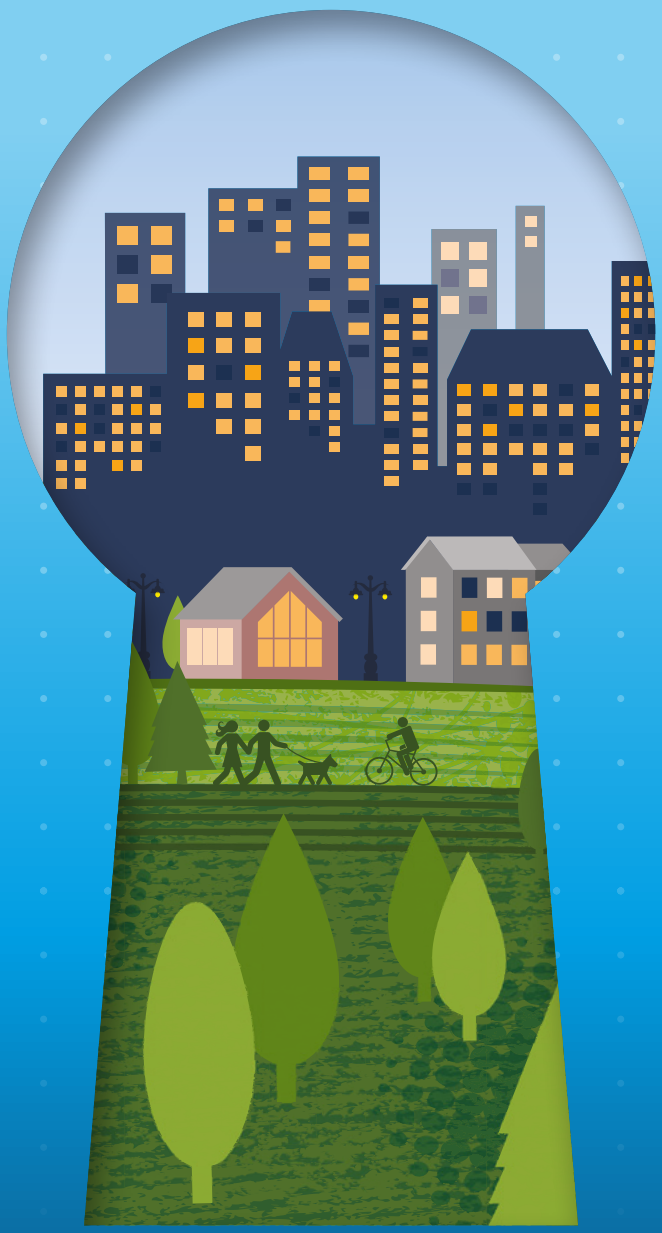
UNLOCKING SUBNATIONAL FINANCE

Overcoming Barriers to Finance for Municipalities in Low- and Middle-Income Countries



WORLD BANK GROUP

1818 H Street NW, Washington DC 20433

Telephone: 202-473-1000; Internet: www.worldbank.org

Figures

Tables

Boxes

Executive Summary

1. Introduction and Context

Municipalities in low- and middle-income countries (L&MICs) confront financing needs that greatly exceed available flows. Investment needs for urban infrastructure in L&MICs amount to approximately 2 to 4 percent of combined L&MIC GDP each year. Current investment flows are only a small fraction of these needs, with the overall financing deficit likely in the range of 1 to 3 percent of GDP.

These needs cannot be met from existing public and international development sources alone. Currently, most investment in municipal infrastructure is financed directly from public fiscal sources. To increase investment flows more in line with needs, much greater use of private and repayable financing will be required.

This report is intended to address this development challenge. It provides a snapshot of the volume of finance flowing to municipalities in developing countries, showing that such flows have been extremely restricted in recent years. It then identifies the chief factors that contribute to such low levels, and offers recommendations for municipalities, national governments, and development partners to address these constraints.

2. The Lay of the Land: Recent Trends in Financing for Municipalities in L&MICs

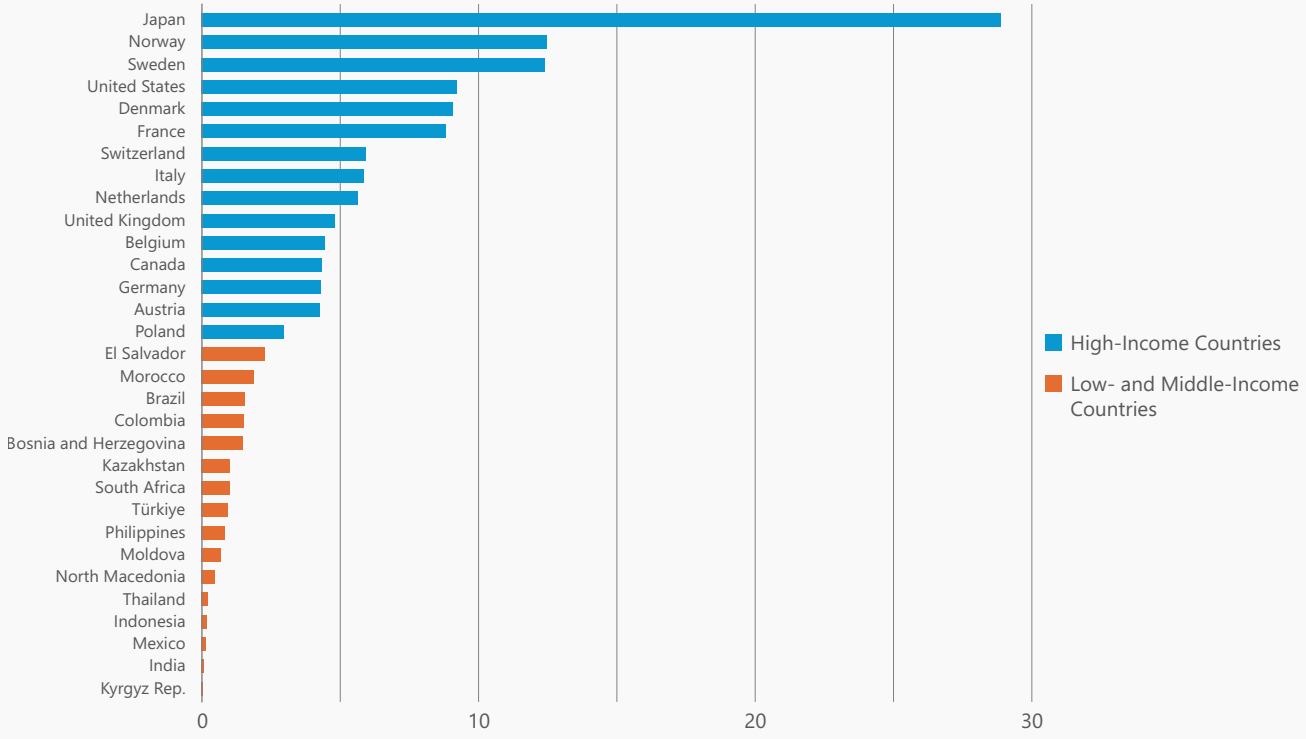
Municipalities in L&MICs currently mobilize very limited repayable finance for their infrastructure needs. Municipal debt is rarely above 2 percent of GDP in L&MICs, and most L&MIC countries have no meaningful municipal borrowing at all (see Figure 1). In those L&MICs where municipalities are allowed to borrow, borrowing tends to be from government financial institutions (GFIs) like development banks, and heavily concentrated in a few larger, richer, high-capacity cities. The great majority of municipalities in these countries remain unable to access debt finance. Municipalities' financial mobilization via PPPs has also been low, stagnant, and concentrated in a few cities. Across all L&MICs excluding China, municipal PPPs comprised just 2 percent of PPP investment value from 2015-2023.

These trends of weak capital mobilization are reflected in the five focus countries of this report.[1] Municipal borrowing stocks are below 0.1% of GDP in India, approximately 1% of GDP in Türkiye and South Africa, and 1.6% of GDP in Brazil and Colombia. With the exception of Brazil, fewer than twenty municipal PPP projects – with aggregate investment value under USD 900 million – are reported across these five countries for the period 2015 to 2023.[2] As with global trends, municipal borrowing is mostly dominated by GFIs and sometimes governments themselves rather than the private sector. However, it is also important to recognize that these GFIs (such as the DBSA in South Africa) themselves often raise finance in the domestic capital market and on-lend this to municipalities.

1 These countries are Brazil, Colombia, India, South Africa and Türkiye.

2 As per the 'Private Participation in Infrastructure' global database managed by the World Bank Group. See Box 4 on the scope and limits of the database.

Figure 1. Municipal* Outstanding Debt Stock (% of GDP)



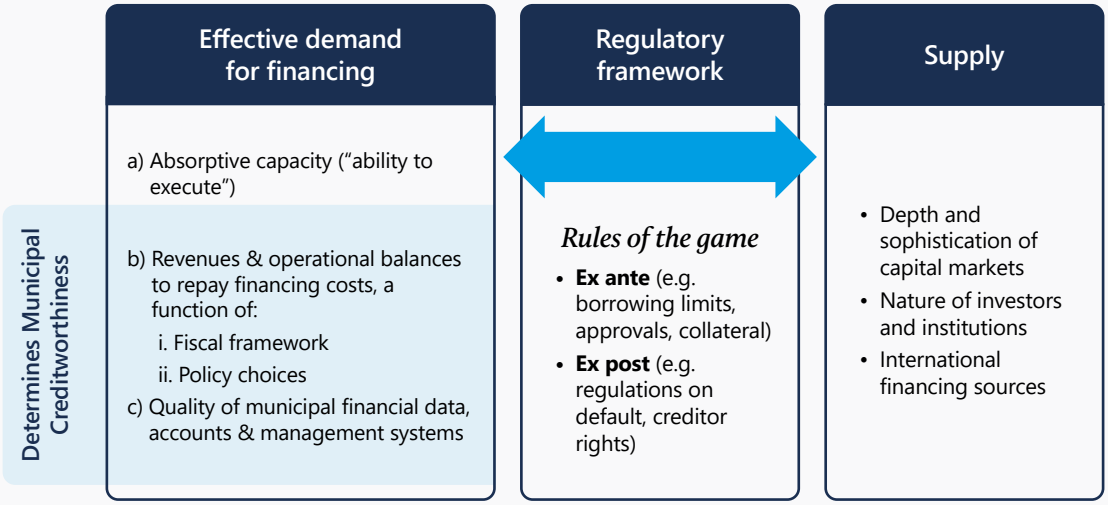
*Note: US data includes municipal and other local government (e.g., school district) outstanding debt stock, but excludes state borrowing.

Source: Authors' analysis of the IMF GFS and the World Bank Local Government Borrowing Database; US data from US Census Bureau (2021)

3. Key Factors Constraining Repayable Financing for Municipalities

Constraints to municipal mobilization of repayable finance exist along three dimensions – demand, supply, and the intermediating regulatory environment. The analytic framework in Figure 2 presents the main drivers of municipal repayable financing in each city and country context.

Figure 2. Factors Determining the Volume of Repayable Financing for Municipalities



Source: Authors' elaboration

Demand-side constraints – predominantly low municipal revenues, poor financial management, and weak absorptive capacity – are ubiquitous and foundational. Many L&MIC cities do not present feasible investment propositions. This is due to a lack of municipal creditworthiness and weak capacity to prepare and execute bankable projects. The ability to issue a municipal bond, for example, demonstrates that a city has a sufficiently robust policy, fiscal, institutional, and credit environment for lending at both the national and local level; as of 2023, only 35 of the 100 largest cities in developing countries had issued municipal bonds. In South Africa, municipalities have struggled to execute their existing finance (leaving 23 percent of infrastructure budgets unspent in 2023, for instance, due to capacity gaps in project execution). Data from 14 large and medium-sized cities across India show that local governments and utilities are generally unable to recover operations and maintenance (O&M) costs of key services provision (e.g., recovering less than half of O&M costs for water supply); poor cost recovery is inimical to investment attractiveness to the private sector. Several demand-side factors such as restricted municipal revenue assignments, constrained human resources, and low local tax and user fees, are largely a function of the broader subnational institutional and fiscal environment.

The regulatory environment in many L&MICs is also restrictive, limiting municipalities' ability to scale-up borrowing and PPPs. For example, following widespread debt crises in the 1990s, municipal borrowing in Brazil is now subject to strict regulation that limits activity. In India, borrowing authorization is often provided on an ad hoc basis without clear criteria; standards governing borrowing volumes may not conform with the credit quality of local governments; and the lack of a structured process for dealing with municipal default increases investor risk. By contrast, South Africa's regulatory system is fairly robust, and those municipalities that can establish themselves as viable credit risks are able to borrow successfully; in 2024, for example, the City of Cape Town concluded a USD 150 million loan with an 18-year tenor with the International Finance Corporation (IFC). Preferential regulatory treatment for development banks may also crowd out private finance to some municipalities, such as in Türkiye, where İlbank

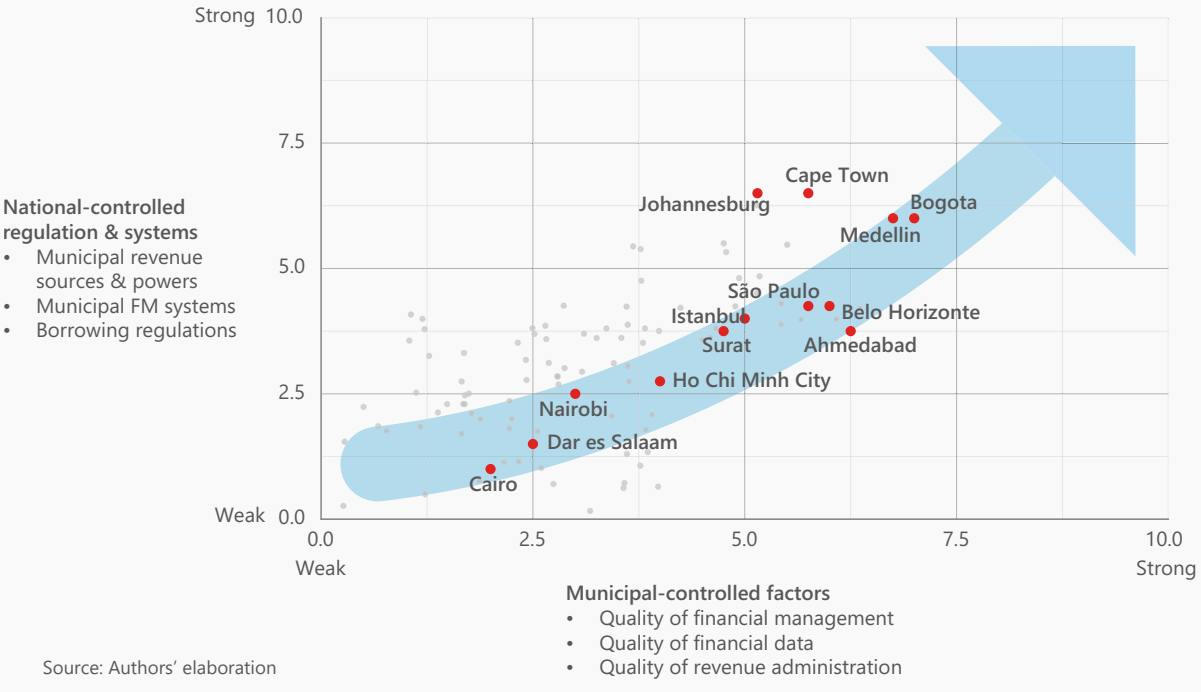
(a public development bank) has certain privileges (such as exclusive rights to intercept government transfers) over private lenders. The regulatory environment can also be restrictive for PPPs – such as in South Africa, where Ministerial control of tariff increases has impeded PPPs in the water sector, or Türkiye, where there is no singular framework Law for PPPs and more enabling legislation governing municipal PPPs is needed (and is under development). Regulation is important to avoid the prevalent risks of debt distress, moral hazard, and distortions, but must be well calibrated to manage these risks without unnecessarily restricting sustainable and effective uses of repayable financing.

Finally, under-developed local financial markets, and currency risks attendant on international finance, limit the supply of finance to meet cities' needs. Supply-side interventions can be conducive to financing but may also constrain the growth of markets. Many governments address supply-side constraints through direct (typically subsidized) lending by central to local governments; the creation and capitalization of government financial institutions that invest in municipal debt or PPPs; or the provision of guarantees to municipalities. However, these measures can be distortionary, create fiscal risk, and/or create an unlevel playing field that crowds out private sector finance – undermining the very objectives at which they are directed. Supply-side interventions should thus be used cautiously and strategically, as a coherent part of a wider program that is amenable to crowd in repayable finance.

4. Addressing the Challenge

Each city's commercial investment readiness can be appraised by considering its strength along two dimensions: factors broadly in national control, and factors broadly in municipal control. Figure 3 provides an approximate stylized plotting of the positions of a few cities on such a spectrum, presented for illustrative purposes.

Figure 3. Commercial Investment Readiness, Large Municipalities in Developing Countries



Source: Authors' elaboration

Many cities face constraints with respect to *both* national and local factors – such as a restrictive intergovernmental fiscal framework nationally, and weak local capacity for financial management and project preparation and execution. Many cities in low- and middle-income countries fall into this category. At the other (less common) extreme are cities with an enabling national *and* local environment – which may be the case for some of the L&MIC cities that have been able to issue bonds. Other cities present a discrepancy between national and local conditions: a robust national framework may not be matched by local capacity, translating into a concentration of finance in only a few stronger cities, or, more rarely (e.g., Kampala, Uganda), a city with strong fiscal fundamentals is restricted from mobilizing finance by a limiting national framework and/or national credit rating.

5. Proposals for Policy Actions: Role of National and Municipal Governments and Development Partners

A program to mobilize finance for municipalities should diagnose and pursue appropriate actions at local and national levels to address demand-side, supply-side, and regulatory environment constraints.

On the demand side, priorities are to:

- **Strengthen the funding base of municipalities.** Cities can only finance insofar as they can fund (i.e., secure *nonrepayable* resources with which to make interest payments or ensure return on equity). To strengthen the funding base, national governments can: i) expand, strengthen, stabilize, and rationalize their intergovernmental fiscal transfer systems to create conditions and incentives for financial leveraging; ii) expand own-source revenue assignments to municipalities; and iii) support capacity building programs targeted at assisting municipalities to strengthen their own source revenue (OSR) efforts. Local governments can strengthen the design and administration of local taxes and fees.
- **Strengthen local financial management and data**, to demonstrate financial strength to investors. Local governments can strengthen financial management capabilities, systems, and reporting. National governments can modernize standards, systems, and auditing for municipal financial management and reporting, with attendant capacity development.
- **Strengthen absorptive capacity of municipalities.** Local governments can improve their capacity and systems to plan and execute sustainable urban investments and to engage in financial transactions, with capacity building and resources from national governments.

On the regulatory side, a priority is to:

- **Improve municipal borrowing and PPP frameworks** to guard against risks while enabling the expanded use of repayable financing where sustainable, and to ensure that risk is properly priced and there is a level playing field between public and private investors.

On the financing supply side, the priority is to:

- **Reduce the risk of investments to the private sector**, such as through project pooling and credit enhancement, including partial risk guarantees and viability gap funding. However, supply-side interventions should be approached with caution to avoid creating distortions and crowding out private finance, and should not be regarded as a substitute for demand-side and regulatory reform.

- **A common supply side intervention is the support of concessional lending to municipalities through GFIs**. To manage associated fiscal risks, a range of policy measures can be considered to strengthen the role of GFIs in this regard, including: i) providing a level playing field between GFIs and private investors; ii) careful design of subsidies to GFIs in order to attract private investors; and iii) using GFIs to grow new market segments and showing proofs-of-concept.

National governments can also use their convening powers to shape this agenda at scale, disseminate information about financing opportunities, and liaise between municipalities and financial institutions to help build the market for private financing of urban infrastructure.

Role of Development Partners

IFIs and bilateral aid agencies can keep scaling up assistance to national and municipal governments with the full range of actions outlined above. This includes financing support (such as credit enhancement) and various forms of technical assistance and capacity-building, which may be provided directly to national governments, and / or to municipalities as single entities or clusters through a variety of operational modalities.

Acknowledgments

This report has been prepared under the auspices of the World Bank Group's Subnational Finance Task Force, by a team led by Roland White (Global Lead for Municipal Finance and Governance) and comprising Sohaib Athar (Senior Urban Specialist), Sally Murray (Economist), Federica Iorio, and John Iwan Probyn (independent experts). The team was advised by Ming Zhang (World Bank Global Director, Urban, Resilience & Land), Sumeet Thakur (IFC Global Head of Water, Cities, Waste, and Circularity) and David Savage (MIGA Manager Corporate).

The report was peer reviewed by Serdar Yilmaz (Practice Manager, Institutions), Fernando Blanco (Lead Economist, Economic Policy) and Rob Pilkington (Senior Urban Finance Specialist). Valuable guidance and comments were also received from Angelica Nunez (Practice Manager, Urban), Emilia Skrok (Practice Manager, Economic Policy), Balakrishna Menon (Lead Urban Specialist), Pavel Kochanov (Senior Municipal Finance Specialist, IFC), Upasana Varma (Principal Investment Officer, IFC), Jeff Delmon (Senior Infrastructure Finance Specialist), Deblina Saha (Senior Infrastructure Finance Specialist), Lorena Meco (Infrastructure Specialist), Seong Ho Hong (Analyst), Alejandra Guttierez (Investment Officer, IFC), and Uri Raich (Senior Urban Specialist). Administrative support was provided by Vidya Mahesh and Adelaide Barra. The report has been designed by Matt Collins of Zephyr.

Acronyms

AP	Availability Payment
CAPAG	Capacidade de Pagamento system in Brazil
CCFLA	City Climate Finance Leadership Alliance
DBSA	Development Bank of South Africa
EBRD	European Bank for Reconstruction and Development
GFI	Government Financial Institution
GFS	Government Financial Statistics
GoTN	Government of Tamil Nadu
HICs	High-Income Countries
HUDCO	Housing and Urban Development Corporation
IFC	International Finance Corporation
IFI	International Financial Institution
IMF	International Monetary Fund
LCU	Local Currency Unit
LGBD	World Bank's Local Government Borrowing Database
LGFV	Local Government Financing Vehicles
L&MICs	Low- and Middle-Income Countries
MIGA	Multilateral Investment Guarantee Agency
MSW	Municipal Solid Waste
OECD	Organisation for Economic Cooperation and Development
O&M	Operations and Maintenance
OSR	Own Source Revenue
PPP	Public-private Partnership
SEBI	Securities and Exchange Board of India
SNG-WOFI	World Observatory on Subnational Government Finance and Investment
SPV	Special Purpose Vehicle
TNUDF	Tamil Nadu Urban Development Fund
ULB	Urban Local Bodies
W&S	Water and Sewerage
VGF	Viability Gap Funding

1. Introduction: The Development Challenge

1.1. Problem statement and rationale

Municipalities in low- and middle-income countries (L&MICs) confront financing needs that greatly exceed current levels of investment. Already, 52% of the population in developing regions resides in cities – a figure expected to grow to 57% by 2030 and 66% by 2050 (UN-HABITAT, 2022). To address backlogs in service provision and adapt to evolving challenges, municipalities will need to invest across a range of sectors, including transportation, water and wastewater, solid waste management, housing, and disaster risk management. Broad estimates of the investment need suggest that it is in the region of 2-4% of L&MIC GDP, equivalent to USD 0.9-1.9 trillion per annum in 2022 (Box 1). Current investment flows are a small fraction of these needs. The City Climate Finance Leadership Alliance (CCFLA, 2024) estimates that, excluding spending by private households, financing of urban investments in low-carbon and resilient transport, solid waste management, buildings, flood protection, water and wastewater, was just USD 92 billion (0.2 percent of L&MIC GDP) in 2021/22.[3] In India, capital spending on all urban infrastructure was only 0.6% of GDP on average from 2011 to 2018, which was less than half the estimated long-term need (Athar *et al.*, 2022). In aggregate, the overall financing shortage may be approximately 1-3% of L&MIC GDP, or USD 0.45–1.4 trillion per annum.

