated, incumbents reduced their efforts in other areas of administration under their responsibility, thus reducing overall performance. As already mentioned, this produces a perverse incentive for local officials, inducing them to lower their efforts and reducing penalization of more slack. A similar impact has been observed for the Philippines, jeopardizing the incentive for elected officials to ensure good governance, as illustrated in Box 6.

Box 6: Conditional Cash Transfers Impact on Local Governance: The Case of the Philippines

A non-efficient electoral impact has been observed in the Philippines (Labonne 2012) during the implementation of *Pantawid Pamilyang Pilipino*, a program seeking to reduce poverty by providing grants to poor households. In this program, a health and nutrition grant is given to households with children aged 0–14 years and/or pregnant women on the condition that children and pregnant women follow established health protocols.

The education grant is given to households with school-aged children on the condition that these children attend classes on a regular basis (at least 85% of the time). The transfers are not negligible, especially for large families (with more than three children).

The first phase of program implementation, which started in 2008, covered the poorest provinces in the country and the poorest municipalities in each selected province. Coverage was expected to reach one million households by the end of 2010 and 2.3 million by the end of 2011.

Contrary to other conditional cash transfer projects, the program is implemented in a fairly centralized way. Local mayors had no control over whether the program was implemented in their municipality and over the selection of beneficiaries. Importantly, the funds were transferred directly from the central government agency to the beneficiaries' bank accounts that were opened as part of the project implementation. Despite these attempts to separate the action of the central government from those of the local governments, the conditional cash transfer impacts local politics by substantially increasing the probability of incumbent mayors to be reelected (Labonne 2012), which can be quite harmful for local competition.

Source: Labonne (2012).

Paradoxically, though not excessively, a central program that is supposed to improve the action of subnational governments ends up with the opposite effect. The solution should not be in discontinuing these programs, but rather consist of a much sharper separation between levels of government, e.g., the full decentralization of the programs.

B. Own Taxes for Intermediate Levels of Government (Regions, Provinces, and Metropolitan Governments)

This subsection provides an analysis and some suggestions referring to the challenge of providing autonomous tax sources to subnational governments situated at the intermediate level, including the governments of metropolitan areas.

Desirable subnational tax handles should be amenable to control at the margin by the relevant subnational government. It is more important for accountability to have control over the rate structure than various aspects of administration (Ambrosiano and Bordignon 2006). This is critical in establishing hard budget constraints. Without a relatively simple mechanism to increase taxes when needed, it is hard for the central government to deflect requests for additional resources for meeting debt or critical social obligations.

The availability of an appropriate tax handle does not ensure that the relevant subnational government has the incentives to use it. This is the case if there are poorly designed transfer mechanisms that permit access to ad hoc transfers that amount to “gap-filling” measures generating adverse incentives for the recipient governments.

State-level value-added tax. The broadening role of value-added taxation in Asian countries could make it a potentially important source of subnational revenues. As a first solution, VAT can be shared between the central level and the lower-level governments. More precisely, the collection is made centrally and part of the proceeds is allocated to subnational governments. This is exactly what is done in the PRC. Such an arrangement does not constitute own-source revenue for the local governments, as they have no discretion in setting tax rates, nor do they have discretion in determining the tax base.

A true local VAT would allow both the central and subnational government to access its tax base. It would also imply local discretion in setting tax rates, although within limits imposed by the center. It could also imply some local discretion in determining the tax base.

There is relatively little experience in implementing a true local decentralized VAT. This experience refers exclusively to federal states, where paradoxically the implementation of a local VAT creates potentially more problems than in nonfederal countries, because of the bigger autonomy that federated states enjoy in comparison with regional governments. On the contrary, a local decentralized VAT would be easier to implement in a nonfederal system.

Brazil has the longest and widest experience in this field with its ICMS, a state administered VAT-type with a small tax base that does not include services (taxed at the municipal level). However, there are many difficulties. Among them are the high level of evasion, the non-homogeneity of tax rules that impose huge costs on taxpayers for information and compliance, complex and burdensome administration for the public sector, and fiscal wars among states—with the tax being widely used for protecting and/or stimulating the local economies.

Canada has moved to a system of dual-VAT that is performing very well. At the same time, this system cannot be adapted for other countries without careful examination because of huge differences between provinces. For example, Quebec administers both its own VAT and that of the federal government, while in other provinces the federal government collects the VAT on their behalf.

An interesting example is provided by India, where recent reform has introduced a unified VAT at the federal level and where states have in recent years made considerable progress in the direction of establishing regional VAT. However, both the federal VAT and the state VAT have yet to make progresses to provide a truly integrated and fully fledged VAT (Bird, forthcoming).

In regional countries, a subnational (regional) VAT might provide substantial autonomy in taxing power without large distortions, provided that some characteristics are determined centrally and with central tax administration. This is particularly interesting for Asian countries.

More precisely, this subnational VAT is an accessible and manageable instrument once its tax base is defined nationwide, the tax is administered centrally and subnational governments determine the tax rates within centrally determined (and reasonably narrow) tax brackets. Finally, all producing and selling units should be registered taxpayers to avoid the problems of allocation of revenue for multistate firms, or the tax administration should have all the information that is necessary to implement efficiently the tax. It would be important to be able to trace both business-to-business as well as business-to-consumer transactions within and across provinces. A subnational VAT with these characteristics and constraints would still retain the essential characteristics of a local tax, since it would allow states to adjust collections (and tax burdens) according to their expenditure needs.

Surcharges (or piggy-backs). Surcharges provide own-source revenues to lower level governments, without the need to establish complex administrations.

The present occupation by the central government in most Asian countries of the major tax bases makes surcharges a quite convenient solution for expanding own revenues for subnational governments. Surcharges have a few distinctive characteristics that make them increasingly popular as financing instruments for state and local governments.

Uniform tax base. With surcharges, the tax base is defined at the national level ensuring uniformity of criteria all across the country. It also reduces the costs of tax compliance for taxpayers having activities or properties in different local jurisdictions and having to pay taxes to more than one government.

Local autonomy. Subnational governments have autonomy in determining their own, marginal tax rates. This creates accountability at the local level.

Administrative ease. Surcharges are administered and collected by the central government. The collections generated in each subnational government are transferred to the account of the latter (origin principle). This allows economies of scale and better use of information created at the countrywide scale. Subnational governments can be, and frequently are, associated with the collection and control process and can provide their own source of information for crosschecking.

Drawbacks. The main negative feature of surcharges may be the emergence of tax externalities. Each level of government, having access to the same base, will tend to set its own tax rates without taking into account the tax rates set by other levels of government. This can lead to an excess of taxation beyond the optimal level. However, the problem can be avoided by imposing upper constraints on the tax rates set by subnational governments.

Promotion of fiscal accountability can also lead to the imposition of lower limits on the tax rates. This forces subnational governments to make, at least, a minimum use of their tax instruments.

In principle, surcharges can be applied to all taxes. The main condition is that the collection potential is big enough to sustain the revenue needs of different levels of government. However, the choice is constrained by some economic characteristics of the potential candidates and by specific collection problems.

As for the economic characteristics, surcharges should not be levied on tax bases that are mobile because that would lead to competition to the bottom and on taxes that can be exported to other jurisdictions, since that would violate the benefit principle and equity.

As for the administration and collection issues that derive from the benefit principle, surcharges should be borne by residents of the local jurisdiction to which the revenues accrue. This requires the identification of taxpayers according to their residence. These criteria are further illustrated in the following discussion of the potential candidates for the application of surcharges.

Personal income tax. A state-level piggyback is possibly the best alternative for a regional level administration and is, as a matter of fact, widely used across the world. Federal, regional, and unitary countries use a personal income tax (PIT) surcharge to finance their intermediate and local governments, among them Canada, Italy, Japan, the Republic of Korea, Spain, and Switzerland. Levied on the basis of the place of residence of taxpayers, the surcharge is consistent with the benefit principle and not exported to other local jurisdictions. With reasonable low local tax rates, it can generate substantial revenues, given the size of the (potential) tax base.

A negative feature is the mobility of the tax base. Individuals could move their residence, also fictitiously, to jurisdictions where a lower tax rate is applied.

Corporate income tax. A local surcharge on the corporate income tax (CIT) creates problems. In fact, it is not used widely, with the exception of those federal systems where the constitution assigns this tax base to all levels of government. One problem with CIT is tax exportation, because profits may be generated in an area that extends beyond the borders of the jurisdiction in which it operates.

