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ADB Working Paper Series

**IMPROVING SUBNATIONAL
GOVERNMENT DEVELOPMENT
FINANCE IN EMERGING AND
DEVELOPING ECONOMIES:
TOWARD A STRATEGIC APPROACH**

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Abstract

Considerable attention has been given to enhancing subnational development finance in response to the 2008 global financial crisis and recent global development agendas, including the Sustainable Development Goals, Financing for Development, and Habitat III/New Urban Agenda. Much work on this topic is fragmented, focusing on specific elements of development finance: fiscal transfers, capital market access, public-sector lending agencies, or public-private partnerships. Most countries, however, have a range of subnational governments with varying needs and capacities that require different and evolving mixes of development finance mechanisms. Enabling greater subnational borrowing is often desirable but requires adoption of other reform policies to improve the fiscal capacity and creditworthiness of subnational governments over time.

This paper reviews the rationale and potential for improving subnational development finance, outlines the overall landscape of institutional arrangements available for this purpose, and considers broad challenges involved. Based on a review of global practice and experience in selected Asian developing countries with a range of special entities and innovations to enhance subnational investment, it proposes a more integrated, strategic approach to building subnational development finance.

Keywords: Subnational government finance, intergovernmental transfers, subnational government debt, subnational government financial intermediaries, Asia

JEL Classification: H70, H71, H72, H74, H77

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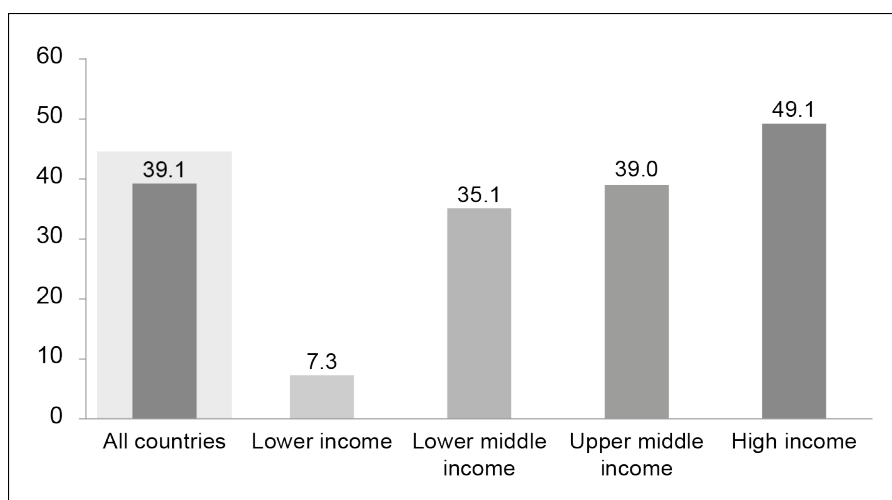
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1. INTRODUCTION

Renewed attention to enhancing subnational government investment and development finance has emerged in recent years.¹ There have been previous efforts to improve subnational government access to sources of development finance, and some were productive. Many of them, however, foundered, and especially in low-income countries, subnational governments have played a limited role in public investment.

Subnational government investment accounts for an average of 1.5% of GDP (in a sample of 95 countries covering the income spectrum), but the percentage for low-income countries is only 0.4.² Subnational government investment as a share of total public investment (Figure 1) averages 39.1%, ranging from 49.1% in high-income countries to 7.3% in low-income countries.³

Figure 1: Subnational Government Investment as a Share of Total Public Investment by Country Income Group (OECD-UCLG Sample of 95 Countries 2013)
(%)



Is it feasible to improve the role and performance of subnational investment and development finance?⁴ The 2008 financial crisis highlighted consequential risks and underlying vulnerabilities in the international financial system. Political crises, natural disasters, outbreaks of disease, and the emergence of conflicts, among other shocks, can also substantially affect public finances, and in the case of weaker economies, may have an impact on the nature and levels of development assistance.

At the same time, the availability and cost of capital have been relatively favorable in the current global environment. Although a range of risks would need to be considered and modalities would need to be sorted out, there should be favorable prospects for using

¹ See, for example, Bahl, Linn, and Wetzel (2013), UCLG (2010, 2013, 2015, 2016), Frank and Martinez-Vazquez (2016), Bahl and Bird (2018), and UN ESCAP (2018).

² OECD-UCLG (2016), p. 34.

³ OECD-UCLG (2016), p. 38.

⁴ See, for example, Ingram, Liu, and Brandt (2013), Ahmad (2014), Alm (2015), UN-Habitat (2015), AFD-UNDP (2016), and Frank and Martinez-Vazquez (2016).

public institutions and resources to leverage more private finance to support infrastructure investment.⁵ Recent transformations in development assistance actors and mechanisms have also generated opportunities to develop innovative approaches to subnational development finance. The form and extent of such efforts, however, depend on understanding the context of particular countries and determining appropriate means and paths to enhanced subnational investment.

This paper considers if and how subnational governments might play a stronger role in infrastructure investment, with a particular focus on emerging and developing economies in Asia. The next section outlines the rationale and potential for improving subnational development finance, followed by a summary of the broad challenges involved in doing so. The fourth and fifth sections respectively outline the landscape of subnational development finance options and present the case for taking a more integrated, strategic approach to developing it. The sixth section discusses a number of recent Asian experiences with a range of special entities designed to enhance subnational investment, followed by an overview of a number of recent innovations that may have potential to support subnational development finance. The concluding section provides some summary comments and recommendations.

2. RENEWED INTEREST IN SUBNATIONAL DEVELOPMENT FINANCE

The emerging focus on a potentially productive role for subnational governments in financing public investment has been reinforced by a broader rethinking of national fiscal policy in the wake of the 2008 global financial crisis and the evolution of recent global development agendas. The UN Secretary General's Synthesis Report on the Sustainable Development Goals (SDGs) states that “many of the investments to achieve the sustainable development goals will take place at the subnational level and be led by local authorities.”⁶ A High Level Panel on the Post-2015 agenda posits that the battle for sustainable development will be lost or won in cities. The Habitat III/New Urban Agenda calls for a new model of urban development that is intended to integrate all facets of sustainable development in order to promote equity, welfare and shared prosperity.⁷ The Addis Ababa Action Agenda on Financing for Development emphasizes the subnational role in financing development and commits to increasing international cooperation to support subnational governments for this purpose.⁸

Beyond responding to fiscal crises and development policy trends, a number of factors underlie the renewed focus on subnational governments in development finance.⁹ First, high-income countries—and increasingly other countries—expect subnational governments to perform a range of public functions, including infrastructure investment. Of course, fiscal decentralization is more recent and less advanced in many low-income and even middle-income countries, where subnational governments may account for 10% or less of public expenditures (Table 1).¹⁰ The share, however, is substantially higher in some Asian cases, such as India, Indonesia, and the Philippines, and the People's Republic of China (PRC) is a special case where subnational governments

⁵ See, for example, De La Torre, Gozzi, and Schmukler (2017).

⁶ UN General Assembly (2014), p. 22, par. 94.

⁷ UN Habitat, Habitat III Secretariat (2017).

⁸ UN (2015).

⁹ See a more detailed discussion in UCLG (2015).

¹⁰ OECD-UCLG (2016), UNDESA-UNCDF (2017).

dominate public expenditures. There are also efforts and further potential to expand the role of subnational governments in many other cases.

Table 1: Subnational Government Expenditure as a Share of GDP and Total Public Expenditure by Country Income Group (OECD-UCLG Sample of 95 Countries 2013)
(%)

SNG Expenditure	Low Income	Lower Middle Income	Upper Middle Income	High Income	All 95 Countries
% of GDP	1.7	6.3	8.3	13.2	9.0
% of public expenditure	7.5	20.3	25.1	29.7	23.9

Second, many countries suffer from large deficits in basic infrastructure and services that support development.¹¹ Filling infrastructure deficits and meeting new needs will require considerable planning and investment, much of it for services that subnational governments do or could play a significant role in providing and financing. Although experience is varied, some evidence indicates that under the right conditions, subnational governments can play a role in advancing local and national development by generating resources, taking responsibility for public investments, and managing service delivery.¹²

Third, many SDGs and other global development goals embody components that must be dealt with in an integrated manner in specific locations, as embodied in SDG 11 (sustainable cities). Subnational governments are considered closer to their constituents and are expected to face greater incentives and opportunities than central government agencies to think holistically about integrated territorial development, which is seen as key for sustainable development.¹³ Moreover, 103 of the 169 SDG targets (61%) have been determined to include a component that will require attention at the local level.¹⁴

Fourth, population growth and the march of urbanization in middle-income and lower-income countries will result in a substantial increase in demand for infrastructure.¹⁵ Cities play an important role in driving economic growth, often producing 25% or more of GDP in countries of all income levels. Almost half of the global population is already urban, and urbanization is projected to approach near 85% in industrialized and 64% in developing countries by 2050.¹⁶ The ability of urban areas to create jobs, deliver public services, and generate sustainable growth, however, is mixed, and the situation is particularly challenging in less-developed countries. There is a general consensus that urban areas will have to do better in making public investments and creating an environment for private investments.¹⁷

¹¹ Ingram et al. (2013), UCLG (2015), Frank and Martinez-Vazquez (2016).

¹² Evidence is reviewed in Local Development International (2013) and European Commission (2016).

¹³ CLGF (2007, 2013), Romeo (2013), and European Commission (2016).

¹⁴ Greene and Meixell (2017), p. 10.

¹⁵ See UCLG (2010, 2014), Ingram et al. (2013), UN General Assembly (2014), and Frank and Martinez-Vazquez (2016).

