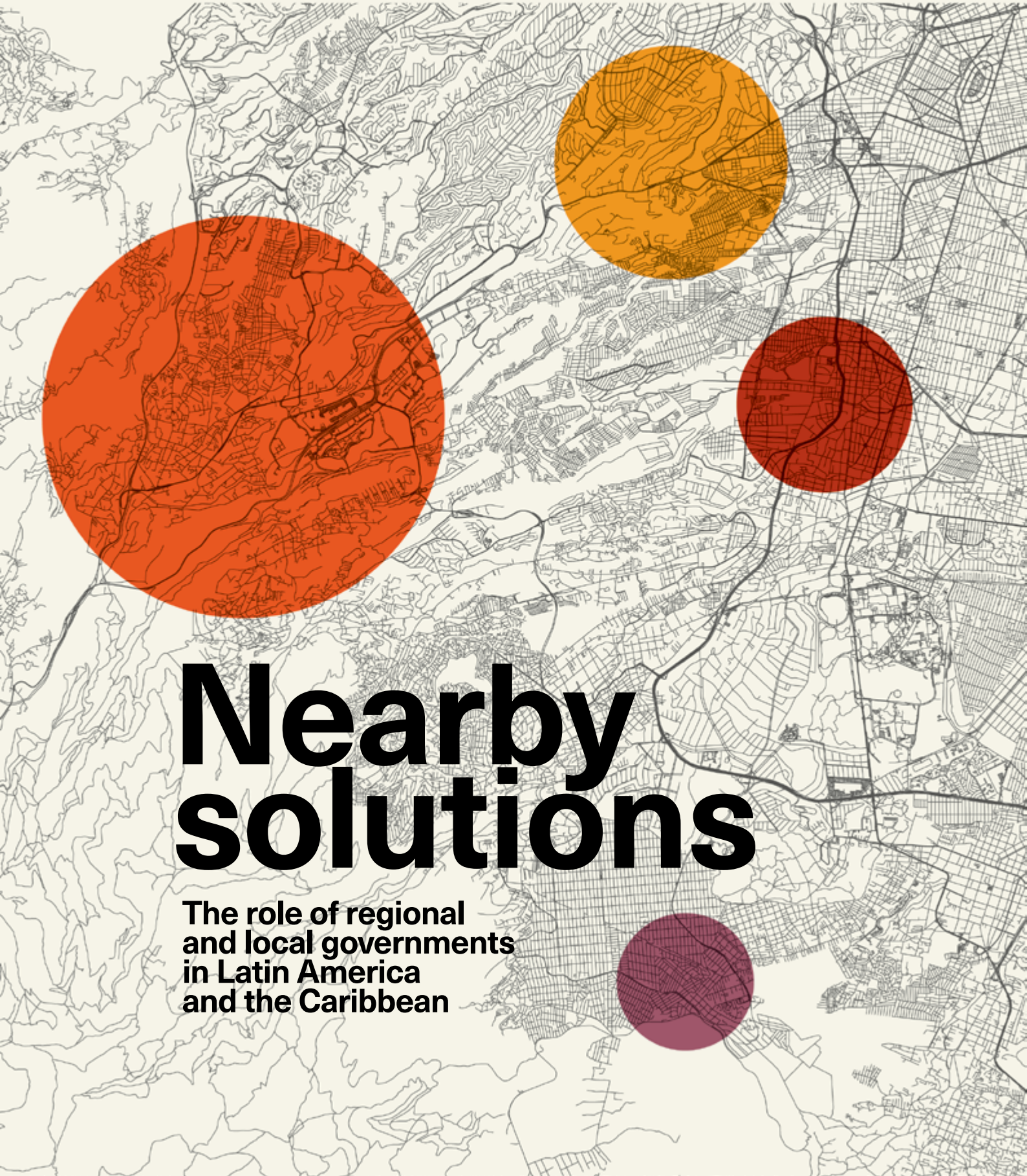
Report on Economic Development

DEVELOPMENT BANK OF LATIN AMERICA AND THE CARIBBEAN



Nearby solutions

The role of regional and local governments in Latin America and the Caribbean

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Foreword

Decentralizing government across our territories is a complex challenge—one with no definitive answers and numerous trade-offs. It is an ongoing process, shaped by the reforms of recent decades, which have largely aimed to strengthen the competencies of subnational authorities. It is also a dynamic deeply intertwined with efforts toward sustainable development. The path taken so far reflects the effort of our countries to advance in closing gaps and fostering growth.