Second, revenues may be subject to fluctuations through time, making the surcharge less appropriate as a source of revenue for subnational governments.

Administration is also a problem, particularly in apportioning the revenue to local jurisdictions as most companies file corporate taxes in their headquarters.

Decentralized business taxation with direct VAT-type taxes. There has been a renewal of attention in the literature and in practice of the virtues of local business taxes, particularly when levied on a benefit basis. Businesses are major users of local services and when user charges and fees are not enough to finance the services, general instruments of business taxation can supplement them. Business can be taxed locally using the property tax—as is widely done.

The broadest tax base for businesses would be the sum of remunerations for all factors; that is, value added. A tax on the value added levied on businesses instead of consumers should have three distinctive features: (i) it should tax income and not consumption; (ii) it should be imposed on an origin and not destination basis; and (iii) it should be assessed using the subtraction method on the basis of period (monthly, yearly, etc.) of accounts, rather than using the invoice method.

This form of business taxation, the regional tax on business (IRAP), has been implemented in Italy since 1998. This kind of tax satisfies the requirements of a direct VAT-type tax. It is a tax payable by businesses on the difference between their sales and the sum of their material purchases and depreciation. Its tax base is the sum of wages, profits, rents, and interest payments. Effectively, it is an origin-based income-type VAT, based on the subtraction method.

It is also a regional own-source tax, even though it can be properly administered centrally, because of the discretion of regions to determine the tax rates.

Even with relatively low tax rates, direct VAT-type taxes can provide substantial revenue. Negative, non-negligible features of direct VAT include the taxation of exports. This would impinge on the competitiveness of the economy, as well as the possible limited deductibility of this tax for foreign firms paying their CIT in their country of residence. This makes this type of tax worth consideration only when more expedient alternatives, such as primarily the PIT, have already been exploited.

Excises. Taxes that could be assigned to subnational governments as a surcharge include excises on fuel, electricity, and a wide range of other products, particularly those whose consumption may have an impact on the environment. These products have broad tax bases and thus provide substantial revenues, also when partially assigned to subnational levels. Moreover, regional consumption of these goods does not vary significantly. While typical excises on alcohol and cigarettes impose a higher burden on the poor, taxation of gas and energy could be more equitable.

The administration of excises is easy when they are levied on production, but can become a problem with a consumption base. In fact, the production of excisable goods is highly concentrated, but consumption is evenly spread. However, if levied on production, a system of apportionment of revenues among states where the goods are sold or ability to set surcharges on a federal tax on production is also feasible.

To avoid tax exporting and uneven regional allocation of revenue, excise taxes should be set on the basis of consumption rather than production. This makes administration more cumbersome than applying the tax on production. Various techniques (e.g., highly visible tax stamps or putting different colors in gas sold in distinct areas) can be used in the effort to prevent smuggling and cross-border trade. Another technique to combat cross-border trade and smuggling is to reduce the rate of excises in border areas, although this may create additional administrative difficulties within regions (as in Mexico).

C. Decentralization and Natural Disasters

This is a relevant policy issue, particularly in Asian countries, most of which are prone to the frequent occurrence of large-scale natural disasters. Figure 2—reported in the Annex—shows the occurrence of disasters in Asia over the period 1975–2004 by intermediate level of subnational government (state and provinces). While some countries are much more prone than others, the figure shows a huge variation among distinct areas, as explained by the presence of volcanoes and/or a long coastline. These natural facts and the prevailing assignment of many policy responsibilities concerning the prevention and response to natural disasters to subnational levels of government make this a crucial issue for decentralized governance.

Natural disasters present at least two challenges to subnational governments: The first challenge refers to reconstruction after their occurrence. Adequate responses include repair and reconstruction of damaged infrastructure, such as schools, health clinics, public markets, drinking water systems, streets, roads, and other facilities that are the bulk of the activity of local governments. The response also includes the rapid reactivation of the provision of all services related to this infrastructure as well as the protection of the poor that are likely to be the most affected population group. Reconstruction becomes a crucial test of the capacity of local governments to act and hence of the strength of the institutions of local governance. There are in fact a number of research papers that use reaction and reconstruction following natural disasters to test the effectiveness of decentralization. In reality, particularly in developing countries, the response is often inadequate and has called for a partial reassignment of tasks to the central government or to the creation of special purposes agencies operating at a higher level of government and under the aegis of the central government—in other words, the creation of deconcentrated agencies, to which crucial local responsibility is assigned, in principle on a temporary basis.⁴

The second challenge is prevention activities where appropriate structuring of incentives is essential.

In most countries, assignments to local government include functions that are crucial for the prevention of natural disasters. This refers to *ex ante* preparations, such as establishing and enforcing land use and building code regulations, and building and maintaining infrastructure, etc. The rationale is that decentralized governments are, potentially, in a better position than the central government to know what infrastructure investments are needed in a locality.

On the other hand, the national government is better positioned to provide insurance across subnational regions since it can pool risks. Hence, providing insurance, usually by means of post-disaster transfers, is a clear national assignment.

This distribution of responsibilities between the central and the subnational government appears, at a first glance, rational. However, it creates a number of critical problems, as recent events, such as the case of Hurricane Katrina, have showed.

The first problem derives from the “weakest link” character of most investment in infrastructure required to prevent natural disasters. The weakest link means that the smallest contribution determines the quantity of a public good for a group. For example, when different local communities are building a dike, the success in holding back the waters will depend upon the minimum strength or height of the different parts. Provision of preventing infrastructure hence demands that responsibility be assigned to a level of government whose area is large enough to produce internalization of spillovers. For example, infrastructure to prevent river flooding cannot be assigned to single municipalities located along a river, but rather to a river basin authority, or to an intermediate level of government, whose geographical area encompasses all the sections of the river that are prone to flooding. The second solution lies in the establishment of adequate coordinating institutions.

The second issue is the interaction between national and subnational governments in the *ex ante* planning and investment in infrastructure, and financial assistance after a disaster occurs. As we have seen, subnational governments are left in charge of preparing for disasters by implementing, overseeing, and also at least partly funding preventive infrastructure investments. These investments

⁴ There is literature on these issues referring to Asian countries as well. See, for example, UNDP (2006).

will affect the damage from the natural disaster—or better the probability of an income loss. Investments can also reduce the impact on neighboring regions, but these externalities are not taken into account by the local governments that fund the investment. At the same time, the same local governments cannot face the cost of reconstruction. By allocating a post-disaster grant, the central government can facilitate the transfer of resources from regions that are spared from natural disasters to regions that are hit by natural disasters. While such a policy relieves the financial impact on the affected region, it also reduces the incentive for subnational governments to invest in costly but effective disaster avoidance infrastructure.

With full national insurance against losses, regional investment in protective infrastructure may be too low. To increase regional investment levels, the central government can reduce its transfers, but this implies less than full national insurance against natural disaster losses. There is thus a trade-off between the degree of insurance against natural disasters provided at the central level and optimal regional investment in protective infrastructure.

A second possible solution to the moral hazard problem would be for the central government to assume full responsibility for disaster avoidance activities, assuming control of economic development and land-use policies. However, recentralization of responsibilities for all disaster avoidance policies would reduce the efficiency gains from decentralized local policy making.

A third suggestion comes from private insurance. Private insurance contracts use deductibles and coinsurance to enhance the incentives for efficient risk avoidance by the insured. According to Wildasin (2008), similar arrangements are possible in a decentralized context. Use of deductibles means that the central government would commit to pay only partial compensation to the affected local governments in case of a disaster. This commitment, however, appears quite hard to implement in a post-disaster situation, particularly if a poor area is affected.

Mandatory coinsurance would mean for the central government to mandate the establishment of disaster contingency reserves (e.g., “rainy day” funds) by local governments.

Under this option, each local government would be required to contribute to a fund from which it would receive disaster relief in the event of a disaster. This scheme would help the financing of the central government reconstruction transfer and improve the distribution of its burden among local governments by asking contributions from all. This could reduce—but not completely eliminate—the moral hazard problems, since governments more prone to disasters will still have partial incentives to undertake investments to reduce the risks.

D. Sharing Natural Resources Revenue among Levels of Government

A number of Asian countries, particularly the developing ones, are rich in natural resources—both renewable (e.g., forests) and nonrenewable—oil, gas, and minerals. Natural resource revenues (NRR) in Asia represent a substantial and recently growing share of public sector revenue (see Table 4). In big producer countries, such as Indonesia and Mongolia, this share is quite high.

