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Government Investment in Developing
Countries: The Case for Increasing Subnational
Borrowing and Commercial Debt**

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Fiscal Decentralization and Subnational Government Investment in Developing Countries: The Case for Increasing Subnational Borrowing and Commercial Debt

Paul Smoke*

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Abstract

Subnational governments in developing economies typically borrow considerably less than those in more advanced economies. Subnational borrowing has attracted attention in recent years due to better documentation of public investment gaps in sectors that are often decentralized, development needs highlighted by global development agendas, and recognition that public funding alone cannot meet the demand. Despite the global pattern, subnational governments in some middle-income countries do borrow, even commercially. This paper focuses on middle-income countries in which subnational governments that should be able to access commercial financing do not, suggesting they use public funding that should be targeted to those unable to borrow. This paper considers whether observed uneven subnational borrowing reflects identifiable contextual factors that could inform policy reforms. Data constraints limit systematic definitive assessment, but available information suggests the potential scope for more borrowing in at least some countries and argues that strategies to expand such activity and to improve overall subnational finance merit greater attention from the international development and finance communities. The conclusions recommend advancing debate on policy reforms and actions to increase subnational borrowing in developing countries.

Keywords: subnational government borrowing, subnational government access to commercial finance, intergovernmental fiscal systems, infrastructure investment for sustainable development

JEL Classification Codes: H7, H74, O2, R5, R51

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1. Introduction

It is well established that subnational governments in many developing economies borrow considerably less than those in more advanced economies.¹ The latest available data indicate that subnational borrowing in high-income countries accounts for 12.2 percent of total government borrowing (9.4 percent of GDP) compared to 2.1 percent (1.0 percent of GDP) in middle- and low-income countries (OECD-UCLG 2022).² Subnational commercial borrowing in these latter countries is often the exception rather than the rule, in contrast to the majority of more developed countries. Although variations in subnational borrowing would be expected across countries in different income categories, the extent of existing differentials raises particular concerns given major infrastructure gaps and the pressing 21st century imperative for local public investments.

Subnational government borrowing has attracted more attention in recent years as its potential value for developing countries is increasingly recognized and better data have documented its relative underutilization.³ Subnational finance data, particularly on borrowing, have long presented challenges. Comparative sources, albeit with varied coverage, have been improving, including the [OECD-UCLG WOFI](#) database and a [World Bank City Creditworthiness Initiative \(CCI\)](#) database. The World Bank Group supports fiscal decentralization and subnational borrowing in various ways. In addition, the International Finance Corporation (IFC) efforts to support subnational governments globally and open more countries to subnational commercial borrowing have included legal reviews of borrowing frameworks and market intelligence on subnational lending in a few dozen developing countries, is drawn on in this paper.

Beyond country income differences, other factors have been cited as hindering subnational government borrowing outside of high-income countries. Immature capital markets that offer

¹ There is no universal standard for using the term “developing” as a country classification. Sometimes it is used to refer only to low- and lower-middle-income countries, with terms like “emerging” applied to upper-middle-income countries and “advanced” to high-income countries. Developing is used here to refer broadly to countries that are not high-income, and when more specific points are being made, lower, middle and high are used.

² Note that these numbers may somewhat understate the situation. The most recent data were collected during the pandemic and are lower than the shares reported in the 2016 and 2019 OECD-UCLG reports.

³ For many years the major source of data was the [International Monetary Fund Government Finance Statistics](#), but the subnational information in this series is not comprehensive or disaggregated in detail.

limited access and unfavorable terms; inadequate or constraining national decentralization policy frameworks that limit fiscal and other powers of subnational governments; incomplete adoption of enabling legal framework provisions; limited managerial capacity; low creditworthiness, and weak subnational borrowing incentives, among others, are often blamed for discouraging or complicating the use of subnational government debt.⁴ But are these types of obstacles really so widespread? Even if some of them occur to varying degrees, do they necessarily disqualify all subnational governments, especially in middle-income countries, from taking greater advantage of borrowing to secure much-needed development finance?

Despite the global pattern of limited subnational borrowing in developing countries, subnational governments in several middle-income countries have greater activity, including some commercial debt. Why is this the case? Does the behavior of higher subnational borrowers have a relationship to economic, institutional, and fiscal fundamentals? This paper examines subnational borrowing in a set of middle-income countries and considers if readily identifiable factors constrain subnational borrowing in some countries. This initial work is based on available comparative data, which is relatively limited and sometimes inconsistent, so it does not provide a systematic definitive assessment. But there is information to suggest the potential scope for more commercial borrowing in some middle-income countries and to make the case that **strategies to expand subnational borrowing where it is limited and to improve overall subnational finances merit more attention from the international development and finance communities.**

The next two sections (2 and 3) respectively highlight the need for more subnational investment and the potential advantages of borrowing to support such activity. Section 4 provides a global summary of subnational borrowing relative to the overall subnational government role across country income categories, including a closer look at fourteen middle-income countries with mixed subnational borrowing. After identifying countries with limited subnational borrowing despite nontrivial public sector roles, section 5 considers other factors that might affect borrowing, including financial access, borrowing frameworks and subnational autonomy. No factors covered here clearly disqualify subnational borrowing, so section 6 offers short vignettes

⁴ See, for example, UCLG (2010, 2015), Frank and Martinez Vazquez (2016), Smoke (2019), and Martell et al. (2021).

of countries with limited subnational borrowing, exploring how details beyond basic regulatory framework provisions and other factors might come into play. Section 7 briefly reviews broader more qualitative considerations—the overall intergovernmental framework, policy implementation, and accountability mechanisms—of potential relevance. Information gaps preclude systematic detailed comparison of countries on these fronts, but the discussion raises issues that may require attention if subnational borrowing is to expand. The final section offers concluding observations and recommendations for advancing debate on policy reform and actions to support increased subnational borrowing in developing countries.

2. The Need for Increasing Subnational Government Investment and Borrowing

Evolving global conditions and priorities point to the considerable value and potential feasibility of more extensive subnational government investment and borrowing in more middle- and lower-income countries. First, **high-income countries have stronger economies and better-off populations in part because of investment in public infrastructure** that supports private investment and improves citizens' productivity and welfare. Middle- and lower-income countries by definition need to advance on this front, and improving subnational government access to and use of development finance is an important means for doing so.

Second, with a **general if uneven decentralization trend in recent decades**, national governments in many middle- and lower-income countries expect subnational governments to take responsibility for local public functions that are often capital intensive. Subnational governments account for 30 percent of public spending and 40 percent (or more) of public investment in high-income countries (OECD-UCLG 2022). Subnational empowerment through fiscal decentralisation is more recent and still evolving in many low-income countries, where subnational governments on average account for only 12 percent of public spending and less than 20 percent of public investment.⁵ Middle-income countries, however, have a fiscal significance not very far behind the high-income countries, accounting for 20-25 percent of public expenditure and 35-40 percent of public investment.

Third, the **gap between subnational government investment spending and subnational government borrowing** in middle- and low-income countries suggests that a considerable share

⁵ See section 3 for more information on fiscal decentralization.

of their investment is financed by transfers and special funding arrangements.⁶ Available data also indicate that subnational borrowing occurring in these countries is commonly concessional funding provided by sovereign governments or dedicated subnational financial intermediaries, often supported by international financial institutions. These forms of development finance are essential but inappropriate use may create disincentives for subnational commercial borrowing where it is allowed and feasible, and they may also lead to inefficient use of development capital. Even where subnational commercial borrowing occurs in middle- and low-income countries, it is typically limited and used by relatively few intermediate-tier and larger urban governments.

Fourth, many middle- and low-income countries face **major deficiencies in providing basic infrastructure** to the extent that the estimated infrastructure investment gap in emerging market economies is \$1.3 trillion per year.⁷ Needs are expected to surge as population continues to grow in many countries. Filling the gap will require effective development planning and considerable public investment, much of it related to functions that subnational governments do or could play a more significant role in delivering and financing.⁸ Although evidence is mixed and performance varies across and within countries with highly diverse intergovernmental systems and fiscal arrangements, there is ample data to show that subnational governments can contribute significantly to development by making public investments, raising resources, and managing service delivery and other functions that contribute to both local and national development goals.⁹

Fifth, **continued strong urbanization**, particularly in certain regions, signals that infrastructure demand will continue to grow and underscores the need for subnational borrowing. Cities drive economic growth—more than 80% of global GDP is created in cities, and urban areas in many countries often produce a quarter or more of GDP. Over half of the global population is already urban, and urbanisation is expected to be near 88% in industrialized and 68% in developing countries by 2050 (UNDESA 2018). The urban record on delivering services and creating jobs,

⁶ See, for example, Friere and Petersen (2004), Peterson and Annez (2007), Platz (2009), Canuto and Liu (2013), Ahmad (2014), OECD (2015), UN-Habitat (2015), Smoke (2019), Yilmaz and Ebel (2020), Martell et al., (2021).

⁷ There are multiple global estimates of infrastructure finance needs assessments based on different approaches with a wide range of results. See, for example, Rozenberg and Fay (2019), Swiss Re Institute (2021).

⁸ A World Bank webpage on [Getting Infrastructure Finance Right](#) provides relevant material and cases.

⁹ Selected evidence reviews include Ahmad and Brosio (2009), USAID (2013), Local Development International (2013), Faguet and Pöschl (2015), Smoke (2015a), European Commission (2016), Martinez-Vazquez, et.al. (2016), Dick-Sagoe (2020), Hanif et al. (2020), Canare (2021), Faguet (2021), Hung and Thanh (2022).

however, is uneven, with middle- and low-income countries commonly facing severe challenges in providing infrastructure to support urban and national economic growth.¹⁰

Finally, there is increasing recognition that **subnational governments can contribute to responses to multiple complex challenges facing individual countries and the world.** Global warming, financial crises, energy deficiencies, the COVID-19 pandemic and other health crises, and food insecurity, among others, require considerable public investment. International and national government measures are essential, but subnational governments can and have already taken action on these fronts in some countries. These local actors are often well situated—if they have appropriate powers, support, and funding—to develop innovative responses through appropriate investments (e.g., climate adaptation, energy conservation, green growth, etc.), and local resource mobilisation.¹¹

The critical role of subnational governments in sustainable development has been strongly underscored by major global development agendas. Agenda 2030 commits the international community to an ambitious set of Sustainable Development Goals (SDGs) in less than a decade. If this is to occur or even make credible progress, countries and their subnational governments have to work in new ways and with new partners, and they must effectively use all the governance, fiscal and managerial mechanisms at their disposal and develop new ones. Calls for “localizing” the SDGs have become prominent across the international community and in many countries.

A UN Secretary General's Synthesis Report on the SDGs states “many of the investments to achieve the sustainable development goals will take place at the subnational level and be led by local authorities.”¹² Only SDG 11 is focused on subnational governments, but 103 of the 169 SDG targets (61%) are considered relevant to cities or require local action.¹³ The High-Level Panel on the Post-2015 Agenda claims “cities are where the battle for sustainable development will be won or lost.”¹⁴ The New Urban Agenda (Habitat III) calls for “addressing unique and

¹⁰ See, for example, Bahl, Linn and Wetzel (2013), McGranahan and Satterthwaite (2014), UCLG (2016), UN-Habitat (2020), World Bank (2022).

¹¹ See, for example, Broto and Bulkeley (2013), UCLG (2014), Bazaz et al. (2018), Chu et al. (2019), Hughes, et al. (2019), Smoke and Cook (2022).

¹² UN General Assembly (2014), p. 22, par. 94.