Clearly these needs cannot be met from existing public and international aid sources alone. Currently, most investment in municipal infrastructure is funded directly from public, fiscal sources – municipal own source revenues, such as property tax and service charges, and fiscal transfers – and aid sources such as multilateral development banks. To escalate investment flows more in line with investment need, much greater use of repayable financing will be required.

Repayable financing for municipalities for infrastructure investment has several potential economic and societal benefits. First, it spreads infrastructure investment costs over both current and future beneficiaries through the taxes or user charges that fund the cost of the financing (intergenerational equity). Second, it can be socially equitable when structured so that financing costs are borne by municipal users rather than the national taxpaying population (for example, by user fees rather than inter-governmental fiscal transfers). Third, through providing immediate access to large volumes of capital, it allows local governments to develop "chunky" or strategic infrastructure, which would not be possible on a "pay as you go" basis. Fourth, it can enhance municipal planning, project execution, and financial management performance by requiring municipalities to determine major investment priorities, secure the required financing, and subject themselves to the scrutiny of the markets. The materialization of these benefits and the mitigation of attendant fiscal and other risks requires that municipal borrowing is carefully managed through sound budgetary and debt management practices and robust legal and regulatory frameworks that collectively instill fiscal discipline and minimize moral hazard. (Urban Institute & Brookings Institution 2024; Farvacque-Vitkovic and Kopanyi 2014; Freire, Mila and John Petersen, 2004).

3 This analysis draws on CCFLA background data not presented in the CCFLA (2024) report. Methodological details can be found in the Background Paper to the World Bank's forthcoming "Banking on Cities" Background Paper (Murray *et al.*, forthcoming).

This report speaks to the need to scale up repayable finance for municipal investments. Its objectives are reflected in its structure. First, it provides an overview of the quantum of repayable finance flowing to municipalities in developing countries, showing that this is extremely restricted. Second, it analyzes this situation, identifying the chief factors that constrain commercial financing flows. The analysis considers all low- and middle-income countries, but with particular emphasis on evidence and case studies from five focus countries: India, South Africa, Türkiye, Colombia, and Brazil. Third, it offers recommendations for municipalities, national governments, and development partners to tackle these constraints, to improve municipalities' access to repayable financing in a robust and sustainable manner.

Box 1. Estimates of municipal investment needs and financing flows

The estimate of municipal investment needs – of approximately 2-4% of L&MIC GDP – is derived from several different but broadly convergent sources. According to a forthcoming World Bank analysis (Deuskar et al., 2025), capital costs to deliver low-carbon and resilient urban infrastructure in L&MIC cities are estimated to be between 0.8-2.6% of GDP; this analysis excludes investments that do not contribute directly to mitigation or resilience, such as urban roads. Operation and maintenance costs of these assets, which include vital functions such as transit operation, solid waste collection, and asset maintenance, add a further 1.7% of GDP. CCFLA (2024) has estimated that the annual investment needs for low-carbon cities globally amount to USD 4.3 trillion, which approximates 4% of global GDP. They estimate urban adaptation in L&MICs to require an additional USD 147 billion annually, representing approximately 0.3% of their GDP. Country-level analyses provide similar estimates. For instance, the World Bank has projected that delivering climate-resilient and low-carbon urban infrastructure in India will necessitate 1.7 to 2% of GDP by 2050 (World Bank, forthcoming). White and Masaki (2019) estimated that urban infrastructure investment needs in Nepal are approximately 4% of GDP.

1.2. Objectives, scope, and methodology

Three parameters define the report's scope. **First, the focus is confined to the municipal (or "third") sphere of subnational government,** i.e., to municipalities and municipally owned or controlled utilities.[4] While the expenditure assignments of city and municipal governments vary widely across (and sometimes within) developing countries, in most cases such governments (and utilities) have substantial responsibilities for funding, building, and operating core infrastructure and services in sectors such as local roads and drainage, sanitation and water supply, solid waste management, public parks and spaces, and so on.[5] State and provincial ("second tier") governments tend to have rather distinct functions and are usually treated differently to municipalities from a constitutional and legal perspective, not least when it comes to their financing systems (such as deficit financing and the regulation of their borrowing activities). The issues surrounding the commercial financing of state or provincial governments would require a separate analysis.

4 In this report, the terms "municipal government" and "local government" are used interchangeably, unless otherwise specified. Both refer to the third tier of government, typically responsible for service delivery and urban infrastructure at the city or municipal level.

5 In regions around the world, local government expenditure as a proportion of general government expenditure varies from a low of around 6 per cent in Sub Saharan Africa to a high of around 28 per cent in East Asia and the Pacific. Source: OECD SNG-WOFI, 2020.

Second, the paper focuses on the two main avenues through which repayable financing may be leveraged into infrastructure investment: direct debt financing and public-private partnerships (PPPs). Direct debt financing encompasses instruments through which finance is borrowed by a government entity. Repayments and returns are secured by the general balance-sheet of the borrowing entity (general obligation borrowing) or by hypothecated revenue flows that are dedicated to this purpose. PPP arrangements are those in which private finance is secured as equity contributions and/or debt for specific infrastructure projects; the private investor secures returns through the future revenue streams directly attached to those projects (such as user fees) and/or general revenues of the municipality/utility through dedicated fee arrangements.

Third, this paper focuses on "financing" for municipalities. For the purpose of this report, "finance" means all repayable financing, inclusive of both market-based financing and repayable financing that is provided on below-market terms. This allows for discussion and analysis of the relatively large fraction of repayable but concessional finance that flows to municipalities, e.g., subsidized lending by development banks. In this report, the concept is agnostic with respect to, first, the *source* of financing (i.e., whether it is provided by private or public sector financial institutions, such as national development banks), and second, the financing *instrument* (i.e., whether the finance is provided in the form of loans or bonds and whether it is secured by guarantees or, in the case of PPPs, in the form of equity).

It should be noted that financing and funding are two different things. Finance refers to the raising of money for investment; funding refers to the payment for the investment, including the financing cost, over the long term. Finance thus does not obviate the need for funding. In fact, because finance comes at a price (interest or return on equity), it aggravates the funding need. If municipalities are to mobilize finance, they need to demonstrate the ability and commitment to pay for that finance with funding, which can be sourced only from some combination of local taxes and service charges ("own source revenues") or fiscal transfers (including aid grants). The greater the volume of repayable finance, the greater the need for funding. To finance more, one needs to fund better – the two issues need to be addressed simultaneously.

The paper is based on existing sources of information.[6] It provides updated information and analytic insights, drawing chiefly on the latest available data from country and global databases and in-depth work that the World Bank has undertaken on municipal financing over the past two decades. In addition to general information sources, such as the International Monetary Fund (IMF) Government Financial Statistics (GFS), three sources are particularly important: (i) the Local Government Borrowing Database (WB LGBD) developed by the World Bank's City Creditworthiness Initiative in 2022;[7] (ii) country and global studies on commercial financing in developing countries;[8] and (iii) work undertaken by a recent internal task force established by the World Bank Group (WBG) to enhance its activities in the area of subnational financing. Available data on municipal borrowing is generally more comprehensive and robust than that for PPPs and the emphasis and substance of the paper inevitably reflects this. In addition to a global review, the report provides more detailed analysis of five countries, namely Brazil, Colombia, India, South Africa, and Türkiye, which are the initial focus countries of the aforementioned WBG task force.

6 The data in this report primarily come from IMF Government Finance Statistics (IMF GFS), the OECD's World Observatory on Subnational Government Finance and Investment (SNG-WOFI), and the World Bank's Local Government Borrowing Database (WB LGBD), each with its own methodologies and limitations. IMF GFS relies on self-reported data from national authorities, derived from administrative and accounting records. OECD SNG-WOFI uses official statistics and unconventional sources such as geospatial data. WB LGBD relies exclusively on official public sources. For municipal public-private partnerships (PPPs), the report mainly uses data from the World Bank's Private Participation in Infrastructure (PPI) database with caveats as outlined.

7 Available here: https://www.citycred.org/database

8 For example, World Bank (2011), World Bank (2018), World Bank (2022), White, R. and Wahba, S. (2019).

Finally, this paper recognizes the importance of financing resilient and energy-efficient, low-carbon growth in L&MIC cities, but does not focus on climate change-specific financing instruments and approaches. Those instruments may bring some benefits, but the core priority for financing climate investments remains strengthening the overall municipal financing environment (see Box 2).

Box 2. The Climate Finance Dimension

The need to address climate resilience and mitigation adds urgency to the subnational financing agenda, but does not obviate the need for the fundamentals of sound financing. Simply put, before a city can issue a green bond, it must first meet the conditions to issue a regular bond. More broadly, municipalities can only access dedicated repayable "climate finance" instruments once they meet the conditions for repayable financing more broadly. Furthermore, many investments that support resilience and mitigation are core urban investments – such as public transit or solid waste management – which are amenable to urban investment financing. Dedicated climate financing instruments typically place additional requirements on the borrower (such as to demonstrate compliance with green bond standards), but the first priority remains to establish the foundations for general urban financing.

Conclusions on the magnitude and reliability of pricing and other benefits from dedicated urban climate finance instruments still need to be formulated, in part because the market in developing countries is so limited. To date, very few developing country cities have issued "green bonds" (for example, Istanbul, Johannesburg, Cape Town, Mexico City, Vadodara), and a reliable, substantial pricing benefit has not consistently been demonstrated; compliance with the non-financial terms of "green finance" does, however, add additional duties and complexity for issuers (GIZ, 2017; VanEck, 2017; OECD, 2015). Nevertheless, some investors are clearly attracted to "impact financing" of this type, and this demand may benefit issuers, such as through high subscriptions and more diverse investor pools. For example, the coupon on the 2017 Cape Town green bond was 35 basis points less than that of a similar regular bond issued at the time by another South African city (Ekurhuleni) with a similar Moody's credit rating, but was significantly oversubscribed (Gorelick, 2018).

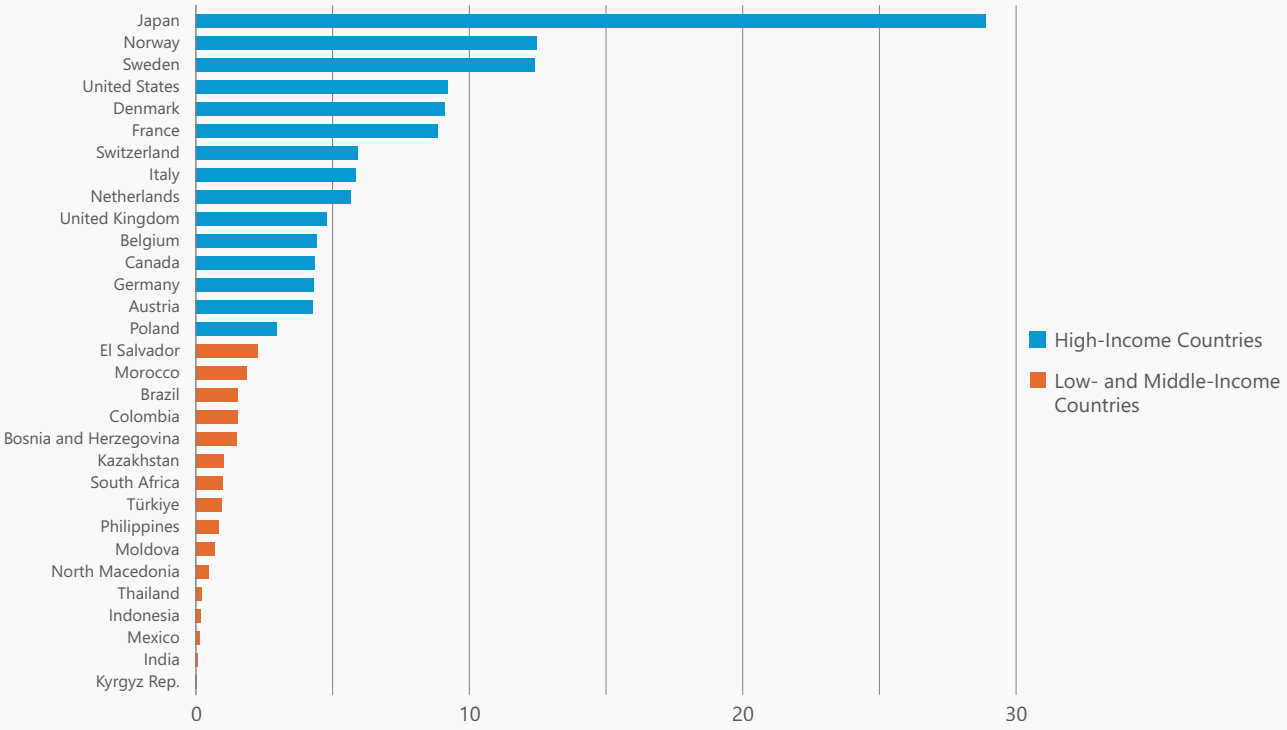
2. Current Position: Municipal Debt and PPPs

2.1. Municipal borrowing: trends and observations

In contrast to high-income countries (HICs), municipal borrowing for infrastructure investment in L&MICs is highly limited. While there is substantial municipal borrowing in a few upper-middle-income emerging markets in East and Central Europe, this is not true of most developing countries, and overall borrowing volumes are low. (China is an exception, where subnational borrowing is nearly 70% of GDP – see below.) The chart below contrasts the situation in HICs and L&MICs as of 2022.

Across sub-Saharan Africa, municipal borrowing is essentially non-existent except in South Africa. In South Africa, metropolitan municipalities have developed some access to commercial financing. Private banks and the Development Bank of Southern Africa (DBSA) dominate municipal lending, and while a small bond market exists, issuance remains limited to a few large cities. South African local government debt stood at USD 3.9 billion in 2023, representing 1% of GDP. Beyond South Africa, local government borrowing is legally allowed in certain countries – including Tanzania, Nigeria, Namibia, Ethiopia and Kenya – but has not effectively emerged.

Figure 4. Municipal* Outstanding Debt Stock (% of GDP)



*Note: US data includes municipal and other local government (e.g., school district) outstanding debt stock, but excludes state borrowing.

Source: Authors' analysis of the IMF GFS and the World Bank Local Government Borrowing Database; US data from US Census Bureau (2021)

In the South Asia region,[9] India is the only country where meaningful municipal borrowing occurs, but even in India volumes are minimal relative to GDP. The stock of local government debt in India stood at USD 2.7 billion, or 0.08% of GDP, in 2021. Within this, concessional or guaranteed loans from state-controlled financial institutions dominate, restricting private sector participation. Elsewhere in South Asia, municipal borrowing is rare, with most local governments relying almost entirely on government transfers for infrastructure investment.

In the East Asia and Pacific region, apart from China (which is unique, see Box 3), municipal borrowing levels remain low. The Philippines has some local government borrowing activity, where municipalities primarily rely on domestic financing from public banks for infrastructure investments; even here, however, total municipal debt stock stands at only USD 3.59 billion or 0.84% GDP (2023). In Indonesia and Thailand, local governments have some experience with borrowing, but it remains very limited, with Indonesia's local government debt stock (which includes not just municipal but also provincial debt) at USD 2.69 billion (0.2% GDP).

In the Middle East and North Africa (MENA) region, municipal borrowing remains highly constrained. In Morocco, with the exception of limited financing from the International Finance Corporation (IFC) and European Bank for Reconstruction and Development (EBRD), local government borrowing has mostly been limited to loans from the Communal Equipment Fund (a GFI), although there are no legal restrictions preventing borrowing from other financial institutions. Total local government debt stock in Morocco amounted to USD 2.28 billion in 2023, representing 1.93% of GDP. Agadir in Morocco has recently issued its first municipal bond, signaling new interest in the use of local capital markets for urban development financing. However, financial markets for municipal debt in the MENA region overall are underdeveloped, with local governments primarily dependent on public sector funding.

Latin America presents a more developed but varied municipal borrowing landscape, but overall borrowing levels remain low. Argentina has a relatively well-developed municipal borrowing market, though municipal bond issuance has been limited. Colombia has made progress in developing its municipal bond market, with municipal bonds comprising 20% of total local borrowing in 2023. However, the country's municipal debt stock reached USD 5.7 billion in 2023, equivalent to only 1.6% of GDP, and is characterized, first, by continued reliance chiefly on publicly owned Findeter (which provides discounted loans through private banks and recently started to lend directly), and second, by strict federal oversight limiting broader private sector participation. Brazil's municipal borrowing is primarily reliant on public banks, due to the current regulatory framework. Local government debt stood at USD 31 billion in 2022, representing 1.6% of GDP. In Mexico, commercial banks hold a substantial share of municipal debt, accounting for approximately 50% of all recorded credit to municipalities. However, municipal debt is low, accounting for only 0.15% of GDP in 2023 (equivalent to USD 2.1 billion).

9 This report uses the World Bank Group's regional classification of countries unless otherwise noted.

In the Europe and Central Asia region, municipal borrowing is more developed than in other regions, though access to private financing remains uneven. As indicated in Figure 4, municipal borrowing is more extensive among HICs in the region. For example, in Poland, where municipal debt in stood at USD 20 billion (equivalent to 3% of GDP) in 2022, local governments routinely issue bonds and have well-developed access to both commercial and concessional financing. In Türkiye, on the other hand, municipal debt stood at USD 11.2 billion (1% GDP) in 2023. The country has an established municipal lending system, with İlbank (a publicly owned financial institution) playing a dominant role in municipal finance, and limited municipal access to independent private financing.[10]

Box 3. Local government borrowing in China

In China, a 1994 Budget Law prohibited subnational governments from running deficits or borrowing directly to finance investment. This led to the rise of Local Government Financing Vehicles (LGFVs) – local state-controlled companies that leveraged land-use rights and public assets to raise capital through bank loans and bonds. These funds were primarily used for urban infrastructure investment, which expanded rapidly (Han et al., 2024).

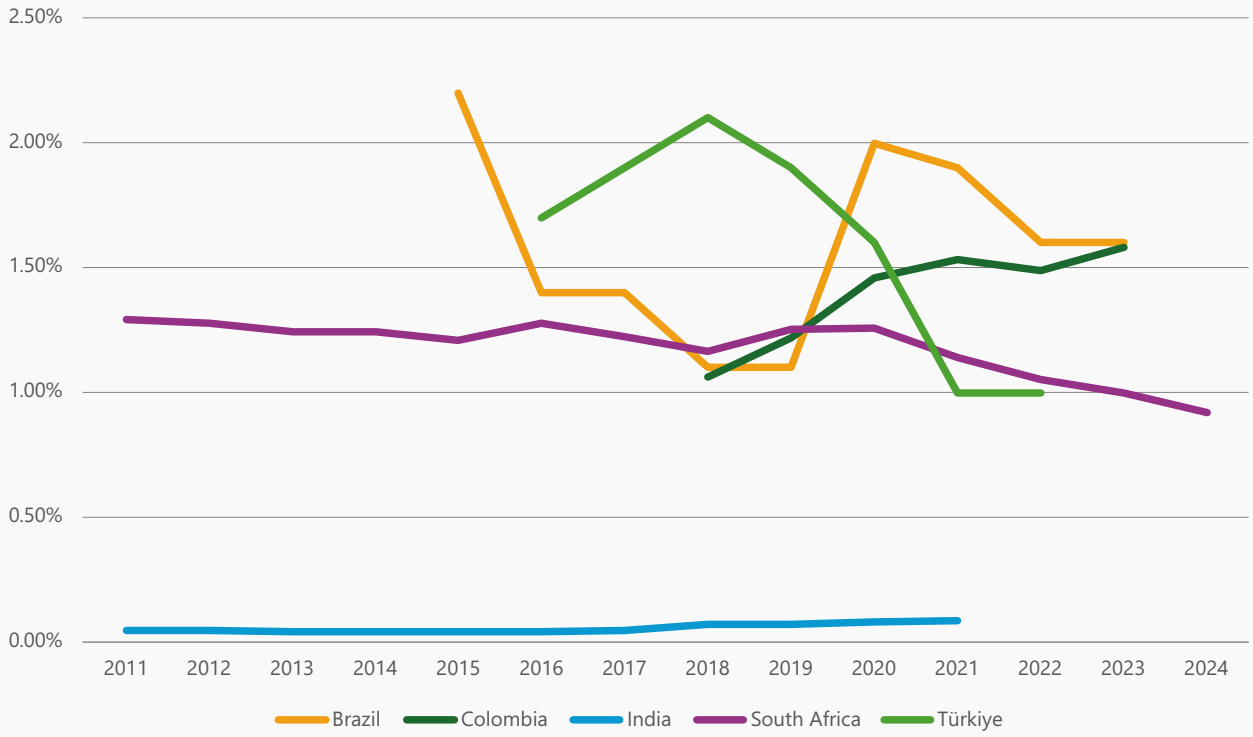
Between 2000 and 2014, LGFV debt grew unchecked, especially after the 2009-2011 financial crisis. By 2017, there were over 9,000 LGFVs. Given escalating fiscal risks, the central government passed a 2014 revised Budget Law requiring subnational governments to shift from off-budget borrowing through LGFVs to issuing loans on balance sheet, predominantly in the form of bond-type instruments. However, even after bond issuance became legal, many cities continued to rely on LGFVs for infrastructure financing. By 2023, official local government debt had risen by 135% in eight years, reaching 32% of GDP (Ministry of Finance of the People's Republic of China, 2024). At the same time, the IMF estimated total LGFV debt at 44% of GDP, bringing total subnational debt to nearly 70% of GDP.

According to the IMF, the central government has recently stepped in to mitigate fiscal pressure. As local governments reduced spending due to declining property-related revenues, the central government offset these constraints through tax relief, economic stimulus, and increased investment in disaster recovery and resilience. Additionally, growing expectations of government support helped reduce LGFV borrowing costs, even as bond financing slowed in late 2023, shifting reliance toward bank loans (IMF Asia and Pacific Dept, 2024).

There has been limited growth in municipal borrowing among the five focus countries of this report. Municipal borrowing over the past 10-15 years demonstrates some variation across the five countries, but overall, with the exception of Colombia, these have not shown significant sustained growth over this period. As a percent of GDP, municipal borrowing in Brazil and Türkiye has wavered but ultimately declined over the past 10 years or so; in India it has grown only slightly, while in Colombia it has grown by about 0.5% GDP. In South Africa, real municipal borrowing activity expanded steadily from 2005-2011, but since then has leveled off and begun to decline. (Annex 1 provides further detail from these five countries.)

10 İlbank shareholders are municipalities and provinces, but it is subordinate to the Ministry of Environment and Urban Planning.