As in the rest of the world, the local governments of the producing areas are entitled to a varying share of NRR, as reported in Table 5. In Indonesia also the nonproducing areas are entitled to a share of NRR. Furthermore, asymmetric arrangements apply to Aceh, Papua, and West Papua as special autonomous regions, under which they receive 70% of oil and gas revenue produced in their jurisdictions instead of the general arrangement.

Table 4: Share of Natural Resource in Public Sector Revenues (%)

	2000	2007	2008	2009	2010	2011
Arab world	30.0	41.3	47.9	29.3	31.6	35.3
East Asia and Pacific (all income levels)	1.5	3.1	4.0	2.3	4.7	5.4
East Asia and Pacific (developing only)	5.4	8.6	12.3	6.3	8.2	9.0
Euro area	0.3	0.4	0.5	0.2	0.3	0.3
Europe and Central Asia (all income levels)	2.7	3.6	4.8	2.6	3.2	3.6
Europe and Central Asia (developing only)	21.1	18.3	21.8	13.2	14.6	15.8
Latin America and the Caribbean (all income levels)	6.2	10.7	12.2	7.5	8.3	9.7
Latin America and the Caribbean (developing only)	6.1	10.5	11.9	7.4	8.2	9.6
Middle East and North Africa (all income levels)	27.1	38.7	45.2	27.1	28.5	31.7
Middle East and North Africa (developing only)	21.9	36.6	43.1	24.5	20.7	24.8
Middle income	9.0	13.2	16.9	9.5	10.1	11.3
North America	1.3	2.2	3.3	1.3	1.7	2.1
Pacific island small states	2.3	2.6	3.3	2.6	3.7	2.9
South Asia	4.0	6.2	9.9	5.9	6.1	6.8
Sub-Saharan Africa (all income levels)	14.9	22.4	3.7	3.5	4.6	5.0
Indonesia	14.3	14.1	17.2	8.9	9.5	9.9
Mongolia	8.7	32.9	32.6	29.8	48.1	46.0
World	2.9	5.5	7.7	4.2	4.8	5.6

Source: World Bank (2013).

Table 5: Intergovernmental Sharing of NRR in Asian Countries

Country and System	Ownership of NRR According to Constitution	Legal Regime for Exploration and Production	Taxes National/Subnational	Sharing System with Subnational Governments		Constraints on Use of NNR by Subnational Governments
				Based on Origin	Based on Derivation	
Indonesia (Unitary with regions)	State		Corporation income tax, royalties	Forestry and mining: 20% to CG; 16% Provinces; 32% to Districts. For oil: 84, % to CG; 3,1% to Provinces; 6,2% to Districts; for gas: 69,5% to CG; 6,1% to Provinces; 12,2% to Districts. For fishery: 20% to CG	For forestry and mining 32 % to Districts. For oil 6,2 % to Districts. For gas 12,2% to Districts. For fishery 80% to Districts.	None
Mongolia Unitary	State	Concession regime	Corporation income tax windfall gain tax, royalties	For royalties: 10% to Districts, 20% to Municipalities and 70% to central government		None
Pakistan Federal	Not specified	Concession on onshore and contractual on offshore	Excise tax, royalty, gas development surcharge	Royalty and part of the gas development surcharge	Included in general transfers	None
Philippines	State	Contractual	Royalties, Corporation income tax, minimum tax/business tax	40% of all NRR are allocated to SBNGs (20% to the Province, 45% to Local governments; 35% do Barangays)	Included in general transfers	None

CG = central government, NRR = natural resource revenue, SBNG = subnational government.

Source: Compilation by the author based on the Constitution, the Mining Code, the Tax Code and the various tax laws of the distinct countries included in the table.

Abundance of NRR is not necessarily a bounty in view of the difficulties of governing them efficiently and equitably, particularly in a context of underdevelopment. Economic theory stresses the inefficiency potential built in the assignment of (part of) the NRR to subnational governments.

Volatility is a strong argument against assignment of NRR to subnational governments, since the central government is better equipped to face revenue fluctuations as it has access to a wider range of financial instruments. Price fluctuations may make nonrenewable NRR a not “reliable” source of revenue: funding “reliable” expenditure, such as salaries and other current expenditures, with volatile revenues carries a higher risk for subnational governments. Economic theory also stresses the possibility of substantial efficiency losses from insufficient absorption capacity and/or from corruption.

At the same time, the social impact of natural resource exploitation can be more disappointing than satisfying for local people, as shown by the growing number of conflicts across the world, where local communities vehemently oppose exploration and/or exploitation projects despite the lure of huge benefits promised by the operating firms and by the government. The environmental impact can be particularly important and immediate, consisting of air, water, soil, and landscape pollution.

Conflicts may surely be attenuated by recognizing that the governments of the producing areas be given full compensation for the damages and full reimbursement of all the costs incurred for the provision of services and infrastructure related and/or necessitated by exploration and production activities. Box 7 illustrates in detail how application of economic theory may help in this regard.

Assignment of NRR to nonproducing areas has much less economic rationale, because of the abovementioned non-suitability of these resources to fund subnational governments. Some countries, such as Indonesia, however, have such an assignment. The main reasons are equalization of revenue between producing and nonproducing areas and the notion that national resources are, at least in part, ownership of the entire nation.

There is another motivation to extend the assignment of NRR beyond the producing areas. It refers to the huge, sometimes complete, obfuscation that usually permeates the extraction of the rent and to the illegal acts of incredibly huge appropriation that frequently characterizes exploration and exploitation of natural resources. This problem has recently been recognized and many initiatives originated and/or supported by international organizations and nongovernment organizations, such as the Extractive Industries Transparency Initiative (EITI) and the Kimberley Process, are increasing transparency around these operations and reducing graft by public officials and private firms and individuals. Even in the presence of these activities, assignment of NRR to all subnational governments increases the number of stakeholders and the level of public attention on the extraction of the rent.

When a share of NRR is recognized to subnational governments, be they operating in the producing areas or nonproducing areas, efficiency and equity considerations require the full insertion of these revenues into the framework of intergovernmental equalization grants, as is correctly but incompletely done in Indonesia. In other words, NRRs are to be considered, for the purposes of equalization, as tax revenues.

Box 7: Implications from the Theory of the Remuneration of Production Factors for Assignment of Natural Resources

The theory of the remuneration of production factors provides an analytical framework that helps clarify the issue of assignment of natural resources and find accommodation between conflicting claims. It explains the contribution of all levels of government to the production process and justifies their entitlement, for efficiency reasons, to receive a share of these resources as compensation, and not as recognition of a property title, or of some other entitlement. In other words, subnational governments situated in the producing areas are, according to economic theory, entitled on efficiency grounds to receive a share of natural resource revenues, whose amount has to be in strict correspondence with their contribution to production. The theory also allows adequate consideration of the compensation of environmental damages.

Production costs refer to both exploration and exploitation activities and consist of remuneration for all factors of production needed. They typically include labor, material and nonmaterial inputs, and capital.

Costs also include the use of the environment, hence the necessity of remunerating those entities, individuals, or firms that bear the cost. The way environmental policy is devised and implemented is crucial. When, as in most countries, the environmental policy is based on regulation—more precisely, through standards on maximum levels of allowed emissions—and it is actually implemented, the cost of complying with the regulation is borne by the producing firms and is accounted for in the remuneration they receive. Higher and implemented standards mean higher production costs and, consequently, a smaller rent. Costs also include insurance against unpredictable damages, when firms subscribe policies voluntarily, or by effect of regulation. However, it is possible that regulation cannot be fully enforced and/or that unpredictable damages arise, such as for oil spills. One also has to take into account that regulation cannot completely eliminate all environmental damages, as in the case of offenses to the landscape. Damages emerging despite regulations have to be compensated to fully reflect the cost of production. If the environmental impact is local, compensation is paid locally to governments and/or to individuals. If damages are nationwide, compensation is paid to the national government and/or to all residents. It is important to remark that in all these cases the payment of compensation does not amount to the allocation of the economic rent, but takes place during the process leading to the determination of the rent.

The same principle applies also to costs other than environmental ones imposed by mining activities on the local populations. Examples are displacement of people, disruptions in transportation, or pecuniary externalities deriving from increasing the price of food and other commodities. Again, regulations can force the producing companies to pay appropriate compensation to the local population. When enforced, regulations expand the production costs absorbing another part of the value of production.