¹⁶ See, for example, UNDESA Division for Sustainable Development (2015).

¹⁷ See, for example, McGranahan and Satterthwaite (2014) and UN-Habitat (2016).

Finally, there appears to be a growing sense that subnational governments can play a consequential role in helping to address contemporary global challenges—global warming, energy shortages, health crises, and food insecurity, among others. Such challenges obviously require concerted national and international action, but subnational governments in some countries have already taken steps to deal with such issues—through climate adaptation policies, green growth strategies, and other efforts that require capital investments.¹⁸

3. CHALLENGES TO IMPROVING SUBNATIONAL DEVELOPMENT FINANCE

Given the potential value of a strong subnational government role in public investment, why has more progress not been made in emerging economies? On a general level, the challenges involved in financing public investments are well known, especially in poorer countries. Public finances, including flows of development assistance, face many limitations and are often subject to significant volatility.¹⁹ Infrastructure investment requires long-term finance, but short-term finance is more readily available in some cases.

More specific to the question at hand is the lack of robust intergovernmental frameworks and policies to empower, finance, incentivize, and support vibrant subnational governments.²⁰ Current systems in many countries exhibit various deficiencies or need updating to reflect changing conditions and new challenges, and capacity deficits can be large, especially in low-income countries. Particularly salient are revenue limitations—own-source revenues, intergovernmental transfers, and development finance—and unfunded expenditure mandates are not uncommon.²¹

A great deal has been written and substantial reforms have been undertaken to expand and enhance fiscal decentralization in recent years.²² These measures have demonstrated some productive progress, but many have been disappointing, especially in low- and middle-income countries. Weaker than expected performance of reform programs results from various factors, including insufficiently contextualized reform design, unrealistic time frames and expectations of progress, fragmented implementation, and political economy forces, such as a common central government disinclination to strengthen subnational governments and the potential effects of problematic local politics. Mainstream approaches to fiscal decentralization are valuable, but their application must recognize the challenges to be overcome and the widespread dissimilarities in structures, responsibilities, capabilities, and performance across and within countries.²³

Beyond these general challenges to fiscal decentralization, much of the effort specifically on subnational development finance has been relatively disjointed. Rather than looking at development finance in the context of fiscal decentralization overall and the broader economic, institutional, and political context, various analysts and frameworks have tended to focus on (and try to promote) specific individual reform elements—

¹⁸ See, for example, UCLG (2013, 2016).

¹⁹ World Bank and IMF Development Committee (2015).

²⁰ See discussion in Smoke (2017).

²¹ See, for example, UCLG (2010, 2015), Martinez-Vazquez and Vaillancourt (2011), Bahl, Linn, and Wetzel (2013), UN-Habitat (2015), OECD-UCLG (2016), and Bahl and Bird (2018).

²² The references cited in the previous footnote discuss these reforms in detail.

²³ See summary in Smoke (2017).

development transfers, tapping capital markets, public-sector lending agencies (designed to surmount the challenges faced by previous generations of municipal development banks and funds), or public-private partnerships, among others.

These various mechanisms operate in different ways, create different incentives, and vary in terms of their suitability for different types of local governments and investment projects. Because most countries comprise a range of subnational governments with differential needs and capacities, improving subnational development finance will often require a different mix of mechanisms, which could be progressively diversified and deepened as economic and fiscal conditions evolve. *In many cases, promoting greater subnational borrowing would be appropriate, but doing this, particularly in low-income countries and many middle-income countries, will require the adoption of other reform policies intended to improve the fiscal capacity and creditworthiness of subnational governments over time.* The following sections turn to these issues.

4. THE LANDSCAPE AND FOUNDATIONS OF SUBNATIONAL DEVELOPMENT FINANCE

Subnational governments, especially in less-developed countries, receive much of their funding for long-term development investments from intergovernmental transfers.²⁴ Access of subnational governments to capital markets has been a major source of infrastructure finance in more advanced industrial economies, and in a few other cases, such as the PRC. Borrowing, however, is generally limited at best to selected larger cities and regional governments in many low- and middle-income countries, and much of this activity occurs through dedicated financial intermediaries rather than through issuing bonds.

A starting point in thinking about how promoting borrowing over time can help subnational governments to meet increasing demand for infrastructure is to document the current landscape of development finance and why it takes a particular form in a specific country. Equally important is being aware of the potential significance of other steps that need to be taken, such as restructuring broader intergovernmental fiscal frameworks and adopting dedicated measures to build subnational fiscal responsibility and creditworthiness.

4.1 Subnational Development Transfers

Many countries use intergovernmental development transfers to support subnational infrastructure, such as health facilities, schools, housing, roads, and water. Some transfers are general, and others are specific for development finance (see fuller discussion below). Allocation mechanisms for capital transfers vary from ad hoc (often project specific) to formula based. Matching grants (such that a subnational government must raise a specific percentage of project costs) are used to some extent in many countries, but of course their value depends on subnational governments' ability to raise revenues to finance their share of the total. In developing countries, development grants play a dominant role in infrastructure finance.

²⁴ OECD-UCLG (2016), UNDESA-UNCDF (2017).

4.2 Subnational Borrowing

Recent data collected by the OECD and United Cities and Local Governments (UCLG) for a sample of 95 countries (all income levels) indicate that subnational debt accounts for an average of 14% of total public debt, but 63% of all countries fall below this level, and in many developing countries the percentage is effectively zero.²⁵ In federal countries the percentage is higher (nearly 32%) than in unitary countries because of the role of states/provinces, but this is not the case in non-OECD federal countries, such as Brazil, India, Mexico, and Nigeria, where the average falls to 17% (and is distorted by the 21% figure for India). Not surprisingly, subnational debt as a percentage of total public debt is highly correlated with GDP per capita.

The same study examines the stock of subnational debt, which is composed of financial (largely borrowing) and nonfinancial debt (other accounts payable and pension liabilities). Loans accounted for 57% of subnational debt in the sample of 95 countries—bonds for over 31% in federal countries but less than 7% in unitary countries. Subnational loans from other sources—especially central government agencies and special financial intermediaries set up to lend to subnational governments—accounted for 60% of the subnational debt stock in unitary countries and more than 70% in nearly 20% of the countries in the sample.

In short, subnational government borrowing is relatively limited in many countries, and the bulk of it is in the form of loans rather than bond financing. This highlights the fact that subnational credit markets were developed over time with central government oversight and support in countries where they are important. The dominant mechanism for enhancing subnational government access to development finance in developing countries has been the above-mentioned special financial intermediaries managed or highly regulated by the public sector. These include a range of municipal development banks and funds. Many countries have created such entities to provide subsidized loans for subnational governments without access to credit markets. There have been efforts in developing countries to advance the use of subnational bonds as well, but these have not been widely used beyond a limited number of creditworthy subnational governments, and some initiatives have failed.

Despite their prevalence, special financial intermediaries have not fared well in many countries.²⁶ It has not been uncommon for them to establish a monopoly over subnational government lending, in some cases combining all aspects of the investment project cycle— from preparation, planning, and assessment to project supervision and evaluation—under the same entity. They rarely have had sufficient capacity or incentives to operate effectively. Evaluations have indicated that their close ties to central governments and reliance on publicly managed funding have led to politicization of lending decisions, resulting in loans being approved for non-creditworthy subnational governments and for nonviable investment projects, sometimes at unjustifiably subsidized interest rates and excessively favorable terms. Political interference also has created space for undermining loan repayment and precluded the possibility for these entities to operate as revolving funds, the typical intention.

²⁵ OECD-UCLG (2016), chapter 4.

²⁶ Peterson (2000), Friere and Petersen (2004), UCLG (2015).

In recent years there has been a movement in a growing number of countries to improve subnational government access to development finance. One of the more fundamental measures has been the institution of sound subnational government borrowing regulations and fiscal responsibility frameworks.²⁷ Leaders on developing fiscal responsibility frameworks have included, among others, Argentina, Brazil, Colombia, India, Mexico, Peru, and South Africa, although not all of these countries have sustained their initial progress with such reforms.

Other efforts have involved reinventing public mechanisms for lending to subnational governments that are more insulated from political interference and that focus on the core business of lending rather than on multiple aspects of technical assistance and development project implementation. Another aspect of reform is to organize such intermediaries so that they operate on more market-based principles. Several countries, including Colombia, the Czech Republic, India, and the Philippines, for example, have progressively involved the private sector in lending through government-initiated mechanisms. (Some examples of these intermediaries in Asia are discussed below).

Use of municipal bonds has been more limited but has had notable progress, including, for example, in Brazil, India, Mexico, the Philippines, and South Africa. Even in such cases, however, borrowing tends to be concentrated in larger urban areas. Current comparative data are hard to find, but a study done in Brazil several years ago indicated that 70% of total local borrowing was assumed by only three large municipalities.²⁸ In India, states have borrowed extensively, but the leaders in local borrowing are a number of the large municipal corporations, and only a few substate governments have issued municipal bonds (although more have borrowed). In recent years loans have financed between 14% and 25% of total South African municipal capital expenditures, but 87% of municipal borrowing in 2015 was done by the eight metropolitan municipalities (74% by just four of them). Another 7% of subnational borrowing in that year was accounted for by 19 secondary cities, and the remaining 6% by a subset of the other 256 municipalities.²⁹

Many of the subnational lending mechanisms that attract private finance involve creating a separate legal entity structured to meet the requirements of commercial banks and investors. Access to such entities and a means of credit support (such as partial guarantees) is often needed for the “typical” subnational government in many emerging countries to access finance given their constrained fiscal position.