¹³ Greene and Meixell (2017), p. 10.

¹⁴ UN (2013), p. 17. 2013.

emerging urban development challenges...in developing countries.”¹⁵ The Addis Abba Action Agenda (Financing for Development) emphasizes the role of subnational governments in financing sustainable development and commits to scaling up international cooperation and mobilizing public and private resources to support local and regional governments.¹⁶

In short, major infrastructure gaps indicate a pressing need for more subnational investment in developing countries. The international development community has recognized this need and the role of subnational governments in filling it. Making progress will require resources beyond what central and subnational governments can generate internally, highlighting the value of subnational borrowing and public-private partnerships.¹⁷ Given funding needs, commercial borrowing must play a greater role, but it has been insufficiently utilized in many countries. Indeed, subnational government commercial borrowing often falls through the cracks in efforts to improve subnational government finance and is not adequately prioritized by international organizations or by individual national governments to an extent commensurate with its potential value. Even development finance institutions that lend to national governments could play a stronger role in strategically promoting subnational borrowing and access to commercial sources.

3. Potential Benefits of Increasing Subnational Government Borrowing

The preceding discussion highlights international community expectations for the role of subnational governments in promoting development in the 21st century. Is there a conceptual and practical basis for these expectations and what role could subnational borrowing play? This section briefly reviews the potential advantages of properly empowering subnational governments, including increasing their role in borrowing, both from sovereign sources (concessional) and the market. It also notes potential risks (real and perceived) that should be recognized in advancing the subnational borrowing agenda.

¹⁵ UN-Habitat (2017), p. 9, par.19

¹⁶ UNDESA (2015).

¹⁷ Although not a focus of this paper, PPPs can be an important mechanism for subnational infrastructure delivery and finance, although they face challenges in many middle- and low-income countries. Useful overviews include the [World Bank PPP Legal Resource Center](#) and [The Public-Private Infrastructure Advisory Facility \(PPIAF\)](#) websites.

The role of subnational governments in mainstream public finance theory (fiscal federalism) is defined by a framework for decentralization of powers and functions on the basis of normative criteria.¹⁸ The theory highlights allocational efficiency, such that lower levels of government should provide public services for which public demand varies across jurisdictions, but higher-level provision or regulation is needed for functions that exhibit scale economies or externalities. The associated principle of subsidiarity posits that a public function should be provided at the lowest possible level of government. This includes capital-intensive infrastructure services such as roads, transport and water, and social services such as education and health, which require investment in facilities and can also benefit from borrowing.

The fundamental rationale for fiscal decentralization is the assumption that **subnational governments enjoy locational and governance advantages**—greater knowledge of their jurisdictions and a more robust accountability connection to their constituents. Local spending decisions are expected to be more closely tied to real resource costs since public services are more visible in specific locations and better linked to locally generated revenues. The existence of many subnational governments can also create a competitive environment for productive innovation, which can benefit subnational public investment and commercial borrowing.

There is another factor, however, that is not emphasized by mainstream approaches to decentralizing specific public functions—**subnational governments would be expected to have greater motivation and potential to pursue integrated development.** The logic is that they will be more inclined to consider public needs and functions in their jurisdictions in a holistic way compared to national ministries with narrower sectoral mandates. Many public investments are interdependent—e.g., schools and clinics need electricity, roads, sanitation, and water. Subnational governments may be in a better position than central agencies to recognize these relationships on the ground and to plan the investments needed to provide these services jointly.

Also neglected in traditional decentralization thinking is the claim that subnational governments should have a **general mandate to provide for the overall development of the territories they govern and the welfare of their constituents.**¹⁹ General mandates imply more empowered and

¹⁸ Fiscal federalism originated in Oates (1972) and there has been a substantial literature about the topic. A useful expanded treatment grounded in the original theory is provided in Bahl and Bird (2018).

¹⁹ See, for example, Commonwealth Local Government Forum (2013), Romeo (2013), Romeo and Smoke (2016), European Commission (2016).

autonomous subnational governments able to act beyond specific functions assigned to them in the national legal framework.²⁰ This broadens the subnational government's scope to deal with territorial needs, including public investment financed by borrowing. Such a mandate, of course, must ensure an appropriate balance between legitimate national mandates and standards with the potentially greater subnational ability to deal with specific needs on the ground.

In addition to the potentially productive role of subnational governments in public investment, there are also specific **advantages that subnational government borrowing** offers, both in general and specifically from commercial sources. First, **borrowing can accelerate development** beyond what is possible with regular subnational government resources. Public investments made with borrowed funds can make much needed infrastructure available sooner and create revenue-generating assets, which in turn can stimulate private investment and spread some of the costs of long-term public investments to future beneficiaries.

Second, the assumption of **debt can create additional accountability to lenders and increase fiscal discipline that helps to secure more attractive debt terms** (interest and tenor). It can also improve incentives for subnational governments to use their revenue powers to raise more of the resources they need independently and to improve borrowing capacity and fiscal responsibility more generally. Subnational governments need to generate funds and manage them well in order to be able to repay the loans that they assume to finance investments as well as to effectively operate and maintain the facilities constructed with loan proceeds.

Third, access to commercial borrowing is desirable because the **financial markets offer subnational governments more flexibility** to address local investment needs in their jurisdictions. Central government/concessional development funding may be limited and/or may flow irregularly, so it may not be available when needed by subnational governments. In addition, such funds may be primarily targeted to national public investment priorities that do not fully meet local needs, and they can involve centralized bureaucratic processes that take considerable time and effort to complete, secure a decision, and receive the funding.

²⁰ More than 40 countries have adopted the [European Charter of Local Self-Government](#), which introduces the “general mandate” in Art. 4.2. Many middle- and lower-income countries have reference to such mandates in their legal frameworks, although they are not necessarily used in practice.

Fourth, subnational government borrowing may offer **potential benefits for national government finances** and the nation as a whole. If subnational governments rely more on non-sovereign supported loans and bonds loans for their investments, this can reduce demands on the national budget and support the production of network infrastructure that generates economic and social benefits beyond the boundaries of the borrowing jurisdiction. If market-ready subnational governments borrow commercially, this can free up public resources that enhance the fiscal space for national governments to pursue redistributive revenue sharing/transfer policies.

Fifth, subnational government bonds can **offer a good long-term asset for certain types of investors** in many countries, including insurance companies and pension funds. They can also provide an effective means of converting the savings of individual citizens into domestic investments in much-needed public infrastructure.

Despite potential advantages, central governments in middle- and low-income countries often raise concerns about subnational borrowing and fiscal decentralization more generally due to the inherent loss of central control over public resources, deficiencies (real or perceived) in subnational government capacity and accountability, and lack of subnational fiscal discipline, among others. Although such concerns may be quite legitimate to varying degrees in many political and institutional contexts and for certain subnational governments within any country, they are not universal and can potentially be alleviated by well-conceived and well-executed subnational government borrowing frameworks and overall fiscal decentralization policies, as evidenced in many developed countries.

4. Subnational Government Borrowing in Context²¹

Global Subnational Borrowing Variations Across Country Income Categories

Following the preceding brief documentation of limited level subnational borrowing in middle- and low-income countries, the considerable backlog of essential infrastructure in sectors for which subnational governments do or could have responsibility, and the potential contribution of borrowing for much-needed local public investments, this section provides more detail on the overall subnational borrowing situation and considers selected factors expected to shape the role

²¹ Data (unless otherwise noted) are from the [OECD-UCLG World Observatory on Subnational Government Finance and Investment](#). The most recent data are for 2020 and may reflect effects of the COVID-19 pandemic.

it plays in specific countries. A broader global scan of key indicators based on available data is presented first, followed by a closer look at subnational borrowing behavior in a set of middle-income countries and characteristics of the intergovernmental fiscal system, the regulatory framework and other factors that might enable or hinder subnational borrowing.

Subnational debt (borrowing) is important in high-income countries—9.4 percent of GDP and 12.2 percent of total government debt (Table 1)—but much less in low-income groups.

Although subnational borrowing can be important in any decentralized system, in federal (especially OECD) countries it accounts for higher shares of GDP and total public debt (20.3 and 22.7 percent) relative to unitary countries (2.8 and 4.3 percent). Debt is also more prominent at intermediate tiers (states/ provinces/regions)—even in OECD countries, lower-tier debt accounts for only 3.7 percent of GDP and 5.7 percent of total government debt. This may reflect the scale and empowerment of intermediate-tier governments, including different infrastructure responsibilities, rather than necessarily indicating weaker capacity at local levels.

Limited available data indicate that **subnational debt is dominated by loans**—81.6 percent in high-income, 84.9 percent in upper-middle income and 95.1 percent in lower-middle and low-income countries. Bonds are used more in high (18.4 percent) and upper-middle income countries (15.1 percent) compared to lower-middle and low-income countries (4.9 percent). Loans are a lower share of subnational debt in federal than in unitary countries (67.9 versus 89.4 percent) and bonds a higher share (32.1 versus 10.6 percent). There can be variation across countries in these categories. The IFC estimates that relatively regular subnational borrowing occurs in 25-30 developing (mostly middle-income) countries--about 20 have at least one subnational bond issue and about half of that number have more regular activity. Very few middle-income countries (Argentina, India, Russia, and Ukraine, among others) have issued subnational government bonds on the international market.

Table 1. SNG Debt (Borrowing) by Country Income and Other Selected Categories*

Country Income Level	SNG Debt/GDP	SNG Debt/Total Government Debt	Loans/Total SNG Debt	Bonds/Total SNG Debt
High	9.4	12.2	81.6	18.4
Upper-Middle	1.5	4.4	84.9	15.1
Lower-Middle/Low	1.0	2.3	95.1	4.9
Local Government	2.7	4.1	NA	NA
Federal	20.3	22.7	67.9	32.1
OECD All SNG	23.3	29.5	NA	NA
OECD Local	3.7	5.7	NA	NA
Unitary	2.8	4.3	89.4	10.6
OECD All SNG	5.5	8.1	NA	NA

Source: OECD–UCLG (2022). *These figures include only debt through borrowing bonds and loans, not other forms of liabilities.

The overall—if not particularly surprising—finding is that subnational government borrowing is more utilized in high-income countries and in federal countries. Subnational borrowing is dominated by loans, but there is more use of bonds, particularly at intermediate tiers and in cities, in high-income countries and in federal countries. This is logical since the use of bonds signals more sophisticated markets and greater liquidity, so higher use should be expected by larger and more creditworthy subnational governments. There would seem to be considerable need and potential space for more borrowing in at least some middle-income countries, including in unitary countries where there is sufficient decentralization.

The Subnational Government Role in Public Sector Expenditure and Investment

Why is subnational borrowing typically so much lower outside of high-income countries?

Many factors are considered later, but a basic question is whether subnational governments in middle- and low-income countries might play a considerably smaller role than their counterparts in wealthier countries. Subnational expenditures are in fact on average a larger share of GDP in higher-income countries as (14 percent in high-income and 8 percent in upper-middle-income countries) compared to 4.5 and 2 percent, respectively, in lower-middle-income and low-income countries (Table 2). The two upper categories also account for more total public expenditures (28 and 23 percent) relative to the two lower categories (19 and 12 percent). This suggests that on average there are greater subnational functional responsibilities (*de facto* if not *de jure*) in richer countries, which would be expected to affect the need and capacity for borrowing.