The search for an effective decentralization model does not occur in a vacuum. Each country in Latin America and the Caribbean faces unique circumstances, shaped by its history, geography, and socioeconomic diversity. In our region, there are countries with vast territorial extensions coexisting alongside smaller countries with lower population densities, leading to a variety of governance systems tailored to these specific realities. Despite these differences, local and regional governments play a crucial role in providing essential public services and implementing development policies. Their role is fundamental to improving the population's quality of life and serves as a powerful tool for achieving the Sustainable Development Goals (SDGs).

One of the greatest strengths of subnational governments is their deep knowledge of their own territories. This proximity to local realities enables them to identify the specific needs, opportunities, and challenges of their communities with greater accuracy. Decentralization, therefore, represents an opportunity to leverage this knowledge and enhance it through the exchange of experiences and best practices. With more than 18,000 autonomous governments across the region, each represents a space for policy innovation and experimentation. However, for this potential to translate into effective outcomes, it is essential to strengthen their institutional and operational capacities, equipping them with the tools and resources necessary to fulfill their responsibilities effectively.

Recognizing this need, CAF — Development Bank of Latin America and the Caribbean — has committed to becoming a strategic ally for subnational governments. This involves providing them with strong financial support for infrastructure and development projects while also generating and disseminating relevant knowledge about their functioning. Currently, systematized information on subnational governance is limited, which hinders informed decision-making and the implementation of effective policies. The lack of data and analysis regarding their capacities, resources, and responsibilities is a significant barrier to advancing decentralization and improving governance.

This report has been drafted with the goal of helping to close that information gap, offering a comprehensive perspective on subnational governance in the region. Its purpose is to serve as both a reference tool and a source of reflection for governments and other key development stakeholders. This publication represents an invitation to rethink the role of local and regional governments as drivers of sustainable development, fostering greater coordination among different levels of government and with the private sector.

At CAF, we reaffirm our commitment to working alongside subnational governments, providing technical and financial support to help them fulfill their roles efficiently and effectively. Strengthening decentralization is key to building more equitable, resilient, and inclusive societies. It is also the path to successfully navigating the threefold transition—green, digital, and energy-focused, with a strong emphasis on human development—that we face as a region and as a global society.

We invite all stakeholders—national and subnational authorities, civil society, academia, and the private sector—to join this collective effort to promote territorial development and improve the quality of life throughout Latin America and the Caribbean.

Sergio Díaz-Granados
Executive President of CAF — Development Bank of Latin America and the Caribbean —

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The report was drafted by the following researchers:

Chapters 1 and 2 Guillermo Alves and Gustavo Fajardo

Chapter 3 Pablo Brassiolo and Rodrigo Cifuentes

Chapter 4 Pablo Brassiolo

Chapter 5 Carolina Camacho and Ricardo Estrada

Chapter 6 Guillermo Alves and Gustavo Fajardo

Chapter 7 Ricardo Estrada

Chapter 8 Florencia Buccari and Gustavo Fajardo

The research team was formed by Carla Calá, Daniela Goyheix, Facundo Lurgo, Mateo Fernández, Pilar Toyos, Pedro Di Plácido, Rodrigo Fernández, Sofía Caballero, and Sofía Gallego. Ana Gerez conducted the editorial review and style corrections.