Figure 5. Municipal Outstanding Debt Stock (% of GDP) in Focus Countries, 2011-2024



Source: Authors' analysis of the World Bank Local Government Borrowing Database and (for India) Athar et al., (2022)

In those L&MICs where municipalities can borrow, borrowing tends to be heavily concentrated in a few larger, richer, high-capacity cities. The great majority of municipalities in these countries remain unable to access debt finance. In India, Colombia, Brazil, South Africa, and Türkiye, most local debt is issued by a small number of large cities. For instance, in South Africa, eight metropolitan municipalities account for 86% of all local borrowing and 19 secondary cities hold 10%, meaning that just 26 out of 257 municipalities hold 96% of outstanding municipal debt. Similarly, in Colombia, the four largest cities hold 67% of all municipal debt, with Bogota alone accounting for 40%. Türkiye and Brazil have slightly less concentration, with roughly the largest 1% of municipalities holding about 40% of borrowing.

In contrast, borrowing is more evenly distributed in high-income countries, where smaller municipalities routinely access debt financing, often through pooled financing mechanisms such as bond banks. Scandinavian countries such as Denmark and Norway, as well as countries with high levels of borrowing such as the United States and Japan, are illustrative of this trend. In Denmark, all local governments borrow via a municipal-owned agency (KommuneKredit). In Japan, nearly 100% of municipalities carry debt, with larger cities issuing bonds directly in markets while smaller ones rely on bank loans or the Japan Finance Organization for Municipalities. The U.S. has a deep and diversified local financing system, with over 55,000 of its 90,000 municipal entities having issued municipal bonds.

Municipal lending activity in L&MICs is dominated by government financial institutions (GFIs) and sometimes governments themselves, rather than the private sector. This is true even for larger and more creditworthy municipalities. Practices vary somewhat across

countries. In Indonesia, all municipal borrowing to date has been sourced from central government and/or government owned intermediaries. GFIs such as the DBSA in South Africa and İlbank in Türkiye lend directly to municipalities. Historically, Colombian development bank, Findeter, mainly supported subsidized private sector lending to municipalities via a discount window, but Findeter is now lending directly to municipalities. Table 1. below summarizes the situation for the five focus countries of this report.

Table 1. Comparison of Private (Commercial Bank and Bond) vs GFI Lending to Municipalities in Focus Countries (% of total municipal debt stock)

	Private	GFI	Government	IFI	Other/Unknown
South Africa	40	47	-	13	-
Colombia	74	14	1	11	-
Türkiye	18	24	4	-	54
Brazil	19	30	35	13	3
India	14	51	29	-	6

Notes:

For Colombia, lending from Findeter's rediscount window is included in the Private column since it flows to municipalities via private commercial banks. This comprises 42% of the figure. GFI lending consists of all direct lending from Findeter.

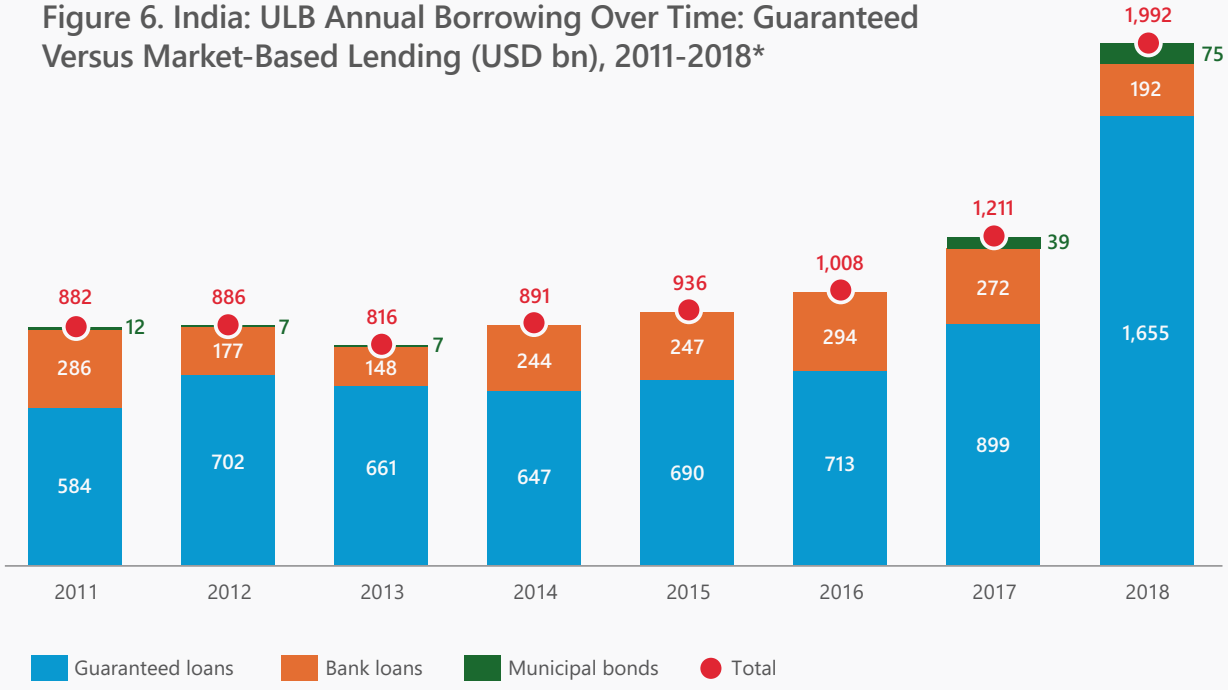
For Türkiye, private lending captured in the table is all in the form of bonds, while GFI lending is all from IlBank. The 'other / unknown' column includes loans from the private sector and national government, but disaggregation was not possible due to data limitations.

Data from 2023 except Brazil (2022) and India (2021).

Source: Authors' analysis of the World Bank Local Government Borrowing Database

Moreover, just as overall municipal borrowing has not expanded, private sector lending to municipalities also does not appear to have expanded relative to public sector lending over time. In India, for example, state guaranteed loans to Urban Local Bodies (ULBs) provided by the Housing and Urban Development Corporation (HUDCO) grew significantly as a proportion of total ULB lending over the period 2011-2018, while bank loans did increase in this period (see Figure 6). In South Africa, lending by DBSA has expanded relative to private sector lending in recent years (see in Figure 17 in section 3.2).

Figure 6. India: ULB Annual Borrowing Over Time: Guaranteed Versus Market-Based Lending (USD bn), 2011-2018*



*Notes: "Guaranteed loans" are provided by GFIs, mainly HUDCO.

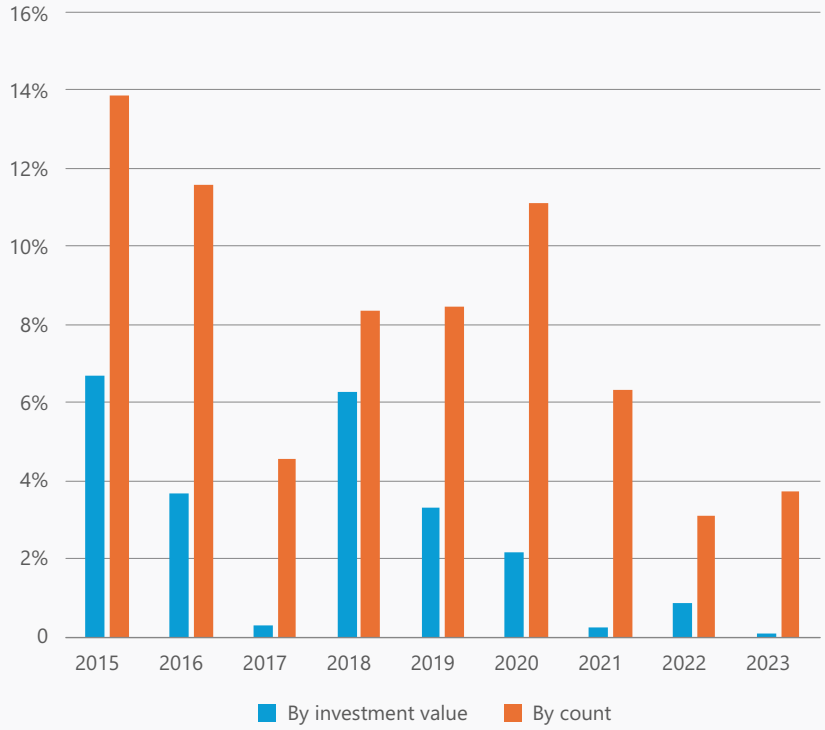
Source: Athar et al., (2022)

However, it is also important to recognize that GFIs often raise finance in the domestic capital market and on-lend this to municipalities. In other words, municipalities that borrow from GFIs are often, in effect, borrowing *indirectly* from the private sector. The relationship between GFI financing and direct private sector financing is a complex one, which is discussed further below (Box 5).

2.2. Public Private Partnerships: trends and observations

Although data on municipal public private partnerships (PPPs) is more limited, it indicates similar trends. The World Bank PPI database gives an impression, though the data on municipal PPPs have certain important limitations (see Box 4). In aggregate, the data indicate that across all L&MICs excluding China, close to 2,100 PPPs were contracted from 2015 to 2023 at all levels of government, with a total investment value of USD 560 billion. Of this, municipal PPPs comprised only 8 percent of contracts and 3 percent of investment value. Temporal trends suggest that municipal PPPs may be declining as a share of all PPPs in terms of investment value and number of projects; municipal projects accounted for less than around 2 percent of all PPP investment value since 2020, and less than around 6 percent of the number of projects since 2021 (Figure 7).

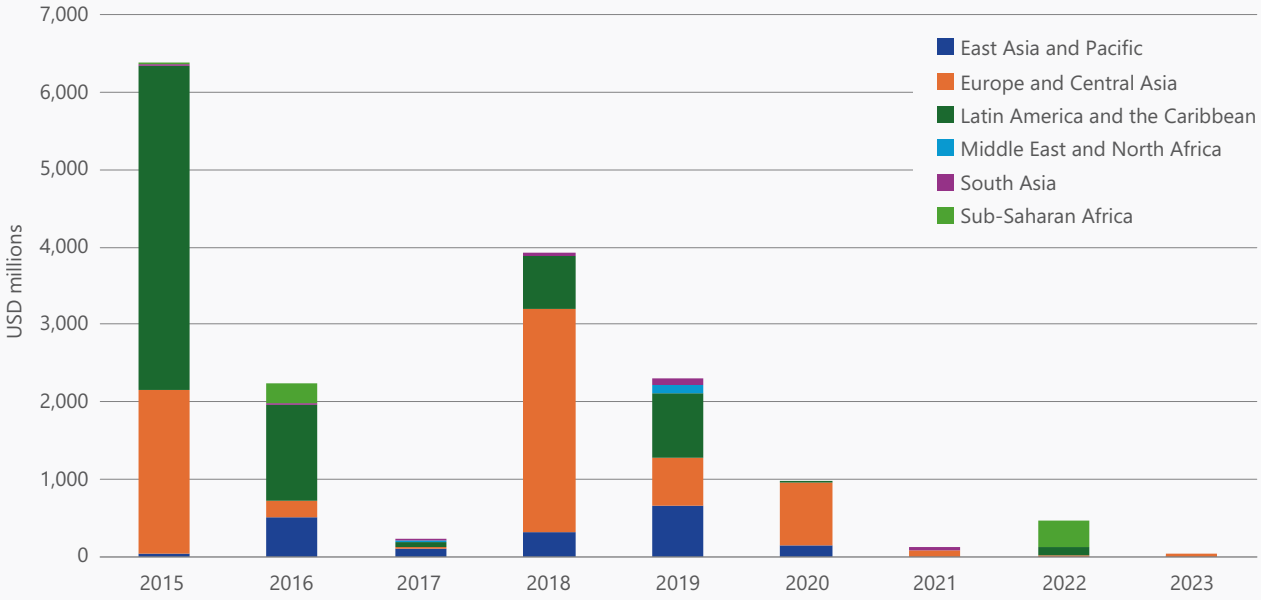
Figure 7. Municipal PPPs as a Share of All PPPs, by Year (2015-2023) (All L&MICs Excluding China)



Source: Authors' analysis of the World Bank PPI Database

By region, municipal PPP activity was highest in Latin America, Europe and Central Asia, and East Asia (Figure 8). Excluding China from the regional analysis, the number and investment value of municipal PPPs was highest in Latin America (66 PPPs, totaling USD 7.1 billion of investment) and Europe and Central Asia (63 PPPs, with USD 6.8 billion invested), followed by East Asia (16 PPPs; USD 1.8 billion). The lowest municipal PPP activity was in Sub-Saharan Africa, the Middle East and North Africa (MENA), and South Asia: of the subset of PPP types that are recorded by PPI, just 4 municipal PPPs were contracted in MENA (investing USD 0.1 billion); 5 in sub-Saharan Africa invested USD 0.6 billion; and 11 in South Asia invested just USD 0.1 billion over the 9-year period of analysis (2015-2023).

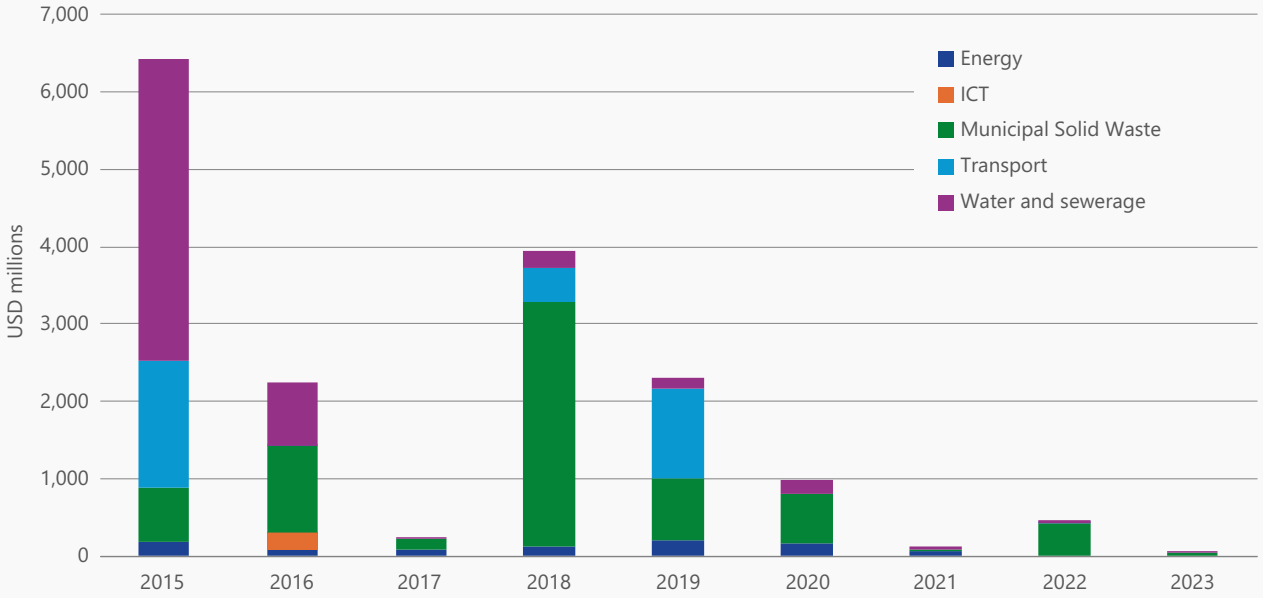
Figure 8. Municipal PPPs: Contracted Investment Value, by Region and Year (2015-2023) (all L&MICs excluding China)



Source: Authors' analysis of the World Bank PPI Database

By sector, municipal PPP investments were concentrated in municipal solid waste (MSW) and water and sewerage (W&S), followed by transport and energy (Figure 9). Municipalities signed USD 7.0 billion in MSW PPPs, USD 5.3 billion in W&S, USD 3.2 billion in transport, and USD 0.9 billion in energy. This pattern may partly reflect differences in monetizable revenue potential across sectors, as activities with stronger cost recovery prospects, such as activities within solid waste management and municipal water supply, are more likely to attract private participation.

Figure 9. Municipal PPPs: Contracted Investment Value, by Year and Sector (2015-2023) (all L&MICs excluding China)

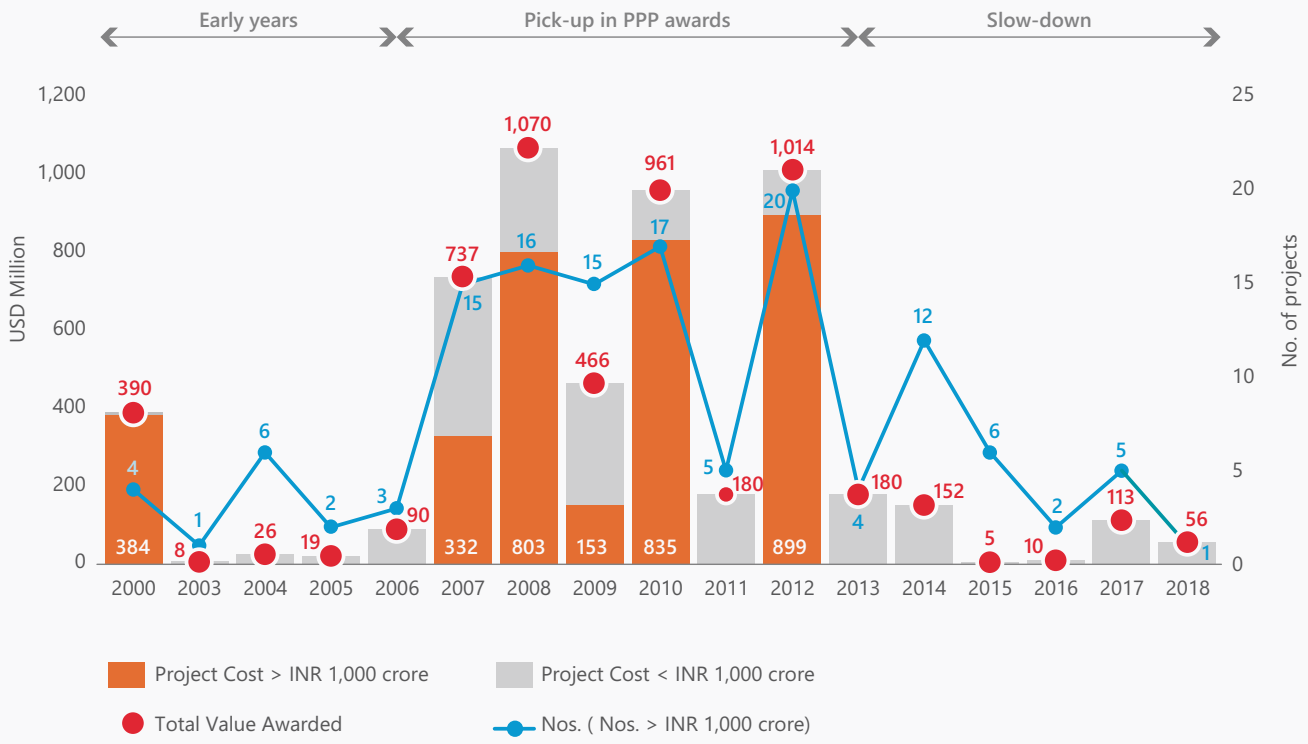


Source: Authors' analysis of the World Bank PPI Database

More detailed information on PPPs by region and country is provided in Annex 2. To complement this, additional information for two of the focus countries, which show somewhat contrasting patterns, is given here. For India, PPI data shows only low-value transactions from 2015 to 2023, and wider evidence points to a decline in urban / municipal PPP activity over time. From 2015 to 2023, PPI data shows aggregate investment of just USD 130 million via municipal PPPs in India, across 10 relatively small transactions. These include 8 greenfield MSW PPPs (totaling USD 78 million of investment) plus two water and sanitation projects (USD 44 million of investment). 7 projects involved investments under USD 7.5 million; the highest-value projects were a USD 36 million sewage treatment plant in Kolkata (2021), a USD 16.8 million MSW merchant PPP in Kolkata (2016), and a USD 30 million MSW BOOT PPP in Nagpur, Maharashtra (2018). A complementary analysis (Athar *et al.*, 2022) of *urban* infrastructure PPP transactions in India (i.e., not limited to municipal PPPs)[11] shows that these peaked from 2007 to 2012, then slowed until at least 2018 (see Figure 10). From 2007 to 2012 (except for a dip in 2011), India processed 15-20 urban infrastructure PPPs per year, with annual investments as high as USD 466 to 1,070 million. By contrast, from 2013-18, India saw only 1- 6 urban infrastructure PPPs per year, bringing just USD 5 to 180 million in investment. The PPI database shows fewer than four municipal PPP transactions annually from 2015 to 2023, investing just USD 130 million over the period.

11 In India, it is more common for state governments to find and develop projects in cities than for municipalities to deliver PPPs directly, due to funding and capacity gaps.

Figure 10. India: Urban Infrastructure PPP Projects Awarded since 2000, # of Projects and Cost (USD million)



Source: Athar et al., (2022)

Colombia's experience has been more positive, with the delivery of complex urban PPP projects in a number of key sectors, including major hospitals and the modernization of urban transport. For example, the Bogotá Metro Line 1, Colombia's largest urban infrastructure project, is being developed under a USD 3 billion 'design, build, operate and maintain' PPP with support from Chinese investors and World Bank technical assistance (Ganic, 2024; RailwayPro, 2025). The city also contracted a USD 465 million 'design, build, operate, and maintain' PPP for the RegioTram commuter rail (Wade, 2017). Several leading cities such as Bogota, Medellin (World Bank, 2019), Cali, and Barranquilla have contracted PPP concessions for BRT operations. This includes a USD 213 million PPP for the TransMilenio BRT system (Global Platform for Sustainable Cities, World Bank, 2019) in Bogotá, partially financed by the IDB and World Bank, which encompasses investments in buses and stations and O&M of buses. Bogota has also used PPPs to finance critical health infrastructure: in 2020, it signed a PPP for an 18-year concession for the expansion and modernization of the Bosa hospital in a low-income area of Bogota. The project was jointly structured by the IFC and Colombia's National Development Finance Agency (FDN) with financial support from the State Secretariat for Economic Affairs of Switzerland (IFC, 2022).[12]

12 Notably, none of these major contracts are currently captured in the PPI database for methodological reasons. The PPI database does not include BRTs; the Bogota metro project reached financial closure in 2024, and will be entered into the PPI database with its next annual update; and health is not a sector covered by the PPI database.

Box 4. Note on use of PPI data to describe municipal PPP trends

Except as noted otherwise, the analysis of PPPs in this section is based on the World Bank's Private Participation in Infrastructure Projects (PPI) global database. This database contains detailed information on private investment in over 10,000 public infrastructure projects. However, it does not aim to be exhaustive of every infrastructure project with private participation, and investment estimates may be imprecise. Some scope limitations are particularly relevant for an analysis of *municipal* PPPs. First, only projects in the PPI database's focus sectors (i.e., transport, energy, ICT, water and sewage, and municipal solid waste) and subsectors[13] are captured; investments such as municipal health, justice, and recreation facilities, as well as non-PPI subsectors (such as Bus Rapid Transit, within transport), are not captured. PPPs with investment values under USD 1 million are also excluded, and the database does not have good coverage of small-scale providers, for which reporting tends to be more limited. For some projects, data on the contracting government entity is unavailable, and these projects are thus not considered "municipal", though some may be. The database captures data at the point of contracting and financial close; projects that did not reach financial or contractual close are not included, and subsequent amendments to contract terms may not be reflected in all cases. In some cases, data on investments is approximate due to conflicting public sources. Finally, some PPPs, such as off-balance sheet PPPs, those with municipal SOEs, or PPPs otherwise not publicly reported in main sources, may also not be captured. Full details of the methodology and scope are available online.[14] Unless stated otherwise, this report's analysis of municipal PPPs takes 2015 to 2023 as the period of analysis, and includes only projects undertaken by the municipal / local government tier: municipal infrastructure PPPs contracted by state/provincial and national entities, or with unknown contracting entities, are not included in this analysis.