Table 2. SNG Expenditure by Country Income Category

Country Income Level	National Public Expenditure/ GDP	SNG Expenditure/ GDP	SNG Expenditure/ Total Government Expenditure	SNG Investment/ GDP	SNG Investment/ Total Government Investment
High	46.0	14.0	28.0	1.7	44.1
Upper-Middle	37.1	8.0	23.0	1.5	41.5
Lower-Middle	27.5	4.5	19.0	1.3	34.8
Low	23.2	2.0	12.0	0.7	18.0

Source: OECD-UCLG (2022).

At the same time, countries in the three higher-income categories play a more comparable role in public investment, respectively accounting for 1.7, 1.5 and 1.3 percent of GDP and 44.1, 41.5 and 34.8 percent of total government investment. Only countries in the low-income category lag far behind at 0.7 percent of GDP and 18 percent of total government investment.

The Subnational Government Role in Public Sector Revenue Generation

Why is subnational government borrowing so much more important in higher-income countries if subnational roles in the public sector, especially in public investment, are on average significant in all but the lowest income countries? One reason may be differences in revenue sources legally available to subnational governments and the extent to which these are used by the subnational governments in practice.

It is well established in the fiscal decentralization literature that subnational revenue generation rarely matches expenditure burdens—the inevitable vertical fiscal gap necessitates **a major role for intergovernmental fiscal transfers in most countries, regardless of income level.**²² Richer countries, however, have an advantage in revenue generation—in high-income countries subnational government raise 19.7 percent of total government tax revenue compared to 4.4 percent by low-income countries (Table 3). Yet upper- and lower-middle-income countries respectively raise 13.9 and 13.0 percent of total national tax revenues, which is not too far behind the high-income and significantly greater than low-income countries.

Across all income categories, subnational governments raise a relatively similar amount of tax revenues as a share of their total revenues (respectively 34.2, 35.2, 26.5 and 25.9 percent).

²² This is well established in the academic and practitioner fiscal decentralization literature. For a recent treatment see Bahl and Bird (2018).

They also perform comparably in user charges as a share of total revenues (respectively 11.1, 10, 8.9 and 11.1 percent) and dependence on transfers (respectively 51.4, 58.0, 44.4 and 53.0 percent). These data suggest that subnational governments may use revenue sources available to them (see caveats in section 7) but often rely substantially on shared taxes and other transfers. **Additional analysis is needed to better understand the revenue picture since aggregate data do not capture variations across countries or asymmetries within countries.** Intermediate-tier governments (provinces, states, regions) and large local governments (metropolitan areas, cities), for example, may have stronger own-source revenue profiles and be less dependent on transfers than other jurisdictions.

Table 3. SNG Revenue Shares by Country Income Category

Country Level	Income	SNG Tax Revenue/ Total Government Tax Revenue	SNG Tax Revenue/ Total SNG Revenue	SNG User Charges/ Total SNG Revenue	Intergovernmental Transfers/Total SNG Revenue
High		19.7	34.2	11.1	51.4
Upper-Middle		13.9	35.2	10	58.0
Lower-Middle		13.0	26.5	8.9	44.4
Low		4.4	25.9	11.7	53.0

Source: OECD-UCLG (2022).

More analysis is needed, but the fact that subnational governments in high-income countries borrow considerably more than those in other groups even though all but low-income countries account for one-fifth or more of public investment suggests that some **middle-income countries depend more on intergovernmental transfers or centrally managed sources for subnational investment.** Borrowing capacity may be a constraint, but if eligible subnational governments could borrow more, resources from the total investment transfer pool could be directed more to the fiscally weaker entities unable to borrow. In addition, documenting the stability of the subnational own-revenue and transfer streams is important for lenders to assess subnational borrowing capacity and credit risk.

A Deeper Look at Selected Middle-Income Countries

Thus far, the focus has been on comparing selected basic features of subnational borrowing and intergovernmental systems globally across country income categories. This subsection examines a selected group of middle-income countries (federal and unitary), some of which have


significant subnational borrowing. **Can the varied intensity and mix of subnational borrowing in be tied objectively or even qualitatively to the broader nature and performance of intergovernmental fiscal systems?** Relevant factors include the public sector role of subnational governments and a range of indicators that affect public investment and subnational borrowing needs.

Table 4 provides information on subnational government borrowing in the fourteen countries. This is purposeful/opportunistic (rather than a scientific) sample of middle-income countries with varied subnational borrowing experience for which adequate data are available. (It does not include some countries with considerable borrowing experience but unique circumstances, such as China, for which comparative data are also an issue). The table reports some of the same basic data provided for the global sample in the above tables as well as information on the main types of SNG borrowing used in each country (commercial versus concessional, where the latter is defined as flowing through sovereign governments on terms more favorable than those offered by the market).

This table includes data from both 2016 and 2020, the first and most recent data available from the [OECD-UCLG World Observatory on Subnational Government Finance and Investment database](#). In some cases, debt increased, possibly reflecting a need for subnational governments able to do so to take on more debt to respond to the COVID-19 pandemic. In other cases, debt decreased, potentially indicating an inability of subnational governments to borrow during the pandemic, a cautious attitude about assuming more debt during a crisis, or an increase in fiscal transfers from the national government to support public investment during the pandemic.

Table 4. Subnational Debt (Borrowing) Indicators for Selected Middle-Income Countries

COUNTRY	Country Income Category	SNG Debt/GDP		SNG Debt/Total Government Debt		SNG Debt/SNG Revenue		Subnational Borrowing Sources: Commercial and Concessional (national government backed debt)**
		2016	2020	2016	2020	2016	2020	
Argentina	Upper-Middle	5.6	0.5	10.5	7.5	37.0	2.7	Primarily commercial
Brazil	Upper Middle	12.5	13.9	17.8	13.4	61.0	60.3	Mix of commercial & concessional
Colombia	Upper Middle	1.4	2.2	2.0	2.1	5.3	20.2	Mix of concessional and commercial
India	Lower-Middle	15.5	19.7	22.5	22.2	82.7	97.3	Primarily commercial (provincial), mix local
Indonesia	Lower-Middle	0.0	0.2	0.1	0.4	0.4	1.8	Primarily concessional
Kazakhstan	Upper Middle	0.9	0.3	5.6	1.9	10.5	3.0	Almost exclusively concessional,
Mexico	Upper Middle	2.5	2.5	NA	14.6	NA	18.6	Mix of commercial and concessional
Nigeria*	Lower-Middle	2.9	3.9	21.2	18.2	84.0	112.4	Mix of commercial and concessional

Pakistan	Lower-Middle	4.0	4.3	4.7	4.9	NA	42.2	Almost exclusively concessional,
Philippines	Lower-Middle	0.6	0.6	1.4	1.2	14.8	13.1	Primarily concessional, some commercial
South Africa*	Upper-Middle	1.3	1-3	2.9	2.3	19.4	17.6	Mix of concessional and commercial
Thailand	Upper-Middle	0.2	0.3	0.6	0.6	NA	5.4	Primarily concessional
Türkiye	Upper-Middle	1.8	2.0	5.8	4.7	18.4	59.2	Mix of commercial and concessional
Vietnam	Lower-Middle	NA	0.001	NA	0.003	NA	4.4	Primarily concessional
Illustrative Benchmarks		≤1.2% 2020 MIC Average		≤3.2% 2020 MIC Average.		≤30% 2020 MIC Average		Shading indicates primarily or almost exclusively concessional borrowing
 = Meets Benchmark								

Source: OECD–UCLG (2017 and 2022) except certain data for India, South Africa, Thailand and Vietnam.

*Nigeria debt figures include all financial liabilities (not just loans and bonds); South Africa data are for 2019 rather than 2020

**Based on expert judgement of IFC and WB City Creditworthiness Initiative teams using their latest available information

About half of these countries meet or exceed the 2020 middle-income averages of subnational government debt both as a share of both GDP and total government debt (respectively 1.2 and 3.2 percent). Indonesia, Kazakhstan, the Philippines, South Africa, Thailand and Vietnam miss both benchmarks. Argentina misses the first (with a dramatic decline from 2016), which may reflect its decline in financial markets or reflect effects of the COVID-19 pandemic. This table also includes data on subnational debt as a share of total subnational revenues. In about one third of the countries, the share exceeds the 2020 middle-income average (30 percent), sometimes substantially. The countries that fall furthest below the average are mostly lower subnational borrowers (Indonesia, Kazakhstan, the Philippines, Thailand and Vietnam), with a few countries (including Argentina, Kazakhstan and Türkiye) seemingly affected in different ways by the pandemic.

Sources of subnational borrowing vary considerably across countries. In just a few cases, borrowing is mainly commercial, and six countries have a mix of commercial and concessional borrowing. This mix can vary over time, and certain types of debt may be concentrated at one level of subnational government or even be dominated by a small number of subnational governments. In other countries, subnational borrowing remains primarily or entirely concessional, including Indonesia, Kazakhstan, Pakistan, the Philippines, Thailand and Vietnam.

Although variations occur across years and countries, **several countries stand out as having (a) relatively lower subnational debt as a share of GDP and/or total public debt; (b) lower subnational debt as a share of subnational revenues** (suggesting possible fiscal space for more borrowing), and **(c) a heavier reliance on concessional compared to commercial debt** (indicating potential to increase commercial borrowing under the right conditions). **Countries**

that generally meet these criteria are Indonesia, Kazakhstan, the Philippines, Thailand, and Vietnam. Pakistan is included because although there is more subnational borrowing, it is concessional. These six are referred to going forward as “low subnational borrowing countries.” South Africa is excluded despite lower subnational borrowing because a higher share is commercial and borrowing is rising.

Relative Fiscal Importance of Subnational Governments

Why are these countries seemingly underutilizing subnational government borrowing in general and commercial borrowing in particular? One possibility is that they have fewer expenditure responsibilities and revenue options than countries more engaged in subnational borrowing. Table 5 presents data on the relative importance of subnational governments in the public sector in terms of general expenditures, public investment, and tax revenue generation. It also indicates the dependence of subnational governments on intergovernmental fiscal transfers.

Table 5. Subnational Government Expenditures and Revenues in Selected Countries

COUNTRY	Subnational Expenditure/ Total Government Expenditure		Subnational Capital Expenditure/Total Government Capital Expenditure		Subnational Tax Revenue/ Total Government Revenue		National Transfers/ Subnational Revenue	
	2016	2020	2016	2020	2016	2020	2016	2020
Argentina	42.2	21.0	63.4	63.8	54.6	56.1	2.7	7.9
Brazil	43.8	22.4	59.1	70.9	44.0	43.6	39.7	44.8
Colombia	27.3	32.7	43.7	40.7	21.2	20.6	50.8	60.2
India	61.8	62.5	63.6	62.8	60.1	59.1	20.6	21.1
Indonesia	47.7	46.6	53.4	46.4	10.9	13.5	82.7	78.7
Kazakhstan	43.5	44.5	62.1	83.6	27.1	32.8	58.0	60.3
Mexico	42.7	43.0	43.8	51.6	6.7	6.4	92.4	92.2
Nigeria	47.9	38.6	62.3	41.4	NA	18.9	47.4	NA
Pakistan	NA	32.8	NA	51.7	NA	61.5	NA	5.5
Philippines	14.9	15.7	8.5	11.1	6.1	7.1	68.4	67.0
South Africa	49.3	52.9	68.4	68.9	4.8	6.5	70.3	69.3
Thailand	19.1	15.9	52.0	29.5	9.3	8.1	62.0	65.5
Türkiye	10.1	8.4	19.2	16.1	2.3	1.9	70.1	75.2
Vietnam	54.2	60.6	71.4	53.5	NA	NA	NA	39.1
Illustrative Benchmarks ■ = Meets Benchmark	≥28% 2020 HIC Average		≥41.5% 2020 MIC Average		≥19.7% 2020 HIC Average		≥44% 2020 MIC Average	

Source: OECD–UCLG (2017 and 2022).