When governments provide services that contribute effectively to the production, they have to be considered as additional production factors or as inputs and are entitled to receive compensation. Although most of the investment for the exploitation of oil and other natural resources is made directly by the producing companies, additional investment in local infrastructure is usually required. Roads to the producing mines and fields have to be built; airports and ports may have to be upgraded; and schools, health, and social services have to be expanded to serve the growing population attracted to the area. To the extent to which the demand for these services exceeds the demand that would have prevailed in the absence of extraction, the governments of the producing jurisdictions are entitled, as partners in production, to have these additional costs funded. In a way, this amounts to applying the peak load pricing principle.

To determine the appropriate area, one has to single out the externalities created by natural resource extraction through all the stages of the process. In turn, there are environmental and socioeconomic externalities. Transportation may create costs not only for the environment but also individuals and business. Pipelines spoil the landscape, may generate spills, or obstruct transportation and economic activities. Transport of minerals on roads affects, through higher maintenance costs, congestion and other nuisances, an area that extends beyond the one for production. Workers employed in mining may commute from other areas and require services from the local governments situated there. Even when they are residents of the producing areas, they will affect other areas when the mine closes and they are forced to move. Workers will generate new costs for their destination governments by demanding services and thus creating a demand for new infrastructure. Sometimes, especially with open mines, extraction requires resettlement of residents to new areas whose governments will have to face an increased demand for services.

Source: Brosio and Jimenez (2012).

VI. SOLUTIONS TO STRUCTURAL EMERGING PROBLEMS OF INTERGOVERNMENTAL RELATIONS

A. Asymmetric Federalism

This is a quite convenient institutional solution to problems emerging in the assignment of responsibilities with important implications for processes of decentralization in Asia. In this framework, government units of the same layer have different allocation, regulatory, and also taxation powers. It implies that the level of decentralization varies across the same country, amounting to “variable speed decentralization.”

This is a common but frequently neglected feature of federal and decentralized systems, of which history provides a number of examples (see Box 8). Asymmetric federalism allows the avoidance of excessive decentralization and simultaneous provision of a deeper level of autonomy to a small number of regions. Asymmetrical devolution is quite helpful and also popular in (highly) divided societies with different demands for autonomy. This would be the case in Asia of Sri Lanka and possibly Nepal. Some regions with minorities (at the national level) feel that they are (or could be) excluded from the majority that governs the state and that they could consequently suffer a net loss. Of course, there are institutions that reduce this risk, such as qualified majorities. Asymmetric assignments may be a better alternative: “asymmetric” regions enjoy the benefits (and also the cost) of higher autonomy in some areas of their activity. The rest of the regions enjoy the benefits of centralized arrangements in the same areas, such as economies of scale and better coordination.

Box 8: The Practice of Asymmetric Decentralization

Most classic federal systems have used and are still using asymmetric arrangements. This is the case of the territories of Australia and Canada. These are large sparsely inhabited areas, where the assignment of the same responsibilities devolved to the rest of the country would have created problems in terms of capacity and finance. Asymmetry in this case means more centralization—or better, more central government help for the territories. When territories increase their capacity, or demand less federal control, their status is promoted to that of the rest of the country as it happened in Canada in 1949 with Newfoundland and Labrador, almost 2 centuries after the creation of the federation.

Also frequent is the case in which asymmetric arrangements are introduced to allow some areas to enjoy a deeper level of autonomy. In Europe, the most relevant cases are Spain, with the Basque countries and Catalonia, Italy with the so-called autonomous regions, and Scotland and Wales in the United Kingdom. The Italian autonomous regions enjoy a status in terms of guarantees of their autonomy that is similar to that of federated states, while the rest of the country has typical regional arrangements. The Basque countries enjoy huge autonomy in terms of tax policy and administration. Scotland also enjoys a high degree of autonomy. In the People’s Republic of China, the autonomous regions are an example of asymmetry enjoying, at least in principle, more autonomy than the rest of the country, in terms of finance, economic planning, arts, science and culture, organization of local police, and local languages. While in Italy asymmetric arrangements have helped to quench the thirst for more autonomy and/or secession of the concerned regions, in Spain, the United Kingdom, and the People’s Republic of China, the asymmetry has been less successful. Asymmetric arrangements are also implemented at the local level, where ethnic or cultural differences are played down by a more politically neutral search for efficiency. For example, the communities of Northern Virginia, the wealthiest region of the State of Virginia in the United States, recently sought special authority to create a local sales tax to fund high levels of construction and mass transit. Local governments received permission from the State of Virginia to impose such taxes—but subject to a local referendum—which sales tax proponents lost. This is, however, a result that most ardent supporters of decentralization should be happy to accept, because at the end decentralization pursues to adapt policies to local preferences.

Source: Congleton (2006).

Asymmetric arrangements may also be a solution to conflicts with natural resources-rich areas. The governments of these areas can claim a (huge) share of the rent from these resources. These claims can be at least accommodated with the claims or the entitlements of the rest of the country if the assignment of a (larger) share of NRR is matched with the assignment of more expenditure responsibilities.

B. Contracting

A crucial innovation in intergovernmental relations is the substitution of rules and hierarchical commands with contracts. Contractual agreements can be designed to reduce the risks and costs associated with asymmetries of information, difficulties, or impossibility of verifying the behaviors of the parties, the lack of skills, and the defaults of credible commitments. Since contracting is by definition consensual, it can take place, within the public sector, only among autonomous bodies with no hierarchical links. Hence, the use of contracts to order an intergovernmental arrangement reflects the growing autonomy of decentralized governments, although it is also an established practice in old federal states. Contracts may solve many problems of intergovernmental relations. First of all, they are a solution to missing assignments, which are frequent in the case of new and innovative policies.

In unitary regimes, contracting is useful to manage decentralization policies and empower progressively subnational levels of government (e.g., France and Italy). When decentralization is already in place (e.g., Canada) or has already been achieved (e.g., Spain), contracting is useful to manage cooperation, especially in cases in which policies have to deal with interdependencies and a complete legal framework is missing (see Box 9 which provides an interesting illustration).

Box 9: Multi-Agency Contracting: Multipurpose River Basin Projects

Consider a case that is of present interest to almost most countries: a multipurpose river basin project. It may include building of dams, irrigation canals, hydropower plants, and recreational areas. It may impact ecosystems, riverside communities, and existing infrastructure, such as highways, bridges, and navigation. Even in a mildly decentralized system, no level of government has all the powers needed to bring the project to completion. For example, the central federal government has a say on all decisions impacting the volume of water carried by rivers of national ambit. Energy policy is also frequently reserved as the domain of the central government. Transportation and irrigation infrastructure are the domain of states, regions, and/or provinces. Municipalities and riverside communities are responsible for water quality and recreational activities, among other functions. Moreover, at each level of government, different specialized agencies, such as the environmental protection agency or the energy commission, may be acting in addition to the ministries of reference. Each level and each agency needs the other to reach its goals. At the same time, it can obstruct and even veto decisions taken by the other. Sometimes, these huge undertakings are put under the responsibility of the central government. This will undermine intergovernmental relations and is not legally possible in a federal system. In Canada, when provinces were not satisfied by federal government decisions, they obstructed or halted the development of a project. Contracting is a viable solution. The initiative can be taken by the level of government with more responsibilities and/or interest at stake. Contracting may also distribute the cost among participants, placing higher weight on those with bigger financial means. It can also substantially decrease the occurrence of vetoes and other delaying tactics. There are in fact a number of examples across the world referring to this kind of contracting projects (Scott 2009).

Source: Scott (2009).

Contracts require not only autonomous government, but also a “third party” to facilitate their execution. They require a specific legal framework, with easy recourse to the courts and sanctions. Some countries have introduced specific legislation of contracts between public entities. Other

countries make renewed use of existing legislation. For example, each public entity and each civil servant has the obligation to perform the duties assigned to it or to him or her, and, in the case of public entities, the duties that derive from engagements taken voluntarily in the public interest. Hence, cases of insufficient performance can be taken to courts.

Contracting can also take place between entities that are part of different countries. In other words, it can facilitate the building of projects that extend across countries. It is a common practice for the European Union (EU) to establish contractual relations with subnational entities of member countries. It is also common practice in the EU to have contracts between regional governments of different member countries (OECD 2007).

C. Coordination between Governments

The need for coordination among levels of government is a correlate of decentralization processes. The need originates from the overlap of activities of each level of government.