2.3. Summary

The above data reveals two core realities. First, repayable financing flows to municipalities in developing countries are extremely low. With the unique exception of China, in no L&MIC does total municipal debt stock exceed around 2% of GDP, and in most such countries it is much lower. Across entire regions – sub-Saharan Africa, South Asia and East Asia – there are only a few countries in which municipalities borrow at all. In those countries, only a small group of larger, richer municipalities can typically access meaningful debt finance. This contrasts with the situation in HICs where municipal borrowing for investment is a key part of the municipal financing system and extends widely across municipalities regardless of size. Moreover, municipal PPPs account for only a small fraction of total L&MIC PPP activity, and average transaction sizes are much lower (about half, on average).

13 Sectors and Subsectors are as follows: Energy: electricity generation, transmission, and distribution; natural gas transmission and distribution. Information and communications technology: ICT (including land based and submarine cables except purely private telecoms. Instead, it will track ICT backbone infrastructure (fiber optic cables etc.) that has an active government component). Transport: airport runways and terminals; railways (including fixed assets, freight, intercity passenger, and local passenger); toll roads, bridges, highways, and tunnels; port infrastructure, superstructures, terminals, and channels; e-charging infrastructure. Water: potable water generation and distribution; sewerage collection and treatment. Municipal solid waste: Collection and Transport; treatment/Disposal; Integrated Municipal Solid Waste.

14 See https://ppi.worldbank.org/en/methodology/ppi-methodology

Second, while the position is a little mixed, it does not, in aggregate seem to have improved very much over the past 10-20 years. Direct private lending to municipalities has remained extremely limited. Public sector lending – direct lending by higher level governments, or through GFIs – dominates and, in some countries, has become more dominant over time. In some cases, such as South Africa, there have been definite periods of growth which has then stagnated or even declined. Some countries, such as India, have seen more varied patterns, with brief periods of nominal growth but no sustained real growth over the last decade. In yet other cases, the position has remained unchanged over the past 5-10 years. Among the five focus countries of this report, only Colombia shows a definite and consistent increase in real municipal borrowing volumes. As regards PPPs, both global and country data indicate a stagnant, even negative trend.

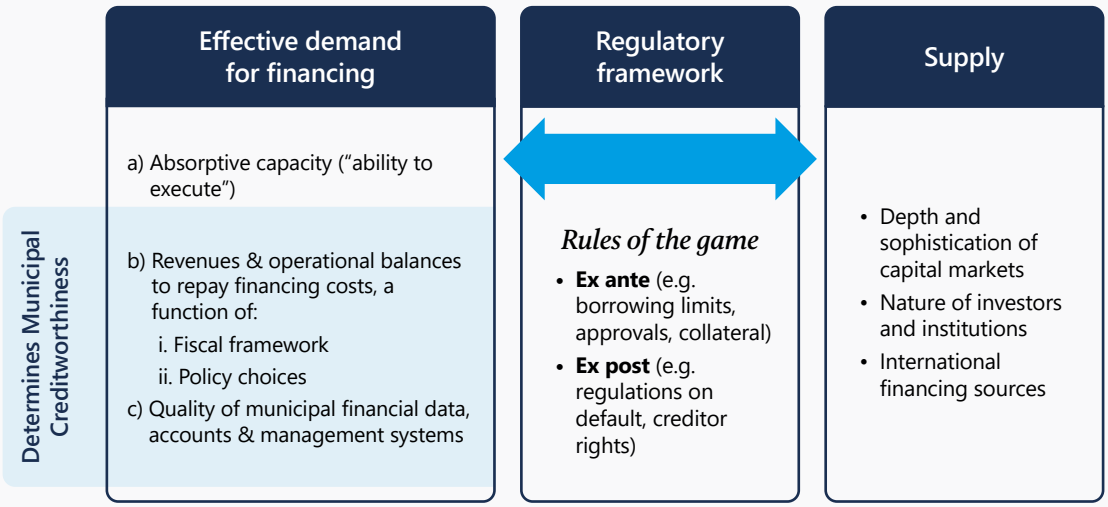
The report turns now to analyzing the chief factors that are restricting municipal repayable finance in L&MICs, and why these have been so persistent over time.

3. Analysis of Key Constraints

3.1. Analytic framework for the demand and supply of repayable finance for municipalities

The World Bank has developed an analytic framework for assessing the main drivers of municipal repayable financing in any country, which is summarized in the diagram below. In essence, the volume of financing is determined by the interplay of factors in three core areas: the effective demand for such financing by municipalities; the supply of such financing by investors; and the legal and regulatory framework that intermediates the demand and supply of this financing.[15]

Figure 11. Factors Determining the Volume of Repayable Financing for Municipalities



Source: Authors' elaboration

15 It may be noted that any number of wider factors – such as the macro-economic climate, wider political processes governing decentralization, conflict and fragility – may have some or other general influence: the effort here is to focus on those which most acutely affect municipal repayable financing.

The effective demand for repayable financing comprises various factors:

a. **Absorptive capacity**, which refers to municipal capability to plan and execute capital infrastructure investments (both with current resources and the financing potentially available to them). It includes their ability (internal or externally sourced) to engage effectively with private sector investors/financiers and to design optimal structures – such as project finance and transaction modalities - for private financing of urban infrastructure projects.

b. **Revenues** available to municipalities to generate the operational surpluses required to repay financing costs (interest and principal payments or returns for PPPs). This, in turn, is a function of (i) the intergovernmental fiscal framework, which includes fiscal transfers and the assignment of revenue sources (such as property tax and user charges) and expenditure responsibilities to municipalities, and (ii) the policy decisions and administrative efforts which, together, determine yields from municipal revenue sources.

c. **The quality of municipal fiduciary performance and financial data**, including financial accounts and financial management systems, which determine the ability of investors to make sensible credit and investment decisions with confidence that repayment obligations will be honored. Together with factor (b), this determines the credit strength, or degree of creditworthiness, of the municipality.

Some demand side factors lie within the control of national governments, while others are usually under the control of local governments – though the situation can vary by country. The fiscal framework is universally under the purview of the central government (or in federal countries, state governments), which assigns revenues sources to municipalities and determines the size of fiscal transfers (subject, in certain cases, to constitutional constraints). The quality of financial management and own source revenue administration typically – but not always - lies in the hands of municipalities themselves. The situation with respect to own source revenue policy varies between countries, with higher levels of government often playing important policy-setting roles in less decentralized environments. In South Africa, for example, municipalities are generally free to set their own property tax rates and administer property taxes; in India Urban Local Bodies (municipalities) are generally responsible for property tax administration but may only set property tax rates within ceilings prescribed by the States; while in Pakistan, property tax rates are determined by the Provinces, which are also responsible for property tax administration.

The supply of repayable finance is primarily determined by the size and sophistication of the domestic financial sector and how this is regulated, as well as the nature and behavior of investors and financial institutions from which municipalities may source finance.[16] International financing sources could also be considered, but this is often constrained as most governments in developing countries do not allow local governments to take on private foreign currency liabilities.[17]

16 As indicated above, the macroeconomic situation and sovereign credit rating may also limit investors' appetite, capacity to lend, and perception of credit risk. Because countries with very low sovereign credit rating and weak or volatile macro environments are highly unlikely to be able to develop or improve municipal commercial borrowing, the analytic and prescriptive focus of this report is on factors in circumstances where the macro environment is not prohibitive.

17 These policies are informed by historical experiences in which liabilities denominated in foreign currencies have sometimes created severe financial difficulties for sub-nationals when exchange rates have plummeted. There are some international financiers that provide local currency financing.

Local governments do not have control over the supply-side factors, but these are impacted by central government actions. First, central governments affect financing supply to municipalities through their regulation of the domestic capital market and financial system. Second, they (and, in federal countries, state governments) may also directly supply repayable finance through their own lending to municipalities. Third, central governments may establish, capitalize, and regulate GFIs as intermediaries that lend to municipalities. GFI lending to municipalities is quite common internationally (such as the Development Bank of South Africa, İlbank in Türkiye, Findeter in Colombia, BNDES in Brazil, and the Tamil Nadu Urban Development Fund in India). Fourth, central governments may stimulate private lending through the provision of credit enhancements such as partial risk guarantees, which is much less common.

The regulatory framework intermediates the demand and supply of financing for every investment and transaction. It comprises the "rules of the game", which are necessary to limit and manage the risks related to municipal financing. Undisciplined or inappropriate borrowing or PPP contracting can generate fiscal stress, leading to default and bankruptcy – and, at its most extreme, a systemic municipal debt crisis. Broadly, regulatory frameworks regulate municipal borrowing and PPP activities in two areas: (i) ex-ante rules and procedures governing whether, and how much, municipalities may borrow; approval requirements; the types of collateral they may pledge; currency restrictions; the ability to enter long-term PPP contracts; regulations pertaining to investors in municipal risk; and information on, and monitoring of, municipal debt; etc., and (ii) ex-post procedures to deal with instances of default (or other distress) on financing obligations.

All countries where municipalities exist have some sort of legal and regulatory framework related to municipal borrowing, even if this is a simple rule prohibiting it. Three main approaches to the regulation and control of municipal borrowing can be identified internationally: [18]

- **"Market based" approaches**, where decisions about municipal borrowing are made by the borrowers and lenders within an overall legal framework and some level of administrative oversight, but without transaction-specific higher-level authorization or detailed rules regarding the amounts and terms of borrowing transactions.
- **"Rules based" approaches**, where decisions about borrowing are made within a more tightly-circumscribed set of parameters outlined in a detailed set of rules. Higher-level approval of specific transactions may be required, but this is largely limited to monitoring compliance with the rules themselves, rather than reviewing the underlying merits of the transaction or the investment it is financing.[19]
- **"Direct control" systems**, where the emphasis is on the direct approval of specific municipal transactions by higher levels of government, which have extensive discretionary powers in respect of the approval process.

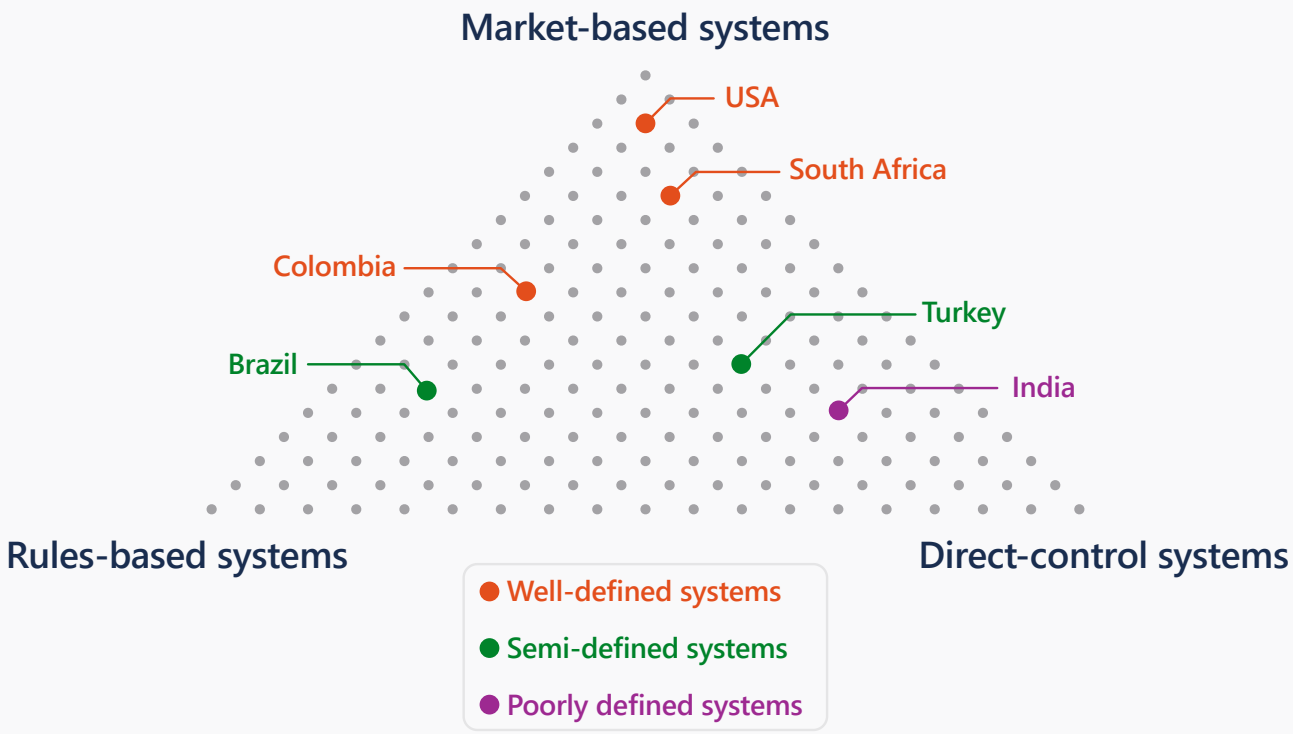
18 This framework is loosely based on the work of Teresa Ter-Minassian and others regarding sub-national borrowing in general (see, for example, Ter-Minassian, 1996). Note that the framework has been adapted for use with specific regard to municipal borrowing. This has material implications for the framework and particularly for the categorization of countries within the framework.

19 Exceptions would be Slovenia and Latvia, for example, where national commissions decide upon the technical merits as well as the financial feasibility of municipal borrowing projects, based on published and operationalized rules.

In general, market-based systems are more appropriate where private markets can provide fiscal and financial discipline to municipal financing. This may require factors such as a history of macroeconomic stability, a robust legal system that provides investor confidence in situations of default, clear public disclosure guidelines, and reliable and transparent financial data. To the extent that these conditions do not exist, more rules-based or direct control systems may be needed.

No country in the world represents any one of these systems in its purest form. Rather, the three systems are best understood as tendencies or points on a triangular spectrum. Systems in specific countries mix the three approaches, emphasizing each to a greater or lesser degree. Moreover, these systems differ widely as regards the degree to which they are clearly defined and articulated in detailed regulations, the extent to which these regulations are meaningful in terms of current realities, and whether the written provisions are applied in practice. Figure 12 provides a stylized representation of the regulatory systems of various countries on these three dimensions, and their definitional quality.

Figure 12. Municipal Borrowing Regulatory Systems



Source: Authors' stylized elaboration

The merit of each country's regulatory system lies in the extent to which it inhibits or enables appropriately disciplined financing. In certain countries – such as South Africa, which has a well-defined market-oriented system – the regulatory system is working effectively following reforms undertaken in the 1990s-2000s. In other countries – such as India, which has a poorly defined direct control-oriented system – it constitutes a real constraint (World Bank, 2011). The regulatory framework is universally within the control of central government or state governments in federal countries.

3.2. Analysis of key constraints to expanding repayable finance: applying the framework

Evidence regarding the interplay, and relative importance, of the above factors affecting financing to municipalities points to a few core themes.

A. Demand-side constraints

Demand-side constraints are ubiquitous and seem to be binding in relation to the (in) ability of municipalities to raise financing. These constraints predominantly consist of the limited mandates and functions of municipalities relative to higher tiers of government (i.e., a restrictive intergovernmental framework), low municipal revenues which impact the funding base for private financing, poor financial management systems, and weak absorptive and implementation capacity.

A key indication of these constraints is the low level of revenue capacity of municipalities to fund any financing that is raised. This is reflected in the persistent orientation across various countries to tax and charge for urban services at rates well below service delivery costs. This limits the level of funding available to cover the costs of financing and thus places an indirect cap on the volume of financing that can be raised. Property tax from urban areas is a notable example, as it is regarded as a key source of recurrent own-source revenue for municipalities globally. Revenue generated from this tax is equivalent to only 0.3% of GDP in low-income and 0.6% of GDP in middle-income countries globally, compared to 1.1% in OECD countries. Certain middle-income countries fare well below the middle-income country average, e.g. Egypt (0.08% of GDP), India (0.17%), Mexico (0.3%), Philippines (0.4%) and Vietnam (0.04%) (Kelly, White and Anand 2020). This low own-source revenue performance is a constraint on demand as it impairs the ability of municipalities to service higher debt and PPPs. The level of recurrent revenue determines the volume of debt that can be raised and the viability of PPP transactions.

In addition to revenues being below optimal levels, the intergovernmental framework for urban governance in many countries is characterized by weak and fractured functional devolution for municipalities. Municipalities generally do not have strong mandates for urban infrastructure, with central and state governments having the primary role in this regard. The case of Tamil Nadu state in India is an illustrative example and reflects the situation in several countries: despite it being a highly urbanized state with municipalities of high capacity in large cities, the state government has a strong decision-making role in approving individual projects for execution. This centralization of decision making on capital expenditure is reflected in the high share of tied (conditional) fiscal transfers in urban investment. This kind of weak authorizing environment and expenditure assignments for urban services directly influences demand for investment funds (Athar *et al.*, 2022).

Not surprisingly, as a result only a small share of cities in these countries are considered creditworthy and investment grade. Of the largest 100 cities in the developing world (i.e., where one would expect credit quality to be concentrated), only 29 are rated as investment grade on a domestic scale as of 2024, and only 3 are investment grade on an international scale (see Table 2). Earlier analysis (White and Wahba, 2019) indicated that once the sample is extended to the largest 500 cities, the fraction with domestic or international credit ratings drops substantially, to around 20%.

Table 2. The 100 largest cities in developing countries: active credit ratings and experience with bond issuances, 2024

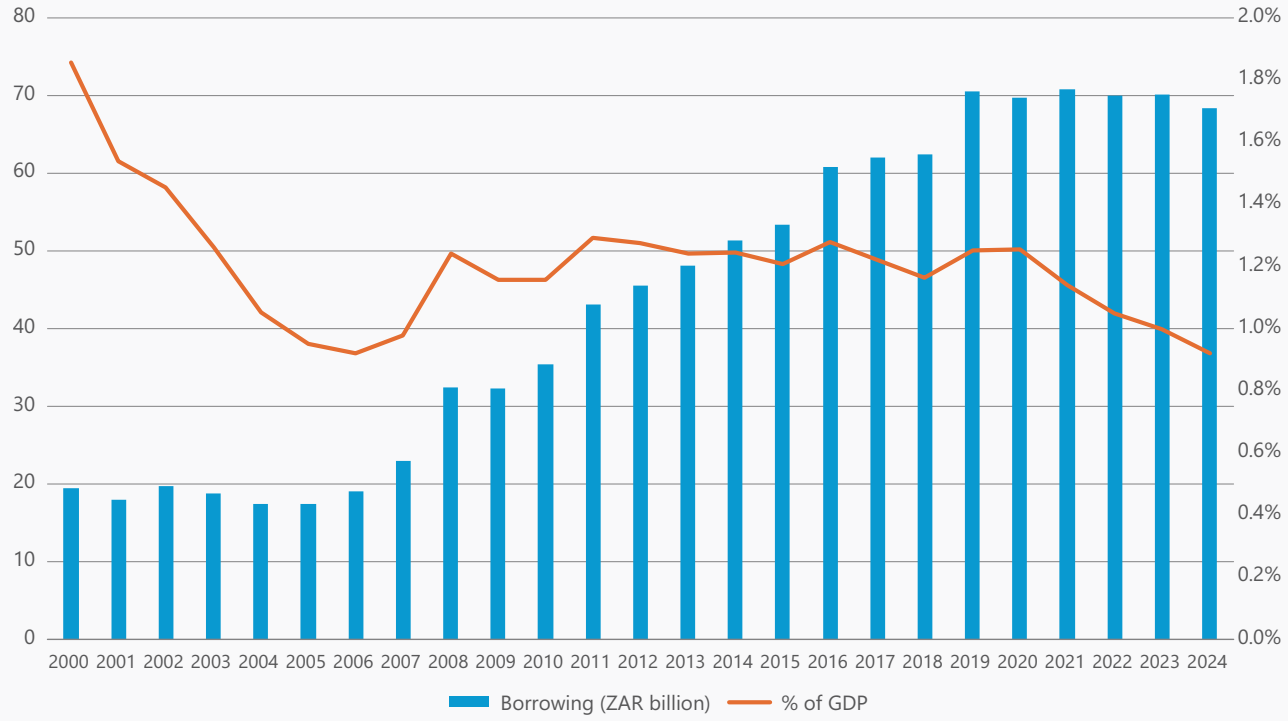
	East Asia and the Pacific	East and Central Asia	Latin American and the Caribbean	Middle East and North Africa	South Asia	Sub-Saharan Africa
No. of "100 Largest Cities" in this region	44	4	16	5	16	15
Investment-grade rated cities, of which:	6	4	8	0	8	3
Domestic scale: Country (number of cities)	China (6)*	Russia (2) Türkiye (2)	Brazil (3) Colombia (2) Mexico (2) Peru (1)	0	India (8)	South Africa (3)
International scale: Country (number of cities)	0	0	Colombia (1) Mexico (1) Peru (1)	0	0	0
Countries with "100 Largest Cities" that have issued bonds	China Vietnam	Russia Türkiye	Argentina Colombia Mexico Peru		India	South Africa

*Note: Does not include local government financing vehicles

Source: Authors' analysis of the World Bank Local Government Borrowing Database.

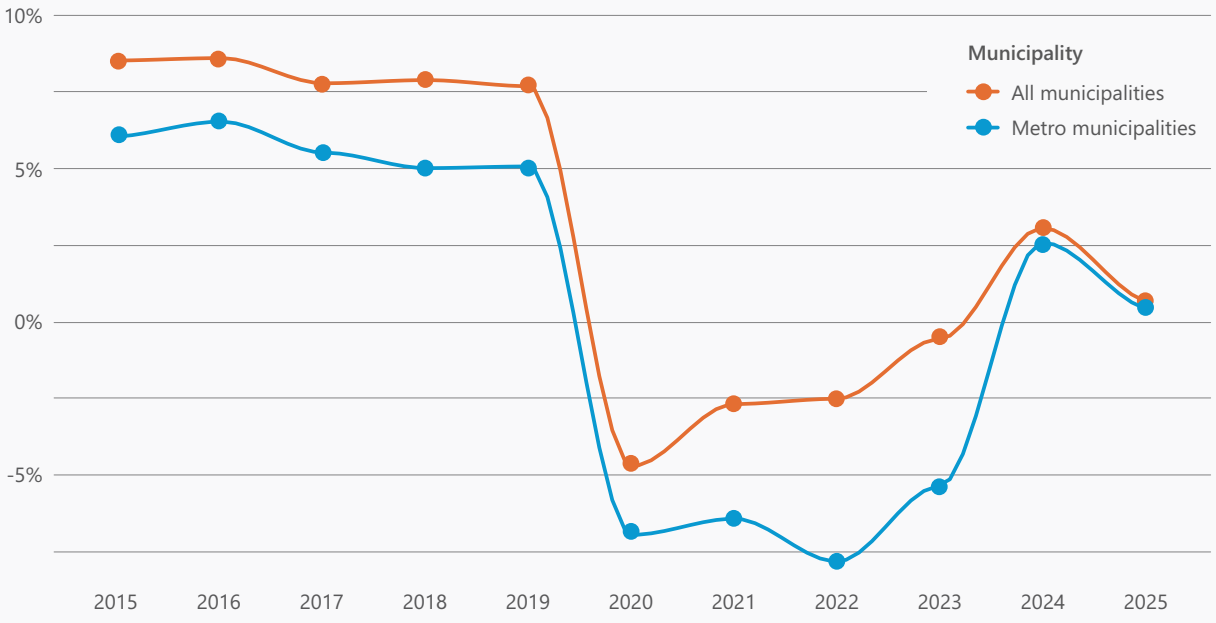
The global picture is reinforced by more detailed country data. For example, the decline (or lack of growth) in municipal borrowing in South Africa since 2019 closely tracks the deterioration in the fiscal condition of municipalities, particularly the larger borrowers (Figure 13 and Figure 14), underscoring the importance of demand-side constraints to repayable financing.