4.3 Public–Private Partnerships

There has also been considerable interest in using public–private partnerships (PPPs) to support subnational governments in securing the expertise and funds they require to be more active players in infrastructure development.³⁰ PPPs may involve securing finance through the private-sector partner, but such an arrangement is on the more advanced end of the range of private involvement. Some PPPs involve stronger public-sector roles, such that the private partner is only involved in operation and

²⁷ Some treatment of borrowing frameworks can be found in Kehew, Matsukawa, and Petersen (2005), Platz (2009), Liu and Waibel (2010), Kahkonen and Guptu (2012), Ingram et al. (2013), Smoke (2013), PPIAF (2013), KfW (2015), and Martinez-Vazquez and Vulovic (2017).

²⁸ See de Mello (2007).

²⁹ This is detailed in Republic of South Africa National Treasury (2016).

³⁰ See, for example, Pessoa (2008), Marin (2009), Brinkerhoff and Brinkerhoff (2011), Ingram et al. (2013), Suzuki et al. (2015), ADB (2016), Jomo et al. (2016) and Saha (2018).

maintenance or designing and building an infrastructure project. Whether or not private partners are directly involved in securing finance, private involvement can in principle help subnational governments to develop, operate, and maintain infrastructure more effectively, making finance easier to obtain and helping to ensure repayment of associated debt.

Much PPP activity for infrastructure development, however, has been managed by central governments, particularly in low- and middle-income countries. This is partly due to legal restrictions but also results from private partners' concerns about subnational governments, as well as suspicions of subnational governments about the motives of private partners. There have been more efforts to develop subnational PPPs in recent years in a number of countries, especially in larger cities. This has been particularly true in certain sectors, such as water, roads, transportation, and housing.

Broadly speaking, however, subnational PPPs have been a difficult type of reform to make work effectively, particularly but not exclusively in low-income countries.³¹ A dominant issue is that effective PPPs must be managed under a strong legal regulatory framework and with adequate subnational capacity to develop and administer them. Developing a PPP framework takes time and requires efforts to ensure responsible subnational government fiscal behavior (including cost recovery). In developing countries, oversight and support from the national government are usually needed

Despite these challenges, there should be opportunities for subnational governments, especially in urban areas and at intermediate levels, to use PPPs to develop, operate, and help finance sustainable infrastructure projects and service delivery. Certain sectors seem to have more success than others, including sewerage and solid waste projects in, for example, the PRC, Indonesia, and Viet Nam. A number of other countries, including Brazil, India, Mexico, the Philippines, and South Africa, also have had some positive experiences.

A common concern expressed about PPPs is that they may privilege large-scale projects and the most profitable sectors instead of basic infrastructure and services, a particular problem for disadvantaged subnational governments. Proponents counter that their wider use for more financially viable projects can both decrease demand for public funds that could be more beneficially used for infrastructure investment in poorer jurisdictions and help to develop subnational government capacity in procurement and financial management where they are undertaken. Over time, such efforts have the potential to increase the number of sustainable infrastructure projects and may help to facilitate greater subnational government access to development finance. Although subnational PPPs have not played a major role to date in developing countries, it seems likely they will remain on the agenda as part of efforts to deliver and finance infrastructure investment.

4.4 Recurrent Subnational Finance

The focus of this paper is development finance, but it is important not to neglect recurrent finance and financial management. Indeed, an important reason for the limited creditworthiness of many subnational governments and their challenges with PPPs in developing and emerging countries is the weakness of the intergovernmental fiscal system and the poor fiscal performance of individual subnational governments.

³¹ UCLG (2014), UNDESA-UNCDF (2017).

4.4.1 Own-Source Revenues

It is well accepted that central governments have intrinsic advantages in raising revenue given the nature of productive revenue bases and administrative considerations, while subnational governments may be better able to contribute to provision of many types of public services. The resulting vertical imbalance necessitates a key or dominant role for intergovernmental transfers. Thus, how the central government shares resources with lower levels is significant. But there is a persuasive case for subnational governments to raise a sufficient share of their income. Subnational resource mobilization alleviates burdens on national budgets, associates the costs of providing local services with the benefits of using them, and raises funds to repay loans for local public investments. If wealthier (often urban and regional) subnational governments raise a larger portion of their income, it releases national resources to support fiscally weaker jurisdictions.

There is broad agreement that many central governments, especially in lower- and middle-income countries, decentralize fewer revenue sources than is justified by fiscal principles and subnational needs.³² While subnational governments in high-income countries raise 30% of total public revenues, their counterparts in low-income countries raise less than 8% (Table 2) despite the typical availability of a range of subnational own-source revenues.³³ These often include property tax, fees and charges, licenses, economic activity taxes, and sometimes at intermediate, urban, or metropolitan levels, motor vehicle, natural resource, and other revenues. Voluntary subnational government surcharges on higher-level taxes are often recommended but less frequently used, more often in federal or large countries and typically for regional governments.

Even where subnational governments can raise their own revenue, they are often underutilized. Intergovernmental transfers can create disincentives for subnational revenue generation, limited information and capacity create administrative challenges, and local political dynamics can weaken revenue policy and administration. Central controls are also a common constraint, and charges for public services may be unduly regulated. Of course, subnational government own-source revenues and tax-sharing provisions are diverse, as are the conditions in which they operate. Thus, if subnational revenues are limited, it is important to determine why.

Table 2: Subnational Government Revenue as a Share of GDP and Total Public Revenue by Country Income Group (OECD-UCLG Sample of 95 Countries 2013)
(%)

SNG Expenditure	Low Income	Lower Middle Income	Upper Middle Income	High Income	All 95 Countries
% of GDP	1.7	6.3	8.3	13.2	9.0
% of public revenue	7.5	20.3	25.1	29.7	23.9

Many countries have pursued subnational government revenue generation reforms. Some initiatives involve fresh approaches to managing conventional sources. There have also been initiatives to create and expand new sources, such as land value capture to raise funds from land value increments generated by infrastructure

³² See UCLG (2010, 2015).

³³ Bahl and Bird (2008, 2018), McCluskey and Franzen (2013), Martinez-Vazquez (2013), and UN-Habitat (2015) review subnational government revenues.

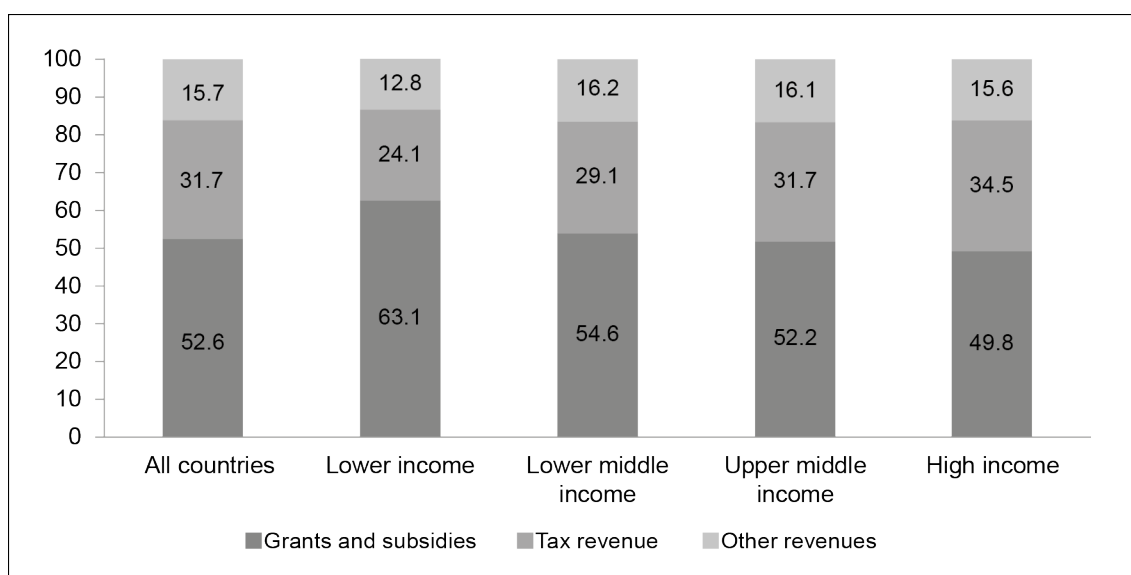
(roads, sewerage, transit, etc.)³⁴ Such instruments include betterment levies, land readjustment, special assessments, and tax increment financing. Thus far land value capture has been used primarily in high-income and stronger middle-income countries, for example Brazil, the PRC, Colombia, and India, but there should be more scope in low-income countries as urban growth advances and reforms to strengthen subnational governments proceed.

4.4.2 Intergovernmental Fiscal Transfers

Intergovernmental fiscal transfers often dominate subnational finance, although urban areas can be more fiscally independent.³⁵ Transfers are particularly important in lower-income countries, where they account for 63% of total subnational revenue compared to 49% in high-income countries (Figure 2).

Several aspects of transfer systems strongly affect subnational governments. Given own-source revenue constraints, subnational levels need adequate and predictable transfers. At the same time, national revenues are not unlimited and are subject to many demands, so transfers cannot fully provide for all subnational governments, and the central government also needs discretion to respond to shifting macroeconomic conditions. On balance, there have been increasing efforts to define the total volume of transfer resources in a reasonably predictable way to limit disruptive (and politicized) variations in the level of national funds shared with subnational governments.