Actions taken by one level can impact or interact with action taken by another level, hence having major consequences for policies of each level. To give a very simplified example, the granting of scholarships is a component of general social policy, which is usually assigned to the center. Increasing the number of scholarships has to be accompanied by other policies, such as the creation of new classes, that are frequently under the responsibility of other governments. Without new classes, the additional scholarships will not have an impact, but the creation of new classes may force subnational governments to reduce their activity in other areas that may have higher priority for them. Another more evident example of the need for coordination is the multipurpose river basin projects illustrated in Box 9, where the suggested solution is contracting. Most countries have developed an extensive network of intergovernmental committees or bodies, and executives of different levels share information, reach a consensus, and, when legally required, take joint decisions. These practices and institutions are labeled “executive federalism.” Canada and Germany provide two of the most sophisticated versions of the federalism of the executive with a proliferation of federal–provincial conferences, committees, and liaison agencies.

Coordination is considerably difficult when sharing of resources is at stake. Assignment of taxes, sharing of tax revenues, and designing of intergovernmental transfers is fraught with technical and especially political difficulties. To solve this issue, many countries, also in Asia, have created independent authorities, whose main examples are briefly illustrated in Table 6.

These independent bodies are widely popular, particularly in divided societies and in federal systems. They may ensure greater transparency, but their effectiveness depends on their composition and the range of tasks with which they are assigned. The polar cases are represented by India and Australia. The Indian Finance Commission has a high reputation, convenes every 5 years and makes recommendations to the President and the Congress. While its recommendations are usually well accepted, the commission shares with other institutions the responsibility within the same domain.⁵ The Australian Grants Commission has a clearly defined and more limited mission consisting of defining and implementing the formulas for allocating grants to the states. It is highly regarded for its

⁵ This happens with the allocation formula for general purpose grants. The Finance Commission is responsible for the formula for revenue-sharing grants while the Commission for Planning is responsible for the allocation formula of the Development Budget Grants.

technical work and the federal government rarely questions its decisions, although individual states may complain.

Table 6: Composition and Functions of Independent Bodies for Intergovernmental Revenue Sharing

Country	Legal discipline	Mission	Composition	Role and influence of the commission on intergovernmental affairs
Pakistan <i>National Finance Commission</i>	Constitution of 1973	Advises government on assignment of taxes between levels of government, intergovernmental transfers, and subnational borrowing	Nine members, including federal and provincial finance ministers and experts	Has a role in reaching consensual decisions. Its influence is undermined during autocratic regimes
Uganda <i>Local Government Finance Commission</i>	Constitution of 1995	Advises government on all matters related to allocation of resources to and between local governments; may also mediate disputes among local government	Three members appointed by the central government, four members by local governments	Has lost momentum over the years despite a large mandate, also due to information problems
South Africa <i>Fiscal and Financial Commission</i>	Constitution of 1996 with amendments of 2001	Provides advice on allocation of central revenue to provincial and local governments; provincial taxation; municipal fiscal powers and function; subnational borrowing. Has an observer status at the Budget Council	Nine members appointed by the President, of which three members recommended by provincial premiers, two members recommended by local governments; and two tergovernmenta	Role has been declining and partially superseded by the Ministry of Finance
India <i>Finance Commission</i>	Constitution of India	Appointed by the President of India every 5 years to make an assessment of the fiscal resources and needs of the center and individual states. Recommends to both houses of the parliament the shares of personal income tax and union excise duty and grants-in-aid to the states	Five members appointed by the President every 5 years with duration of mandate limited to drafting of recommendations	Its recommendations have traditionally influenced the sharing of national resources among and within layers of government
Nigeria <i>Revenue Mobilization, Allocation, and Fiscal Commission</i>	Constitution of 1999	Provides advice to the president and parliament on the formula for federal transfers to states and on revenue mobilization at state and local levels	Thirty-eight members, of which 1 for each of the 36 states	Has no role sharing of national revenue. It is mostly a forum for reaching agreement among states for allocation of transfers
Australia <i>Commonwealth Grants Commission</i>	Created by law in 1933	Administers formula for allocation of federal equalization transfers to the states	Consists of a chairperson and a maximum of five members appointed by the federal government in consultation with the states	Serves very effectively for the allocation of transfers to states elaborating and implementing formula

Sources: Compilation by the author on the basis of various legal texts.

A limitation on the effectiveness of these bodies may be the reluctance of parliaments to endorse decisions taken outside their control. However, if the commissions are authoritative, the parliament can hardly oppose their recommendations. If it does not accept the recommendations, it undermines the standing of the commissions, thus making them redundant. Parliamentary resistance tends to increase with the number of areas on which the commissions are mandated to make recommendations. This suggests only assigning a specific mandate focused on a few areas to these independent bodies.

These bodies, when authoritative, have a very important role to play by facilitating agreements between levels and inside levels of government that, when sharing issues are at stake, are particularly

difficult to reach. A recent decision taken by the National Finance Commission of Pakistan and illustrated in Box 10 exemplifies the usefulness of having these coordinating bodies.

Box 10: Pakistan: The Seventh Award National Commission of the National Finance Commission

This award has had a particularly and beneficial impact on Baluchistan, while showing the possibility of reaching agreement between the usually contending provinces. Baluchistan is a very poor and sparsely populated area. This implies high unit costs of providing public services, surely higher than in less sparsely populated provinces. The province is a large producer of natural gas and has traditionally requested increases in the royalty and surcharge on gas, a share of whose collections it is constitutionally entitled to receive. Such increases have to be approved by the National Finance Commission, since it impacts the whole of fiscal intergovernmental relations. The National Finance Commission is a non-permanent independent body with a high constitutional status that convenes periodically to review intergovernmental fiscal relations, to receive requests and to make recommendations. The 7th National Commission formulated the seventh round of recommendations—called Award—at the end of 2009. Baluchistan was requesting an increase in the royalty and surcharge to cover its extra costs. The commission preferred to accept the substance of the province's request—an increase in revenue—through a modification of the formula for the allocation of the tax revenues that are shared between the federal government and the provinces. This is because an increase in the royalty and surcharge on gas would have directly impacted the national energy policy. More specifically, the accommodation was reached by introducing a specific indicator: the inverse of density that clearly favors Baluchistan.

Source: Mustafa (2011).

VII. DECENTRALIZATION OF EDUCATION

A. Process and Expected Results

Most Asian countries have experienced in the recent decades a decentralization of education, although with different intensities and ambitions. Education is a very challenging sector to decentralize. It is quite expensive, usually representing the second largest sector of public expenditure after social security. It is a crucial sector for national growth strategies and for granting of better opportunities to the poor. Hence, it is a sector that allows, in principle, a good indicator of the ambitions and successes of decentralization.

Decentralization can be pursued with at least two different but non-alternative strategies. The first is to rely on subnational governments devolving to them increased responsibilities and, particularly, more autonomous decision-making power in some areas. The second alternative, labeled school-based management strategy, consists in expanding the decision-making power of schools. This strategy is also consistent with a deconcentration process and is quite popular in Asia.

Decentralization of education conforms to quite different aims, chosen by governments, sometimes somewhat conflicting. Their list includes a number of stimulating, but also debatable challenges:

- increased effectiveness of expenditure (less central bureaucracy),
- reduction of the role played by teachers unions (this is meant to be instrumental to reaching the preceding goal),
- fostering experimentation and quality,
- more targeted contribution of education to local development strategies,

- better adaptation of education to local preferences (also with the inclusion of local languages in curricula), and
- control of the growth of public expenditure by engaging subnational governments and families in the financing.

B. Empirical Analysis

Empirical analysis of the impact of decentralization is constrained by both analytical and information difficulties.

Particularly in the case of international comparisons, the assessment requires singling out a (or a few) goals of decentralization. These goals could, however, also be non-coincident with the goals pursued by individual governments'. In general, one could posit that the general aim of decentralization should be the promotion of effective schooling (as proposed by Behrman, Deolalkar, and Soon 2002), but this goal has to be specified, taking into account the existence of a trade-off between efficiency and equity.

The most obvious and widely used indicator of efficiency in education is student test scores, which is clearly an indicator of quality. Equity, which is particularly relevant for developing countries, can be represented by school enrollment, completion of grades, repetition, or dropout rates. When devolution of responsibilities is not matched by adequate devolution of financing sources, this could force subnational governments, particularly those of the poor areas, to ask families for an increased contribution and/or to reduce the level of service provision. More vulnerable groups could be disadvantaged.

The basic problem with empirical assessment is that it requires taking into consideration all the factors that, in addition to decentralization, will impact effective schooling.