Figure 13. South Africa Municipal Outstanding Debt Stock (ZAR and % GDP), 2000-2024



Source: Authors' analysis of the World Bank Local Government Borrowing Database and South Africa Treasury data

Figure 14. Operating Balance of Metro Municipalities in South Africa (% of Revenues), 2015-2025



Source: Authors' analysis of South Africa Treasury data

Low levels of municipal PPP deal flow in India, and their decline over the past decade, appear to be attributable to similar demand-side factors, especially the low levels of user fees and service charges. Data from 14 large and medium-sized cities across India show that their municipalities and municipal utilities are generally unable to recover the O&M costs of providing municipal services such as water supply and sewerage. (They recovered less than half - 45% - of O&M costs pertaining to water supply on average in recent years. See Athar *et al.*, 2022).

Most PPPs in India have required sizable upfront and continued fiscal support, in the form of availability payments and viability gap funding, often in the range of 40-70 percent. Low user charges, and revenues that are well below the economic cost of service delivery, mean that the share of user charges in the funding base is relatively minor (Table 3 from Tamil Nadu illustrates this point). The fiscal gaps have been exacerbated over time due to the lack of, or slow growth of, project-specific revenues and a weak regime for tariffs and user charges, which has undermined the continued viability of PPP projects. PPPs are thus subsidized by intergovernmental fiscal transfers and general local revenue bases (e.g., property tax income), straining municipal balance sheets. Crucially, this dynamic also creates a tradeoff between debt/borrowing and PPPs as financing sources, limiting the utility of PPPs as financing vehicles.

Table 3. India: Urban infrastructure PPP projects awarded in Tamil Nadu since 2000: high level of fiscal support and modest risk transfer

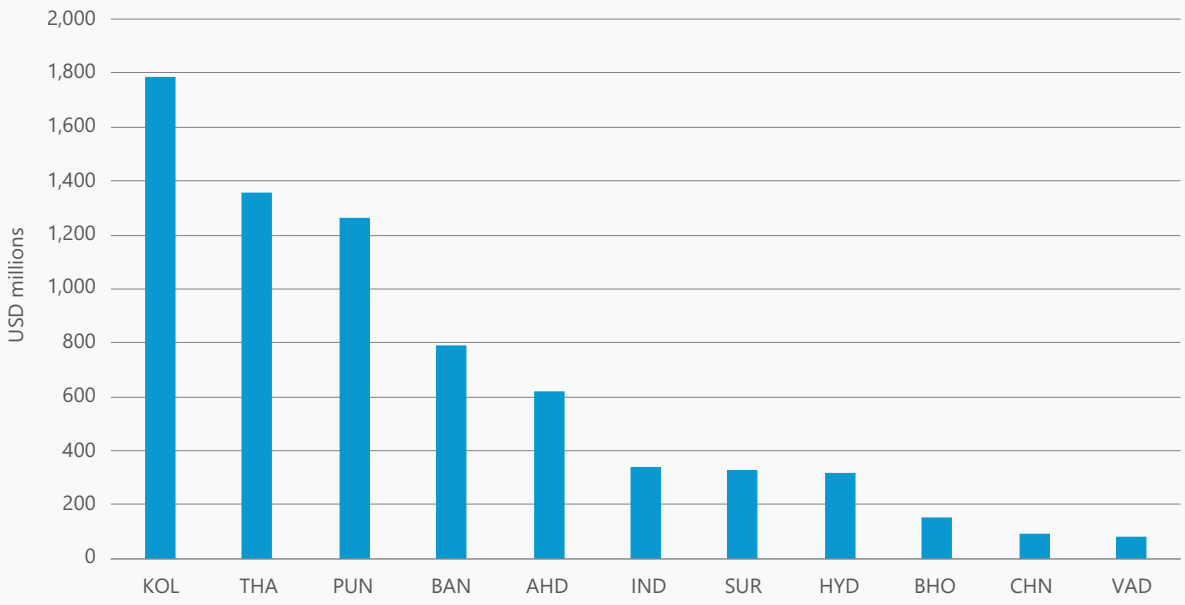
	Year	City	Sector and Project	Term, Years	Capex $ mn	Private financing $ mn	Funding streams for PPP	Status
1	2000	Alandur	Sewage treatment	14	1	1	AP, partly user charges	Litigated, completed
2	2000	Chennai	Waste collection & transport I	7	6.8	6.8	AP	Completed
3	2000	Tiruppur	Water Supply distribution	28	137	137	User charges	Restructured
4	2005	Chennai	Water supply desalination	25	68.5	68.5	GoTN grants	Litigated, Operational
5	2000	Chennai	Waste collection & transport II	7	6.8	6.8	AP	Completed
6	2007	Coimbatore	Waste processing & landfill	20	13.7	4.1	VGF + AP	Operational
7	2008	Madurai	Waste processing & landfill	20	13.7	4.1	VGF + AP	Operational
8	2009	Pallavaram	Waste processing & landfill	20	7.5	7.5	AP	Terminated
9	2018	Coimbatore	24x7 water supply	25	68.5	27.4	AP, partly user charges	Operational
10	2020	Chennai	Waste collection & transport III	7	13.7	13.7	AP	Awarded

Notes: Projects with capex > Rs. 50 crores. AP=Availability payment, VGF=Viability gap funding. In Tiruppur project, Government of Tamil Nadu (GoTN) is a shareholder in the Special Purpose Vehicle (SPV). Projects with higher complexity, higher risk transfer and higher private financing have faced greater challenges (legal, operational, termination).

Source: Athar et al., (2022)

Limited absorptive capacity is another important factor depresses financing demand. For example, South African municipalities spent only 77 percent of their adjusted capital budgets in 2023/24, leaving nearly ZAR18 billion unspent on infrastructure projects.[20] An inability to spend capital budgets indicates a lack of capacity to fully utilize repayable finance, limiting demand. A similar picture is evident in India, where recent analysis (Athar *et al.*, 2022) shows that the current level of debt financing in many large metropolitan cities is well below their existing debt servicing potential.[21] As of 2022, it was estimated that 28 of the largest municipalities (ULBs) nationwide could borrow and service an additional US$12 billion in debt based on their prevailing financial indicators (see Figure 15). This is more than 20 times their existing level of debt stock, which was USD 352 million as of FY2018. The coexistence of high infrastructure investment needs with persistent low borrowing levels, amidst substantial debt carrying capacity, suggests that constrained absorptive capacity is a key factor depressing effective demand.

Figure 15. Estimated Additional Debt Carrying Capacity (USD millions) for 2025-2035, for Selected Large Indian Cities, based on Existing Financial Indicators



Notes: Figure excludes Mumbai. PUN=Pune, AHD=Ahmedabad, BAN=Bengaluru, KOL=Kolkata, HYD=Hyderabad, SUR=Surat, CHN=Chennai, THA=Thane, IND=Indore, VAD=Vadodara, NAG=Nagpur, BHO=Bhopal, VIZ=Vizag, RAJ=Rajkot, JAI=Jaipur.

Source: Athar et al., (2022)

20 South Africa National Treasury's Section 71 fourth-quarter report for 2023/24.

21 Estimates are based on existing operating surpluses of ULBs to fund debt servicing costs using conservative assumptions on business-as-usual growth over 10 years. It is assumed that operating surpluses will increase by 8% per annum over 10 years (which is conservative relative to 10% average annual increase in the period 2011-18), and that 50% of these surpluses will be available for debt service costs. Debt potential is calculated as the net present value of these surpluses over 10 years with a 10% discount rate. See Athar *et al.*, 2022 for more detail.

Demand-side factors like weak municipal revenue assignments, local tax and user fee rates, and institutional and personnel capacity are often strongly impacted by the broader intergovernmental institutional and fiscal environment. They tend to be structural and political-economic in character, reflecting both the evolution of the intergovernmental institutional system and the political choices that are made regarding it. In consequence, demand-side factors are often not easily tractable. In a few countries, rapid and substantial intergovernmental reform has been undertaken in the context of wider political developments (e.g., South Africa in the 1990s; Indonesia in the early 2000s; Kenya in the early 2010s). Aside from these cases, reform in these areas has tended to be incremental and slow. It may also not be monotonic. Pakistan, for example, has recentralized away from the municipal level, following a period of decentralization in the 2000s. While acknowledging such challenges, it is nonetheless important to recognize that these factors do lie in the realm of governmental policy – whether this concerns the intergovernmental fiscal system or, for example, local tax rates – and that both central and local policy makers have considerable, albeit differential, ability to address them.

In sum, the low level of private financing in urban infrastructure is reflective of underlying fiscal and institutional problems. Private financing will remain constrained until these realities shift, with (i) municipalities developing the absorptive capacities and related incentives to invest more aggressively in urban infrastructure; and (ii) policy shifting to increase taxes and user charges to levels such that the financing required for infrastructure can be repaid.

B. Regulatory constraints

The regulatory environment determines the limits of municipal authority to access repayable financing. Assuming effective demand is established, municipalities' ability to access finance, the type of finance they prefer, and their ability to enter into PPP contracts is determined by the legal and regulatory environment.

With some exceptions, most regulatory environments significantly constrain municipal borrowing and PPPs in L&MICs. It is worth noting that many of these constraints have been put in place by higher levels of government to mitigate potential fiscal and debt sustainability risks that may arise from imprudent or unsustainable municipal borrowing or other financing arrangements (Box 6). Pointing to the inhibiting effects of regulatory frameworks on municipal borrowing or PPPs is not necessarily to suggest that they are weak or inappropriate. These frameworks vary widely and may represent both different market conditions and divergent views as to how to manage various risks. For example, South Africa has taken a strongly market-oriented approach to managing moral hazard. By law, municipal liabilities cannot be guaranteed by a higher level of government. The financial consequences of municipal default are thus visited entirely on investors, who are consequently careful to make sensible credit decisions. In Kenya, on the other hand, per the 2013 Constitution, a subnational government may only borrow if the loan (or bond) is guaranteed by the central government and parliamentary approval is required. To date, subnational borrowing in Kenya is practically non-existent. In Latin America, very restrictive borrowing rules were introduced in the context of a strong emphasis on the management of fiscal risk. And in Türkiye, the framework creates an uneven playing field for private investors, potentially inhibiting interest in the municipal market. Where governing frameworks are undeveloped, poorly articulated, or superseded by evolving fiscal and market circumstances, there is potential for reforms that are conducive to expanded repayable financing while appropriately managing and properly pricing risk.

A discussion of the situation in the focus countries is provided below.

In Brazil, strict borrowing rules were introduced in response to a wave of municipal and state government defaults in the 1990s. The federal government enacted a debt restructuring program in 1997, followed by the Fiscal Responsibility Law in 2000, which set borrowing limits and fiscal reporting requirements to curb excessive deficits. These measures improved fiscal discipline,[22] but strongly restricted access to credit. Municipalities are prohibited from issuing bonds, and external loans require Senate approval. Eligibility for borrowing with central government guarantee is tied to central government certification of ability to pay.[23] Additional restrictions include limits on how much local financial institutions can lend to municipalities, and development bank mandates that prioritize central government policy goals.[24]

In Colombia, the legal framework for municipal borrowing was developed in response to fiscal deterioration that followed a wave of decentralization in the early 1990s, which significantly expanded subnational responsibilities without establishing adequate fiscal controls. In the years that followed, a set of fiscal reforms, including the Traffic Light Law, established borrowing limits and fiscal rules based on standardized financial indicators. Municipalities that meet certain fiscal thresholds can borrow without central government approval, while those that do not meet the thresholds require authorization or face restrictions. Although the framework permits bond issuance and access to private loans, actual borrowing remains limited. More recently, borrowing thresholds were expanded to support post-pandemic recovery, though the central government continues to oversee fiscally weaker entities. Despite a well-defined regulatory system, fiscal constraints continue to limit subnational borrowing in Colombia.

In India, these regulatory frameworks are controlled by state governments and vary somewhat across the states. Nevertheless, they are broadly characterized by strong centralized state control of municipal (ULB) borrowing decisions, where borrowing authorization is provided by state governments with considerable discretion rather than clear criteria. Standards governing borrowing volumes and terms (as codified in regulation) do not correlate with credit quality or borrowing capacities of ULBs (Athar *et al.*, 2022). The municipal borrowing frameworks also lack a structured process for dealing with municipal default, which exacerbates investor risk. In most cases, the laws and regulations have not been revised in line with the economic, institutional, and fiscal realities of modern Indian cities.

In Türkiye, regulatory constraints restrict municipal borrowing and tend to induce reliance on state-provided financing. In the 1990s, many municipalities faced financial distress due to rising fiscal deficits, prompting debt restructurings in the 2000s. Strict borrowing controls remain in place, requiring central government approval for municipal debt,[25] which reduces local governments' ability to engage independently with credit markets. İlbank dominates municipal lending and has an exclusive right to secure its loans through intercepts of up to 40% of central government transfers to municipalities. Local governments also receive preferential subsidized rates from the İlbank and can borrow from commercial banks at shorter tenors (under 5 years) with an İlbank guarantee. As a result, most municipalities rely on a centralized, government-dominated repayable financing model, with limited use of market-

22 Municipal debt-to-revenue ratios decreased from 61% in 2016 to 31% in 2022 and only 21 out of over 5,500 municipalities exceeded the law's debt limit of 120% of net current revenue in 2023.

23 Under CAPAG – the Capacidade de Pagamento system in Brazil.

24 Source: World Bank Local Government Borrowing Database.

25 Local governments debt cannot exceed 10% of revenues of the previous year. If borrowing is over 10%, it requires approval by the Ministry of Environment, Urbanization and Climate Change (Municipality Law No. 5393).

based financing.[26] However, larger municipalities such as Istanbul have been able to borrow successfully and at volume including on the international capital market. The city has issued three Eurobonds since 2020 totaling USD 1.6 billion in proceeds, including a USD 715 million green bond issued in 2023 that will finance low-carbon public transportation investments.[27]

The development of a regulatory framework for municipal borrowing in South Africa holds interesting lessons. In the late 1990s and early 2000s, the national government invested considerable effort in strengthening the legal and regulatory framework for municipal borrowing, introducing (in 2004) legislation that encapsulated a modernized and highly articulated market-oriented framework. The supply side (mainly private investors, but also the government-owned DBSA) responded, and lending to creditworthy municipalities – particularly the larger metros – expanded steadily both in nominal terms and as a percentage of GDP in the five to six years immediately thereafter. Subsequently, as this market was saturated and the fiscal position of all municipalities, including the larger metro municipalities, began to deteriorate, lending began to stagnate, then decline. The current situation is one in which the regulatory system remains robust and those municipalities that can establish themselves as viable credit risks (i.e., generate effective financing demand) are able to borrow successfully and, for the bigger ones, at volume on the market. In 2024, for example, the City of Cape Town concluded a USD 150 million loan with an 18-year tenor with the IFC – the WBG's private sector arm.

The regulatory framework surrounding PPPs can also limit PPP activity for municipalities. For example, there is no singular framework Law for PPPs in **Türkiye**, and legislation governing municipal PPPs is under development.[28] Instead, several Laws and Regulations govern different models of PPP contracts in different sectors. Municipalities realise most PPP projects under regulation that was not designed for PPPs; audit reports of the country's Court of Accounts frequently criticize this practice. Some municipal projects have also been developed under regulation which requires a lengthy process for obtaining Presidential approval before issuing the tender.[29] To mitigate these challenges, the central government has drafted legislation tailored to PPPs in municipal services, including water and waste management, which is pending approval. In **South Africa**, a recent analysis makes it clear that the very limited experience of municipal water PPPs (there have been two, only one of which involved any significant investment, which was all provided by the government-owned DBSA after private investors pulled out) is largely due to regulatory factors, such as the unrestrained power on the part of the relevant Minister to limit tariff increases, which has proven to be inimical to private investment in such PPPs (Leigland, 2020).

It also seems likely that the relatively robust regulatory framework for PPPs in Colombia has played some part in the more positive municipal PPP experience in that country, recorded above. Colombia has one of the most advanced PPP ecosystems in the Latin America region (World Bank, 2023). Its Law 1508 of 2012 provides a structured regulatory framework for PPPs, allowing municipalities to engage in long-term infrastructure contracts conditioned on financial sustainability, while another law (Law 142 of 1994) enables private sector participation in water and sanitation projects. Municipal PPPs have also benefited from considerable assistance from the national government especially from the National Planning

26 Source: WB Local Government Borrowing Database (LGBD)

27 See for reference news article.

28 A central government process to enact a general PPP Framework Law has been ongoing since 2016.

29 The two regulations are the following: A) State Tender Law No. 2886 was designed to regulate the sale or lease of movable and immovable assets by state entities. Most municipal PPP projects involve the lease of municipal land to a private company in exchange for the company's commitment to construct a facility and to operate it for some time, as required by the law. However, municipal payments to the private companies often exceed the private companies' lease payments, undermining the intended purpose of the law. B) 1994 Build-Operate-Transfer Law No. 3996.

Department (DNP) and National Development Finance Agency (FDN) – a local development bank linked to the Ministry of Finance – as well as international development partners. For example, the DNP evaluates PPPs for technical, financial, and social feasibility, provides technical assistance and co-financing to municipalities, and helps to mobilize funding and support from multilateral organizations and financial institutions; while the FDN provides guarantees and financing, technical assistance for PPP structuring and design, and promotion of projects to potential investors.

The regulatory framework for municipal PPPs in Colombia supports the financial sustainability and technical viability of PPP projects, but also contributes to delays in preparation and execution. To enter into a PPP agreement, municipalities must: (i) conduct viability studies that demonstrate financial sustainability; (ii) demonstrate fiscal responsibility and avoid excessive debt exposure; and (iii) obtain regulatory approval from the National Infrastructure Agency (ANI) for large-scale projects. These requirements are important to ensure financial discipline and technical viability, but also make project approval slower and more demanding.

C. Supply-side constraints

Interventions to increase the supply of repayable financing for municipal infrastructure can lead to conducive outcomes but may also constrain the growth of markets if not designed appropriately. Supply side interventions can take many forms. Most obviously, this involves the regulation of the financial sector and institutions that may invest in the municipal sector.

Some countries have taken steps to address constraints to the supply of financing for municipal infrastructure. India since the early 2010s provides a good example, where several changes have been introduced, improving clarity on the national-level regulatory framework for municipal borrowing, especially municipal bonds, for institutional investors. These include the following:

- Foreign portfolio investors have been permitted to invest in municipal bonds in India since 2019, within the limits on State Development Loans. The Reserve Bank of India has eased norms allowing them to invest in such bonds under prescribed limits, to broaden access of non-resident investors to debt instruments in India.
- The Securities and Exchange Board of India (SEBI) has also issued regulations for the issuance and listing of municipal debt securities (in 2015, and updated in 2019), along with compliance requirements, which provide guidance for ULBs to access capital markets, and cover eligibility conditions, requirements for public issue and private placement, and requirements for listing/trading municipal bonds. SEBI has been proactive in making changes to streamline regulations further and has an advisory committee for enhancing the municipal debt securities in India. Recent revisions in 2019 revised the rules for continuing post-issuance disclosure regulations.
- The central government has also moved away from providing tax-free status to municipal bonds and has instead provided an incentive scheme under the Ministry of Housing & Urban Affairs.

In general, supply-side interventions can go considerably further across most countries to encourage the growth of financing for municipal infrastructure. These interventions include direct lending by central governments to municipalities, normally on subsidized terms; the creation and capitalization of GFIs that invest in municipal debt or PPPs; the provision of guarantees to municipalities, and so on. Such interventions are very common – for example, GFI lending to municipalities is widespread in all countries discussed in this report. But they can also be distortionary and generate fiscal risk. Box 5 reviews the potential benefits and distortionary effects of GFIs.

Box 5. Potential benefits and distortionary effects of GFIs providing finance to municipalities

GFIs often play a central role in enabling municipal borrowing in developing countries. These public or publicly-backed entities—ranging from national or subnational development banks to specialized municipal development funds or other types of financial intermediaries—often benefit from subsidized capital sourced from, or guaranteed by, the central government. They frequently leverage this foundation to raise additional funds from the domestic financial sector (through loans or bonds) as well as from international financial institutions (IFIs). GFIs are then able to offer favorable and below-market rate financing terms to municipalities.

This has strong benefits but also comes with risk. GFIs can significantly improve access to longer-term finance for municipalities and are often the only source of such finance for municipalities, especially in countries where such a market does not exist or is at an incipient stage. However, the fact that GFIs are owned by governments can make it difficult for them to deal with municipalities in a commercial manner. An early global review of GFIs found that municipal loan repayment rates varied widely with non-performance rates rising well above commercial viability in many cases (Peterson, 2000). And, even when they are financially successful, they may have unintended systemic impacts. The ability to offer concessional terms such as subsidized lending gives GFIs a competitive advantage over private lenders and may inadvertently undermine the policy goal of expanding private investment flowing to municipalities. Conferring regulatory advantages, such as the use of fiscal intercepts to secure lending, on GFIs while disallowing them for private investors creates an unlevel playing field and has similar effects. As such, the success of GFIs in providing finance to municipalities can come at the expense of developing the market for municipal financing from private sources more broadly. To mitigate such risks and encourage the gradual development of the private market, carefully designed policy frameworks and regulation of GFIs are important.

GFIs can be an effective tool for expanding municipal repayable finance, especially to help develop such a market and increase confidence amongst potential investors. However, across all five countries, the continued relative growth of GFIs as market participants raises important questions about long-term market development and the risk of crowding-out of private capital, as well as the broader objectives of municipal finance reform.