Subnational governments in most middle-income countries in this sample account for a share of total public expenditures that exceeds the 2020 high-income country average (28 percent). Exceptions include the Philippines, Thailand and Türkiye and two countries (Argentina and Brazil) that may have been affected by the pandemic or the data are incorrect.²³ A majority also have shares of total capital expenditures exceeding the upper-middle income average (41.5 percent, close to the high-income average, 44.1 percent). Exceptions are the Philippines, Thailand and Türkiye, **overall, subnational governments the low subnational borrowing countries reported above except the Philippines and Thailand have a relatively significant public spending role** (and even they exceed 15 percent). The major decline in Thailand from 2016 may reflect pandemic effects or a data issue.

In contrast to the spending side, fewer countries are major players in generating tax revenue. Several countries exceed the high-income average subnational share of total tax revenue (19.7 percent), in some cases significantly. The majority, however, including Indonesia, Mexico, Nigeria, the Philippines, South Africa, Thailand and Türkiye, are well below this average, and some are also below the lower-middle-income average (13 percent).

As expected, most countries are fairly dependent on transfers, registering above the lowest 2020 average level of dependence (lower-middle-income—44 percent) among the country income groups reported in Table 2, with the exception of Argentina, India, Nigeria, Pakistan and Vietnam. Note that there are possible issues with these OECD-UCLG data because some countries seem to have reported shared taxes for which subnational governments cannot control the tax base or rate as own-source revenues, while other countries apparently reported them (correctly) as transfers. This does not, however, affect the conclusion that transfers in some form are almost universally important.

As noted above, lenders should value subnational revenue stability, both own-source and transfers, as well as subnational control over transfers. Understanding revenue stability and autonomy over transfer use would require time-series data and details on transfer allocation criteria. The situation can be difficult to document if legally unconditional transfers are in practice subject to restrictions, as they are in some countries, and conditional transfers may be only

²³ Subnational governments are highly empowered in these countries, so the numbers do not seem accurate.

broadly restricted (e.g., for use in one sector, such as health or water). Others, however, may be subject to strict conditions that amount to central imposition of a line-item budget template for a particular sector.

Data are not available for all countries, but several have constitutional or legal requirements for robust revenue sharing that maintain relative stability in subnational revenue. Indonesia and the Philippines, for example, have major and largely unconditional general revenue sharing transfers, although own-source revenues are limited. A systematic assessment of each country is required, and additional information would also be needed to identify any controls that might exist on subnational government revenue generation and expenditure decisions (see sections 5 and 7).

The overall conclusion is that there is does not seem to be a clear relationship between the role of subnational governments and borrowing. Relatively modest subnational roles in public expenditure (Colombia, Türkiye) and low subnational taxation (Mexico, South Africa, Türkiye) need not preclude subnational borrowing. Perhaps more striking, most low subnational borrowing countries considered here (especially Indonesia, Kazakhstan and Vietnam) have significant public sector roles, and more are active in public investment. All have access to own-source revenues and/or intergovernmental fiscal transfers, and at least some enjoy adequate stability in these sources.

It is important to recognize that the subnational intergovernmental institutional structures in these countries vary greatly. Not only are some federal while others are unitary, but the levels and numbers in each category are highly diverse. Table 6 reports the system type and the number of units at various levels. There can be five or more subnational government levels in some countries, but the OECD-UCLG data only report three tiers—an upper tier (provincial/regional/state), intermediate tier (e.g., districts and cities) and local tier (e.g., counties, municipalities and towns). Units with the same name can be in different tier categories across countries and there can be varied relationships among levels (more independent versus more hierarchical). Thus, it is important to understand the subnational structure in a particular country and the relative powers and functions of each, including borrowing authority. Other institutional factors discussed below may also be at play.

Table 6. Type of Government System and Structure of Subnational Government System

COUNTRY	System Type	Number of Government Units at Each Subnational Tier			
		Provincial/Regional/State	Intermediate	Local	Total
Argentina	Federal	24		2311	2335
Brazil	Federal	27		5570	5597
Colombia	Unitary	32		1103	1135
India	Federal	36		267428	267424
Indonesia	Unitary	34	514	83813	84361
Kazakhstan	Unitary	17	216	6938	7171
Mexico	Federal	32		2481	2513
Nigeria	Federal	37		774	811
Pakistan	Federal	4		12369	12373
Philippines	Unitary	82	1634	42046	43762
South Africa	Unitary	9		257	266
Thailand	Unitary	76		2443	2519
Türkiye	Unitary	81		1390	1471
Vietnam	Unitary	63	707	10614	11384

Source: OECD-UCLG

Development Indicators that May Affect Subnational Investment/Borrowing Needs

A range of other indicators suggest that subnational government investment and borrowing could play a larger productive role in some middle-income countries. Table 7 provides selected data on GDP growth, urbanization, and population growth rates. Although not necessarily the most important investment need indicators, they can inform expectations and requirements for public service delivery and public investments that may be the responsibility of subnational governments.

GDP growth is positive in all countries considered here, in some cases even exceeding ten percent (Argentina, Colombia and Türkiye). These are 2021 data, so the surges may reflect recovery from the COVID-19 pandemic. Overall, most countries had GDP growth below the middle-income average rate of 7 percent, including all of the low subnational borrowing countries. **As countries recover from the pandemic and deal with other crises and demands, more public infrastructure investment and borrowing will likely be needed to support continued economic growth.**

Important **demand-side considerations** include urbanization and population growth. Urban areas have greater and often more expensive infrastructure needs, so the scale of resources needed to finance urban public investment is high and growing. Most countries considered here have high urbanization rates. Global population growth has slowed, but still relatively high in many of these countries, mostly near or exceeding the middle-income country average of 0.8 percent. The urban population growth rate is often higher, mostly near or above the middle-income country average of 1.9 percent, particularly in less urbanizing countries. **The extent of urbanization and the rate of urban population growth point to growing infrastructure requirements in the low subnational borrowing countries and thus the potential value of promoting additional borrowing.**

Table 7. Basic Socioeconomic Factors Affecting Subnational Investment/Borrowing Needs

COUNTRY	GDP Growth	Urban Population Share	Population Growth Rate	
			Total	Urban
Argentina	10.4	92	0.53	1.1
Brazil	4.1	87	0.53	0.8
Colombia	10.7	81	1.14	1.5
India	8.7	34	0.80	2.3
Indonesia	3.7	55	0.69	2.2
Kazakhstan	4.3	57	1.14	1.5
Mexico	4.7	80	0.56	0.9
Nigeria	3.6	50	2.14	4.1
Pakistan	6.5	37	1.83	2.7
Philippines	5.7	47	1.49	1.9
South Africa	4.9	66	1.21	2.0
Thailand	1.5	50	0.18	1.7
Türkiye	11.4	75	0.76	1.5
Vietnam	2.6	36	0.84	2.8
Illustrative Benchmark ■ = Meets Benchmark	≥7.0 MIC Average	≥50% MIC Average	≥0.8 MIC Average	≥1.9 MIC Average

Sources: GDP data: OECD–UCLG; Urbanization and population data: World Bank Data Bank

A number of other indicators of development (Table 8) can also be interpreted as signaling a need for greater public investment, reinforcing the general concern raised about sizeable public investment gaps made in section 2. These include the Human Development Index, the SDG progress score, the extent of climate change vulnerability and preparedness, and estimates of financial gaps in meeting infrastructure needs.

Table 8. Other Development indicators Affecting Subnational Investment/Borrowing Needs

COUNTRY	Development		Climate Change Vulnerability/ Readiness Index	Infrastructure Finance Deficit	
	Human Development Index	SDG Score (Rank)		US\$ billions	%GDP
Argentina	.813	72.8 (54)	48.8	358	1.7
Brazil	.754	72.8 (54)	48.1	1200	2.07
Colombia	.752	70.1 (75)	48.1	100	0.93
India	.633	60.3 (121)	44.0	526	0.47
Indonesia	.705	69.2 (82)	46.8	70	0.17
Kazakhstan	.811	71.1 (65)	57.9	84	1.11
Mexico	.758	70.2 (74)	47.5	544	1.37
Nigeria	.535	54.2 (139)	37.5	221	1.09
Pakistan	.544	59.3 (125)	39.0	124	0.93
Philippines	.699	66.6 (95)	43.9	69	0.49
South Africa	.713	63.7 (108)	47.4	152	1.47
Thailand	.800	74.1(55)	52.4	100	0.72
Türkiye	.838	70.4/71	56.7	405	1.26
Vietnam	.703	72.8/55	47.1	102	1.0
Illustrative Benchmark ■ = Meets Benchmark	≥.896 High tier	≤54 Top third	≥54 Top third	≥0.55 (Overall % of Global GDP)	

Development index data: Human Development Index (HDI) and the SDG Report 2022; Climate change index data: Notre Dame Global Adaptation Initiative; Infrastructure finance deficit data: Global Infrastructure Outlook.

The **Human Development Index** for countries considered here is mixed, including for low-subnational borrowing countries, but only a few approach the high-threshold value of .896, and several are well below it. Performance is also mixed on the **SDG progress score**, with few countries (none of the low subnational borrowers) falling into the top third of the global rankings. Perhaps most striking is the results of an **index that measures climate change vulnerability and readiness to respond**. Only two countries (including Kazakhstan, one of the low subnational borrowing countries) appear in the top third of the rankings. **Although the results and implications of these different indicators are varied, they broadly suggest a need for considerable subnational investment, at least some of which would likely fall under subnational government responsibilities and could be candidates for debt financing.** Finally, a G20 initiative called the Global Infrastructure Outlook managed by Oxford Economics examines (for a 50 country sample) the **infrastructure spending gap** between the amount of investment that would be produced at current country investment trends and the estimated

amount that would be needed in order to meet selected Sustainable Development Goals by 2040. This analysis is not comprehensive, covering only energy, transport (airports, roads, rail, ports), water and telecommunications. Not all of these are necessarily subnational functions, and some other investment sectors that may be subnational functions are not included. Despite these limitations, this is one of the few attempts to measure such gaps carefully and it provides some indication of public investment needs.²⁴

The last column of Table 8 reports the monetary gaps (US\$) and their share of GDP in each country. All but one country and all low subnational borrowing countries have infrastructure finance gaps that exceed \$70 billion, and all except Indonesia have infrastructure finance gaps as a share of GDP that exceed the global gap (for the entire sample covered) of 0.55 percent. Given challenges with such measurements and the selected sectors covered, these numbers must be interpreted conservatively, but they do suggest considerable infrastructure finance needs in these countries.

In short, **the demand for greater public sector investment in countries covered here where subnational borrowing is underutilized is expected to be high given their need to sustain or increase GDP growth and meet demands generated by high urbanization and urban population growth rates.** Performance is mixed, but most low subnational borrowing countries with limited penetration of commercial borrowing need to take steps to improve performance on development indicators and to be better prepared to respond to climate change.

Most of the countries also have **substantial infrastructure finance gaps** relative to expected requirements to achieve the SDGs. These gaps and likely limitations on public resources and aid highlight the potential value of debt financing. Given intergovernmental system characteristics discussed earlier, there is a reason to believe that **more subnational commercial borrowing could be possible in at least some of these countries.** Of course, the situation is complex and varies widely, so further assessment is required to determine appropriate policies in specific countries.

²⁴ As indicated in the introduction, there are multiple global estimates of infrastructure finance needs assessments, but not many report details of individual country results or are not open access.