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Abbreviations

AGESIC	Electronic Government and Information Society and Knowledge Agency
AIG	National Authority for Government Innovation
AIOC	Indigenous Originary Peasant Autonomy
Art.	Article
BCE	Central Bank of Ecuador
BCR	Central Reserve Bank
BRT	Bus Rapid Transit
CABA	Autonomous City of Buenos Aires
CEFP	Center for Public Finance Studies
CELAC	Community of Latin American and Caribbean States
CEPAC	Additional Building Potential Certificate
CETIC	Regional Center for Studies on the Development of the Information Society
CGR	General Comptroller's Office
CGU	Comptroller General of the Union
CIEP	Center for Economic and Budgetary Research
CLGF	Commonwealth Local Government Forum
COP	Conferences of the Parties
COR	Rio de Janeiro Operations Center
COSEP	Superior Council of Public Employment
DANE	National Administrative Department of Statistics
DGCG	General Directorate of Government Accounting
DGIP	General Directorate of Public Investment
DIGEPRES	General Directorate of Budget
DIPRES	Budget Directorate
DNAP	National Directorate of Provincial Affairs
DNIP	National Directorate of Public Investment
DNP	National Planning Department
DNSC	National Directorate of Civil Service
DTU	Digital Transformation Unit
ECE	Continuous Employment Survey
ECH	Continuous Household Survey
ECLAC	Economic Commission for Latin America and the Caribbean
EMSA	*Electrificadora del Meta*
ENAHO	National Household Survey of Peru
NDGS	National Digital Government Strategies
ENOE	National Survey of Occupation and Employment
FONACIDE	National Fund for Public Investment and Development
FONCOMUN	Municipal Compensation Fund
FONCOR	Regional Compensation Fund
FONDEN	Natural Disaster Fund
FPE	State and Federal District Participation Fund
FPM	Municipal Participation Fund
FUNDEB	Fund for the Maintenance and Development of Basic Education and the Appreciation of Professionals in Education
GDP	Gross Domestic Product
GPS	Global Positioning System
IBGE	Brazilian Institute of Geography and Statistics
ICMS	Tax on the Circulation of Goods and Transportation Services
ICT	Information and Communication Technologies
IDB	Inter American Development Bank
IGAC	Agustín Codazzi Geographic Institute
ILO	International Labour Organization
IMF	International Monetary Fund
INAPAM	National Institute for Older Adults
INDEC	National Institute of Statistics and Censuses
INE	National Institute of Statistics
INEC	National Institute of Statistics and Census
INEGI	National Institute of Statistics and Geography
INEI	National Institute of Statistics and Informatics

IPUMS	Integrated Public Use Microdata Series
ISAGS	South American Institute of Government in Health
ISS	Tax on Services of Any Nature
IWGIA	International Work Group for Indigenous Affairs
LAC	Latin America and the Caribbean
LAI	Local Autonomy Index
Mbps	Megabits per second
MECON	Ministry of Economy
MEF	Ministry of Economy and Finance
MEFP	Ministry of Economy and Public Finance
Mercosur	Southern Common Market
MICITT	Ministry of Science, Innovation, Technology and Telecommunications
MINFIN	Ministry of Public Finance
MITECO	Ministry of Ecological Transition and Demographic Challenge of Spain
MOOC	Massive Open Online Courses
MUNIC	Municipal Basic Information Survey
N°	Number
NDGS	National Digital Government Strategies
NNR	Non-renewable Natural Resources
OCEI	Central Office of Statistics and Computing
OECD	Organization for Economic Cooperation and Development
OMU	Urban Mobility Observatory of Latin America and the Caribbean
ONE	National Statistics Office
OPC	Budget Office of Congress
OSCE	State Procurement Supervisory Agency
OSR	Own-Source Revenues
OTU	Uruguay Territory Observatory
PIMI	Public Investment Management Index
PISA	Programme for International Student Assessment
p. p.	Percentage Points
PPP	Purchasing Power Parity
PTF	Fiscal Transparency Portal
QR	Quick Response Code
RAI	Regional Authority Index
RED	Report on Economic Development
REDATAM	Data Recovery for Small Areas by Microcomputer
SDG	Sustainable Development Goals
SEA	State Service for Autonomies
SEFIN	Secretariat of Finance
SENARECOM	National Service for the Registration and Control of the Marketing of Minerals and Metals
SFP	Secretariat of Public Administration
SGD	Digital Government Secretariat
SHCP	Secretariat of Finance and Public Credit
FMIS	Financial Information Systems
SNA	System of National Accounts
SNIP	National Public Investment System
SNIS	National Sanitation Information System of Brazil
SOEs	State-Owned Enterprises
SSPD	Superintendency of Residential Public Services
STN	National Treasury Secretariat
SUNASS	National Superintendency of Sanitation Services
TSE	Superior Electoral Court
UBN	Unmet Basic Needs
UCLG	United Cities and Local Governments
UDAPE	Unit for Analysis of Social and Economic Policies
UNASUR	Union of South American Nations
UNDP	United Nations Development Programme
UNGL	National Union of Local Governments
USD	United States dollar
VAT	Value-Added Tax
UNGL	Unión Nacional de Gobiernos Locales
USD	Dólar estadounidense

Introduction

Over the past four decades, many countries in Latin America and the Caribbean have undergone significant decentralization. Throughout this process, local and regional governments have increased in number, strengthened their political autonomy, and assumed new responsibilities. Today, more than 18,000 subnational governments carry out essential tasks in diverse areas such as education, health, security, and the provision of road infrastructure, water, and sanitation services.