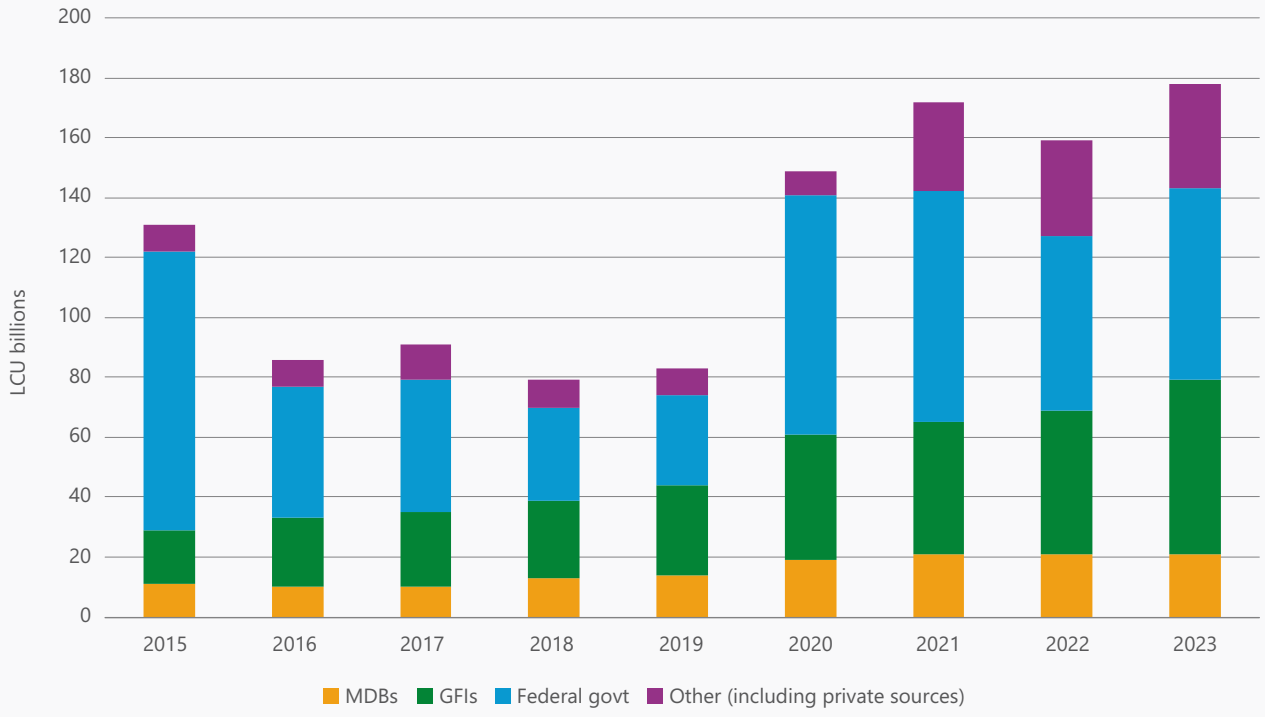
There is evidence that supply-side policies in L&MICs are crowding out, or at least, failing to crowd in, private financing to municipalities. In Türkiye, the dominance of İlbank – a GFI under the central government with shareholders comprising municipalities and provinces – is underpinned by regulatory and other advantages such as access to treasury funds, making it difficult for private lenders to expand their activities. In the Philippines, where government-controlled banks receive preferential access to holding deposits of municipalities and revenue

intercepts, 90% of outstanding loan balances of local governments are held by such banks. Subsidized lending by the federal government and GFIs appears to have constrained private lending in Brazil (Figure 16), while DBSA lending has expanded as private lending has declined in recent years in South Africa (Figure 17). DBSA lending is concentrated in large metropolitan municipalities, many of which already have access to private finance, including from international sources. In India, the Tamil Nadu Urban Development Fund (TNUDF) has relied primarily on public and IFI funding to sustain lending operations.[30] In Colombia, FINDETER was created as a second-tier lender and saw early success in promoting private sector involvement but has recently shifted significantly toward direct lending to municipalities.

This may not all be negative from the perspective of expanding municipal commercial financing: as mentioned earlier, a lot of GFI financing is sourced ultimately from private markets. However, the curtailment of direct private lending (particularly for creditworthy borrowers) due to state-supported and subsidized competitive pressures is generally not conducive to maximizing private financing flows to municipalities. Supply-side policy should be guided by an understanding of the full range of its impacts, including those which are systemic and may not be intended.

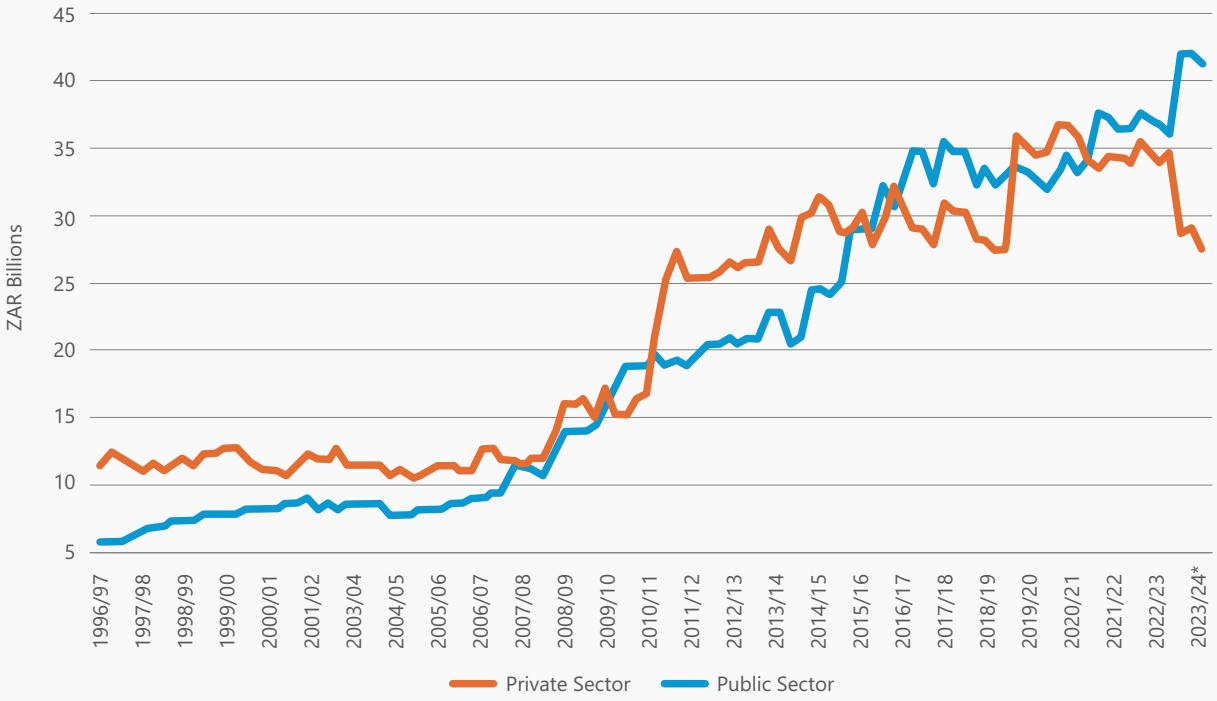
30 TNUDF was established in 1996 to pool public and private resources for municipal investment and provide loan and grant funding to municipalities within Tamil Nadu state.

Figure 16. Brazil: Total Outstanding Debt Stock by Lender Category among Municipalities (LCU billions), 2015 - 2023



Source: Brazilian Treasury, Financial Bulletin of Subnational Entities

Figure 17. South Africa: Municipal Outstanding Debt Stock 1997-2024, Private vs Public Lending



Source: South Africa National Treasury, Municipal Borrowing Bulletin

4. Addressing the Challenge

4.1. General perspective: A spectrum of readiness for financing

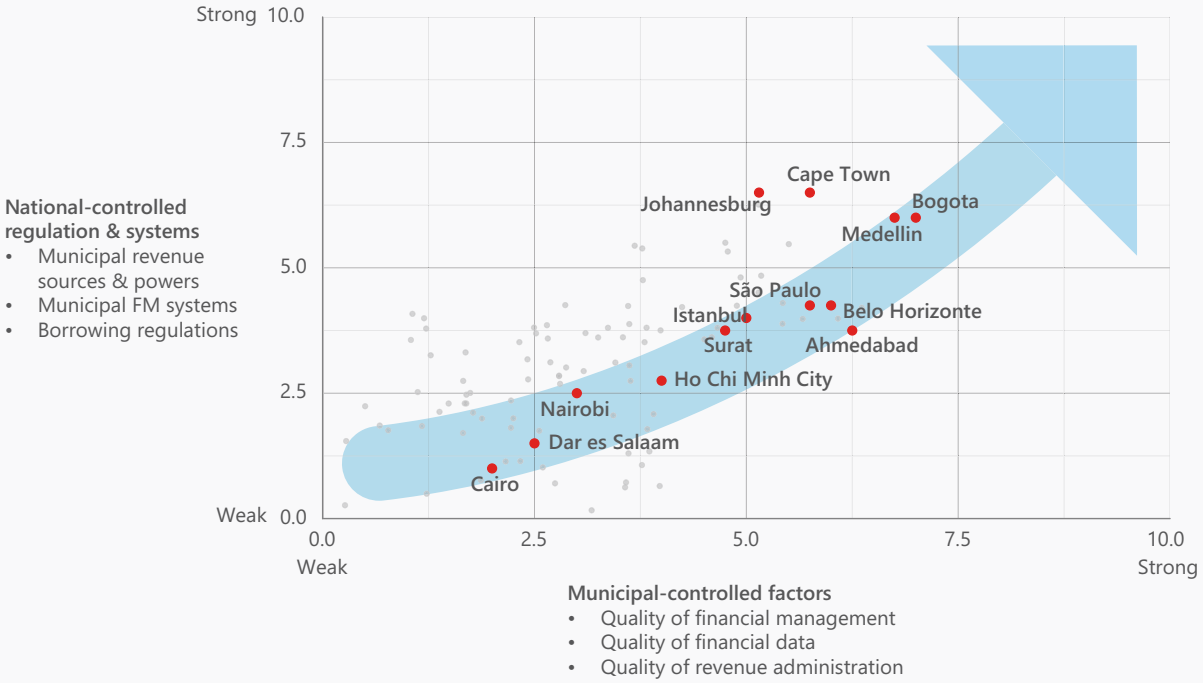
Municipal financing readiness can be appraised along two dimensions: factors broadly under national government control, and factors broadly under municipal control. With respect to demand-side and regulatory constraints, cities in developing countries can be placed on a two-dimensional spectrum as regards their readiness for repayable financing.

- One dimension pertains to the strength of regulatory and systemic aspects that are generally under the control of *national governments* (or in federal countries, state/provincial governments). These include the revenue sources that are assigned to local governments, the fiscal transfer system, municipal accounting standards, the rules governing borrowing powers and procedures of municipalities, and so on.
- The other dimension comprises factors that are largely under the control of *municipal governments,* such as the quality of their financial data, their revenue administration performance, the quality of their financial management, and so on.

This distinction may vary a little between countries. In some countries, local tax rates are set by municipalities; in others they may be set or limited by higher levels of government, for example. However, it provides a useful general means of locating municipalities with respect to the binding constraints outlined above.

This spectrum is outlined in Figure 18 along with an approximate stylized plotting of the positions of a few cities for illustration purposes. It should be noted that this spectrum, and the position of cities on it, can be disaggregated according to different transactional types. For example, Johannesburg may have clear borrowing powers and capacities, but the regulatory regime governing its ability to enter into, say, a water PPP may be more prohibitive.

Figure 18. Commercial Investment Readiness, Large Municipalities in Developing Countries



Source: Authors' elaboration

While a systematic analysis of the situation of each L&MIC city in terms of these dimensions has not been undertaken, it is evident that most would tend to cluster towards the lower left of the spectrum. These towns and cities face constraints with respect to both nationally determined factors and their own local performance. Such cities may be subject to an intergovernmental fiscal framework in which their revenue raising powers are limited – thus inhibiting the growth of the funding base required to attract finance – and in which the municipal borrowing or PPP regulatory framework is restrictive or weak – thus discouraging investor interest. Simultaneously, the quality of their accounting and financial management practices may be poor and their capacity to develop bankable projects weak. Many cities in Africa and Central, South, and Southeast Asia lie in this part of the spectrum. To unlock access to repayable finance in these contexts, there is a need to reform national institutions and frameworks, and improve the quality of city fiscal performance and financial data, accounts, and management systems.

At the other (highest) end of the spectrum are cities with an enabling national and local environment. Such cities enjoy an intergovernmental fiscal system that provides them with strong revenue powers, permits municipal borrowing and PPP transactions, authorizes cities to secure lending with their own revenues, and mandates good practice municipal accounting standards. These cities also have robust financial management practices and the capacity to prepare bankable projects (in-house or on an outsourced basis).

There are a handful of developing country cities at the top end of the spectrum. An indicator of this might be the ability to issue a municipal bond, as this demonstrates that a city has a sufficiently robust policy, fiscal, institutional, and credit environment at both the national and local level. As of 2023, a study of the 100 largest cities in developing countries found that only 35 cities across 10 countries (Argentina, China, Colombia, India, Mexico, Peru, Russia, South

Africa, Türkiye, and Vietnam) have issued municipal bonds (as shown earlier in Table 2). At the time of issuance, these 35 cities would all theoretically have fallen into the top right quadrant of Figure 18; however, this needs to be treated with some caution as certain bonds may have benefitted from credit enhancements.

In some cases, commercial investment readiness is constrained primarily at the local level. This is the situation of cities in the top left quadrant. Many smaller, lower-income, or poorly managed cities will fall into this category. In other cases, private investment readiness will be constrained primarily by national factors (represented by cities in the bottom right quadrant). This would include cities such as Kampala, which received a domestic scale investment-grade rating in 2015 but is prohibited by domestic law from borrowing at volumes that would make any transaction attractive to investors.[31]

Sustainably expanding the flow of finance into municipal infrastructure investment involves systematically shifting municipalities to the top right quadrant of the spectrum. This will require action by both national/state governments and municipalities, depending on the factors they control, to address constraints across all three dimensions: demand, regulatory, and supply. The specific actions that are required will of course vary with the circumstances in each city and country. Broadly speaking, however, the following agenda is proposed.

4.2. Proposals for national and municipal governments

This report proposes a three-pronged approach to address the constraints identified. Such an approach focuses on structural reforms that are required to address the systemic constraints to which all cities are subject – which are also the most difficult - as well as targeted actions aimed at increasing the mobilization of private financing by more high-potential municipalities in the short- and medium-term.

- First, and most fundamentally, the fiscal and institutional determinants of municipalities' ability to develop effective demand for financing must be addressed. Unless municipalities establish fiscal positions that allow them to meet the financial obligations that borrowing and PPP contracting entail, a sustained expansion of financing volumes is not feasible. Moreover, absent this, it is possible – even likely – that supply-side interventions designed to stimulate financing activity (see below) will generate or aggravate market distortions and risks, which could become self-defeating.
- Second, demand-side strengthening needs to be combined, where necessary, with regulatory reform which is conducive to expanding financing while limiting and managing associated fiscal risks and distortions.
- Third, the systemic strengthening and reform required on the demand and regulatory sides will take time to emerge and consolidate. In parallel, there is a role for supply-side interventions to stimulate borrowing activity in imperfect environments, so that municipalities can reap the rewards of increased financing and provide demonstration effects, which, in turn, generate pressures for demand-side and regulatory action. However, it is vital that such interventions are designed in a manner that limits distortionary impacts and do not become a substitute for demand-side and regulatory reform.

31 In 2015 the Kampala Capital City Authority was awarded a national scale rating of A1(ug) by Global Credit Ratings, a Moody's affiliate agency based in South Africa.

Specific measures in these three areas are outlined below. Strategies need to be calibrated in accordance with country and city circumstances. In some countries (or cities) core fiscal constraints will be too severe for substantial financing activity in the short- to medium-term. In these cases, the emphasis needs to lie in strengthening demand-side factors. In others, where the fiscal base to support financing has already been established, the focus can fall more on regulatory and supply-side interventions.

Summary of proposals

A. Demand-side interventions

1. Strengthening the funding base of municipalities

Actions for national governments:

- Strengthen fiscal transfer systems to create conditions for financial leveraging
- Expand own-source revenue assignments to municipalities and introduce reforms to incentivize them to improve revenue performance
- Provide capacity building support to municipalities on revenue performance

Actions for municipalities:

- Set positive own source revenue growth targets and improve revenue mobilization. Raise local taxes and user fees where applicable

2. Improve the quality of financial data and strengthen financial management

Actions for national governments:

- Establish modernized accounting and financial reporting standards for municipalities

Actions for municipalities:

- Improve quality of financial data and strengthen financial management

3. Expand the absorptive capacity of municipalities

Actions for national governments:

- Support municipalities on capital investment planning, developing investible projects, project execution, debt and PPP structuring
- Strengthen municipal HR capacity related to these issues

Actions for municipalities:

- Identify and develop strategic projects in investment plans and build execution capacity to position themselves as credible counterparties for private investors.
- Build financial expertise to improve interface with potential financing partners/ investors

Summary of proposals

B. Regulatory actions

Actions for national governments:

- Regulate financial markets and institutions in prudential regulations for contractual savings industry, municipal bond listing requirements and tax treatment of investing in municipalities
- Strengthen ex-ante municipal borrowing frameworks
- Strengthen ex-post provisions to introduce procedures for dealing with situations of municipal fiscal stress and default

C. Supply side interventions

Actions for national governments:

- Careful use of de-risking interventions to kickstart market and show demonstration effects
  - Credit risk guarantees to cover municipal debt services
  - Various risk insurance and hedging products in collaboration with IFIs
- Strengthening the role of GFIs while avoiding fiscal risks and distortions
  - Providing a level playing field between GFIs and private investors
  - Careful design of subsidies to GFIs in order to squeeze-in private investors
  - Using GFIs to grow market segments and showing proofs-of-concept

D. Market development: building the case, information dissemination

Actions for national governments:

- Sharing municipal plans with financiers through dialogues, build relationships between investors and borrowers
- Developing data systems and information disclosures on urban financing, in collaboration with financial sector regulators
- Establish dedicated structures, e.g. national platforms, to focus on finance, assist municipalities with transaction preparation and investments

A. Demand-side actions

Demand-focused actions unavoidably involve tackling the fundamentals of the municipal financing system. In many cases this will involve confronting sensitive policy issues, such as expanding the fiscal autonomy of municipalities or raising local taxes and user fees. This may be difficult and is unlikely to be quick, but a step-change in financing flows to municipalities cannot be enabled without systemic change of this kind.

There are three chief areas for action on the demand side:

1. **Strengthen the funding base of municipalities.** As discussed earlier, a municipality can finance only insofar as it can fund. To strengthen the core funding base of municipalities, the following set of actions are proposed at the national and municipal levels.

   National governments can do the following:

   - **Expand, strengthen, stabilize, and rationalize their intergovernmental fiscal transfer systems to create conditions and incentives for financial leveraging**. Governments can put in place fiscal transfer systems that are more stable, formula-based, and unconditional rather than tied grants fixed to specific projects. This will provide municipalities with a stream of predictable, recurrent revenues. Well-designed conditional transfers, such as performance- or results-based financing, can also improve institutional outcomes of municipalities[32]. In South Africa, for example, reforms of this type laid the basis for the consolidation of municipalities' financial position and, along with regulatory reform, provided the basis for the expansion of municipal borrowing after 2005.
   - **Expand own source revenue assignment to municipalities and introduce supportive reforms to allow, or incentivize, municipalities to drive up local revenue performance**. This may include, for example, modernizing property tax systems or allowing for greater municipal discretion over setting taxes and user fees. The key policy reform needed to improve the fiscal and revenue base and municipal creditworthiness is the need for a buoyant local revenue base and cost recovery of urban infrastructure investments, through improving property taxes, user fees and other specific revenue streams. Without changes in the user fees regime directed at charging more economic rates, PPP projects will predominantly depend on fiscal support via availability payments for bankability. In Indonesia, for example, decentralizing revenue assignment to districts led to an almost doubling of OSRs, from close to 7 percent in 2006 to near 15 percent in 2020 (Chattha, K. M. *et al.*, 2023).
   - **Support capacity-building programs targeted at assisting municipalities to strengthen their own source revenue efforts.** Development partners are often engaged in this area in collaboration with national governments, providing technical assistance on the design and implementation of such programs.

   Municipalities need to set positive own source revenue growth targets and improve revenue mobilization. Where they have policy jurisdiction, they will often need to raise local tax rates and user fees and strengthen revenue administration practices to drive increases revenue yields. For example, in Casablanca, with technical assistance and incentive funding from the central government and the World Bank, the city is modernizing its revenue management systems focusing on revenue administration improvements across its key revenue sources, including using digital technologies. Own-source revenue for the city has increased 45 percent since 2016.[33]

32 For example, see World Bank brief "Strengthening Urban Management and Service Delivery through Performance-Based Fiscal Transfers".

33 See World Bank-supported Casablanca Municipal Support Program (P149995).

2. **Improve the quality of financial data and strengthen financial management.** Given any funding base, a municipality's attractiveness to investors is determined by the quality of its financial data and the strength of its financial management practices, both of which are critical ingredients of broader creditworthiness.

   National governments can introduce modernized accounting and financial reporting standards for municipalities, support the introduction of enhanced financial management systems such as IFMIS, and support strengthening of the statutory external audit system.

   Municipalities can build their financial management capabilities and strengthen their financial reporting and management performance and improve the quality of their financial data.

3. **Expand the absorptive capacity of municipalities.** Municipalities need to expand their capabilities to plan, design, and execute investment projects, and their ability to undertake financial transactions with investors:

   National and state-level governments can do the following:

   - **Provide municipalities with technical assistance and capacity building, as well as financial and technical support**, in areas such as capital investment planning, the development of investible projects, and project execution, as well as the issuance of debt instruments, the enhancement of debt management capacities, and the development of PPPs.
   - **Provide any necessary permissions for the expansion of municipal capacity**, especially personnel with technical and financial expertise to prepare projects and raise financing for them. Municipalities also need access to the expertise required to design commercial transactions for private financing and engage with private investors. National and state governments should work with municipalities to have such capacity available, either internally or outsourced.
   - **Create incentives for municipalities** to develop their capacities, address infrastructure gaps, and use repayable finance as part of broader policy measures and fiscal instruments, e.g., through performance-oriented fiscal transfers which provide funds to municipalities upon demonstrated improvements in these areas.
   - **Review subnational institutional frameworks** with a view to addressing broader fiscal decentralization factors that may be inhibiting enhanced repayable financing flows, such as those related to assignment of expenditure responsibilities and public assets, the budgeting process, regulation of public service standards, etc.

   Municipalities can focus on improving investment and project planning and execution, and grow their capacities to engage repayable finance providers, including using any assistance provided by national governments or development partners. This can include two avenues of action:

   - **Identify strategic projects in territorial and multi-year capital investment plans based on their infrastructure needs and trends**. Such plans need to be converted into bankable projects along with demonstrated expertise to successfully execute such projects, allowing municipalities to position themselves as credible counterparties for private investors.

- **Build financial expertise to improve interface with potential financing partners and investors.** Many municipalities do not have the financial expertise to interface with private sector investors in financial terms and have limited experience with complex project bidding, using processes that may not attract a diverse pool of investors. They can build or hire expertise to design commercial transactions for private financing, liaise with investors, and streamline their project bidding processes.

B. Regulatory actions

As with demand-side factors, country circumstances regarding the regulation of municipal borrowing and PPPs vary widely. In some cases (e.g., municipal borrowing in South Africa), frameworks may be reasonably robust and modern, while in many others (e.g., India; North Macedonia) the frameworks may be much older and less relevant to current circumstances. Central governments (or state governments in federations) have policy and legislative authority in this area and can initiate a review of their existing policies and frameworks and, as necessary, undertake a process of reform and modernization to develop a sustainable regulatory framework that is conducive to commercial investment while ensuring that moral hazard is limited, and that risk is properly allocated and priced. Box 6 provides a set of principles that can be used to assess and mitigate fiscal risks of municipal borrowing and ensure sustainable and prudent financing.