5. Subnational Financial Access, Borrowing Frameworks and Autonomy

The previous section documented subnational borrowing across country income groups and went into more detail on a set of middle-income countries with mixed borrowing records. In many of the low subnational borrowing countries, subnational governments play an important role in the public sector (including public investment apparently financed substantially by transfers and concessional loans) and have reasonable access to revenues, with adequate stability in at least some cases. In addition, various socioeconomic and performance indicators suggest the need for increasing subnational investment to fill considerable infrastructure gaps. **Given the (apparently) enabling subnational legal frameworks and high investment needs, it is important to understand why more subnational borrowing is not occurring in certain countries.**

One possibility is that subnational governments have limited **access to debt finance**, either due to inadequately developed national capital markets or weak creditworthiness. Another factor could be that the **national legal framework for subnational borrowing** constrains subnational governments' ability to assume debt. Even if subnational governments play an important role in the public sector and are to some extent legally empowered to borrow, they may in practice not have enough genuine **autonomy** to be able to make investment and borrowing decisions.

Financial Market Development and Creditworthiness

The state of domestic financial market development is expected to affect subnational governments' ability to borrow. The **IMF Financial Development Index** (FDI) assesses countries on the depth, access and efficiency of financial institutions and markets. Table 9 reports the overall FDI index as well as the sub-index on financial markets (FM). Most countries (except Nigeria and Pakistan) rank above IMF's emerging markets FDI benchmark (≥ 33) and FM benchmark value (≥ 23). A deeper assessment of particular countries is needed, particularly to determine the extent to which subnational governments can access the market, but **the FDI assessment in some low subnational borrowing countries suggests that there may be more scope for subnational governments in some countries to access financial markets.**

Another factor is **credit rating**. Individual subnational government ratings are needed to assess their borrowing readiness. IFC estimates that 17 middle-income countries have at least one

subnational government international credit rating, and some have subnational rating done by national credit rating agencies. For present purposes, the sovereign rating (reported in Table 9) is a good country indicator and is often closely correlated with credit ratings of fiscally sound (typically larger) subnational governments.

In nearly half of the countries considered here, the sovereign credit rating is investment grade, including the low subnational borrowing countries except Pakistan and Vietnam. A weaker credit rating does not necessarily preclude borrowing—indeed some of the countries with weaker ratings already have considerable subnational borrowing. A lower rating will, of course, unfavorably affect the terms on which loans are offered.

Table 9. Financial Markets and Creditworthiness in Selected Countries

COUNTRY	IMF Financial Development Index		Sovereign Credit Rating (S&P unless otherwise noted)	Sovereign Investment Grade Credit
	Overall	Markets		
Argentina	.33	.25	CCC-	No
Brazil	.63	.64	BB-	No
Colombia	.38	.30	BB+	No
India	.44	.48	BBB-	Yes
Indonesia	.37	.29	BBB	Yes
Kazakhstan	.34	.25	BBB-	Yes
Mexico	.43	.32	BBB	Yes
Nigeria	.25	.20	B-	No
Pakistan	.24	.17	CCC+	No
Philippines	.37	.34	BBB+	Yes
South Africa	.65	.54	BB-	No
Thailand	.74	.66	BBB+	Yes
Türkiye	.53	.56	B	No
Vietnam	.41	.31	BB+	No
Benchmark ☐ = Meets Benchmark	IMF Emerging Markets		S&P investment grade rating is \geq BBB-	
	\geq .33	\geq .23		

Sources: Financial Development Index: IMF Financial Development Index; Credit rating 9/4/23: S&P and Fitch

The basic takeaway from Table 9 is that the **state of financial markets** in a majority of the low subnational borrowing countries considered here appears potentially sufficient to allow more borrowing than is currently occurring. In addition, most of these countries have **investment grade sovereign credit ratings**, which provide an indication of the potential ability of at least

some stronger subnational governments in these countries to assume additional debt, including commercial. As always, the situation in a specific country and particular subnational governments inevitably needs deeper investigation to draw specific conclusions.

Subnational Government Borrowing Frameworks

Subnational borrowing and fiscal responsibility frameworks are another factor shaping the feasibility, sources, and extent of subnational borrowing. Such borrowing requires central government regulation and monitoring, but country circumstances and preferences lead to this being done in different ways and to different extents.²⁵ Empowering and restrictive provisions may include the legal right of each level of subnational governments to borrow (with or without central approval and/or guarantees); permitted debt instruments (loans, bond, guarantees); restrictions on foreign lenders/currencies, authorized use(s) of loan proceeds (capital expenditures, refinancing, deficits); and permitted or restricted security structures (pledge of revenues or fixed assets), among others.

Although certain elements to empower subnational governments to access development finance and also promote fiscal responsibility are considered basic good practice and are generally accepted globally, there is no standardized/universal guidance on the precise details of best practice. Existing frameworks in fact vary considerably, sometimes adopted or modified as part of broader subnational government/fiscal decentralization reform programs and sometimes developed independently.

The provisions in subnational government borrowing frameworks may or may not be well aligned with current economic realities and subnational government capacity, such that they may unduly restrict or discourage subnational borrowing even where it is needed and viable. Formal provisions for subnational government commercial borrowing—whether they are allowed to assume loans or issue bonds in domestic or foreign currency—are provided in Table 10.

²⁵ Treatment of borrowing frameworks can be found in Kehew, Matsukawa, and Petersen (2005), Liu and Waibel (2010), Kahkonen and Guptu (2012), PPIAF (2013), KfW (2015), Martinez-Vazquez and Vulovic (2017), and Vammalle and Bambalaite (2021).

Table 10. Provisions for SNG Borrowing (General and Commercial) in Selected Countries

COUNTRY	SNG Levels Allowed		Types of SNG Commercial Borrowing Allowed			
	All	Primary or Dominant Level	Local Currency		Foreign Currency	
			Loans	Bonds	Loans	Bonds
Argentina	Yes	Province	Yes	Yes	Yes	Yes
Brazil	Yes	State	Yes	Yes	Yes	No
Colombia	Yes	Municipal	Yes	Yes	Yes	Yes
India	Yes	State	Yes	Yes	Yes	NA
Indonesia	Yes	Local	Yes	Yes	No	No
Kazakhstan	Yes	Regional	No	Yes	No	No
Mexico	Yes	State	Yes	Yes	No	No
Nigeria	Yes	State	Yes	Yes	Central Guarantee	No
Pakistan	Yes	Province	Yes	Yes	No	No
Philippines	Yes	Municipal	Yes	Yes	No	NA
South Africa	Yes	Municipal	Yes	Yes	No	No
Thailand	Yes	Municipal	Yes	Yes	Yes	NA
Türkiye	Yes	Municipal	Yes	Yes	Yes	NA
Vietnam	Yes	Provincial	Yes	Yes	No	No

indicates allowed but regulatory details may vary considerably across countries.

Source: IFC and World Bank City Creditworthiness Initiative data and case studies.

In all countries covered here, **subnational debt is legally allowed for all levels of subnational governments**, although it may be more available to or be more heavily utilized in practice in certain countries by intermediate (state, provincial, regional) or by local tier governments (city, municipal) depending on the structure of the intergovernmental fiscal system and the specific functions and the degrees of empowerment of each level. These countries (except Kazakhstan) allow subnational loans denominated in the local currency, and all of them also permit local currency bonds, including the low subnational borrowing countries. There are, however, considerably more prohibitions of or restrictions on subnational foreign currency loans and bonds, which are not permitted in most of these countries (likely since subnational revenues are in local currency).

Data on **prudential limits on subnational government borrowing**, including the Golden Rule (borrowing only for investment), limits on the stock or flow of debt, and limits on debt service as a share of the annual budget or other measures, are provided in Table 11. In most of the countries, central government approval of borrowing is required for some types of subnational

governments and/or some types of borrowing. The Golden Rule applies in many of these countries, but there are indications that it is framed in various ways, for example in Kazakhstan as only applied in certain sectors. Debt service limits of various types are in force in a majority but not all of these countries.

Table 11. Prudential Limits on SNG Borrowing in Selected Countries

COUNTRY	Central Government Approval Required	Golden Rule(Capital Expenditure only)	Debt Stock/ Flow Limit	Debt Service Limit
Argentina	For Some Types	Yes	No	No
Brazil	For Some Types	Yes	Yes	Yes
Colombia	For Some Types	Yes	Yes	Yes
India	Yes	NA	Some States	Some States
Indonesia	For Some Types	Yes	Yes	Yes
Kazakhstan	Yes	Some Sectors	Yes	Yes
Mexico	For Some Types	Yes	Yes	Yes
Nigeria	Yes	No	Yes	Yes
Pakistan	For Some Types	No	Yes	No
Philippines	Yes	Yes	No	Yes
South Africa	No	Yes	Yes	No
Thailand	For Some Types	No	No	Yes
Türkiye	Yes	Yes	Yes	No
Vietnam	Yes	Yes	Yes	No
<input type="checkbox"/> = Meets Benchmark	No clear standard*	Generally considered desirable**		

Source: IFC and World Bank City Creditworthiness Initiative data and case studies.

*Approvals may be appropriate in some cases, but excessive or multiple approval channels can hinder borrowing.

**Limit details vary considerably and this can affect their desirability.

The bottom line is that the **national regulatory frameworks in all countries considered here allow some types of subnational government borrowing, mostly for all levels**. Each country also has **certain types of prudential limits in place** to help ensure a degree of subnational government fiscal responsibility. Some practical considerations may limit subnational borrowing, but the basic provisions of the subnational government borrowing frameworks do not seem from this initial comparison to be overly restrictive.

Subnational Government Autonomy

No matter what the relative fiscal importance of subnational governments in a particular country may be, the strength of pressures that exist for them to invest and borrow, and the provisions of the framework that legally empowers them to do so, prospective lenders should be interested in how much control those governments have in making subnational revenue and expenditure decisions. Unfortunately, **subnational government autonomy** is very challenging to measure, and *de jure* autonomy may be very different than *de facto* autonomy (in ways and for reasons discussed in subsequent sections). There have, however, been a number of attempts to comparatively assess subnational government autonomy globally.

The most detailed and periodically updated initiative to measure subnational autonomy is the Regional Authority Index developed by a research team at the University of North Carolina. It does not cover all countries and regions (Africa is not included at all) and it has not been updated for a few years, but it seems to be the most comprehensive dataset available. The fact that it is not current for all countries is not a major concern since legal provisions on subnational autonomy tend to be relatively stable. There are also a number of one-time efforts to assess subnational government autonomy, such as a World Bank initiative to develop indicators on localization and decentralization. Selected indicators from these sources are provided in Table 12.

Table 12. Regional Authority and Decentralization Indices in Selected Countries

COUNTRY	Regional Authority Index (Selected Indicators 2018)			Localization and Decentralization (Selected Indicators 2012)			
	Overall Autonomy	Functional Autonomy	Fiscal Autonomy (Revenue)	Fiscal (Spending, tax, and borrowing)	Composite	Country Fiscal Ranking	Country Overall Ranking
Argentina	3.00	3.00	2.00	0.53	1.11	40	64
Brazil	4.01	3.49	3.00	0.78	8.59	12	13
Colombia	2.68	3.83	1.71	0.55	5.23	37	19
India	6.72	5.98	3.46	0.48	0.48	47	76
Indonesia	3.98	3.97	1.96	0.50	3.48	44	30
Kazakhstan	NA	NA	NA	0.37	0.72	69	69
Mexico	3.05	3.00	3.00	0.42	0.32	57	81
Nigeria	NA	NA	NA	0.24	1.87	86	48
Pakistan	5.14	4.25	4.72	0.50	1.14	43	60

Philippines	2.04	2.00	1.0	0.55	3.02	42	33
South Africa	NA	NA	NA	0.58	2.03	30	47
Thailand	1.00	0.00	0.00	0.46	2.55	49	36
Türkiye	3.00	1.75	0.00	0.46	0.69	51	71
Vietnam	2.00	2.00	0.00	0.16	1.14	120	63
	1 - least	0 = weak	0 = none	Higher = greater autonomy	Composite (All indices)	N = 182 countries	N=182 countries
	Higher = stronger						

Source: Regional Authority Index and Ivanya and Shah.