Figure 2: Composition of Subnational Government Revenue by Category and Country Income Group (OECD-UCLG Sample of 95 Countries 2013)
(%)



³⁴ Peterson (2009), Ingram and Hong (2012), Walters (2012), World Economic Forum (2014), Suzuki et al. (2015), UN-HABITAT-IDB (2017), and UNDESA/UNCDF (2017) review various experiences with land value capture.

³⁵ Synthetic reviews of intergovernmental transfers include Bird and Smart (2002), Boaqway and Shah (2007) and Shah (2013).

In addition, there has been a growing tendency to allocate the transfer pool on the basis of objective criteria, reducing politicization and improving transparency. Transfer formulas allow the central government to advance certain goals—enhancing subnational resources (and redistributing to fiscally weaker subnational governments), increasing autonomy (through unconditional transfers), and targeting high-priority functions (through conditional transfers). A key decision about transfers is to determine the relative importance of goals and what this implies for how transfers should be structured and allocated.

Another area of concern is the incentives generated by transfers. If the total volume of transfers is large and the formula creates disincentives for subnational tax effort, they may dampen local revenue generation (and local accountability) as well as discourage borrowing by creditworthy subnational governments, even for self-financing infrastructure (reducing funds for weaker subnational governments or less bankable investments). In addition, strong conditions placed on transfer use may create incentives to overprivilege certain sectors or to invest in infrastructure that subnational governments do not have sufficient recurrent resources to operate and maintain.

Despite some identifiable trends, the practice of intergovernmental transfers is highly diverse. Many countries increasingly define rules to determine the annual pool, for example basing it on a share of certain national revenue sources (e.g., Cambodia, Ghana, Kenya, Indonesia, Mexico, the Philippines). In other cases, the pool is still determined annually in the budget process (e.g., South Africa, Uganda) or set for a specific period of time (e.g., five years in India and Pakistan based on National Finance Commission recommendations).

A number of countries have developed relatively unified transfer systems, for example a single or dominant unconditional formula-based transfer, as in Indonesia, Kenya, the Philippines, and South Africa. Other countries use multiple transfer programs or place conditions on revenue-sharing use, as in Brazil, Ghana, and Uganda. The degree of restrictions can shift, as in Uganda, where the central government introduced numerous conditions on the use of transfers. Many countries share national revenue with each level of government, but in some cases, particularly federal systems such as India, Mexico, Nigeria, and Pakistan, most transfers go to the intermediate tier, such that decisions about sharing with lower tiers rest with states or provinces. Excessive conditions placed on transfers could constrain subnational governments from meeting debt service obligations.

4.5 Other Elements Supporting the Intergovernmental Fiscal System

This paper focuses primarily on subnational finance, but such policies do not operate in isolation, and it would be negligent not to acknowledge briefly the broader considerations that affect subnational fiscal performance.³⁶ These include the quality of the larger intergovernmental system, the capacity of subnational governments, and the incentives they face to make financial mechanisms and processes work on the ground. As noted above, subnational creditworthiness is contingent on reliable and adequate levels of recurrent revenues. More fundamentally, subnational fiscal responsibility depends on sufficiently empowered and motivated subnational governments that have at their disposal adequate systems for planning, budgeting, implementation, financial management, asset management, etc.

³⁶ See, for example, the discussion in Connerley, Eaton, and Smoke (2010) and Smoke (2015).

In addition to these empowerment and system requirements, the operations of subnational governments need to be sufficiently transparent and subject to accountability provisions.³⁷ Upward accountability mechanisms can improve compliance with budgeting and financial management systems as well as promote national development priorities and basic service standards. Also relevant is downward accountability of subnational governments to their constituents through elections and non-electoral means (subnational borrowing may be subject to referenda). Together, transparency and accountability can help to ensure that subnational borrowing and other fiscal powers will be used responsibly.

5. IMPLICATIONS FOR A STRATEGIC APPROACH TO BUILDING A DEVELOPMENT FINANCE SYSTEM

Given the complex, diverse, and unevenly developed landscape in which subnational governments operate, it is important to plan efforts to enhance subnational development finance in a particular country carefully. Suspicious of special subnational financial intermediaries because of the challenges in making them work sustainably (reinforced by donor reluctance to support them), some countries perhaps have tried to move too quickly into developing municipal bond markets or PPPs and/or have continued to rely heavily on development transfers for subnational governments that could not take advantage of these more advanced financial arrangements.

The fact remains that the majority of subnational governments in many developing countries are not creditworthy and will need assistance to access development finance and craft financing strategies. At the same time, in many countries at least some subnational governments could responsibly assume loans, if not directly from capital markets then from appropriately structured special financial intermediaries or commercial banks. Disadvantaged local governments with weak fiscal capacity, however, may have little hope of borrowing substantially from any type of financial intermediary in the near future.

5.1 Developing a Range of Subnational Lending Mechanisms

Under these conditions, there would seem to be value in developing a range of development finance mechanisms appropriate to a particular country. Transfers will remain important in many countries (some of the concerns outlined above about how to structure transfers are revisited below). With respect to lending mechanisms, a simplified version of the general range of options is presented in Table 3. At the one extreme would be a government account managed out of a central government agency, such as a ministry of finance or a ministry of local government, and financed out of contributions from the national budget. At the other end of the spectrum would be fully private entities, such as commercial banks and financial markets, which provide access to private funding from domestic and/or international sources.

In either of these extremes, there could be various alternative arrangements or contextualized restrictions. For example, the central ministry in which a loan account is based may secure resources from international development agencies or international financial institutions and then on lend them to subnational governments rather than rely fully on budget contributions. In the case of private entities, lending to subnational

³⁷ See reviews of accountability in Boex and Yilmaz (2010), Yilmaz, Beris, and Serrano (2010), Agrawal and Ribot (2012), and Faguet (2014).

governments from private international sources may face challenges if there are serious risks of foreign exchange fluctuations, so funds made available might be restricted to domestic sources. The specific nature of the arrangements would be determined by the conditions in a particular country and the national legal framework regulating subnational borrowing.

Table 3: Simplified Spectrum of Subnational Government Lending Mechanisms

Management and Finance	Ownership			
	Government Agency	Government Owned	Mixed Public–Private	Private Entity
Lead Entity/ Institution	Ministry of finance, local government	Development bank or fund	Development bank or fund	Commercial banks, financial markets
Potential Source(s) of Finance	National budget or external donors	National budget, SNG contributions, external donors, financial institutions	National budget, SNG contributions, private investors, depositors, external investors	Private finance (domestic or external)

In between the government agency and private entity options are various types of special financial intermediaries specifically intended to lend to subnational governments for development. The closest to a fully public option would be a subnational development bank or fund that is fully owned and managed by the government. Such entities could be capitalized in a variety of ways, for example from the national budget, mandatory or voluntary contributions from subnational governments, or funds in the form of grants or sovereign loans from external donors and international financial institutions.

Moving further to the private-sector side, a subnational development bank or fund could be co-owned and operated by the national (or a regional) government and private investors. Such entities would likely blend funds from public sources (contributions from national and subnational government budgets as well as money secured from international development and financial institutions) and private sources (private investors, individual deposits, etc.).

The boundaries between the public- and private-sector roles in these subnational development banks/funds could vary. Even a fully national government-owned entity could include private-sector (and other nongovernment) representatives on the board of directors. In addition, some elements of the lending process (e.g., loan application appraisals) could be contracted to private firms, or private investors might contribute resources in the expectation of suitable returns.

What would work in a particular case will depend on a variety of factors, including the extent to which subnational governments are creditworthy and infrastructure projects are financially viable. Equally important is the extent and authenticity of the central government's willingness to relinquish borrowing decisions to subnational governments and lending decisions to private-sector actors, as well as the level of development of financial markets and the potential sources of funding for a development bank/fund, among other factors.

The relative importance of the various options can also change over time as subnational government capacity and creditworthiness improve, financial markets develop, government attitudes about subnational borrowing evolve, and investor confidence in the ability of subnational governments to repay loans improves, among other considerations.

As indicated above, there is some evidence that subnational development banks/funds perform better the more the private sector is involved.

Accordingly, there could be a situation in which most lending to subnational governments is initially channeled through the ministry of finance (as has long been the case, for example, in Indonesia, as discussed below), but over time the central government may decide to create a dedicated municipal lending entity outside of a government ministry. Initially it could be largely owned, operated, and capitalized by the central government (perhaps with external contributions). As this fully public entity establishes a sound track record and subnational governments develop creditworthiness, the door might open to more extensive private involvement in managing and financing a reconfigured entity, increasing the volume of funds available and possibly lending at closer to market terms.

This is not to say that only one avenue for subnational development financing needs to be created initially and then strategically modified over time. In some countries there will be needs and opportunities to operate multiple channels that target different types of subnational governments and development projects from the beginning. If some large cities can go directly to capital markets for self-financing projects, it makes sense to develop a legal framework to enable that. Subnational governments with less robust fiscal capacity or facing greater challenges to recovering costs will have to rely on other lending mechanisms that have flexibility to offer more favorable terms and varying degrees of interest rate subsidization. And in some cases, subnational governments will likely have no access to borrowing and will continue to rely on intergovernmental development transfers.

Whatever form financing mechanisms take along the spectrum from more public to more private, basic norms need to be followed. As noted above, the challenges with subnational development banks/funds with more public involvement have been how they have been organized and managed. Some entities have been one-stop shops for all stages of the development project cycle, creating conflicts of interest when, for example, the same entity that designed an infrastructure project was also in charge of appraising it for a loan. Too frequently, appraisal has been superficial, enabling approval of loans for nonviable projects and rejection of loans for good projects. There also have been challenges with subjective determination of loan terms. Repayment has been another challenge; many loans have not been repaid because a loan was attached to a nonviable project or repayment was not enforced.