Many of these subnational government entities, whether newly created or still in the early stages of their development as autonomous bodies, are engaged in a continuous process of learning and development. As they take on new responsibilities, they face emerging challenges. While subnational governments present fertile ground for innovation and institutional strengthening, they have received relatively little academic and policy attention to date. This edition of the *Report on Economy and Development* (RED) seeks to provide an in-depth understanding of subnational governments in the region by documenting their responsibilities, analyzing their territories, and examining the resources at their disposal. Each layer of analysis in this book goes beyond mere description, aiming to outline an agenda for strengthening governance capacities at the local level.

The RED highlights how subnational governments in Latin America and the Caribbean operate in a context marked by unique challenges and opportunities. One defining characteristic of this environment is the region's predominantly urban landscape. The vast majority of its inhabitants live in cities, underscoring the importance of the governments responsible for managing these territories. Urban planning, as a tool for organizing land use, is a critical state function in highly urbanized societies. Additionally, large metropolitan areas span multiple local jurisdictions, creating the challenge of coordinating actions across them.

A second key feature shaping decentralization efforts in the region is the presence of significant territorial inequalities within countries. Closing these gaps requires both transfer systems to redistribute resources across regions and institutional strengthening initiatives that prioritize governments in the most disadvantaged areas.

At the global level, two major phenomena are particularly relevant to subnational governments: the climate crisis and the rapid pace of technological change. Regarding the first, this edition of the RED underscores how key levers for mitigation, adaptation, and biodiversity conservation are often activated at the subnational level. As for technological change, the challenge lies in facilitating the adoption of new management tools so that digital transformation helps close gaps rather than widen them.

As a development institution, CAF is committed to strengthening the governance capacities of local and regional governments, as emphasized in this publication. Beyond providing access to credit, CAF supports subnational governments through non-reimbursable funding and advisory services for project preparation. The institution also plays a role in building government capacities by offering specialized courses and open online classes for officials at different levels of government. Additionally, CAF promotes collaboration and knowledge-sharing among local and regional governments, as exemplified by the BiodiverCities Network, which by the end of 2024 includes 192 local governments from 17 countries. One of the network's core objectives is to harmonize urban planning with natural environments, fostering resilience, environmental protection, and local nature-based solutions.

Dedicating CAF's flagship knowledge product to subnational governments further demonstrates the multilateral institution's commitment to supporting them. This edition of the *Report on Economy and Development* deepens our understanding of local and regional governments in Latin America and the Caribbean while offering valuable insights for enhancing their capabilities. I would like to thank the team at the Directorate of Socioeconomic Research, which prepared this report under the supervision of the Knowledge Management Department, as well as all CAF officials who contributed to the various stages of its production and dissemination. I also extend my gratitude to external collaborators from the public sector, academia, and other multilateral institutions whose contributions enriched this publication. I am confident that this new edition of the RED will help elevate the role of local and regional governments as key agents of development and transformation in Latin America and the Caribbean. These governments are the closest to the people and work every day to bridge the region's persistent inequalities.

Christian Asinelli
Corporate Vice President of Strategic Programming
at CAF — Development Bank of Latin America and the Caribbean —



Government headquarters
of the State of São Paulo, Brasil.

The territorial organization of countries and the challenges faced by local and regional governments

- The territorial organization of governments in LAC
- Origins and recent evolution of territorial organization
- Territorial challenges: Urbanization and development gaps
- Challenges of global trends: Climate change and digitalization

1

Key messages

1 Accumulated knowledge about the realities of subnational governments in Latin America and the Caribbean (LAC) is limited. To help address this gap, a public database has been developed alongside this report, containing information on all jurisdictions, their population, land area, and a range of indicators linked to the Sustainable Development Goals (SDGs).

2 The territorial organization of countries in the region is diverse and strongly correlated with territorial size: 13 countries, including all of South America, have two levels of subnational government; another 16 have only one level; and four Caribbean countries lack subnational governments.

3 Over the past four decades, many new local governments have been established, while the number of regional governments has remained relatively stable. The formation of local jurisdictions was especially pronounced during the 1980s and 1990s.

4 A small number of local governments serve a large portion of the population: one-fifth of these governments account for two-thirds of the population.