The data from the periodic Regional Authority Index and the one-time Localization and Decentralization Indicators portray a mixed situation, but most low subnational borrowing countries show some degree of overall autonomy (at least above the deconcentrated/least autonomous ranking even if below the most autonomous status) as well as functional autonomy. Only Thailand scores at the lowest end of these measures. On fiscal autonomy, which in this particular index includes only subnational revenue autonomy, some of the countries are at or near the lowest end of the scale, including the Philippines, Thailand, Türkiye, and Vietnam.

The Localization and Decentralization Indicators, which are older, are constructed differently and give a somewhat more favorable impression of subnational government autonomy in the countries under consideration. **The fiscal decentralization indicator suggests that most of the low subnational borrowing countries have somewhat greater fiscal authority compared to the results of the Regional Authority Index.** This is likely the case because this indicator includes all spending, tax and borrowing powers rather than just the degree of own-source revenue autonomy measured in the Regional Authority Index. Only Vietnam continues to score quite low on this indicator, likely because most local funds are provided in the form of national tax sharing.

The composite decentralization indicator, which also includes both administrative and political decentralization, paints a different picture. Indonesia and the Philippines, for example, have higher scores than they do on some of the other indicators, most likely because of the effect of their more robust degree of political decentralization, while Vietnam scores relatively higher on the composite indicator than on the fiscal decentralization indicator, most likely because of its more developed subnational government administration.

The localization and decentralization indicators also provide ordinal rankings of the performance of specific countries relative to the full sample, and most of the low subnational borrowing countries do not fare badly. In a majority of cases, they fall in the top quarter or top third of the 182 countries included in the sample. The lowest ranking is Vietnam, which ranks 120 on fiscal decentralization indicator, but it improves to a rank of 63 among the sample on the overall composite indicator, again most likely because of its relatively developed administrative decentralization systems noted above.

Developing such autonomy measures is challenging. There will be inevitable questions about assumptions made by the researchers, the quality and comparability, and how to interpret findings in the broader country context. Although they cannot be considered definitive, they do offer some indication of autonomy. **Despite general concerns about own-revenue autonomy, most low subnational borrowing countries fare reasonably well on at least some aspects of autonomy, and some even compare favorably to countries with more subnational borrowing.** This suggests that at least stronger subnational governments in some of the low subnational borrowing countries may have enough control over fiscal decisions to make borrowing worth additional consideration. Further investigation on particular countries and potential subnational government borrowers is, as always, required to make more definitive judgments.

To summarize the story to this point, section 4 documented low subnational borrowing in some middle-income countries considered here (Indonesia, Kazakhstan, Pakistan, the Philippines, Thailand, Vietnam). Details vary, but most of them seem to play a notable role in the public sector, have reasonable access to revenues, and face major needs for infrastructure investment. This section considered whether low subnational borrowing might result from limited access to capital (weak capital markets and credit ratings), inadequate or restrictive borrowing frameworks, or limited autonomy. Some or all of these factors could present obstacles to varying degrees in many countries, but financial access and basic borrowing frameworks do not alone seem to create overwhelming impediments in most cases. Subnational autonomy is hard to assess and compare and issues are common (see section 7), but most of the low-borrowing countries seem to enjoy some autonomy, even though it likely varies across subnational jurisdictions within them. **On balance, the various factors considered thus far do not by themselves**

appear to sufficiently explain the low level of subnational borrowing in some middle-income countries.

6. Selected Vignettes of Country Subnational Borrowing Frameworks and Practice

The review has not been able to identify factors in the low subnational borrowing countries related to subnational government fiscal rules, resources and basic borrowing frameworks that necessarily inhibit subnational borrowing or preclude commercial borrowing. In fact, some countries with more subnational borrowing do not fare any better than low borrowing countries—and in certain cases even fare worse—on some of the indicators considered above.

In order to offer illustrative overviews of subnational borrowing scenarios, this section provides vignettes of six low subnational borrowing countries covered in this paper—Indonesia, Kazakhstan, Pakistan, the Philippines, Thailand and Vietnam.²⁶ Available data are uneven and these vignettes are based on secondary information and the judgement of IFC staff, so they do not provide standardized or comprehensive comparisons of the systems.²⁷ They do, however, offer a sense of the history and evolution of subnational borrowing and some potential clues into certain factors that may inhibit it, particularly with respect to the level of development of subnational borrowing frameworks and how they are implemented and managed. Following short case overviews, a few observations are drawn.

Indonesia: Strong decentralization, major investment needs and highly underutilized subnational borrowing authority

The Indonesian legal framework allows subnational borrowing, but activity is limited (well under one percent of total public borrowing), and there is little commercial activity. The central government created subnational borrowing mechanisms prior to the formal decentralization in 2001. Since the intergovernmental system was deconcentrated rather than devolved at that time, the process was under national authorities. Initial facilities were managed by the Ministry of Finance (MoF), and regional development banks did some subnational lending, primarily to local

²⁶ Pakistan has more subnational borrowing than the others, but it is included for its lack of commercial borrowing. South Africa has relatively low subnational borrowing, but it is excluded because of growing commercial borrowing

²⁷ These vignettes are based on cases prepared by and the expert judgment of IFC municipal finance staff and World Bank City Creditworthiness Initiative staff.

state-owned enterprises. Although early efforts made advances in establishing lending practices, they were not always well used and borrowing was not heavily promoted despite evidence of considerable local infrastructure needs.

Following the devolution, various laws opened the door to more subnational borrowing and were enhanced over time. Local governments can borrow from domestic banks and issue domestic bonds, but the central government has maintained strict limitations and heavily manages the process. Any borrowing requires MoF approval and recommendation from the Ministry of Home Affairs (MoHA) and the National Planning Agency (BAPPENAS), and foreign borrowing is only permitted through the central government. Various other controls are in force, including a prohibition on borrowing by subnational governments with loan arrears and central government authority to block local governments from using assets as loan collateral. As noted above, the Golden Rules are in force, as are prudential limits on debt stock and debt service.

After years of relatively limited attention dedicated to subnational borrowing, a lending facility with more distance from central government (managed by a state-owned enterprise PTSMI instead of the MoF), the Regional Infrastructure Development Fund (RIDF), was set up in 2017 with funds from development finance institutions and the government. It has not been used as much as expected, in part because the government created another facility with lower interest rates and simpler processes during the COVID-19 pandemic. Subnational debt has been growing, but slowly. No subnational government in Indonesia has issued a bond and borrowing from commercial banks is limited despite having the right to tap these sources since 2004. Overall, aggregate subnational government debt remains low, although many subnational governments seem to have considerable borrowing capacity.

Kazakhstan: Limited subnational government control over borrowing, heavy secondary regulation and evolving policy

The legal framework in Kazakhstan allows subnational government borrowing, but its relative importance is low. Prior to the COVID-19 pandemic it accounted for 5.6 percent of total public sector borrowing, falling to about two percent after the pandemic. Until recently, subnational borrowing was restricted to central government loans and bonds to finance national housing programs. Such bonds were usually obtained by national government financial institutions, and subnational governments had little control over the use of these funds by SOE contractors and

program implementing agencies. Initial provisions were made in 2022 for at least the city of Almaty to issue commercial bonds and take local currency loans from development finance institutions to finance “green” projects. Despite some progress, much remains to be done to develop the legal framework to make subnational borrowing more broadly available.

Local currency borrowing regulations are evolving—initially only central government loans were allowed, but there is more space opening on this front with emerging policy changes. Foreign currency borrowing is not permitted. Central government approval is required for any subnational borrowing. The Golden Rule is not formally adopted, but borrowing purposes are restricted, with more flexibility for sovereign loans (including to cover budget deficits). Debt from development finance institutions and commercial bonds can only be used for “green” capital expenditures. There are prudential limits in the form of debt stock ceilings and debt service limits. The borrowing process is heavily regulated and subject to secondary regulation, but it is not fully developed and coordinated. Comprehensive regulation is needed on lending process details and roles of specific actors in making decisions and managing the process. The legacy of centralized control is not likely to change rapidly but needs and opportunities for subnational investment can create momentum for reform, and Almaty and perhaps other subnational governments could benefit from borrowing.

Pakistan: Subnational borrowing mostly concessional, subject to heavy central control without clear criteria and dominated by provincial governments.

Pakistan is a federal country that has gone through periodic reformulations of its intergovernmental system over the years. Subnational borrowing is limited (less than five percent of total public sector borrowing) and is only practiced at the provincial level. The constitution was amended in 2012 to formally allow provinces to borrow domestically or internationally subject to conditions specified by the National Economic Council (NEC). The NEC is authorized to establish annual limits for local currency borrowing, which to date been relatively small, and there have been no visible efforts to raise commercial debt. If a province has outstanding debt to the central government, it needs specific approval to take an additional loan.

On balance, the subnational borrowing framework in Pakistan is under-developed. There is no Golden Rule provision and no specific limits on debt service, although there are on debt stock. The constitution gives the NEC considerable power over subnational borrowing, so even if

provinces were inclined to borrow more, they would require NEC approval. The criteria for approval do not appear to be clearly specified. Punjab and Sindh provinces have considerable sovereign guaranteed debt on their balance sheets, and recorded provincial debt originates only from external sources despite some liquidity in the domestic banking sector. The financial performance of Punjab and Sindh provinces suggests that they could potentially borrow on commercial terms, but this would require NEC approval. Over time a stronger regulatory environment that formalizes prudential limits and specific criteria for subnational borrowing would allow more systematic management of than annual borrowing limit decision made by the NEC based on unspecified criteria.

Philippines: Strong decentralization and solid borrowing framework but mostly concessional loans and limited subnational government use/interest

The Philippines is a unitary country with multiple levels of subnational government. It has been decentralized since the early 1990s with the bulk of responsibilities at the local government level. The legal framework allows local governments access to a variety of public and private sources, including loans, deferred payment schemes and bonds. Local government borrowing, however, had dominantly come from government financial institutions on highly favorable terms, with a major player being the Municipal Development Fund Office (MDFO), which has recently been dissolved and its functions absorbed by the Department of Finance (DoF). Despite having been authorized to borrow for many years, local government debt remains fairly limited, accounting in 2020 for less than one percent of GDP and just over one percent of total public sector debt. Nearly three-quarters of subnational debt is held by cities and municipalities. Although 115 of 146 cities had outstanding debt as of the end of 2021, some of this borrowing originated years ago or is very small in amount.

There is a well-defined subnational government borrowing framework in place. Local governments cannot borrow without first getting local government legislative authorization for each individual credit operation. Subsequent approval is also required from the Bureau of Local Government Finance, which certifies that debt service requirements will be met with the issuance of a new instrument. Final approval rests with the Monetary Board of the Philippines Central Bank, which also requires follow up reporting on terms and conditions of the loan.