Many problems have been a function of managerial structures and lack of accountability, while others have been due to understaffing and insufficient or inappropriate capacity. Not uncommonly, politicization has played a role. The end result, however, has been similar: many subnational lending agencies have failed as revolving funds and have had to be continuously recapitalized. In some cases with heavy reliance on external sources, funds have continued to flow even when the mechanism was not performing. Apparently international financial institutions that provided loans benefitting these intermediaries were in some cases more concerned about being repaid by the client government than whether subnational governments repaid on-lent funds. And perhaps some central governments have accepted the need to bail out intermediaries because of the political benefits they derived from doing so.

Clearly, how a subnational development bank/fund is structured and managed matters. Such entities need to be properly managed by directors who want the mechanism to succeed and create a foundation for further development of subnational lending. This means that they must be operated professionally, must objectively evaluate loan applications on standard terms using robust assessment tools, and must seriously consider the creditworthiness of subnational governments. In addition, loan repayment

must be treated as a requirement and enforced, insulating the lending entity from political interference to the extent possible.

5.2 Determining an Appropriate Mix of Development Finance Instruments

The discussion thus far has centered on the options and challenges for developing a set of suitable subnational lending mechanisms in a particular country, with the understanding that a range of entities would often be required. The specific mix of mechanisms will depend on country context.

Beyond the source of finance and the financing entity, the finance instrument is also important. Under the circumstances outlined above, it would seem sensible to acknowledge that a robust intergovernmental fiscal system would benefit from offering an appropriate spectrum of development finance instruments to its subnational governments. These could range from grants and subsidized (according to well-criteria) loans for fiscally weaker subnational governments and non-self-financing projects, to various types of loans for fiscally stronger subnational governments and self-financing projects.

Table 4 presents a simple schematic illustrating how the finance mechanism mix might broadly differ among subnational governments with varying fiscal capacities and development projects with differing potential for cost recovery. There is, of course, potential for nontrivial subjectivity in defining these various classifications and for challenges in determining where specific subnational governments and projects fit into this landscape (as well as who makes those decisions). If such an approach were to be used, considerable care would need to be taken to develop objective criteria to define the categories in a clear way and to create practical assessment tools to operationalize the criteria.

Table 4: Illustrative Financing Arrangements by Type of Investment and SNG Creditworthiness

Type of Investment	SNG Income Level/Creditworthiness		
	Low	Medium	High
Self-Financing	Mix of loans (possibly subsidized) and transfers	Mix of loans (possibly subsidized) and bonds (if feasible)	Mix of bonds and loans
Partially Revenue-Generating	Mix of loans (likely subsidized) and transfers	Mix of loans (likely subsidized) and transfers	Mix of loans (possibly subsidized) and transfers (if justified)
Non-Self-Financing/Social Purpose	Transfers only	Mix of loans (possibly subsidized) and transfers	Mix of loans (possibly subsidized) and transfers (if justified)

Note: The mix of financing instruments would have to be based on objective criteria and the source of financing (Table 3) and would vary based on availability and specific criteria.

The expectation is that over time more subnational governments will develop greater capacity and creditworthiness and additional projects could be classified as at least partially revenue generating. This means that subnational governments may move across categories and pursue different types of development projects as the conditions in which they operate and their own capabilities evolve.

Perhaps the most formidable test in this process is how weaker subnational governments would “graduate” from full reliance on grants and subsidized loans to greater use of credit markets. To some extent, such an evolution could happen naturally under conditions of sufficient macroeconomic growth, the development of a more appropriate institutional environment, and the emergence of favorable political conditions in which subnational governments increasingly adopt a developmental orientation and seek to improve their status and performance.

The central government, however, could also proactively develop policies that favor progressive transformation through development of new systems and procedures, creative use of incentives to influence subnational fiscal behavior, and supportive technical assistance and capacity-building initiatives where needed. One potentially productive approach would be to pursue more coordinated development of grant and loan financing options such that these mechanisms are appropriately used. The range of development finance options could be set up, for example, to ensure that fiscally strong urban governments would not be eligible to receive grants for self-financing infrastructure projects, a practice that diverts grant resources from fiscally weaker subnational governments currently unable to borrow.

At the same time, it is neither productive nor sustainable to keep weaker subnational governments perpetually dependent on grants and subsidies. The structure and allocation of transfers could generate incentives for these weaker subnational governments to improve their capacity and modify their behavior so that they can begin to borrow. Initial borrowing could be realized through subsidized loans from special financial intermediaries (development banks/funds), moving later to borrowing on more market-based terms. If even weak subnational governments must borrow for a modest percentage of infrastructure project finance and they are supported to build the capacity and exercise the fiscal discipline required to manage the loan (including local revenue generation for repayment), they can begin a trajectory of building creditworthiness that can progressively improve over time. The idea of a grant–loan linkage is discussed in more detail below.

Finally, adopting national policies regarding the structure and management of subnational lending entities and creating various types of financial mechanisms are not enough. It will often also be necessary to develop other means to facilitate subnational access to credit, such as risk mitigation strategies. These include comprehensive or partial credit guarantees from the central government or development partners, cofinancing initiatives, secondary market support, use of bond banks and credit pooling, and risk instruments offered by the insurance industry.³⁸ Although risk mitigation can create moral hazard by shielding subnational governments from the consequences of their behavior, strategic use of such instruments seems inevitable where subnational governments are not independently creditworthy and private lenders would be unlikely to extend credit in the absence of government policies to alleviate risk.

³⁸ See, for example, Kehew et al. (2005), Matsukawa and Habeck (2007), Annez and Peterson (2007), Eichler (2012), FMDV (2015), OECD (2015), and De La Torre et al. (2017).

6. SELECTED EXPERIENCE WITH SUBNATIONAL DEVELOPMENT FINANCE INTERMEDIARIES

The illustrative strategy outlined above relies heavily on the notion that in developing and emerging economies, where a limited number of subnational governments can directly access markets to secure development finance, dedicated financial intermediaries—perhaps multiple versions—will play a substantial role. In some countries, such entities have been important. As noted above, many have faced challenges, but some have yielded positive results, and countries seem to be learning from past mistakes.

It is impossible to cover the range of diverse intermediaries that have been used or proposed in Asia and globally due to space and information limitations, so this section provides more information on only a few cases that have had some success or seem to hold promise. There is first a discussion of the experiences to date in India and the Philippines, both of which use a variety of subnational development finance entities that have expanded subnational access to development finance. This is followed by an overview of different mechanisms recently launched in Indonesia and Cambodia, with the latter developing a financing entity that focuses on development transfers rather than loans.

6.1 India

Since the Ahmedabad Municipal Corporation first borrowed directly from the capital market in 1998, Indian municipal corporations have raised sizable resources through both taxable and tax-free municipal bonds, with and without state guarantees.³⁹ Some of the more innovative and influential mechanisms for subnational lending, however, have been at the state level. Two that have been considered productive and successful—mixing public oversight with private finance—are the Tamil Nadu Urban Development Fund and the Greater Bangalore Water and Sanitation Project.

6.1.1 Tamil Nadu Urban Development Fund

The Tamil Nadu Urban Development Fund (TNUDF) is a financial intermediary facilitating access to capital markets for the financing of infrastructure by urban local bodies (ULBs, which include municipal corporations, municipalities, and town panchayats) in the Indian state of Tamil Nadu.⁴⁰ It was established in 1996 as a trust fund, motivated by the government of Tamil Nadu's successful experience with the Municipal Urban Development Fund financed by the World Bank.

The fund is managed by Tamil Nadu Urban Infrastructure Financial Services Limited (TNUIFSL), a public limited company with equity participation from the state of Tamil Nadu and various private financial institutions (ICICI Bank, Housing Development Finance Corporation Limited, and IL & FS Financial Services Limited), making it a PPP with the private sector holding the majority. This arrangement allows for public-sector involvement but keeps management of the fund at a distance from the government.⁴¹

³⁹ Government of India (2010, 2015), World Bank (2015).

⁴⁰ For more details see <http://www.tnuidf.com>.

⁴¹ TNUIFSL is also responsible for the management of a number of other infrastructure funds such as the project development grant fund, Project Sustainability Grant Fund, Chennai Mega City Development Fund, Tamil Nadu Urban Road Infrastructure Fund, and the Water & Sanitation Pooled Fund.

The TNUDF's financial resources consist of capital provided by the partners as well as funding from a World Bank line of credit, market borrowing, and other institutional borrowing—from the Japan Bank for International Cooperation and KfW (German Development Bank), among others. The fund makes a profit and performs well, with a loan recovery rate of 100% in the financial year 2015/16. Its institutional creditors are repaid through the government of Tamil Nadu and the Indian government.

TNUDF enables debt financing of local infrastructure development projects by providing access to capital markets either directly or through pooling arrangements. It also offers grants for public infrastructure targeting the poor. ULBs may request a broad range of technical assistance and capacity-building support, not only for financial appraisal, structuring of projects, and related fund sanctions and disbursement, but also for project development, monitoring, and management more generally.

Eligible ULBs apply for financing for a variety of urban infrastructure projects. Currently, the TNUDF project portfolio is composed of 39% bridges and roads, 38% sewerage and sanitation, 17% water supply, and 6% other projects. Loans to the ULBs usually have repayment terms of 20 years with a 5-year grace period at a fixed rate. They can cover up to 60% of the project cost.