In very general terms, the relationship between decentralization and effective schooling can be checked, as suggested by Behrman, Deolalkar, and Soon (2002), by using the equation of the following kind:

$$ES = S(D, Z)\varepsilon, \tag{1}$$

where ES means effective schooling, D is an indicator of decentralization, Z describes all other impacting factors, and ε is an estimation error. All dependent and independent variables can be single, or vectors of, variables. Moreover, some elements of vectors D and Z are themselves endogenous variables, requiring the solution of a system of equations.

To have an indication of the difficulties, let us consider the results of student tests. They depend on individual factors, such as motivation and health. They depend, obviously, also on the quality of schools in general—here, decentralization has to have an impact. They depend, furthermore, on the general context, which is made up of families and is determined by the location of schools and also by other policies impacting individual factors. Scholarships may increase motivation of families. Allocations to poor families, such as CCTs, may also have an impact, not necessarily on the positive side. A host of other policies can have an impact also. For example, cuts in central transfers to local governments can also impact scores, as we will see.

As in the case of any other policy, the correct assessment of the impact of decentralizing education requires the construction of two distinct samples. The first is made up of cases in which the policy has been implemented. These cases are compared with those of the second sample, where the policy has not been implemented. There are two possibilities. The first is to refer to a single country, as Barankay and Lockwood (2007) have done with reference to Switzerland, and compare local government units where a policy has been (differentially) implemented with the remaining units where the policy has not been implemented. Individual country analysis involves fewer problems for data collection, also because the context in which schools operate is more uniform than between countries. Box 11 provides one example of this kind of analysis. It also shows, if the analysis has been properly performed, that effective results can be obtained even with small policy steps. However, to provide convincing evidence, a sufficiently large number of cases should be analyzed.

Box 11: School-Based Management in the Philippines

In the Philippines, education is mostly a central government responsibility, and subnational governments are assigned only with the construction and maintenance of school premises. To improve the quality of education, the central government has concentrated its efforts on the promotion of school-based management. The system was experimented with between 2000 and 2006 and then mainstreamed thereafter.

According to the guidelines of the strategy, every school participating in the program needs to have a School Governing Council (SGC), or other form of school community partnership. The principal and other school staff are trained on various aspects of school-based management, including the preparation of a mandatory school improvement finance plan. Selected schools receive a very small grant to use for didactical purposes, and all schools receive a maintenance and other operational expenditure grant proportional to school enrollment. The schools are allowed and encouraged to raise their own funds from communities, parents, and other sources.

Compared to other school-based management strategies, the experiment in the Philippines is very mild. School principals and staff as well as the school councils have weak additional powers, focused mostly on planning activities and involvement of families in planning, supervision, and also finance. Despite these limited instruments, the program has been quite successful, improving the scores of students. According to a very recent study in 2013 by the World Bank, which sponsored the program, the results have been substantial, leading to a significant improvement of the overall score indicator (see table).

Table 7: Results of the School-Based Management Experiment in the Philippines

	School-Based Management			No School-Based Management		
	Mean	SD	N	Mean	SD	N
Overall National score, 2006	56.07	12.94	2,105	61.12	12.85	1,860
Overall National score, 2009	69.42	12.10	2103	70.62	12.85	1,937
Δ in score 2006 to 2009	13.38	14.40	2,093	9.69	12.95	1,851

Source: World Bank (2013).

Not only do schools taking part in the experiment have a faster improvement of scores, which is largely expected, but also inequality has been reduced more than in non-participating schools—this is something that is much less expected. As we can observe in the table, participating schools had a lower departure point that can explain part of the catching up. However, the results, if confirmed in the continuation of the program and by other checks, appear encouraging: with small reform steps, it is possible to reach results, if the steps are taken in the right direction.

The second alternative is cross-country analysis. Two different alternatives can be explored. The first one is to compare countries with different levels of decentralization. The second is to compare the results obtained by countries before and after a process of decentralization. In both cases, the main difficulty is the availability of comparable information for a sufficient number of countries. Even the solution of a reduced form model, such as equation (1), faces extremely high difficulties.

To illustrate difficulties and methods and at the same time try to provide a minimum of orientating evidence on the impact of decentralization, two pair-wise comparison analyses are presented here. They are Indonesia versus the Philippines and the Republic of Korea versus Japan.

1. Comparing Indonesia with the Philippines

The two countries have a similar level of development, which eases the comparison. As a matter of fact, a common finding of the empirical literature is that the impact of decentralization depends also, via the quality of institutions, on the level of economic development (Ahmad, Brosio, and Tanzi 2008).

They differ in terms of decentralization of education. Following research done by the World Bank and UNESCO with reference to a sample of East Asian countries (see King and Cordeiro Guerra [2008] for a summary), an index of decentralization in education—built around the decision-making power assigned to subnational governments—is available for the two countries. The index is calculated for only 2 years and is ad hoc, but it broadly reflects the difference in decision-making power (see also Annex Table in the Annex).

The index (reported in Table 8) shows that the process of decentralization in education that Indonesia underwent between 1999 and 2003 was more intense than that of the Philippines, as can be observed in Annex Table. Most of the powers concerning teachers and management of schools were transferred to the subnational governments.

Table 8: Education Performances and Expenditure, Indonesia vs. the Philippines

	Indonesia	Philippines
Indicator of centralization, 1999*	63	36
Indicator of centralization, 2003*	37	62
Student performance in mathematics, 1999**	403	348
Student performance in mathematics, 2003**	411	378
Student performance in mathematics, 2009**		350
Student performance in mathematics, 2011**	386	
Student performance in science, 1999**	435	345
Student performance in science, 2003**	420	377
Student performance in science, 2009**		349
Student performance in science, 2011**	406	
Private expenditure on total expenditure for education, 1995***	35.7	
Private expenditure on total expenditure for education, 1997***		42.7
Private expenditure on total expenditure for education, 2002***	35.7	40
Public expenditure for education on GDP, 2007****	3	2.6
Public expenditure for education, 2010****	3	
Public expenditure for education, 2011***		2.8

Sources: * UNESCO stats.uis.unesco.org and World Bank (Education statistics); **Trends in International Mathematics and Science Study; <http://nces.ed.gov/> *** World Bank; **** UNESCO.

The comparison is not superposed and thus its results are not in contradiction with those of Box 11 on the Philippines. The school-based management experiment has taken substantial dimensions in the years that follow the period of time taken into consideration here.

Availability of data constrains the comparison of outcomes. Although the two countries devote resources to record their education outcomes, the diversity of methodologies forbids the use of national data for comparison. The only available information is provided by Trends in International Mathematics and Science Study (TIMSS) scores available for 2003 and 2006 for both countries. Most recent data refer to 2011 for Indonesia and 2009 for the Philippines. On these scores, Indonesia performs a little better than the Philippines, but both countries show a marked worsening of performance with indicators declining from 2003 onward.

Clearly, data are very circumscribed, but it does not bode well either for decentralization nor centralization. To some extent, differences in performance could be ascribed to differences in expenditure for education. Here, comparability is again undermined by limited availability of data. The United Nations Educational, Scientific and Cultural Organization (UNESCO) dataset refers, in the case of these countries, to different years, adding to the previous dissimilarities concerning scores. Broadly, Indonesia seems to spend more public monies for education, while the Philippines relies more on private expenditure. Table 9 provides further checks: although public expenditure is higher in Indonesia, both countries are quite similar in the allocation of this expenditure among levels of schools.

Table 9: Expenditure for Education by Level of Schools, Indonesia vs. the Philippines

	2007	2007	2010	2011
	Indonesia	Philippines	Indonesia	Philippines
% distribution of current expenditure by level (primary)	47.6	52.0	44.9	39.9
% distribution of current expenditure by level (lower secondary)	15.2	...	15.1	14.0
% distribution of current expenditure by level (upper secondary)	10.5	...	10.4	10.9
% distribution of current expenditure by level (secondary)	25.7	25.1	25.4	24.9
% distribution of current expenditure by level (tertiary)	12.1	11.0	13.1	15.7
Current expenditure on education as % of total education expenditure	90.2	90.6	88.2	86.8
Expenditure in primary as % of total educational expenditure	48.4	50.5	44.4	39.9
Expenditure in lower secondary as % of total educational expenditure	14.6	20.3	14.2	13.1
Expenditure in upper secondary as % of total educational expenditure	10.5	4.5	10.1	10.5
Expenditure in post-secondary as % of total educational expenditure	.	1.4	.	.
Expenditure not allocated by level as % of total educational expenditure	13.1	11.7	14.5	16.6
Expenditure in secondary as % of total educational expenditure	25.1	24.8	24.3	23.6
Expenditure in tertiary as % of total educational expenditure	12.8	10.6	16.1	18.9
Public expenditure on education as % of GDP	3.0	2.6	3.0	2.8
Public expenditure on education as % of total government expenditure	15.9	15.9	17.1	15.2
Public expenditure per pupil as a % of GDP per capita (all levels)	12.6	9.4	12.2	11.0
Public expenditure per pupil as a % of GDP per capita (primary)	11.5	8.7	10.5	8.7
Public expenditure per pupil as a % of GDP per capita (secondary)	9.5	8.8	8.8	7.6
Public expenditure per pupil as a % of GDP per capita (tertiary)	23.7	9.2	23.1	23.7

GDP = gross domestic product.