The regulatory framework restricts use of long-term debt to infrastructure, capital investment, acquisitions and other self-financing projects. Short term-borrowing is allowed but only to stabilize local government finances. Local debt service is limited to 20 percent of regular income, which is defined as the sum of fiscal transfers and local own-source revenues. The government does not provide guarantees, but fee-based guarantees are available from a public corporation. Formal intercepts of transfers are restricted to loans from the MDFO (presumably now the DoF), but other government and approved private finance institutions that hold local government transfer funds can use these deposits as collateral. Although the framework is relatively developed, there does not seem to be a robust culture of local government borrowing or strong efforts to promote it.

Thailand: Subnational borrowing legal but subject to complex regulations, multiple approval channels, and few subnational governments likely ready to borrow

Subnational government borrowing in Thailand is allowed but is rather limited (around two percent of total public sector debt) and it has been decreasing in recent years. Domestic and foreign loans in both domestic and foreign currency may be taken by provinces, municipalities, the Bangkok Metropolitan Administration (BMA) and Pattaya City Government Administration. Each subnational loan, however, must be approved by the central government, and there are special processes and criteria required for commercial borrowing. Bangkok and Pattaya are also permitted to issue bonds, but neither of these urban administrations has done this. Most subnational borrowing occurs through the Ministry of Finance (MoF) and state banks and financial institutions, primarily the former since the MoF began lending to subnational governments several years ago.

The processes used for approving loans vary to some extent by instrument and type of subnational government borrower. A range of national government actors can be involved, including the MoF, the Ministry of Interior (Department of Local Administration), and the Public Debt Management Office, each of which may have secondary regulations. Official subnational borrowing regulations include some standard provisions but not others. The Golden Rule, for example, is not enforced for subnational governments, and there is no debt stock limit (a central government debt limit is not relevant since local government debt is not guaranteed). There are,

however, other borrowing obligations and restrictions, including a balanced budget requirement and debt service limits.

Thailand is a country with a large and widely dispersed population but only one major city. It seems likely that most of the subnational governments in Thailand would be unable to borrow commercially, at least not without some guarantee or pooling arrangements. On the other hand, BMA seems well placed to assume commercial debt. The main potential constraints are likely whether the central regulatory actors would allow commercial borrowing and whether BMA officials would feel motivated to go through the bureaucratic processes needed to get approval.

Vietnam: Subnational borrowing framework insufficiently transparent with limited use

Subnational government borrowing is permitted by law in Vietnam, but it is not a major source of development finance. Although subnational investment accounts for a significant share of total public investment (ranging from around 50 percent to more than 70 percent in recent years), subnational borrowing is a trivial share of public borrowing. Subnational borrowing is permitted only in domestic currency and is mostly done by provinces and a few cities. Bonds are allowed, but they must be approved by the MoF. Borrowing from commercial banks does not seem to be allowed under the current framework, but loans may be permitted from certain domestic sources, such as provincial financial reserve funds or state funds as stipulated in the law on public debt management.

Details of the framework are complex and not fully transparent, but some features can be identified. There does not seem to be a firm Golden Rule, but some borrowing is targeted to socioeconomic development projects determined through government planning and public investment processes. Central approval is required for subnational government borrowing, and there are statutory limits on the debt stock but not on debt service. There may also be other limits imposed when the central government decides this is necessary to meet national fiscal responsibility standards and macroeconomic goals. It seems that some aspects of the subnational borrowing framework are not transparently codified, and the process is embedded in a rather centralized institutional structure without documentation of the basis for decisions. Although there seems to be considerable promise for more subnational borrowing, at least in certain provinces and major cities, significant progress on this front may require clarifications and reforms to the subnational borrowing framework.

Summary Observations on the Cases

The six middle-income countries covered in this section have in common a limited subnational borrowing portfolio and little or no commercial debt. Although they are diverse in various ways, their subnational borrowing environments share a number of features beyond low subnational borrowing. **First, the subnational borrowing frameworks of most countries cover some basics, but not all are fully developed or sufficiently rule-based.** This potentially leaves nontrivial space for national government actors to make borrowing authorization decisions based on criteria that are not clearly specified or inconsistent with generally accepted conventions.

Second, several of these countries are dominated by public/concessional lending options that may crowd out commercial borrowing even where it is feasible. These sovereign/subsidized options may be critical for some subnational governments, but they may also unproductively discourage subnational governments able to go to the market from doing so.

Third, there appears to be a range of secondary regulations that may make the borrowing process more complex than might be desirable and create additional steps. These regulations may take additional time and place extra burdens on subnational governments that seek to borrow. They may also raise uncertainly and obstacles that both the borrowers and prospective lenders consider to be unacceptable.

Fourth, in some of these cases, multiple national government agencies are involved in the borrowing review and approval process. This situation creates the possibility of conflicts, delays and inconsistent perspectives/decisions if the various actors involved are not sufficiently coordinated and mandated to follow clear objective guidelines.

Where one or more of these conditions exist, potential lenders may be discouraged from the subnational market and subnational governments may not be motivated to consider borrowing, especially commercially, even where they are legally allowed and have the capacity to do so. This stands in contrast to certain countries with more active commercial borrowing, where, for example, central government approval (from one or multiple agencies) is not required (as in South Africa). In other cases where more subnational borrowing occurs, the requirements are relatively straightforward (as in Argentina) and formalized conditions that need

to be met, such as compliance with prudential limits and/or allowable use of proceeds, are well defined and understood.

7. A Closer Look at Underlying Contextual Factors Influencing Subnational Borrowing

If the factors considered to this point cannot sufficiently explain—at least not without more detailed consideration of the situation in specific countries—why subnational government borrowing in general and commercial borrowing in particular is limited in some middle-income countries where it is needed and seems potentially feasible, what other factors and dynamics might be at play? The previous section took the discussion somewhat beyond the basics, suggesting that details of and processes required by apparently reasonable subnational borrowing frameworks as well as entrenched perspectives and behaviors may contribute to the borrowing gap in some countries.

The nature of subnational borrowing frameworks and the perspectives and behaviors of the various actors may reflect contextual factors that are often neglected and interrelated. First, even if subnational governments play a significant public sector role, the broader **intergovernmental fiscal framework (beyond borrowing)** may constrain subnational spending and revenue generation/ access and hinder aspects of autonomy not covered in detail above. Second, even if the framework is fundamentally sound, it may be **implemented in a way that does not respect legal provisions and underlying principles**, such that operations and results are inconsistent with stated intentions. Third, **weak development and use of adequate accountability mechanisms** can undermine subnational governments' incentives to meet their responsibilities and borrow. Even without comprehensive case studies, examples of these factors are evident in most of the countries considered here.

The Intergovernmental Fiscal Framework²⁸

Most intergovernmental fiscal systems are to some extent based on standard public finance/fiscal federalism principles for sharing responsibilities and resources among government levels noted in section 3, but there are often issues. First, **lack of clarity of assignments** in the legal

²⁸ Synthetic reviews of intergovernmental fiscal system challenges in developing countries include Martinez-Vazquez and Vaillancourt (2011), Bahl, Linn and Wetzel (2013), UN-Habitat (2015), UCLG (2017), Yoshino and Morgan (2017), Bahl and Bird (2018), Kim and Dougherty (2020), World Bank (2021), Jackson (2022).

framework is not uncommon, and many functions are co-responsibilities across government levels. Network infrastructure, for example, must be coordinated across jurisdictions (vertically and/or horizontally), and some functions that meet national priorities, such as education, health, and water, are subject to higher-level regulation and may be jointly provided. In some countries, for example, higher levels construct schools and hospitals, but lower levels operate them. In many cases, special districts, state-owned-enterprises, or other special purpose vehicles are responsible for certain infrastructure services, such as transport or water, and these entities have varied relationships with subnational governments and may cover multiple jurisdictions. **Given these realities, it is important to understand where subnational governments have independent authority for investment and any associated debt and how that affects subnational borrowing.**

Second, **own-source revenues** are an essential component of subnational finance. There are well-accepted conceptual and practical reasons why national governments play a larger role in revenue generation, but there is also broad agreement that subnational governments need some revenue sources over which they have some control. The division of revenue sources between national and subnational governments rarely violates fiscal principles in that the center only infrequently devolves inappropriate sources, but many middle- and low-income countries tend to **assign fewer sources to subnational governments than could be justified by normative fiscal principles.** Equally important, even devolved sources are often unduly restricted by higher-level regulation of individual revenue bases and rates. Some regulation is justified but if too excessive it can severely constrain the fiscal autonomy of subnational governments, and this can make it more difficult for subnational governments to borrow.

Third, given the revenue advantages of national governments, **transfers** are inevitably a major component of subnational finances. The volume of transfers, which may dominate investment finance, and how they are shared, however, is critical. As noted earlier, transfers may be allowed to support debt service, but lenders would logically expect **transfers to subnational governments to be sufficient and predictable.** This requires that the transfer pool be determined—and the funds be allocated to specific subnational governments—on the basis of clear, transparent, and adequately stable criteria. Equally important is **whether transfers are unconditional or conditional and can be used for debt service (voluntarily or through intercepts, although the latter are**

controversial). Conditional transfers are not necessarily available for a sector for which an infrastructure loan is sought, and unconditional transfers may be limited. Finally, the transfer allocation formulae can hinder responsible fiscal behavior if they **create disincentives for subnational governments to raise their own resources and borrow**.

Fourth, although not necessarily part of the formal intergovernmental fiscal framework, the common **use of central government agencies and special financial intermediaries to lend to subnational governments in middle- and low-income countries can create challenges for commercial borrowing**. Although these entities serve an essential purpose in providing infrastructure finance to subnational governments that are not ready for the market and help them to build a record of fiscal responsibility, they may continue to provide concessional finance to subnational governments that no longer need it and create disincentives for them to enter the market. A range of documented laws in the design and implementation of special financial intermediaries can also more generally weaken their performance and limit their impact.²⁹

In short, there are various potential issues with intergovernmental fiscal systems that can undermine the environment for subnational borrowing, even if there is a seemingly reasonable subnational borrowing framework in place. Insufficient clarity in responsibility for specific public service functions and inadequate subnational own-source revenue assignments and excessive control on their use are often an issue to some extent. Tax-sharing and intergovernmental fiscal transfer systems that are not properly designed can weaken subnational government incentives to borrow and restrict their autonomy to use their powers and functions to do so. Heavy dependence on special financial intermediaries for subnational lending can misallocate resources and create disincentives for eligible subnational governments to pursue commercial borrowing and free up sovereign resources for those who cannot access the market.

²⁹ See, for example, Friere and Peterson (2004), Peterson and Annez (2007), Ahmad (2014), De La Torre et al. (2017), Smoke (2019), Yilmaz and Ebel (2020), Martell et al. (2021).

Implementation³⁰

Even where an intergovernmental fiscal system is well-designed and does not suffer from too many potential issues noted above, problems can arise during implementation. First, there can be **bureaucratic manipulation of the details of how intergovernmental fiscal mechanisms will be used in practice**. Many provisions for subnational functions, revenue generation and borrowing, as well as for intergovernmental revenue sharing, are defined in laws and official policies in general terms. In many cases, national agencies with a broad (finance, planning, urban development, etc.) or sectoral (health, roads and transport, water, etc.) national policy or supervisory role have much influence over standards and operations in their area of competence. Formal frameworks may give subnational governments autonomy on certain public functions and revenues, but higher-level agencies may have legal or practical authority to weaken or influence what happens in reality. This is relevant for borrowing because central agencies may have a role in approving subnational investments or in regulating revenue sources subnational governments need to meet debt service obligations. In cases with multi-tiered hierarchical systems, intermediate governments may be in a similar position to influence local government investment decisions and activities. Such power has the potential to create borrowing and fiscal responsibility challenges for subnational governments.