One way the TNUDF facilitates subnational access to the credit market is by pooling capital requirements of several ULBs for specific projects and issuing bonds on the capital market on their behalf. In general, projects are required to generate enough revenue to service the debt and cover operations and maintenance, either through user charges or tolls or through upfront user contributions. If this is not feasible, other local revenue sources must be earmarked. An escrow arrangement is set up to ensure that the identified revenues are generated and spent toward debt service.

A safeguard mechanism further ensures debt service compliance by intercepting and repurposing intergovernmental transfers to the ULBs in case of default. Further guarantees to the pooled fund are provided by the governments of India and of Tamil Nadu and by donors (e.g., USAID). These safeguards bolster the fund's credit rating and reduce the interest rate.

The technical assistance and capacity building provided by TNUDF increase the fiscal, technical, and managerial capacities of the ULBs, for example with regard to accrual-based accounting, collection efficiency, effective service delivery, and tariff rationalization, which is particularly beneficial for smaller ULBs. This increases transparency and makes ULBs more attractive for private investors. It also stimulates further reforms in accounting, tax mobilization, e-governance, decentralization, etc.

This public–private debt facility helps to build the creditworthiness of ULBs and advances the development of a municipal debt market, but the lending policies are somewhat rigid. They do not allow for the resetting of interest rates and are not conducive to early repayment of the principal, which reduces their competitiveness with pure market models in the long run.

6.1.2 Greater Bangalore Water and Sanitation Project

The Greater Bangalore Water and Sanitation Project (GBWASP) was set up as a pooled financing mechanism to facilitate provision of piped water and sanitation to the greater Bangalore region (Bangalore, the capital of the state of Karnataka, is now officially known as Bengaluru), which includes eight surrounding ULBs that were merged into the Greater Bangalore City Corporation in 2007.⁴² It started as a

⁴² See the Bangalore Water Supply and Sanitation Board website at <https://bwssb.gov.in/>.

development assistance project in 2003 to establish a market-based financing framework following pooled financing models for infrastructure provision initially promoted by the Financial Institutions Reform and Expansions Program of USAID.

The GBWASP steering committee was composed of representatives of the state government of Karnataka: the Urban Development Department of the Karnataka Urban Infrastructure Development and Finance Corporation (KUIDFC), a public-sector company responsible for developing and implementing urban infrastructure projects, and the Bangalore Water Supply and Sewerage Board (BWSSB), responsible for managing water supply and sanitation in the Bangalore Metropolitan Area. KUIDFC was in charge of managing the Karnataka Water and Sanitation Pooled Fund (KWSPF), allowing access to the capital market. The BWSSB was responsible for the technical oversight of the project and, ultimately, for the operation of the expanded water and sanitation network.

The project was financed through a combination of public and private sources. Public funds came from the state government and from various national schemes, particularly the Megacity Loan program and the Jawaharlal Nehru National Urban Renewal Mission. Some funds came from municipal bonds floated by the KWSPF, which functioned as a financial intermediary between the ULBs and the capital market, pooling ULB revenues to spread risk and lower interest rates. The fund was secured by a USAID 50% guarantee on the principal. ULB property tax revenues placed in an escrow account served as a further safeguard. In 2005 the fund issued 1,000 tax-free municipal bonds at an interest rate of 5.95% and a term of 15 years.

The largest share of project funds (about 35%) came from beneficiary capital contributions, which were requested before the beginning of project construction from all residents in the metropolitan area who planned to benefit from the expansion. The amounts varied based on type of property (residential or commercial) and plot size. Contribution was compulsory, and a penalty was charged if the payment was delayed.

The project has been criticized for a top-down approach and a lack of effective communication vis-à-vis its beneficiaries and the ULBs involved, although some amendments were made to the project design in response to citizen complaints. Furthermore, shortcomings in the project planning and budgeting resulted in time delays and greater costs. Overall, however, it has significantly contributed to improving access to piped water and sanitation in the Bangalore metropolitan area.

6.2 The Philippines

The Philippine Ministry of Finance developed a Local Government Unit (LGU) Financing Framework in 1996. The framework provided for a segmented and targeted approach to LGU capital financing. Lower-income LGUs were expected to access subsidized loans from the government, while the wealthiest LGUs were expected to access private commercial finance. Those in between the two extremes were to be served by various governmental financial institutions. Provisions were also made to encourage PPPs, and a number of limited transfers for infrastructure finance were developed. The performance of the framework has lagged expectations, but two mechanisms—the Municipal Development Fund and the Local Government Unit Guarantee Corporation—have proven to be successful in improving infrastructure finance access to some segments of the LGUs.

6.1.1 Municipal Development Fund Office⁴³

The Municipal Development Fund (MDF) in the Philippines was created in 1984 as a way to offer LGUs access to capital finance for social and economic development projects. Since 1998 the fund has been managed by the Municipal Development Fund Office (MDFO) in the Department of Finance, which also manages a wide range of other financing windows (e.g., Disaster Management Assistance Fund, Municipio Fund, Public–Private Partnership Fund). Each varies slightly in purpose and/or target group, but all are geared toward facilitating financial access for LGUs.

The MDFO is directed by a Policy Governing Board. This is composed of representatives from a range of central government agencies: the Department of Finance, the National Economic Development Authority, the Department of Budget and Management, the Department of Interior and Local Government, and the Department of Public Works and Highways. The MDF is a revolving fund capitalized by grants and loans received from international donors and financial institutions. This arrangement not only harmonizes and aligns disbursement mechanisms for LGU funding but also allows the central government to monitor the disbursement and utilization of international financing.

Eligible LGUs can apply for financing generally consisting of a combination of loans and grants. For many LGUs, especially smaller ones without access to private capital, the MDF constitutes the main source of infrastructure financing. The MDFO evaluates project proposals and administers resources. It can also provide technical assistance to support LGUs in selecting and formulating investment projects that are high-quality, financially sustainable, and provide at least some degree of cost recovery.

MDFO also encourages efforts to raise private funding and other forms of cooperation with the private sector, for example through the Public-Private Partnership Fund. The financing mechanisms offered by the MDFO promote the development of financial discipline, capacity, and transparency among LGUs, thus increasing their creditworthiness. Through a system of credit monitoring, the MDFO evaluates the bankability of LGUs and graduates creditworthy LGUs to the private capital market.

6.1.2 Local Government Unit Guarantee Corporation⁴⁴

The Local Government Unit Guarantee Corporation (LGUGC) provides another type of mechanism for subnational lending. It is a private financial guarantee institution that was incorporated in 1998 by its stockholders, the Bankers Association of the Philippines and the Development Bank of the Philippines. It does not lend directly but provides financial guarantees for LGUs and other public and private entities, such as water districts, electric cooperatives, renewable energy technology projects, and medium and large enterprises, in order to enable them to access capital for infrastructure from private-sector financial institutions. It thus considers itself “the private sector link in public–private partnerships for local development financing.”

The basic LGUGC approach is to provide guarantees to partner financial institutions in case of borrower default. For water projects, USAID provides a co-guarantee of up to 50%. In return, the partner financial institution, usually a LGUGC bank or subsidiary, provides loans to or underwrites bond issues for borrowing entities. For these guarantee services, borrowers pay a guarantee fee, which may range from 0.25% to 2.00% per year of the amount borrowed, depending on the risk assessment.

⁴³ Detailed information can be found at <http://www.mdfo.gov.ph/#>.

⁴⁴ Detailed information can be found at <http://lgugc.com/>.

LGUGC also rates LGU creditworthiness using its LGU credit screening and rating system and following due diligence requirements for its partner financial institutions. Only LGUs with a minimum investment grade rating are eligible for guarantees.

6.3 Indonesia

Subnational governments in Indonesia face growing demands for extensive infrastructure investment but have had limited access to capital markets, which are not well developed to serve subnational borrowers.⁴⁵ To date, no subnational government in Indonesia has issued a bond, although some public utilities have. Over the years, Indonesia has developed a number of mechanisms to expand access to subnational loans for infrastructure investment.

Most of these mechanisms, including the Regional Development Account, the Investment Fund Account, and the Subsidiary Lending Agreement, involve funds borrowed from international financial institutions and then lent to subnational governments through the Ministry of Finance (MoF). All of the MoF accounts have experienced considerable arrears. One entity, the Indonesia Investment Agency, is a state-owned enterprise that has been more successful, but mostly provides funding for small-scale investments, such as local roads, parks, and street lights. Some larger infrastructure projects, such as rapid transit systems, have been financed through PPP agreements with a state-owned enterprise. Given the urgency to improve subnational infrastructure investment, the government is creating a new entity, the Regional Infrastructure Development Fund (RIDF).⁴⁶

In contrast to most previous subnational lending mechanisms in Indonesia, RIDF both targets a broader range of environmental, productive, and social infrastructure and will be managed by an existing state-owned enterprise, PT. SMI, rather than as an MoF account. The initial capitalization will occur through a mixture of debt and equity. The World Bank and the Asian Infrastructure Investment Bank will provide the debt component through the MoF, which will then lend the proceeds to PT. SMI, with MoF assuming foreign exchange risk. The government will provide a matching equity contribution from available funds on the PT. SMI balance sheet, including assets transferred from the Indonesia Investment Agency, the operations of which are being taken over by PT. SMI.

RIDF will provide loans to eligible subnational governments for selected infrastructure projects. Eligibility requirements include that the subnational government is not in arrears, does not have a budget deficit outside of regulatory provisions, and has audit results that meet a specified standard. Projects for which finance is sought need to be included in the subnational long-term development plan and to be approved by the local legislature. The financing arrangements must meet allowable debt service coverage ratios and cannot exceed a fixed percentage of the previous year's accumulated revenues. Loans are appraised according to standard procedures and interest rates, and terms are subject to defined guidelines. Finally, various other reviews are required, including a Ministry of Home Affairs recommendation based on its review of the subnational government's annual budget. Most of these provisions were not adhered to by previous subnational lending mechanisms. By placing RIDF operations under a state-owned enterprise, compliance with good lending practice is expected to improve.