5 A high rate of urbanization and significant territorial development gaps are two defining features of the region. Consequently, urban management and policies to close these gaps represent central challenges for subnational governments.

6 Global phenomena also pose challenges to subnational governance. On one hand, there is a need to address climate change and biodiversity loss at the territorial level. On the other hand, it is essential to leverage digitalization and emerging technologies to build capacity in local and regional administrations.

The territorial organization of countries and the challenges faced by local and regional governments[1]

Introduction

Local and regional governments in Latin America and the Caribbean (LAC) play a leading role in improving the well-being and quality of life for the region's inhabitants. Their importance has grown with the decentralization process, which intensified during the 1980s and 1990s and has since advanced more gradually. This decentralization process not only increased the number of subnational governments through territorial reforms but also granted many of them political autonomy and functional responsibilities.

Currently, these governments shoulder multiple responsibilities. They oversee territorial planning and urban management, regulate and administer public services, collect taxes, and execute investment projects. This positions them as key players in achieving the Sustainable Development Goals (SDGs). Some SDGs, such as those related to water and sanitation, education, health, and security, are directly linked to the mandates of subnational governments. Others, such as those related to environmental objectives or gender equality, are more broadly influenced by the actions of these governments.

Decentralization brings several advantages that, if effectively leveraged, can improve public administration. First, proximity between decision-makers and citizens enhances the ability to identify local needs and tailor services accordingly. Second, closer citizen oversight encourages more efficient state management. Third, a greater number and diversity of subnational governments facilitate mutual learning and collaboration among these entities.

1 This chapter was written by Guillermo Alves and Gustavo Fajardo, with the assistance of Facundo Lurgo.

Whether these advantages materialize depends on how the inherent challenges of decentralization are addressed—and there are several. One significant challenge is that smaller-scale government services may lead to higher provision costs. Additionally, resource disparities between regions within a country mean that decentralization can exacerbate inequalities in well-being. Lastly, shifting decision-making to the local level risks magnifying interjurisdictional externalities.

Among these challenges, significant gaps between regions stand out in LAC. As this chapter and the broader report will illustrate, countries in the region are characterized by substantial territorial inequalities. These include demographic disparities, with large population concentrations in a few areas, and economic imbalances, as productive activities are also highly concentrated. These inequalities affect the ability of governments in poorer and more remote areas to access material and human resources.

Before delving into the report's content, it is essential to highlight the lack of information on subnational governments and their performance in the region. Compared to the abundance of studies on national governments, knowledge about the governance, responsibilities, finances, personnel, and infrastructure of subnational governments is limited. This knowledge gap is partly due to the relatively recent establishment of many of these governments and the region's centralist tradition, which has hindered their study and the extraction of valuable lessons. This year's Report on Economic Development (RED) seeks to close this gap by systematizing data, compiling existing evidence, and producing original knowledge.

Territorial organization of governments in LAC

Current territorial organization

The definition of subnational governments adopted in this report follows the framework outlined in the joint report by the Organisation for Economic Co-operation and Development and the global alliance United Cities and Local Governments (OECD and UCLG, 2016). This definition includes two criteria: the entities must have general competencies over their territory and autonomy in terms of their personnel, budget, and assets; and, their authorities must be elected by the residents of their jurisdiction.

Several types of entities are excluded under this definition, and listing them helps clarify the report's scope. First, deconcentrated agencies of the national government that lack locally elected authorities are not considered subnational governments. For example, this applies to departments in Guatemala, where authorities are appointed by the national government. Second, entities with a specific purpose, such as school districts, are excluded because they, by definition, do not have general competencies. Third, sub-municipal entities, even those with locally elected authorities in some countries, are excluded if they lack autonomy or do not exercise general competencies over their territory. For instance, this is the case of *corregimientos* in Panama.

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In LAC, 29 countries have local governments and 13 have regional ones

In response to the knowledge gap identified in the previous section, this report developed a database of subnational jurisdictions in the 33 member countries of the Community of Latin American and Caribbean States (CELAC). Figure 1.1 describes the variables included in this database, which integrates demographic information and indicators aligned with the Sustainable Development Goals (SDGs). Additionally, it incorporates geographic data that enables visual representation on maps.

Both the database and the maps are accessible through an interactive public visualization platform, enabling users to consult and analyze the information easily.