Second, issues with **general managerial capacity and stability** are a known concern in middle- and low-income countries. These are considered in assessing creditworthiness and an infrastructure loan application, subnational government and parastatal staffing turnover is not uncommon, particularly over the course of the political cycle if there is a change in power. Turnover can affect infrastructure investment planning and the commitment and ability of subnational governments to get a project operational and service associated debt. Concerns over these matters will affect lenders' perception of risk and their lending decisions and the terms on which they are willing to lend.

Third, many national governments have strong **operational oversight over public investment**. A common example is insufficient national attention to developing appropriate subnational

³⁰ Fiscal decentralization implementation received less attention than policy reform, but some literature considers it, including Shah and Thompson (2004), Ebel and Weist (2006), Connerley et al. (2010), Eaton et al. (2011), Bahl and Martinez-Vazquez (2013), Smoke (2015b), OECD (2019), Smoke (2020).

government procurement systems and associated capacity. Standard legal provisions and guidelines may largely reproduce the central procurement process or even control subnational procurement—in some cases all procurement may be handled at higher levels. Subnational governments that wish to borrow for an infrastructure project may have insufficient control over selecting and managing the contractor that will be constructing the facility for which they seek a loan. This can pose risks for both the borrowing subnational government and the lender.

In short, even if an intergovernmental fiscal system is reasonably well designed, there are consequential factors that can create complications and obstacles during implementation.

Opportunities for bureaucratic interference, variations in subnational government capacity, and inappropriately excessive oversight of investment project implementation are examples of the types of challenges commonly encountered. These factors may hinder subnational government borrowing and their inclination to do so, and they may also create reservations among potential lenders.

Accountability³¹

The system design and implementation issues noted above have implications for accountability in terms of understanding which actors lead (*de facto* as opposed to *de jure*) or influence fiscal activities that support or weaken subnational borrowing. There are, however, other accountability elements of the intergovernmental system that also require attention. First, lenders should be concerned about the **quality and consistent use of intergovernmental and subnational management systems**. Development planning, budgeting, financial management, auditing, human resource management, and monitoring and evaluation processes, for example, all affect a lender's confidence in subnational government management. System challenges in these areas are well-documented in middle- and low-income countries. Development planning, for example, may be weakly linked to budgeting, both capital budgets that provide for infrastructure investment and recurrent budgets that provide for operation and maintenance of infrastructure financed by loans. Such issues should be reflected in credit ratings and loan application

³¹ There is a substantial literature on subnational accountability, but often fragmented across types of accountability and focused on specific cases. A World Bank series on [Public Sector Governance and Accountability](#) includes some synthetic publications focusing on subnational governments. Other related materials include OECD (2014), Smoke (2015b), Romeo and Smoke (2016), Rodden and Wibbels (2019), Schwarz et al. (2020), UNDESA (2022).

assessments, and they may contribute to the reluctance of subnational governments to borrow and lenders to provide finance.

Second, developing accountability mechanisms involving **multiple actors in a subnational public investment** can be challenging. As noted above, some sectors with major infrastructure needs are managed by special districts, state-owned-enterprises, or special purpose vehicles with varied relationships to subnational governments. Arrangements among stakeholders would have to be appropriate and clear for borrowing to occur, and secondary borrowing regulations and the role of multiple national actors in borrowing approval are relevant here. Public-private partnerships and interjurisdictional collaboration may also play a role in the infrastructure investment and management, and lenders would expect there to be an adequate accountability framework and suitable operational arrangements for them to consider providing finance.

Third, despite obvious developmental needs, **subnational governments may not feel sufficiently accountable for providing infrastructure or borrowing to do so.** The incentive to borrow may be weakened by issues noted above regarding the design and implementation of tax sharing schemes, intergovernmental transfers, and special financial intermediaries. But even if these issues are not powerful impediments to borrowing, in countries with relatively immature political decentralization, subnational governments may not feel substantial pressure from their constituents to provide better services or be unduly influenced by electoral concerns to provide services that are not the most productive. In addition, they, may be disinclined for political reasons to adopt the subnational revenue increases typically needed to service debt.

Summary Observations on Other Factors Affecting Subnational Borrowing

All of the countries covered here experience some of the institutional, operational and accountability issues summarized here. **These are not necessarily grounds for disqualifying subnational government borrowing**—indeed, the countries with more active subnational borrowing are obviously not immune from these issues. In addition, **there are other considerations**—this paper does not claim to cover thoroughly and systematically the entire range of factors that can affect subnational borrowing. The full set of relevant factors is complex, and their relevance and severity can vary substantially across countries.

Although not comprehensive, the overview presented here **reinforces the need for careful assessment of how to enhance subnational government development finance in a particular**

country—an appropriate mix of grants, concessional finance, and commercial finance, with incentives to push subnational governments that can access commercial finance to do so. Such an assessment and consequent policy recommendations should be based on a robust understanding of the broad contextual factors that support or inhibit borrowing.

It is important to note that this paper **has not explicitly considered political economy dynamics** (national/ local/intergovernmental political and bureaucratic perspectives and behaviors), but these of course can significantly affect any of the above factors in a positive or negative way. This occurs from their influence on framework quality as well as the extent to which even normatively compliant frameworks are properly used in practice. Such dynamics must be understood because reforms designed to remedy technical flaws in subnational borrowing frameworks and practices may be politically infeasible, such that the flaws they are intended to correct may persist even if the desired reforms are officially adopted.

8. Synthesis of Main Points and Observations on Looking Forward

In high-income countries, subnational governments of all sizes usually borrow extensively and have access to commercial banks as well as to bond markets either directly or through pooled financing mechanisms (bond banks in US, municipal pooled financing agencies in various OECD countries) for decades. Many large subnational governments have international credit ratings, tap capital markets, and rarely default. This helps them to raise new and refinance existing debt with affordable interest rates and long-term tenors on an unsecured basis.

Middle-income countries, in contrast and despite heavy subnational infrastructure investment needs, have highly uneven subnational borrowing. In some cases, commercial borrowing by at least several larger subnational governments is becoming standard practice. Credit ratings in many of these countries may be less widespread and usually fall into speculative or low-grade investment categories, making subnational commercial borrowing more expensive and shorter-term. In other cases, concessional (non-commercial) debt is more common or dominant. Such concessional debt is facilitated by the national government, which can provide loans to subnational governments directly or through dedicated government institutions as well as provide guarantees to or on-lend loans from international development finance institutions.

Although the reasons for extensive subnational government borrowing in high-income countries and highly limited activity in low-income countries are reasonably well understood, **there is less clarity about what leads to the large discrepancies in subnational borrowing observed in middle-income countries.** This paper compared the experience of higher and lower subnational borrowing activity in fourteen middle-income countries to explore this neglected question.

Many obvious foundational factors that might be expected to affect subnational borrowing did not provide clear evidence—in some respects, low subnational borrowing countries do not look very different from their middle-income counterparts where borrowing is more established. Most of the low subnational borrowing countries seem to play a meaningful role in the public sector, have reasonable access to revenues from own-sources and particularly fiscal transfers (with adequate stability in some cases), and face extensive infrastructure investment needs in sectors for which subnational governments do or could have significant responsibility. Subnational governments in these countries are often less independent than those in high-income countries, but most have some degree of autonomy. In addition, these countries may have less developed financial markets, but they all fare decently on global indices, and several enjoy investment-grade sovereign credit ratings. Finally, most of the low subnational borrowing countries considered here have basic frameworks to define subnational borrowing parameters and impose at least some standard prudential limits. Country exceptions and caveats on certain indicators used in this review were noted above, but the bottom line is that the factors considered here do not alone sufficiently explain low subnational borrowing in some middle-income countries.

The brief selective country cases of low subnational borrowing countries suggest that underdevelopment or problematic details of subnational borrowing frameworks beyond the basics can be important. Secondary regulations governing subnational borrowing and approval processes in low subnational borrowing countries, and involvement of multiple (uncoordinated) national actors in these processes can be cumbersome and limit or discourage subnational borrowing. **Other factors that are well known in the decentralization literature**—deficiencies in the broader intergovernmental fiscal framework, behavioral and capacity issues that emerge during the implementation of even sound frameworks and in the course of subnational government fiscal operations, and challenges in the structure, underlying

incentives and functioning of subnational accountability mechanisms—can also affect the level of subnational government borrowing.

These latter considerations were not systematically investigated for this paper, but there are indications that they matter a great deal in some low subnational borrowing countries.

All of these consequential factors are likely symptoms of broader institutional and governance challenges that reflect political economy dynamics that broadly affect other aspects of public sector structures and operations. These challenges are not easy to solve, but they must be investigated and understood if pragmatic steps to move the system in the right direction are to be successfully designed and implemented. There have been efforts to identify opportunities and constraints on private financing for subnational and urban infrastructure, and these set a constructive foundation on which to build.³²

Looking Forward

The international development community could take a number of steps to promote more and much-needed subnational government borrowing, particularly in middle-income countries where borrowing would be highly productive and should be more feasible but has been limited. If this is to occur, more work is needed to go beyond the basic assessments outlined in this paper in order to understand in more detail the parameters that shape subnational borrowing in specific countries. Particularly important would be more thorough documentation of secondary subnational borrowing regulations and their effects; and a deeper understanding of how the overall intergovernmental system framework that empowers subnational governments and creates incentives that may limit borrowing in practice. The IFC and World Bank City Creditworthiness Initiative have developed frameworks to assess subnational borrowing. These constitute a useful step, but additional diagnostics could help to determine the broader features of the fiscal decentralization framework that might hinder borrowing, identify the most binding constraints, and explore the dynamics underlying issues with the framework and how it is used. This type of analysis could in turn facilitate the development of strategic interventions in specific countries.

³² Some useful treatments are provided in Alm (2013), White and Wahba (2018), Ahmad et al. (2019), ESCAP (2019).

The overall approach would ideally recognize the strong case for offering a spectrum of subnational development finance options appropriate to a particular country. Stronger subnational governments should have direct access to capital markets and face incentives to borrow commercially, subject to an adequate regulatory framework. Those without direct market access could be served by financial intermediaries offering subsidized finance that are 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, among others. Intergovernmental fiscal transfers should primarily be targeted to investments in subnational governments with weak fiscal capacity. Getting more subnational governments to borrow commercially could free up resources from the transfer pool that can be used to support concessional finance and intergovernmental fiscal transfers for those subnational governments that genuinely need it to meet pressing public investment needs and begin to develop fiscal responsibility and creditworthiness.³³

An overarching challenge is that many development partners and international finance institutions have specific objectives, expertise and programming approaches that are not likely to meet the prevailing complex subnational government fiscal reform needs if pursued independently. **Subnational governments in more developing countries could play a stronger role in essential infrastructure investment, but international agencies ideally need to work together in specific countries and develop diagnostics, technical assistance, and programmatic approaches to help them to do that effectively.** This is important not only to ensure there will be an appropriate range of subnational development finance mechanisms available, but also to support strengthening the broader intergovernmental fiscal system and alleviating obstacles to its implementation and effective operation. This is obviously a tall order and will require considerable commitment and coordination. Such an integrated approach, however, is worth pursuing given its great potential to promote more subnational commercial borrowing. This in turn can facilitate better use of public development resources at a time when they are needed to respond to urgent public investment needs at the local, national, and global levels.

³³ For a fuller treatment of this approach see Smoke (2019).

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