⁴⁵ World Bank (2017).

⁴⁶ There has been some controversy about RIDF. See, for example, <http://elsam.or.id/2017/03/continued-concerns-about-two-proposed-world-bank-supported-indonesian-infrastructure-funds-ridf-iif/>.

Attached to but separate from RIDF will be a Project Development Facility (PDF) that will provide support for subnational governments in preparing infrastructure projects they wish to borrow for. Eligible expenses include identification and preparation expenses, such as feasibility studies, engineering designs, environmental and social assessments, services to assist with financial management and procurement, and capacity development. Because the PDF will operate as a separate business unit independently of RIDF, some of the conflicts of interest discussed above are not likely to arise. Such a facility is expected to help ensure that projects for which finance is sought will meet RIDF guidelines and standards and will lower the costs of project preparation for subnational governments.

6.4 Cambodia

Cambodia stands in contrast to the other countries discussed above; it is a small country with a recent and underdeveloped system of subnational government that involves limited powers and resources and is characterized by pervasive capacity constraints. Subnational governments do not borrow, but they suffer from considerable public investment deficits that they can play some role in filling. Since the public-sector decentralization process began in 2001, starting with lower-level subnational entities—communes/sangkats (urban communes)—and working up to higher levels, subnational governments have been receiving intergovernmental transfers. These funds have been used primarily for small infrastructure projects, but there have been no dedicated mechanisms developed for subnational governments to access financing for specific investment projects.

To help expand the resources available for subnational infrastructure, the government is launching the Subnational Investment Fund (SNIF).⁴⁷ The SNIF will provide grants (no loans initially) for public infrastructure and services on a competitive basis to provinces, districts/municipalities, and communes/sangkats. A single pool of funds will be secured externally, initially from the Asian Development Bank, with disbursements expected to begin in 2018 or 2019. Given the different roles and scale of subnational governments, the pool will be divided into three sub-pools (one for each level).

The SNIF will prioritize sectors and services that are (partially) decentralized or likely to be decentralized in the near future in the ongoing decentralization reform process. Candidates include water, transport, local economic development, agriculture, education, natural resource management, and health. SNIF investment grants are expected to cover both infrastructure and non-infrastructure (e.g., equipment) projects of demonstrated value to subnational governments. To encourage submission of proposals, the SNIF will provide proposal preparation grants based on specific criteria.

Each subnational government will be required to submit an application for the financing of each desired project in any eligible sector. SNIF investment grants will only be allocated to subnational governments that meet specific good governance criteria, such as timely preparation of budgets and timely submission of financial management reports, and there may be prioritization given to subnational governments with certain characteristics, for example heavy needs or a high poverty incidence.

⁴⁷ Asian Development Bank (2011).

The criteria for appraisal include that the proposed project be economically feasible (benefit–cost ratio > 1) and within the minimum and maximum contract size range. In addition, the projects should initially be relatively simple (e.g., not include complex partnering arrangements) and not unusually risky (e.g., with potentially adverse social or environmental impacts).

The management of the SNIF (responsibility for day-to-day operations) is to be based in a newly created department within the Ministry of Economy and Finance (MEF). Overall responsibility, however, is expected to be managed by a broader group of stakeholders through the SNIF board. This would be chaired by the Minister of Economy and Finance but would also include high-level representatives of the Ministry of Interior, major sectoral ministries involved in service delivery and with subnational governments, representatives of subnational government associations, and possibly other members. Although this mechanism is basically under the MEF, the involvement of other actors on the board provides an opportunity for other views to shape how the SNIP evolves.

6.5 Observations on the Selected Cases

The basic information on selected subnational development finance intermediaries provided here portrays different approaches unfolding in different Asian country contexts. In India there has been some direct market borrowing by major urban governments that have been able to develop sufficient creditworthiness. Much subnational borrowing, however, has occurred through dedicated intermediaries at the state government level. Subnational governments in the Philippines have borrowed a fair amount, but mostly through multiple intermediaries with varying mixes of public and private funding that serve different types of local governments and projects. Such variation in sources and instruments is broadly consistent with the type of framework outlined above, although the extent to which the various entities have been systematically developed and used is not easy to clearly assess.

In Indonesia, subnational governments have not issued bonds and have mostly borrowed through on-lending mechanisms based in the national Ministry of Finance. The new Regional Infrastructure Development Fund will be based in a state-owned enterprise instead of a government ministry, a step in a more market-oriented direction. Cambodia—a small, poor, and more recently decentralized country with particularly severe capacity deficits—is not attempting to promote subnational government borrowing at this stage. Instead, it is creating the Subnational Investment Fund to channel grants to subnational governments through a simple but rule-based system for subnational investments.

Because the countries and their subnational governments have different features, operate in diverse contexts, and have uneven levels of experience in local investment, the mechanisms they have developed to finance such initiatives are rather different. It is difficult to systematically compare and evaluate these mechanisms without more research, but it does seem that they mostly share, at least to some extent, a number of characteristics that suggest they are trying to learn from past efforts to support subnational investment.

In each case, the countries are generally moving beyond the subnational development finance systems they have used in the past. With the exception of Cambodia, which does not involve borrowing, the emerging arrangements all engage the private sector more significantly than earlier efforts and move away from full central government management. They have developed provisions to incentivize repayment—including in some cases intergovernmental transfer intercepts—in the expectation of creating a true revolving fund. Each initiative has measures to define objective rule-based approaches

that help to ensure more efficient and equitable allocation of development resources. In varying ways, they provide some financial and/or technical assistance to support subnational governments with project preparation, but generally in a way that reduces problems associated with mixing responsibility for multiple project development functions under a single entity.

A few of these entities combine the use of grants and loans to finance development projects, although in relatively simple ways rather than through the more systematic type of grant–loan linkage mentioned above and discussed in more detail below. It is also worth noting that all of these mechanisms started with some degree of external intervention. If they were not directly part of a development assistance project, the initiatives relied on development partners or international financial institutions for capital, which was then passed to subnational governments in the form of grants and/or loans.

7. INNOVATIONS TO SUPPORT ENHANCED SNG DEVELOPMENT FINANCE

The above discussion focused on options for improving subnational development finance in diverse environments and the need for complementary fiscal and other reform measures to create improved foundations for subnational borrowing. This section focuses on a few selective innovations that may be able to stimulate better subnational government fiscal performance and create conditions that support investment finance. These include more detail on the idea of a grant–loan linkage, the use of performance-based transfers, and initiatives to help improve the use of PPPs.

7.1 Grant–Loan Linkages

Several of the entities discussed above and a number of others around the world already mix grants and loans in financing subnational investments, and a number of them create a specific kind of link that allows central governments to intercept intergovernmental transfer flows to subnational governments that do not meet debt service obligations. These approaches may be productive in some respects, but it is not clear how systematically grant–loan mixes are determined. In some cases, a fixed percentage of the total is allowed as a grant without specific adjustment made for the nature of the project or the circumstances of the subnational government.

grant–loan linkage designed to encourage more careful use of development resources would start with the assumption that revenue-generating infrastructure should be financed by loans at an interest rate that reflects the cost of capital.⁴⁸ A creditworthy subnational government, national regulations permitting, should go to the credit market. In other cases, subnational governments would be eligible to use a special financial intermediary along the lines of the entities discussed above.

⁴⁸ Grant–loan linkages are discussed and illustrations presented in Smoke (1999) and Friere and Petersen (2004).

In many cases, conventional solutions offered by special intermediaries to deal with creditworthiness and affordability constraints, such as uniformly or selectively subsidized interest rates or fixed grant shares, are problematic. Such concerns might be more effectively managed through more refined interest rate adjustments or grant mechanisms that complement loans as justified according to objective and consistent rules.

This approach would mean that all requests for infrastructure funding to the central government or its delegated lending agency would be assessed as if they were to be financed by loans at a prevailing interest rate. If repayments create an infeasible liability for a subnational government or an excessive burden on project beneficiaries (through fees paid by users of the infrastructure being financed), the subnational government would be eligible for support.

If such a grant–loan linkage were to be used, the subsidization would be provided in the form of a grant that covers all or part of initial financing. Affordability would have to be measured according to well-defined rules, and a grant would be provided only if operating costs fall within an acceptable range and user charge collection efficiency meets minimum standards. Such rules ensure that subnational governments are not subsidized, even if meriting such treatment on affordability grounds, unless they meet performance standards. Some subnational governments will of course require technical assistance to do so.

More specifically, if allowable annual outlays based on cost effectiveness standards plus debt service (for a long-term loan at the prevailing interest rate) exceed maximum annual proceeds from user charges meeting specified standards (plus other resources dedicated to loan repayment), the subnational government would be subsidized. The loan amount required to finance the project would be reduced and a grant element introduced to allow the subnational government to meet its obligations and defined affordability norms.

Under such a system, subnational governments developing a new infrastructure project should face incentives to operate more efficiently and to recover costs from users of the infrastructure. This approach would also better serve equity because fiscally stronger subnational governments and revenue-generating infrastructure projects would be more substantially financed by loans, while fiscally weaker governments and projects that provide basic services but cannot recoup costs would more likely benefit from subsidies.