Reviews of the regulatory frameworks in various L&MICs[34] indicate the areas that could receive useful reform attention include the following:

- **Regulation of financial markets and financial institutions** in areas such as prudential regulations pertaining to the contractual savings industry, municipal bond listing requirements, and tax treatment to ensure that these are not inadvertently prejudicial to municipal lending
- **Ex ante municipal borrowing rules** concerning
  - Borrowing limits and ratios - to ensure that these are relevant and in line with prevailing market and municipal fiscal conditions
  - Approval procedures – to ensure that these are sufficiently streamlined, rationalized and transparent such that due diligence requirements are appropriately balanced against the need for greater transactional efficiency and municipal borrower and investor certainty
  - Sources of financing – to facilitate greater access to potential cross-border sources of finance while ensuring that municipalities are not exposed to unhedged currency risk
- **Ex post borrowing provisions** to introduce clear and robust procedures for dealing with situations of municipal fiscal stress and default, to create greater certainty for investors regarding events in such circumstances while limiting investor reliance on implicit government guarantees and curtailing the potential scope for bail-outs and softening of municipal budget constraints.

34 See for example World Bank (2011).

Box 6. Principles to assess and mitigate fiscal risks of municipal borrowing and ensure sustainable and prudent financing

Repayable financing for municipalities – especially borrowing – can lead to fiscal and debt sustainability risks if it is not adequately regulated. Such risks can extend beyond the municipality and create contingent liabilities for higher levels of government, even in cases where no sovereign guarantee has been provided by the central government. It is, therefore, important to fully assess and mitigate against these risks in order to enable prudent municipal borrowing. This includes ensuring the fiscal sustainability of municipalities to be able to service any financing over the medium to long term.

National governments – or states and provinces in federal countries – must put in place appropriate, robust, and transparent regulatory frameworks that empower municipalities to mobilize finance, while guarding against prevalent fiscal and systemic risks, moral hazard, and distortions. A set of principles that can be used to assess and control for fiscal risks at the municipal level is provided below.

1. Legal framework for borrowing

- Legal clarity on whether local governments are permitted to borrow, including from both domestic and international sources.
- Presence of rules or restrictions governing borrowing practices, including required approvals and oversight mechanisms to ensure proper authorization and risk control.

2. Government support and debt resolution

- Existence of structured mechanisms to resolve local government debt or defaults.
- Clarity on whether central government provides financial assurances or guarantees for local borrowing, and how this affects fiscal risk exposure.

3. Financial capacity, revenue autonomy and capacity, and creditworthiness

- Degree of reliance on intergovernmental transfers and overall fiscal space to manage expenditures and debt.
- Strength, diversity, and autonomy of local revenue sources, including taxing powers and user fees.
- Effectiveness of revenue administration, availability of liquidity reserves, and alignment between revenue-raising authority and expenditure responsibilities, and rigidity in spending or earmarking of revenues.
- Existence of credit ratings or independent assessments.

4. Fiscal rules

- Existence of, and compliance with, a set of fiscal rules governing the use of borrowed funds (e.g., the Golden Rule), deficit and debt limits (e.g., yearly thresholds, debt brakes, deficit caps, etc.), and borrowing purposes.
- Consistency of these rules with international or good practice standards and demonstrated compliance by the local government.

5. Governance and risk sharing

- Existence of political approval processes for borrowing and mechanisms for intergovernmental coordination to uphold fiscal rules.
- Participation of other lenders and use of risk mitigation or risk sharing instruments such as guarantees or insurance to reduce exposure.

The World Bank Group has a suite of analytical and advisory tools to support national and state/provincial governments and municipalities in applying these principles to systematically assess the fiscal risks from municipal borrowing and put in place appropriate regulatory, policy, and institutional measures to mitigate these risks and increase municipal borrowing in a sustainable and prudent manner.

Note: These principles are based on an analytical framework developed by the World Bank's Prosperity vertical to assess fiscal risks of municipal borrowing.

C. Supply-side interventions

For as long as demand-side and regulatory weakness remain, efforts to expand financing of municipalities may require some sort of supply-side intervention to kickstart the market and show demonstration effects. De-risking interventions can support and accelerate reforms through providing positive feedback loops. This de-risking can be provided through various forms of credit enhancement such as such as (i) credit risk guarantees, to cover municipal debt service payments; (ii) non-commercial insurance against risks of war or civil disturbance, expropriation, or contract payments or termination that are associated with PPPs; (iii) limited or matching viability gap funding or (iv) currency risk hedges, including against currency transfer and convertibility, to facilitate cross-border investment, given that municipalities and utilities find it difficult to hedge forex risks, particularly in PPP contracts. While these forms of support can be provided at a transaction level by IFIs such as multilateral development banks, efforts are currently underway in various countries to develop more programmatic approaches to systematically mobilize domestic capital markets, through the establishment of credit guarantee vehicles that combine the retail-level origination capacity of GFIs with the balance sheets and performance standards of bilateral and multilateral development banks.

The most common form of supply side intervention is the support of concessional lending to municipalities through GFIs (as shown earlier in Box 5). While GFIs can be an effective tool for expanding municipal financing flows, it is important to recognize that these do not relieve central governments from fiscal transfer responsibilities: municipalities cannot borrow their way out of a structural fiscal gap. Moreover, as indicated earlier, GFIs can have unintended impacts. Even when they are financially successful, the financial and regulatory advantages bestowed on them can make it difficult for the private sector to compete and can, over the medium to long term, lead to narrowing rather than widening the flow of private financing to municipalities.

To manage these risks, a range of policy measures can be considered to strengthen the role of GFIs in this regard:

- **Providing a level playing field between GFIs and private investors:** A level playing field should be created between GFIs and private lenders to the extent possible. For example, if regulatory mechanisms such as fiscal transfer intercepts are provided to lenders to secure loans, they should be available to all lenders, not just those which are government-owned such as GFIs.
- **Careful design of subsidies to GFIs in order to attract private investors:** The impact of interventions centered on GFIs will, to a significant extent, be determined by how any subsidy from which they benefit is structured, and by the relationship these entities are induced to develop with private lenders. In general, the more any subsidy is designed to attract rather than crowd out private lenders, the more beneficial will be the impacts on private market development. Interventions that focus more on using subsidies to de-risk private investment and attracting private capital to municipal infrastructure through credit enhancement and wholesale support mechanisms are likely to be least distortionary and most beneficial to systemic market development, compared to direct retail lending to municipalities in competition with the private sector

- **Using GFIs to grow new market segments and showing proofs-of-concept:** Regulation of GFIs should be designed so that they focus on less creditworthy borrowers, rather than market-investible municipalities which can raise finance in the market on the basis of their own credit strength. Ideally, GFIs should play a transitional role, targeting and opening up market segments which are not yet fully investible by the market, establishing solid lending practice over time, then leaving these municipalities to be covered by the market once they are established as viable credit risks.

D. Broader actions for market development: building the case, facilitation, information dissemination

Another key role of national governments is to use their convening powers to shape this agenda at scale, disseminate information, and liaise between municipalities and financial institutions to help build the market for private financing of urban infrastructure. It is worth noting that these kinds of measures can only succeed to the extent that the fundamentals are in place at the municipal level, i.e., there is a viable entity (municipality) with strong creditworthiness and a set of investible projects.

National governments can play a leading role in information dissemination, convening, "building the case" for urban infrastructure finance, as well as providing technical assistance and capacity building to municipalities to remove market frictions and facilitate transactions. This can include the following steps:

- **Sharing municipal plans and strategies with prospective financiers**, through dialogues / workshops for investor groups and selected borrowing municipalities, to build the relationship between investors and borrowers based on long term infrastructure and financial plans. Such activities can help to build the business case for urban investment and expose investors to the market potential for financing urban infrastructure, government policy, and available revenue streams to support infrastructure financing. An urban finance working group, convened by the national government, can be a useful vehicle for this.
- **Developing and expanding data systems and information disclosures on urban financing**, in collaboration with financial sector regulators, to support the development of an ecosystem of private investment which includes credible and publicly available data, analysis, and research on municipal finance trends. This will include readily accessible data on municipal finance and investment needs.
- **Facilitation, technical assistance, capacity building and removing market frictions:** Governments can establish dedicated structures – such as a **national platform** - to focus on urban infrastructure finance within appropriate ministries to assist specific municipalities with transaction preparation and implementation for private financing including borrowing and PPP transactions. Such a platform can focus its activities, either conducted on its own or in partnership with relevant agencies and other stakeholders, on a set of high-potential cities and sectors in each country that are deemed to be better placed to access private financing. It can provide technical assistance to municipalities in preparation of financial plans, interacting with financial markets, provision of expertise to design transactions for private financing, and engaging with investors. It can also provide secretarial functions for any information dissemination activities in this topic.

4.3. Role of development partners

IFIs and bilateral aid agencies can – and to some extent already do – assist both national and municipal governments with the full range of actions outlined above. This may be through a combination of financing support, technical assistance, capacity-building, training, and knowledge exchanges. For the actions that fall to central governments, such as regulatory reform, this assistance can be provided directly to national governments; for municipalities, it can be provided to single entities or clusters of local government through a variety of operational modalities.

A. Support to national governments and national programs

Development partners' support to national governments is often targeted at interventions that reform national systems affecting a large set of municipalities. Targeted areas often include fiscal transfers; institutional and regulatory frameworks for municipalities to sustainably raise private finance; and capacity building and technical assistance programs to strengthen municipal project preparation, execution, revenue capacity, and creditworthiness. There is significant scope for development partners to expand activities that assist national governments to strengthen the systemic foundations of municipal financing through providing policy advice on intergovernmental fiscal strengthening, the reform of regulations pertaining to municipal borrowing and PPPs and support to programs that provide assistance to municipalities to prepare bankable projects.

Development partners can also finance specific interventions or programs of national governments. One potentially fruitful area, which has not yet been sufficiently explored, lies in financial and technical support for the establishment of credit enhancement vehicles which can provide de-risking of private investment in municipal borrowing or PPPs on an institutionalized basis, with such programs being housed in existing GFIs or possibly in new institutional vehicles created specifically for this purpose. Development partners can also support GFIs both in the form of capital for on-lending and, as importantly, policy, technical, and institutional support to GFIs and governments to optimize systemic impacts and minimize the risks of distortionary consequences.

Finally, development partners can play an important convening role to assist national governments and municipalities to strengthen engagement with potential financiers and build awareness of commercial and concessional financing options. They can provide information and technical assistance on accessing financing and funding opportunities and their requirements, and support municipalities in acquiring certification and accreditation to access financing and funding vehicles, especially those related to climate change action.[35]

35 For more information on these recommendations, see: World Bank and UN Capital Development Fund (2024).

B. Direct support to municipalities

Development partners often support municipalities directly by providing financial and technical assistance for specific investment projects and transactions or preparing city-level investment plans and pipelines. Development partners can work with countries to formulate innovative country- and city-specific strategies and interventions which calibrate and focus the different instruments they have at their disposal to different segments of the municipal market. For example, for more creditworthy borrowers, financial assistance can take the shape of support to reduce project risks for investors, through a combination of derisking interventions to leverage finance on favorable terms without displacing private capital, and minimizing government counter guarantees. Box 7 showcases a recent example of this, where the World Bank Group provided a package of financing and guarantees for a municipal waste management and waste-to-energy project in Belgrade, Serbia. For less creditworthy borrowers, support can be provided in the form of direct IFI financing through a fiscal transfer combined with non-guaranteed IFI financing or credit enhancement support to attract more limited private sector involvement.

Box 7. Municipal waste management and waste-to-energy project in Belgrade, with MIGA guarantees and IFC financing

The project involves the closure and remediation of a saturated landfill near Belgrade and the construction of a new EU-compliant sanitary landfill, along with a waste-to-energy facility and a facility for processing construction and demolition waste. It is being implemented under a long-term PPP contract awarded to a special project vehicle (SPV) with the exclusive right to treat the municipal solid waste generated by thirteen municipalities of the metropolitan area. The SPV was formed by three firms: the global utility company Suez, the Japanese conglomerate Itochu, and Marguerite Fund II (a pan-European equity fund). The financing package includes an IFC loan of €72 million, a parallel loan of €35 million from Oesterreichische Entwicklungsbank, a concessional loan of €20 million from the Canada-IFC Blended Climate Finance Program, and an EBRD loan of €128 million.

To reduce the project's risk profile for investors, MIGA has issued guarantees amounting to €97 million, which cover up to 90 percent of equity investments by the three equity owners of the project SPV for a term of 20 years. These guarantees are designed to mitigate noncommercial risks, to protect against losses that may arise from a government's breach or repudiation of a contract, such as a concession or a power purchase agreement. The guarantee reduces pressure on the country's fiscal space by serving to backstop the obligations of Belgrade city and providing comfort to investors without the need for a sovereign guarantee.

Source: IFC (2020). IFC and MIGA Support Pioneering Waste-to-Energy PPP Project in Belgrade. *IFC press release.*

Development partners can formulate country-specific strategies to expand such activities, which customize approaches that calibrate, focus and sequence the different instruments they have at their disposal to different segments of the municipal market.

C. IFI collaboration

In addition, it would be helpful for IFIs to establish a shared view on the role of, and good principles and practices surrounding financing at the municipal level. This should describe how repayable finance at this level should be approached based on successful experience in high- and middle-income countries. This will help coordinate and guide the interventions of IFIs and development partners and inform national government policy makers about the standards and practices which they might aim for.

4.4. Conclusion and way forward

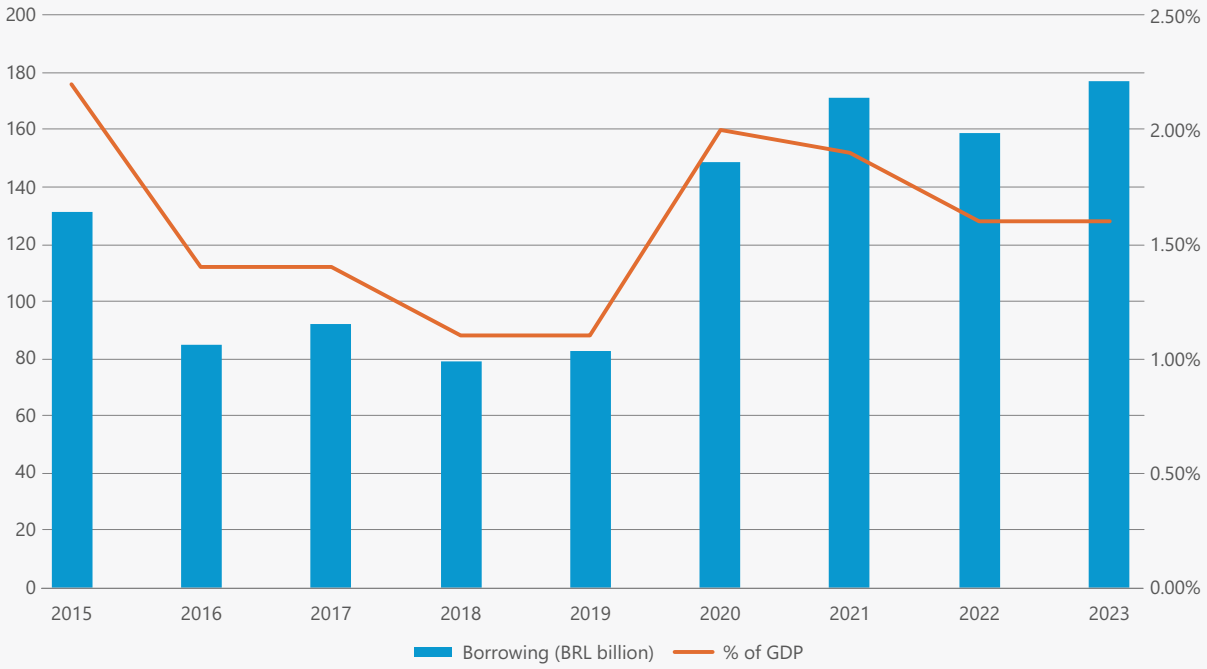
Municipalities play a critical role in delivering services, addressing climate change, and supporting jobs and economic growth. Closing gaps in service provision, and meeting the need of future populations, will be impossible without a transformative scale-up in municipal financing in low- and middle-income countries. While grants have a role to play, the scale of capital investment required makes it essential to unlock repayable financing flows.

Financing begins with strong municipal revenue bases, sound financial management, and local capacity to plan, prepare, and execute investable projects. But municipalities cannot achieve this transformation alone. Ministries of Finance, government financial institutions, financial regulators, central banks, municipal associations, development partners, and private actors must all help to create the conditions for increasing private capital to flow to municipalities in a sustainable and prudent manner. National governments have a particularly important role to play, to empower local governments to raise revenues, strengthen their funding base and provide targeted technical support for cities to become credible investment counterparts. They must also put in place appropriate, robust and transparent regulatory frameworks, which empower municipalities to mobilize finance, while guarding against prevalent fiscal and systemic risk and moral hazard. Supply-side interventions, credit enhancements, and financing by public entities should be used strategically to catalyze private investment and develop the municipal finance market while limiting market distortion.

Annex 1: Municipal Outstanding Debt Stock in Five Focus Countries

Brazil

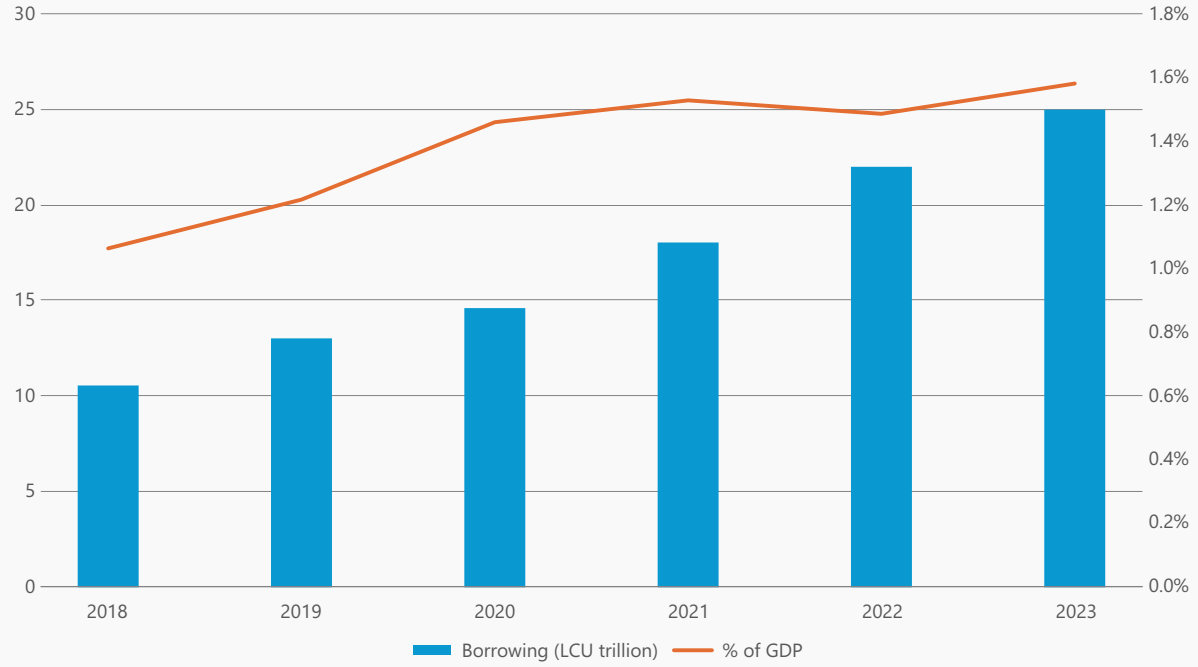
Figure 19. Total Outstanding Debt Stock, Brazilian Municipalities 2015 - 2023 (LCU bn and % of GDP)



Source: Authors' analysis of the World Bank Local Government Borrowing Database & Treasury Data

Colombia

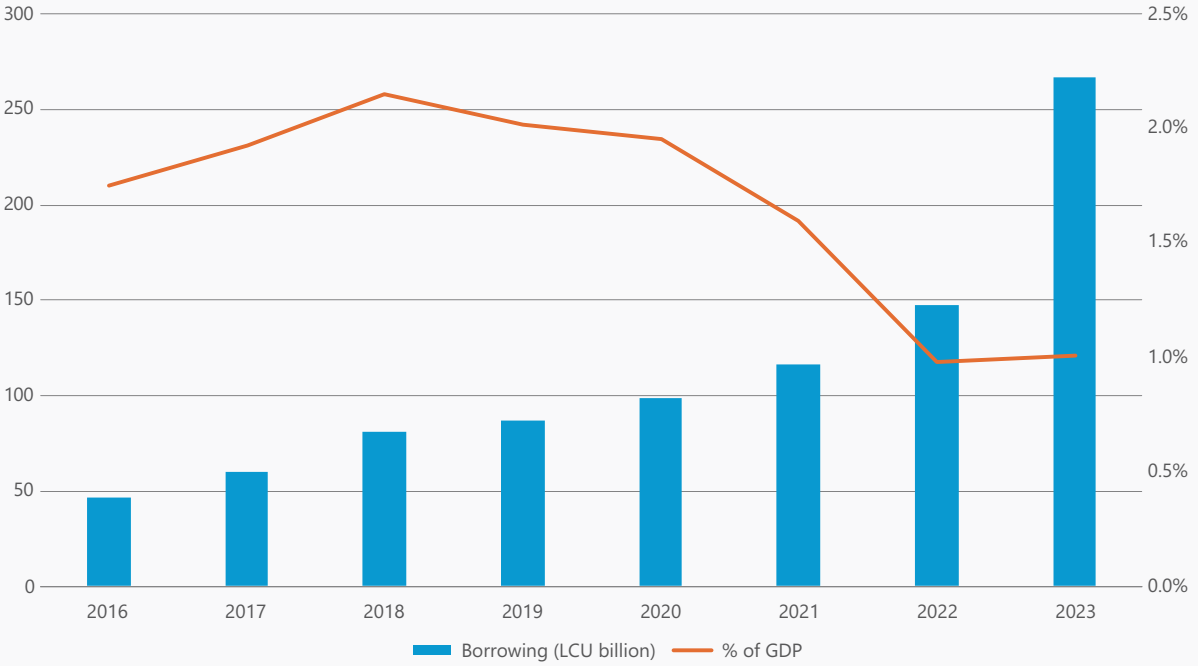
Figure 20. Total Outstanding Debt Stock, Colombian Municipalities 2018 - 2023 (LCU bn and % of GDP)



Source: Authors' analysis of the World Bank's Local Government Borrowing Database & Ministry of Finance