Figure 1.1
Available indicators in the Atlas of Local and Regional Governments of Latin America and the Caribbean

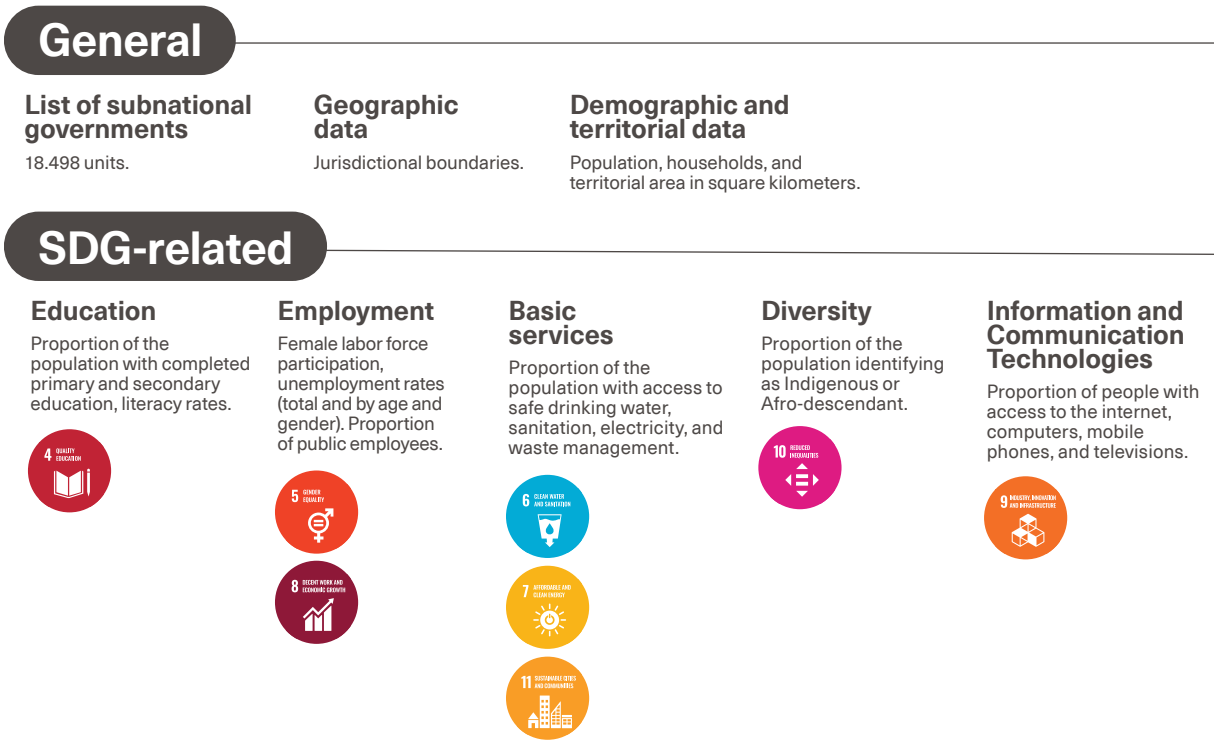


Table 1.1 presents the names and numbers of subnational governments in CELAC countries, as defined in this report. Details on how this definition was applied to each country are available in a methodological document accompanying the report (Alves et al., 2025).

Subnational governments are divided into two levels: local and regional. In total, 29 countries have local governments, comprising 18,236 units, most commonly referred to as municipalities.

The regional level, positioned between the local and national levels, is often referred to as the intermediate level. This level exists in 13 countries, including federal states such as Argentina, Brazil, Mexico, and Venezuela, as well as larger unitary states. The most common terms for territories under regional governments are “department” and “state.” Of the 33 CELAC countries, only four—Barbados, Grenada, Saint Lucia, and Saint Vincent and the Grenadines—are excluded from Table 1.1, as they do not have subnational governments.

CAF in Action.
Scan the QR code to access the interactive visualization platform.