This sounds fairly straightforward, but there are many complications and potential political obstacles. Such an approach would be compromised, for example, if subnational governments have access to grants that do not require this type of assessment. There could be challenges with defining some critical information, such as affordability to users of a particular infrastructure project. Moreover, existing regulations, such as central guidelines on service charges that limit prospects for cost recovery, could potentially complicate the application of such an approach.

It is premature to recommend broader use of grant–loan linkages. But it would seem worthwhile—given the need to target development grants to specific uses and find a way for weaker subnational governments to begin borrowing—to think more carefully about how in developing countries it might be possible to combine grants and loans in a way that improves the use of scarce capital resources and provides opportunities to get lower-capacity subnational governments on a path to gradually building fiscal responsibility and creditworthiness.

7.2 Performance-Based Grants

Performance-based grants have become a focus of attention in subnational government finance in recent years.⁴⁹ On the one hand, some decentralization proponents question the merits of placing conditions on subnational governments in devolved systems. On the other hand, even in devolved systems there are legitimate reasons to enforce standards for the delivery of services that have broader national development effects, and in less-developed countries, many subnational governments do not have the capacity or incentives to perform well.

In the world of subnational development finance, capacity and performance are ideally captured in credit ratings. If a subnational government has an adequate credit rating, there is some confidence that it will perform effectively in repaying a loan it takes for an infrastructure project. Much of this paper, however, has been focused precisely on the problem that the bulk of subnational governments in many developing countries are not creditworthy. There has been some treatment of various ways to try to build greater fiscal responsibility and capacity and to improve performance. It is possible that performance-based transfers could assist in this broader process.

Many industrialized countries use conditional transfers for service delivery in particular sectors in which certain standards must be met, but such instruments based on standards and behaviors have been less common in developing countries. With increasing interest in performance and effective use of public resources and development assistance, there have been more efforts to adopt such transfers. Sectoral-based performance incentives may be useful if the right kind of data can be regularly assembled, analyzed, and used to help develop use of improved systems and attainment of better outcomes. A few countries in Asia, including India, Indonesia, and the Philippines, have been using performance-based transfers in recent years.

Perhaps more directly useful for current purposes is the use in a wide range of poorer countries of broader performance-based grant systems. These tend to be focused on process-oriented reforms in subnational governments, generally in building routine capacity in financial management, planning, transparency, human resource management, etc. Subnational governments may receive these transfers, which are commonly for development expenditures, only after meeting minimum conditions. Once met, they may receive bonuses (or be subject to penalties) for attaining (failing to attain) targets.

Normally these targets are, at least initially, based on process requirements rather than on service delivery outcomes, so they might be more accurately called compliance grants. Although seemingly limited, they have worked in a range of African countries and in a number of Asian countries, including Bangladesh and Nepal.

Of course, central governments should not be paying subnational governments indefinitely for routine tasks, such as producing a budget on time and adhering to expenditure targets, but this type of approach has helped to build basic capacities in some poorer countries. Such capacities are foundational elements of fiscal responsibility and creditworthiness, so such initiatives may contribute to more effective subnational government performance in infrastructure delivery and ultimately strengthen subnational government capacity to manage development finance.

⁴⁹ See, for example, Shah (2010), Steffensen (2010), and Lewis and Smoke (2012).

7.3 Initiatives to Support Project Preparation and PPPs

In an effort to help subnational governments develop better infrastructure projects and secure financing, a number of development partners have supported or proposed the creation of Project Preparation Facilities (PPFs).⁵⁰ These take multiple diverse forms.

One such effort is the Cities Development Initiative for Asia (CDIA), a joint initiative of the Asian Development Bank (ADB), several European bilaterals, and the Shanghai Municipal Government.⁵¹ CDIA supports medium-sized cities in the Asia and the Pacific region to take projects identified in their development plans and transform them into specific infrastructure investments with a focus on urban environment, poverty reduction, and climate change adaptation. CDIA works with cities to support infrastructure planning, prepare feasibility studies, build capacity, and locate potential sources of finance. It has involved 55 cities in 14 countries, including Bangladesh, India, the Lao People's Democratic Republic, and the Philippines.

Other examples include the International Finance Corporation Global Infrastructure Project Development Fund⁵² (although this focuses on private-sector-led projects), the African Development Bank Infrastructure PPF,⁵³ and the ASEAN Infrastructure Fund⁵⁴. Although these other PPFs are not specifically targeted to subnational governments, there may be lessons that can be drawn that could be directly applied to subnational public infrastructure projects.

A number of international agencies and initiatives have been attempting to enhance the use of PPPs and assist with setting them up. For example, the Public–Private Infrastructure Advisory Facility (PPIAF), a multi-donor technical assistance facility based at the World Bank, has been supporting some subnational PPPs.⁵⁵ The European Bank for Reconstruction and Development (EBRD) supports the creation of infrastructure PPPs.⁵⁶ This is done through sub-sovereign direct lending, along with efforts to improve the creditworthiness of subnational governments, and the piloting and development of contractual agreements that involve the EBRD, subnational governments, and a designated public service provider. Such efforts have mostly not targeted developing countries, but over time there may be ways to adapt them for such use.

A number of country-specific initiatives have also been established. The Philippines, for example, has made strong progress in developing subnational PPPs, especially in water and electricity, after a long period of experimentation and learning. The Project Development and Monitoring Facility (PDMF) is supported by the ADB, Australia, and Canada to assist with the preparation of infrastructure projects for a PPP Center attached to the National Economic Development Authority.⁵⁷ Other mechanisms tailored to the local context have also been created in India, Indonesia, and Viet Nam. These initiatives are relatively new but growing rapidly and starting to show at least some impact.

⁵⁰ GIZ (2014), World Economic Forum (2014), Schmidt-Traub and Sachs (2015).

⁵¹ <http://cdia.asia>.

⁵² <https://www.ifcamc.org/funds/ifc-global-infrastructure-fund>.

⁵³ <https://www.afdb.org/en/topics-and-sectors/initiatives-partnerships/africa50/>.

⁵⁴ <https://www.adb.org/site/funds/funds/asean-infrastructure-fund>.

⁵⁵ <https://ppiaf.org/sub-national-ta>.

⁵⁶ <http://www.ebrd.com/infrastructure/infrastructure-IPPF.com>.

⁵⁷ See ADB (2016) and <https://ppp.gov.ph>.

8. CONCLUDING OBSERVATIONS

Given the multifaceted, varied, and asymmetrically developed landscape in which subnational governments operate across developing and emerging countries—both in Asia and globally—enhancing subnational development finance must be tailored to the country context. In recent years, some countries have tried to engage too quickly in developing municipal bonds and/or overly ambitious use of PPPs, and many have maintained heavy use of development transfers for subnational government infrastructure. Insufficient attention to developing the types of special financial intermediaries discussed above seems to result from concern—on the part of developing and emerging countries and international development partners—about the documented difficulties involved in making such entities work sustainably and, in some cases, unrealistic expectations regarding the role that municipal bonds can play in the near term.

Although there is good reason not to repeat past missteps with subnational financial intermediaries, their performance issues often stemmed from correctable defects in their design and implementation rather than inherent shortcomings in the underlying concept. Even more significant, there can be little doubt that a large proportion of subnational governments in many developing and emerging countries are not creditworthy and will require support to build fiscal responsibility and access development finance. The weakest subnational governments, whatever their needs, may not be able to borrow in the near term. At the same time, there are likely to be subnational governments in many countries capable of assuming debt, if not directly from capital markets, then from properly structured financial intermediaries and commercial banks.

Given the diversity of conditions, there is no universal solution to expanding subnational government borrowing. Instead, there is a strong case for promoting a spectrum of development finance mechanisms appropriate to each country. Stronger subnational governments should have direct access to capital markets, subject to an adequate regulatory framework. Those without direct market access could be served by financial intermediaries structured according to accepted principles with an initially appropriate level of private-sector involvement that can grow over time. Means to mitigate risk may be needed, such as credit guarantees, co-financing initiatives, secondary market support, bond banks, and credit pooling.

Improving subnational development finance will also require restructuring broader intergovernmental fiscal frameworks as well as initiatives to build fiscal responsibility and creditworthiness. There is often scope to strengthen subnational government mechanisms and capacities to raise own-source revenues. These will include traditional sources, such as local taxes and user fees, and more innovative approaches, such as sources that capture part of the local added value (economic, land, property) produced within the territory of subnational governments. Intergovernmental transfers may require reform to improve predictability and buoyancy, to institutionalize transparency in how they are allocated, and to promote their use in a way that promotes accountability. There is some potential value to expanding the use and quality of performance-based transfers.

Equally important are efforts to strengthen subnational government financial and asset management systems and capacity, including for budgeting and expenditure control, administration of subnational government taxes and fees, life-cycle and portfolio management of local assets, design and implementation of local investment projects, and effective use of accountability mechanisms. All of these measures can contribute to subnational government fiscal responsibility and creditworthiness.

Finally, there is potential value in developing appropriate and well-enforced PPP regulatory frameworks to support blended financing and assist subnational governments in building accountable and fair partnerships with private enterprises. A key concern is that such frameworks should create conditions conducive for private engagement but preserve public interests and help to ensure access for the more vulnerable to public infrastructure.

In short, the reform agenda for subnational development finance and intergovernmental relations more generally is often very demanding. Not everything can be done at once, even in countries with more developed systems. A process is required to strategically and pragmatically define and advance the agenda, taking care to ensure that critical linkages among interdependent aspects of fiscal reform are adequately considered and new ideas and opportunities that emerge are explored and pursued if warranted. In order to do this, better diagnostics, information on productive experiences, and means to pilot potentially beneficial innovations—in Asia and beyond—will need to be developed.

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