Türkiye

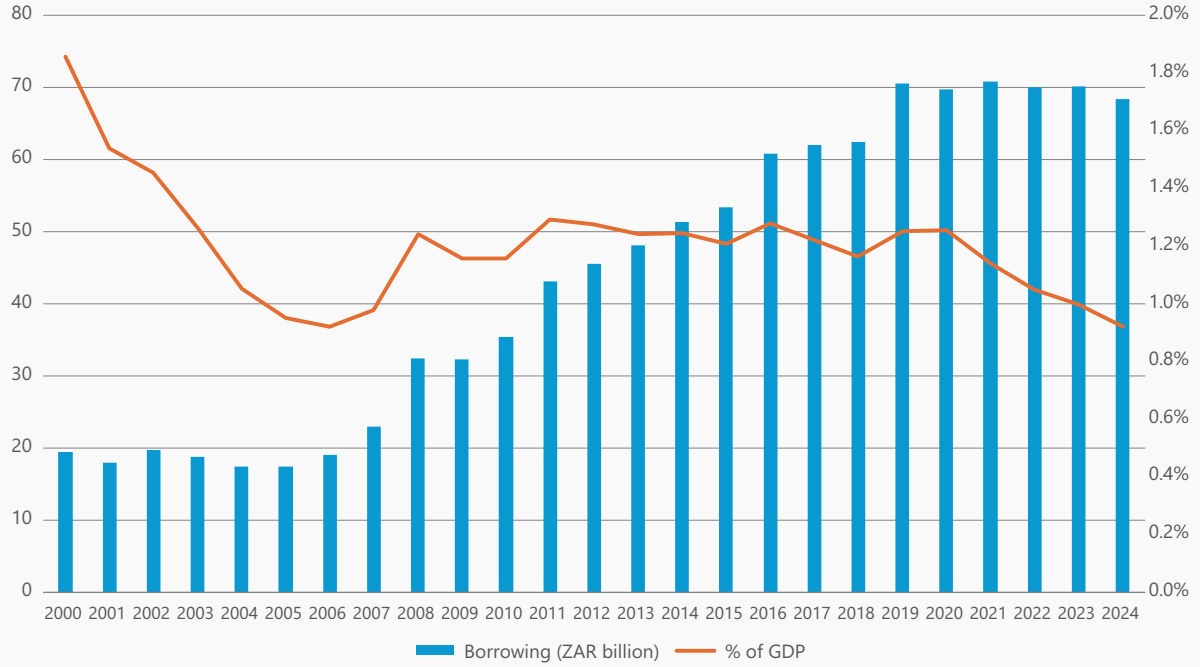
Figure 21. Total Outstanding Debt Stock, Türkiye Municipalities 2016 - 2023 (LCU bn and % of GDP)



Source: Authors' analysis of the World Bank's Local Government Borrowing Database & Ministry of Finance

South Africa

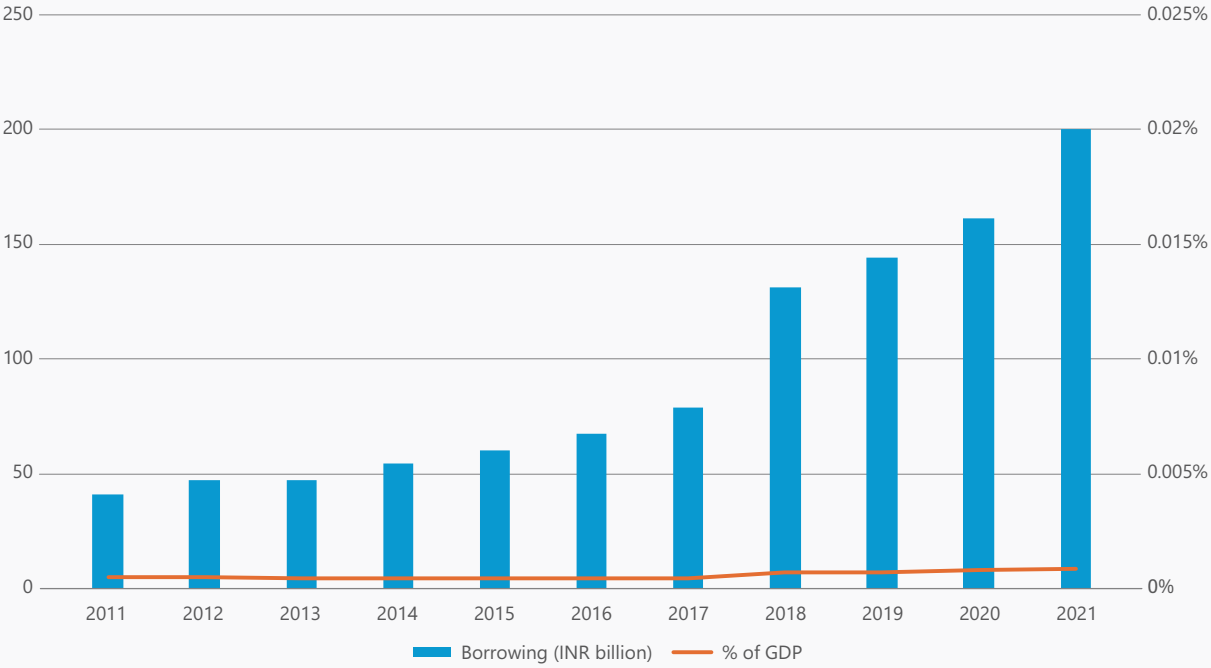
Figure 22. Total Outstanding Debt Stock, South African Municipalities 2000 - 2023 (LCU bn and % of GDP)



Source: Authors' analysis of the World Bank's Local Government Borrowing Database & South Africa Treasury data

India

Figure 23. Total Outstanding Debt Stock, Indian Municipalities 2011 - 2021 (LCU bn and % of GDP)



Source: Authors' analysis of the World Bank's Local Government Borrowing Database and Athar et al., (2022)

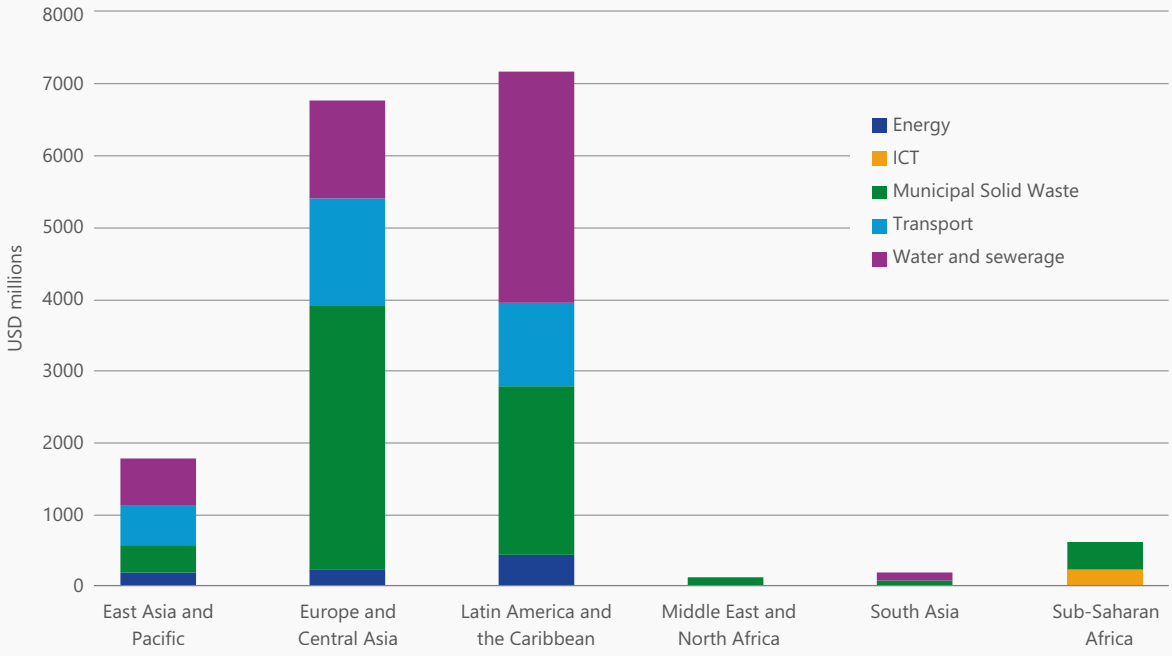
Annex 2: Information on Municipal PPPs in PPI Database

For the project-types captured in the PPI database (see Box 4 for explanation on this data), a snapshot of regional trends over 2015 to 2023 is provided below. See also Figure 24 and Figure 25.

- **Latin America and the Caribbean had the highest number and investment value of municipal PPPs of any region (once China is excluded from the East Asia region), with 66 PPPs at USD 7.1 billion.** Almost half the investment (45 percent) was in W&S, followed by one-third in MSW, 16 percent in transport, and 6 percent in energy. In the transport sector, notable projects include a USD 509 million light rail project in Rio de Janeiro; a USD 345 million expansion of Manzanillo port in Mexico; and additional port- and airport-related PPPs in Brazil, Colombia, Ecuador, Honduras, and Peru. In W&S, several municipalities used PPPs to build, rehabilitate, operate, and transfer water and sewerage facilities, including a USD 730 million PPP in Veracruz and Medellin, and 20 PPPs across 8 municipalities in Brazil from 2015-2017. In the energy sector, municipalities in Argentina contracted 10 PPPs for renewable power generation, including a USD 144 million wind farm in Azul (Buenos Aires Province) and eight biogas plants.
- **The Europe and Central Asia region saw the second highest investment in municipal PPPs in this period, with Russia alone accounting for 78 percent of the region's USD 6.8 billion of municipal PPPs.** Municipalities in Russia contracted USD 5.3 billion of PPP investments across 11 contracts. Almost half of this investment was in MSW, followed by almost a quarter in transport and W&S each. Notable PPPs in Russia include three large projects – a MSW operation, W&S utility, and a highway - that collectively account for USD 4.2 billion of investment. Municipalities in other countries in the region had USD 1.5 billion of PPP investments across 52 contracts. 81 percent of investment was in MSW, 11 percent in W&S, 8 percent in energy, and less than 1 percent in transport. In Türkiye, municipal PPPs focused on greenfield waste-to-energy and waste-to-fertilizer plants, a wind farm, and solid waste management facilities, with contracts ranging from USD 17 to USD 138 million. Other notable PPPs in the region include a USD 416 million MSW sorting plant in Belgrade, Serbia in 2020; a USD 160 million water improvement project in Tashkent, Uzbekistan; a USD 14.2 million waste-sorting and recycling plant in Almaty, Kazakhstan; and a USD 4.5 million e-mobility project in Dushanbe, Tajikistan.
- **In the East Asia and Pacific region excluding China, 16 municipal PPPs were contracted in this period with a total investment value of USD 1.8 billion.** W&S accounted for 37 percent of investment, followed by transport (32 percent), MSW (20 percent), and energy (11 percent). Notable examples include four greenfield water supply projects, the largest being a USD 488 million water supply facility in Bulacan in the Philippines, and six greenfield renewable power generation plants (biogas, wind, and solar), the highest being a USD 58 million plant in Vinh Chau town, Vietnam, and a USD 45 million project in Battambang, Cambodia. MSW projects included waste-to-energy and other waste treatment plants and the expansion of a recycling facility. In the transport sector, a USD 573 municipal PPP in the Philippines was used to construct and operate the Cebu-Cordova toll bridge.

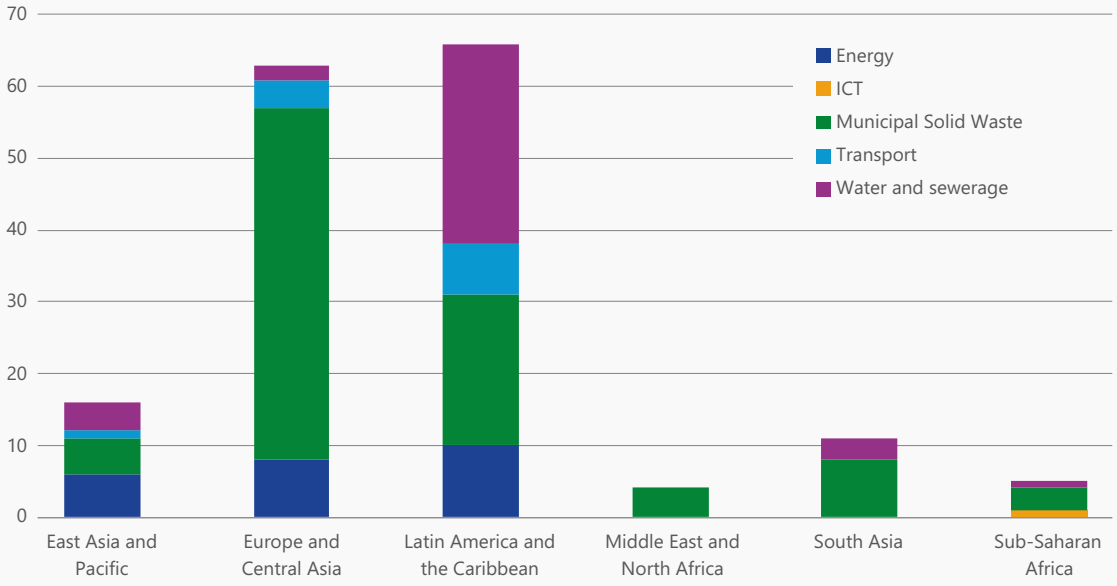
- **In South Asia, total municipal PPP investment was just USD 194 million in this period, with India accounting for 63 percent of this.** 60 percent of investment in the region was in W&S, with the remainder in MSW (PPP projects in transport and energy are only reported prior to the period of analysis). In W&S, municipalities in India and Bangladesh contracted greenfield PPPs for water and sewage, including a USD 72 million water PPP near Dhaka. In the MSW sector, Indian municipalities contracted 8 relatively small MSW PPPs, the largest of which was a USD 31 million build, own, operate waste treatment plant in Nagpur in Maharashtra state.
- **Only five municipal PPPs are reported for the Sub-Saharan Africa region in this period, with total contracted investment value of USD 608 million.** Of these 5 projects, three are in South Africa: municipalities in Johannesburg and Atteridgeville contracted a gas-to-electricity MSW facility and recycling MSW facility respectively, while a municipal PPP in Tshwane supported broadband network development. Those outside South Africa include a wastewater treatment plant in Dar Es Salaam, Tanzania and a MSW facility in Harare, Zimbabwe.
- **Similarly, just four municipal PPPs are reported for the Middle East and North Africa region in this period, with total investment value of USD 127 million.** These consist of two MSW PPPs for landfill and plastic recycling facilities in Algeria in 2017 (with cumulative investment of USD 22 million), and two management and lease PPPs for waste management in Morocco - Tangier (USD 104 million investment) and Khenifra (USD 1.4 million investment).
- **China is analyzed separately due to its very large volume of municipal PPPs.** Chinese municipalities contracted 534 municipal PPPs in this period, valued of USD 66 billion, compared to 699 municipal PPPs valued at USD 16.6 billion across all other L&MICs. 57 percent of China's municipal PPP investment was in transport, followed by W&S, energy, and MSW, ranging between 11 and 17 percent each.

Figure 24. Investment Value of Local/Municipal PPPs Contracted in L&MICs (2015-2023) by Region and Sector, excluding China



Source: Authors' analysis of the World Bank PPI Database

Figure 25. Number of Local/Municipal PPPs Contracted in L&MICs (2015-2023) by Region, Excluding China



Source: Authors' analysis of the World Bank PPI Database

References

1. Ahmad, E. (2015). *Governance and Institutions*. In: E Ahmad, G Brosio. (eds) *Handbook of Multilevel Finance.* Edward Elgar.

2. Ahmad E., Dowling, D., Chan, D., Colenbrander, S., Godfrey, N. (Forthcoming). *Scaling up investment for sustainable urban infrastructure: A systematic approach to urban finance reform for national governments.* Coalition for Urban Transitions. London and Washington, D.C.

3. Athar, S.; White, R.; Goyal, H., (2022). *Financing India's urban infrastructure needs: Constraints to commercial financing and prospects for policy action*. Washington, D.C.: World Bank Group.

4. Brugmann, J. (2012). Financing the resilient city. *Environment and Urbanization*. 24(1), 215-232.

5. Cartwright, A., Palmer, I., Taylor, A., Pieterse, E., Parnell, S., Colenbrander, S. (2018) *Developing Prosperous and Inclusive Cities in Africa - National Urban Policies to the Rescue?* Coalition for Urban Transitions. London and Washington, D.C.

6. City Climate Finance Leadership Alliance (CCFLA) (2024). *The State of Cities Climate Finance 2024*.

7. Chattha, K. M., Soko, N. P., and Violeta, R.M. (2023). Subnational revenue mobilization: A critical issue for the success of fiscal decentralization in Indonesia. April 5, 2023. World Bank Blogs.

8. Colenbrander, S., Dodman, D., Mitlin, D. (2018). Using climate finance to advance climate justice: the politics and practice of channeling resources to the local level. *Climate Policy*. 18 (7) 902-915

9. Deuskar, C., Murray, S., Leiva, S., Khan, I., and Maria, A. (Forthcoming, 2025) *Banking on Cities: Investing in Resilient and Low-Carbon Urbanization*. Washington, D.C.: World Bank

10. Farvacque-Vitkovic F., Kopanyi, M. (eds). (2014). *Municipal Finances: A Handbook for Local Governments*. World Bank, Washington, D.C.

11. Freire, Mila and John Petersen, editors. 2004. *Subnational Capital Markets in Developing Countries: From Theory to Practice*. World Bank, Washington DC.

12. Ganic, A. (2024). Metro Bogotá Line 1, Colombia. IJGLobal. 06 Sep 2024. Accessed at: https://www.ijglobal.com/articles/185528/metro-bogot-line-1-colombia

13. GIZ. 2017. The Potential of Green Bonds.

14. Global Platform for Sustainable Cities (2019). Project Summaries Part 1: Municipal Public Private Partnership Framework. Washington, DC: World Bank.

15. Gorelick, J. (2018). Supporting the future of municipal bonds in sub-Saharan Africa: the centrality of enabling environments and regulatory frameworks. *Environment and Urbanization*. 30 (1) 103-122

16. Granoff, I., Hogarth, J.R., Miller, A. (2016). Nested barriers to low-carbon infrastructure investment. *Nature Climate Change*. 6 1065-1071

17. Han, F., Li, B. G., and Zhou, C. (2024). Fiscal Risk Sharing in China: Is It Significant and How to Further Improve It? IMF Working Paper WP/24/200.

18. IFC (2020). IFC and MIGA Support Pioneering Waste-to-Energy PPP Project in Belgrade*. IFC press release: November 2, 2020.*

19. IFC (2022). Colombia: Bosa Hospital. PPP Project Briefs. Washington, D.C.: IFC.

20. IMF (2014). Government Finance Statistics Manual 2014. International Monetary Fund. Washington, D.C.

21. IMF (2019). Brazil: Technical Assistance Report - Strengthening the Framework for Subnational Borrowing. IMF Country Report No. 19/302. IMF. Washington, D.C.

22. IMF Asia and Pacific Dept. (2024). People's Republic of China: 2024 Article IV Consultation-Press Release; Staff Report; and Statement by the Executive Director for the People's Republic of China. *IMF Staff Country Reports 2024/258.*

23. Kelly, Roy; White, Roland; Anand, Aanchal. 2020. "*Property Tax Diagnostic Manual*". World Bank, Washington, DC.

24. Leigland, J. (2020). Public-Private Partnerships in Sub-Saharan Africa: The Evidence-Based Critique. Oxford University Press. ISBN-13: 9780198861829.

25. Merk, O., Saussier, S., Staropoli, C., Slack, E., Kim, J-H (2012). Financing Green Urban Infrastructure. *OECD Regional Development Working Papers 2012/10.* OECD Publishing.

26. Martimort, D. and Straub, S. (2016) How to Design Infrastructure Contracts in a Warming World: a critical appraisal of PPPs. *International Economic Review*, 57(1), 61-87.

27. Ministry of Finance of the People's Republic of China. 2024. Report on the Execution of the Central and Local Budgets for 2023 and on the Draft Central and Local Budgets for 2024. Second Session of the 14th National People's Congress of the People's Republic of China. March 5, 2025.

28. Murray, S., Leiva, S., Deuskar, C., Khan, I., and Maria, A. (Forthcoming) Background Paper to Deuskar *et al.*, (2025), Banking on Cities. World Bank, Washington, D.C.

29. National Treasury Republic of South Africa (2016). December 2016. Municipal Borrowing Bulletin Issue 3.

30. Noel, M. (2000). Building sub-national debt markets in developing and transition countries: a framework for analysis, policy reform and assistance strategy. World Bank. Washington DC.

31. OECD. World Observatory on Subnational Government Finance and Investment (SNG-WOFI).

32. OECD (2015). Mobilising the debt capital markets for a low-carbon transition. Organisation for Economic Cooperation and Development. Paris.

33. OECD (2018). Development Cooperation Report 2018. Organisation for Economic Cooperation and Development. Paris.

34. Peterson, G (2000). Building Local Credit Systems. Municipal finance background series no. 3. World Bank, Washington, DC.

35. Powertec Engineering Pvt. Ltd., (2017). Draft Report on Overview of India's Municipal Finance Market. Unpublished.

36. RailwayPro (2025). Proposed financing for Bogota metro Line 1. RailwayPro. January 15, 2025. Accessed here.

37. Rajan R. (2010). Fault Lines: How Hidden Fractures Still Threaten the World Economy. Princeton University Press.

38. Schmidt, T.S. (2014). Low-carbon investment risks and de-risking. Nature Climate Change. 4 237-239

39. Ter-Minassian, T. (1996). IMF Paper on Policy Analysis and Assessment 96/4, Borrowing by Subnational Governments: Issues and Selected International Experiences

40. UN DESA (2018). World Urbanization Prospects. United Nations Department for Economic and Social Affairs. Nairobi, Kenya.

41. UN-Habitat (2022). Envisaging the Future of Cities. World Cities Report 2022. United Nations Human Settlements Programme (UN-Habitat)

42. U.S. Census Bureau (2021) *Annual Survey of State and Local Government Finances*. U.S. Department of Commerce

43. Urban Institute & Brookings Institution. 2024. 'Fiscal Federalism and Fiscal Institutions' in 'The Tax Policy Briefing Book', ch. 4 'State and Local Tax Policies'. Tax Policy Center, Washington DC.

44. VanEck (2017). *Income with Impact: A Guide to Green Bonds*. Van Eck Corporation, New York, NY.

45. Wade, J. (2017). Government Approves Funding for $5.2 Billion USD Bogotá Metro and Regional Rail Project. Finance Colombia. January 12, 2017.

46. White, R. and Wahba, S. (2019). *Addressing constraints to private financing of urban (climate) infrastructure in developing countries*. International Journal of Urban Sustainable Development; Volume 11, 2019 - Issue 3.

47. World Bank. Local Government Borrowing Database (LGBD). City Creditworthiness Initiative. Accessed at: https://www.citycred.org/database

48. World Bank (2011). *Developing a regulatory framework for municipal borrowing in India*.

49. World Bank (2016). Subnational Public Private Partnership Market in Developing Countries. Washington, D.C.: World Bank.

50. World Bank (2018). Mobilizing Finance for Local Infrastructure Development in Vietnam.

51. World Bank (2019). Urban Bus Service Concessioning: How Can Unbundling Bus Provision from Operation Support Bus Reforms? *MOLOTF-Urban Transport Global Knowledge Working Paper.* Washington, D.C.: World Bank.

52. World Bank (2023). PPP Ecosystems Case Study: Colombia. *Benchmarking Infrastructure Development (BID) Series.* Washington, D.C.: World Bank.

53. World Bank (forthcoming). Adapt and Prosper: Towards a Climate Resilient and Low Carbon Urban Transition in India. Washington, D.C.: World Bank.

54. World Bank; United Nations Capital Development Fund (2024). *Local Governments Climate Finance Instruments: Global Experiences and Prospects in Developing Countries*. Washington, D.C: World Bank

55. Yilmaz S., Ebel R.D. (2020). Subnational Government, Infrastructure, and the Role of Borrowing and Debt. In: Chen Z., Bowen W., Whittington D. (eds) Development Studies in Regional Science. New Frontiers in Regional Science: Asian Perspectives, vol 42. Springer, Singapore. https://doi.org/10.1007/978-981-15-1435-7_15