Table 1.1
Number and names of subnational governments by country and level

Country	Regional		Local	
	Number	Name	Number	Name
Antigua and Barbuda	-	-	1	Council
Argentina	24	Province	2,320	Municipality, commune, or governing board
Bahamas	-	-	32	District
Belize	-	-	217	Council or municipality
Bolivia	10	Department or autonomous region	341	Municipality
Brazil	27	State	5,569	Municipality
Chile	16	Region	345	Municipality
Colombia	33	Department	1,104	Municipality
Costa Rica	-	-	84	Canton
Cuba	-	-	168	Municipality
Dominica	-	-	42	Council
Ecuador	24	Province	221	Canton
El Salvador	-	-	306	Municipality or district
Guatemala	-	-	340	Municipality
Guyana	10	Regional democratic council	185	Municipality or council
Haiti	-	-	710	Commune or section
Honduras	-	-	298	Municipality
Jamaica	-	-	14	Parish
Mexico	32	State	2,475	Municipality
Nicaragua	2	Autonomous region	153	Municipality
Panama	-	-	82	District
Paraguay	17	Department	263	Municipality
Peru	25	Department	2,087	Province or district
Dominican Republic	-	-	393	Municipality or district
Saint Kitts and Nevis	-	-	1	Assembly
Suriname	-	-	10	District
Trinidad and Tobago	-	-	15	Assembly or municipal corporation
Uruguay	19	Department	125	Municipality
Venezuela	23	State	335	Municipality
Total	**262**		**18,236**	

Note: This table shows the number and most common names of subnational governments in 29 CELAC countries, distinguishing between regional and local levels. Haiti, El Salvador, Peru, and the Dominican Republic have two sublevels within the local government level, and the figures presented are the sum of both.

Source: Authors based on CAF data (2024).

Unlike in LAC, several of the world's most populous countries have more than two tiers of subnational government.[2] According to a UCLG study (OECD and UCLG, 2016) covering over 100 countries, among the 15 most populous nations, the United States, the Philippines, India, and Vietnam have three tiers of

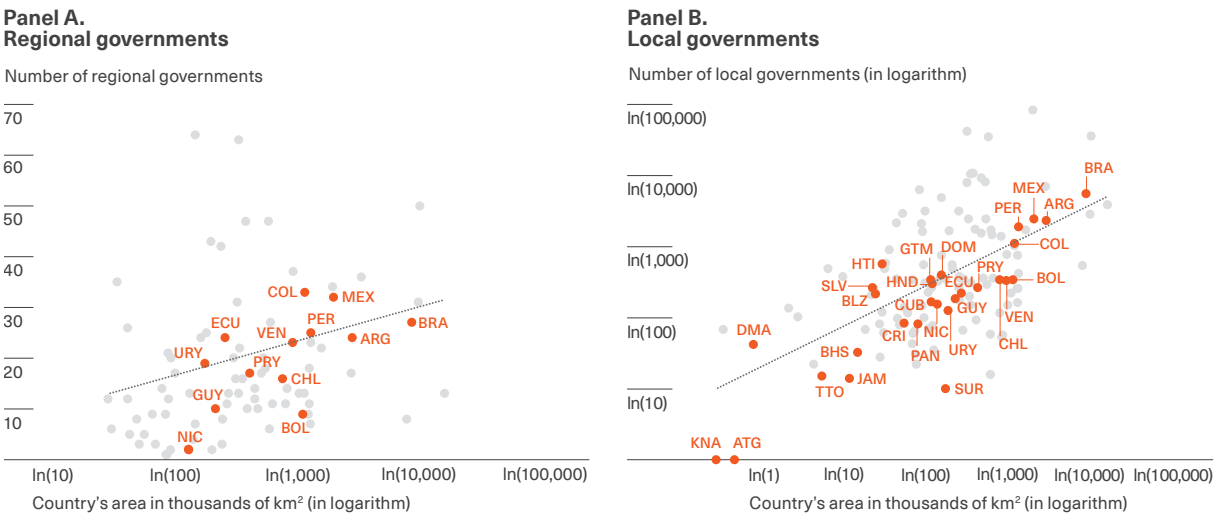
2 Bolivia could be considered a case of governance at three levels of government, with the establishment of the Regional Government of Gran Chaco, which is situated between the department and the municipalities. This is discussed in more detail in the following section.

government. The same is true for the most populous countries in Western Europe, including Germany, Spain, France, Italy, and the United Kingdom.

The UCLG study also indicates that when there is only one level of subnational government, it is always at the local level. All Central American and Caribbean countries with subnational governments have only the local level, except for Nicaragua, which also has a regional level. In contrast, Mexico and nearly all South American countries, except Suriname, have two levels of government. This classification suggests that territorial size and population are key factors in determining the presence of a regional tier of government. In larger countries, the central government is often distant from significant portions of the territory. Moreover, given a certain land area, a larger population provides the necessary scale to sustain a regional or intermediate level of government.