Source: UNESCO, Institute for Statistics. www.stats.uis.unesco.org

Table 10: Primary School Completion Rates by Region in the Philippines, 2003 and 2008 (%)

	2003	2008
National Capital Region	9.0	8.3
Cordillera Administrative Region	12.6	14.0
Ilocos	17.0	16.6
Cagayan Valley	19.6	17.1
Central Luzon	18.2	17.0
Calarbazon	13.6	13.3
Mimaropa	21.5	18.2
Bicol	22.7	21.5
Western Visayas	16.9	13.9
Central Visayas	15.3	15.9
Eastern Visayas	19.1	15.9
Zamboanga Peninsula	18.3	15.0
Northern Mindanao	17.5	13.3
Davao	13.6	15.9
SoCCSKSarGen	14.4	14.6
Caraga	15.3	17.0
ARMM	13.9	13.3
Average	16.4	15.3
Standard deviation	3.4	2.8

Source: UNESCO Institute for Statistics. www.stats.uis.unesco.org

Table 11: Primary School Completion Rates by Region in Indonesia, 2003 and 2007 (%)

	2003	2007
North Sumatra	22.3	18.0
West Sumatra	18.9	18.3
Riau	23.7	22.4
Jambi	29.7	27.0
South Sumatra	32.0	28.3
Bengkulu	20.0	21.6
Lampung	27.8	25.8
Bangka Belitung	24.1	28.7
DKI Jakarta	19.5	16.8
West Java	35.3	32.6
Central Java	31.8	27.9
DI Yogyakarta	18.2	15.6
East Java	24.7	25.2
Banten	25.3	25.8
Bali	24.5	22.8
West Nusa Tenggara	18.7	21.1
East Nusa Tenggara	32.1	27.6
West Kalimantan	19.1	21.1
Central Kalimantan	27.5	30.7
South Kalimantan	28.4	22.1
East Kalimantan	21.3	19.7
North Sulawesi	18.6	18.9
Central Sulawesi	31.3	30.5
South Sulawesi	17.8	21.0
Southeast Sulawesi	24.2	16.4
Gorontalo	28.0	23.4
Average	24.8	23.4
Standard deviation	5.2	4.8

Source: UNESCO Institute for Statistics. www.stats.uis.unesco.org

The differential impact of decentralization must also be assessed with reference to equality in access. Here, the assessment at the subnational level is crucial. National data regionally disaggregated exist, but they are not easily comparable, requiring access to the UNESCO database. Unfortunately, comparable data are only available (Tables 10 and 11) with reference to a single variable—completion of primary school—and for only 2 years covering a short and different years (2003 and 2007 for Indonesia and 2003 and 2008 for the Philippines). In both countries, the primary school completion rate, one of the most obvious targets of any education policy, declines in a marked way between the 2 years. At the same time, completion rates seem to have become more homogenous across the regions.

The decrease in completion rates, however startling, seems to be explained by decreasing expenditure (not on the basis of homogeneous datasets, but with the help of national information; see Manasan 2007; World Bank 2013). Due the financial and fiscal crisis of those years, both countries had to cut public expenditure, including that for education, bringing down even the most basic results previously achieved.

2. Japan and the Republic of Korea

Japan and the Republic of Korea are the two most industrialized Asian countries with very similar per capita GDP, Japan exceeding the Republic of Korea by about 10% and the Republic of Korea rapidly catching up. Education in the Republic of Korea is completely centralized, while in Japan subnational governments are responsible for managing and paying teachers and also for implementing standards and guidelines mandated by the central government.

In principle, the two countries provide a good opportunity for a pair-wise comparison based on overall indicators. They are economically and socially rather similar, while dissimilarity in the degree of decentralization is substantial. Standards of educational achievement in both countries are at the top of the world. Both countries, but more intensely the Republic of Korea, ask families to contribute heavily to the education of their children, both financially and with personal support. According to the OECD (2012)—the World Bank dataset on private expenditure has not been updated after 2004—families in the Republic of Korea contribute to almost 20% of the total expenditure of primary and secondary institutions, while in Japan the corresponding share is about 10%. Family contributions to tertiary education in both countries come in at the top of the global list, only slightly distanced by Chile. Japan and the Republic of Korea are also maintaining a very high rate of increase of family contributions, exerting continuous pressure on families.

Students in Japan and the Republic of Korea take the Programme for International Student Assessment (PISA) tests, whose results are summarized in Table 12 and are easily comparable, referring to the same years and not only to absolute scores, but also to some aspects of variation/equity of results. With reference to equity, Table 12 reports, for sake of brevity, only the percentage of under-scorers: those below level 2.

The OECD surveys represent a huge effort to explain outcomes by linking them to the family and social context of students. However, Japan does not report this information, reducing the significance of comparison.

The Republic of Korea outperforms Japan in terms of national student scores in all subjects: reading, mathematics, and science. However, the relative difference is small, never exceeding 4%, but has very slightly increased over the years.

Table 12: Performance of Students in Japan and the Republic of Korea, 2000–2009

	Japan	Republic of Korea
Proficiency in reading, 2000	522	525
proficiency in reading, 2003	498	534
Proficiency in reading, 2006	498	556
Proficiency in reading, 2009	520	539
Proficiency in reading below level 2, 2000	10.1	5.8
Proficiency in reading below level 2, 2009	13.6	5.8
Change in proficiency in reading, 2009/2000	3.5	0.0
Proficiency in mathematics, 2003	534	542
Proficiency in mathematics, 2006	523	547
Proficiency in mathematics, 2009	529	543
Proficiency in mathematics below level 2, 2003	13.3	9.5
Proficiency in mathematics below level 2, 2009	12.5	8.1
Change in proficiency in mathematics, 2009/2003	-0.8	-1.4
Proficiency in science, 2003	534	542
Proficiency in science, 2006	523	547
Proficiency in science, 2009	529	543
Proficiency in science below level 2, 2003	13.3	9.5
Proficiency in science below level 2, 2009	12.5	11.1
Change in proficiency, 2009/2003	-0.8	+1.6
Between schools variance in reading, 2000	3,378	1,937

Source: OECD, PISA dataset, Paris. www.oecd.org/pisa/

Table 13: Share of Public Expenditure on Education in Gross Domestic Product in the Republic of Korea vs. Japan, 2000 and 2009

	2009	2000	Change in expenditure 2000–2009	Change in GDP, 2000–2009	Change in expenditure on education institutions as a percentage of GDP
Republic of Korea	8.1	7.1	147.1	129.3	113.7
OECD average	8.0	6.1	184.8	141.3	130.8
Japan	6.2	5.3	135.8	121.1	112.8

GDP = gross domestic product, OECD = Organisation for Economic Co-operation and Development.

Source: OECD (various years).

Table 14: Share of Private Expenditure on Total Expenditure for Education, 2009

	Primary, secondary, and post-secondary non-tertiary education	Tertiary education
Chile	21.8	76.6
Republic of Korea	23.8	73.9
United Kingdom	21.3	70.4
Japan	9.6	64.7
United States	7.9	61.9
Australia	15.9	54.6

Source: OECD (2012).

Table 15: Public Expenditure for Education per Pupil in Terms of Gross Domestic Product and by Level of Schools in Japan and the Republic of Korea, 2000–2011

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Public education expenditure as a % of public expenditure	Korea, Rep. of	All levels	13.1	14.7	15.5	15	16.5	15.3	15.2	14.8	15.8	
Public education expenditure as a % of public expenditure	Japan	All levels	9.3	10.5	10.6	9.7	9.8	9.5	9.5	9.4	9.4	
Public education expenditure (% of GDP)	Korea, Rep. of	All levels	3.8	4.1	4	4.4	4.4	4.1	4.2	4.2	4.8	5
Public education expenditure (% of GDP)	Japan	All levels	3.5	3.6	3.6	3.6	3.6	3.5	3.5	3.5	3.4	3.8
Public education expenditure per pupil (% of GDP per capita)	Korea, Rep. of	Primary	18.4	15.7	15.6	17.6	18.1	17.5	17.2	17.1	19.6	23.3
Public education expenditure per pupil (% of GDP per capita)	Japan	Primary	20.8	21.3	22.1	22.6	22.3	22	21.8	21.7	21.6	23.7
Public education expenditure per pupil (% of GDP per capita)	Korea, Rep. of	Secondary	15.7	20.3	22.6	23.7	23.5	21.9	22.2	22.2	23.4	23.8
Public education expenditure per pupil (% of GDP per capita)	Japan	Secondary	20.6	20.9	21.6	22.2	22.3	22.2	22.3	22.4	22.4	24.3
Public education expenditure per pupil (% of GDP per capita)	Korea, Rep. of	Tertiary	8.4		4.8	8.8	8.4	8.7	9.5	9.1	10.2	13.2
Public education expenditure per pupil (% of GDP per capita)	Japan	Tertiary	14.9	17.4	17.2	19.6	20.4	19	19	20.2	21.1	25.3

GDP = gross domestic product.

Source: Educational Policy Data Center. www.epdc.org

The Republic of Korea also outperforms Japan—and to a larger extent—in terms of equity. The share of students with scores in reading below level 2 is lower in the Republic of Korea than in Japan (although the Japanese level is also quite low). Differences in underscoring in mathematics and science are much smaller than in reading. It is also worth noting that in Japan the percentage of scores below level 2 is decreasing over the years, while in the Republic of Korea the trend is opposite, particularly in science. Better equity results in the Republic of Korea are in accordance with the expectations: a centralized system should ensure more convergence of outcomes. Regional data are, however, missing, which limits the evaluation.

The Republic of Korea exceeds Japan in terms of educational scores, but also in educational expenditure, both public (Table 13) and private (Table 14). The two countries allocate similar shares of their public expenditure to schools of different levels.

Public expenditure for education in terms of GDP in the Republic of Korea (8.1%) is higher than the OECD average, while in Japan it is substantially lower (6.2%). The difference in expenditure between the two countries is much higher than the difference in scores: almost 30% against about 5%, respectively. If the relationship between financial inputs (public and private expenditures) and outputs (scores) were linear, which quite possibly it is not, the Republic of Korea would show more inefficiency than Japan, providing evidence that centralization of service provision is less cost-effective than decentralization.

This result could receive support from the much higher (more than double) role played by private expenditure in the financing of primary, secondary, and post-secondary educational institutions, as reported in Table 15. Obviously, there are a number of other factors that impact the scores and that the present analysis is unable to consider.⁶

VIII. CONCLUSIONS

Decentralization in Asia follows a variety of models, with different intensity and aims, as in other parts of the world. Outcomes of decentralization, also in terms of service delivery, do not depend only, or exclusively, on the intensity of decentralization, but rather on how it is done.

There are no easy recipes to ensure service delivery. Most of these recipes are not exclusive to subnational governments but apply also to other levels. A basic ingredient for subnational levels is accountability. When it is missing, decentralization is partial, meaning higher costs, possible accumulation of budget imbalances, and decreasing levels of service delivery. Even small steps, taken in the right direction, can lead to substantial improvements of service delivery, while small deviations from accountability may give rise to severe consequences. Clearly, Asian countries, particularly developing countries, are also facing a number of challenges, among them skills and capacity constraints, particularly for small and remote local governments. Facing them requires gradualism of reform, but also use of new approaches suggested by international practices, such as contracting and asymmetric arrangements.

⁶ Families in the Republic of Korea spend huge sums for preparing their children from primary school onward to take the national university exams. It has been reported that there are now more cram school instructors than regular school teachers. (International New York Times, 7 November 2013).

Other challenges require attention and response, such as those deriving from the need to respond to increased demand for public services in a context of low tax revenues, those deriving from the need to prevent and respond to natural disasters, and those deriving from the need to avoid conflicts about sharing of natural resources.

This paper has also devoted considerable attention to the education sector. A number of countries are engaged in decentralizing the provision of education services, although with different strategies. In principle, education provides a convenient ground for the empirical assessment of the impact of decentralization on service delivery. Countries are very sensitive to international comparisons of their educational performances, but are not yet producing enough accurate and comparable information to allow truly meaningful comparisons.

ANNEX

Annex Box: Alternative Definitions of Decentralization

Decentralization is understood, in general, as a process through which the role and functions of the subnational governments are expanded. This expansion can take place through three main different processes—these are not necessarily in actual or suggested order of sequence.

The first process is that of political decentralization. In countries with democratic institutions at all levels, political decentralization means devolution of political authority or of electoral capacities to subnational actors. Typical examples are the popular election of governors and mayors (previously appointed by local councils or by central authorities), constitutional reforms that reinforce the political autonomy of subnational governments, and electoral reforms designed to augment political competition at the local levels.

The second process relates to fiscal decentralization. This involves a transfer of expenditure responsibilities to lower-level local governments, financed by a combination of own and other sources of revenues, including transfers. Unless complete functions are devolved, the decentralization process may remain incomplete. Also, the manner in which responsibilities are assigned, e.g., by unfunded mandates or earmarked or tied transfers, may reduce the “effective autonomy” of the local governments. Similarly, without own-source revenue at the margin, the local governments may lack incentives for proper “accountability”, as they might be able to leverage the federal government or pass on the consequences of their actions to other jurisdictions (see Ahmad and Brosio 2006; Ambrosiano and Bordignon 2006). Furthermore, with access to borrowed resources, and in the absence of credible hard budget constraints, there is a substantial risk that the costs of subnational operations may be transferred to other jurisdictions, particularly at higher levels. Even in developed countries, there are significant risks to subnational operations, as the current crisis in credit markets has recently illustrated.

The third process relates to regulatory decentralization. This does not imply an appreciable transfer of financial resources or assignments, although its impact may be considerable for citizens (i.e., regulation of car emissions). Pure regulatory decentralization is much less frequent than fiscal decentralization. In fact, there has been a substantial centralization of regulations, particularly in the field of environmental policies, health, and even financial policies.

Both fiscal and regulatory decentralization imply transfer of some decision-making power over the use of public (fiscal) or private (regulatory) resources from the central to subnational governments. Recognition that shifting of decision-making power is the essence of decentralization is crucial to the identification and the use of proper indicators of fiscal decentralization. For example, a simple reassignment of health expenditure from the central to regional budgets does not imply in and of itself an increase in the degree of decentralization, if it is not accompanied by the transfer of some decision-making power relating to this decentralized expenditure.

Sources: Ahmad and Brosio (2006); Ambrosiano and Bordignon (2006).

Annex Table: Assignment of Responsibilities in Education in a Sample of Asian Countries

	Curricula, standards	Teachers recruitment	Teacher management and payment	Building and construction of schools	Implementation of standards, curricula, policies	Financing
Philippines	Central	Central	Central	Local	Central	Central
Indonesia	Central	Central	Local	Local	Schools	Central and local
Cambodia	Central	Central	Central	Central	Central	Central and families
Lao People's Democratic Republic	Central	Deconcentration (provinces)	Deconcentration			Central and families
Nepal	Central	Central (although legally school management committees are empowered)	School management committees about 1,100 schools (Functional Autonomy) and Villages Educational Committee	Local governments and villages		Central school management committees and families
Japan	Central	Prefectures	Prefectures	Prefectures and local governments	Prefectures and local governments	Central, local, and families
Republic of Korea	Central	Central	Central	Central and partly local	Central	Central and families

Sources: UNESCO (2012); King and Cordeiro Guerra (2008), supplemented by information collected by the Author.

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Decentralization and Public Service Delivery in Asia

Decentralization in Asia follows a variety of models as in other parts of the world. Critical issues however lead to “partial decentralization” common to most Asian models. Accountability is key to a more holistic process engendering public service delivery at lower cost but without the accumulation of budget imbalances and decreasing levels. In principle, the education sector provides a convenient ground for the empirical assessment of the impact of decentralization on service delivery. Countries are very sensitive to the international comparisons of their education performances. Yet, they produce not enough accurate and comparable information to allow really meaningful comparisons.

About the Asian Development Bank

ADB’s vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries reduce poverty and improve the quality of life of their people. Despite the region’s many successes, it remains home to approximately two-thirds of the world’s poor: 1.6 billion people who live on less than \$2 a day, with 733 million struggling on less than \$1.25 a day. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

Based in Manila, ADB is owned by 67 members, including 48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