The influence of country size on subnational government structures is evident in the strong correlation between the number of regional and local governments in LAC and national territorial size (Graph 1.1). This correlation remains significant even when controlling for population size and GDP per capita, and it is notably stronger in LAC than in other parts of the world.[3] This pattern may be linked to the colonial legacy that shaped subnational governance structures in the region. In LAC, European colonizers—primarily from Spain—divided territories to facilitate administrative control, resulting in sections that were relatively homogeneous in terms of size. This contrasts with other regions, where historical local identities played a more prominent role in shaping territorial boundaries.

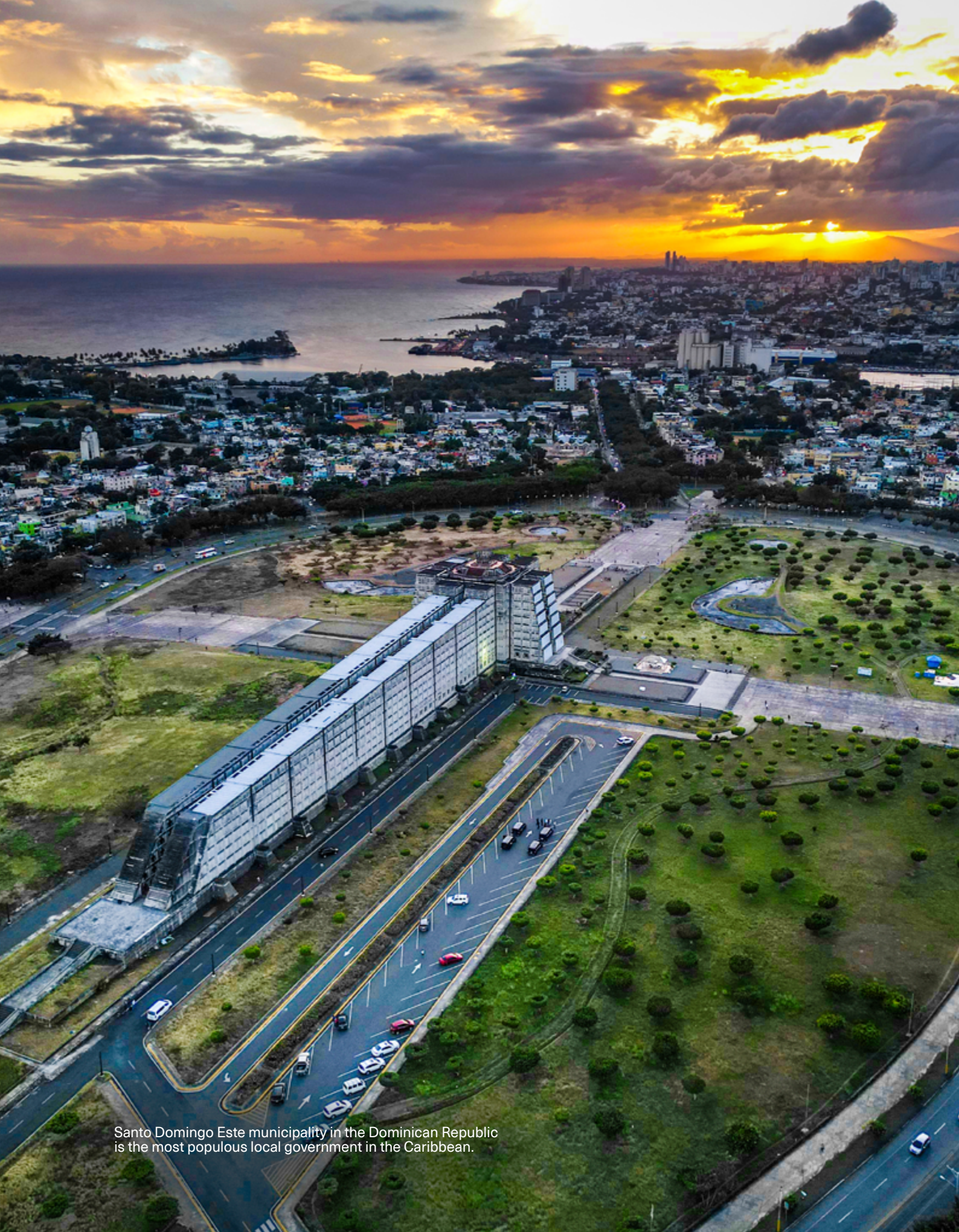
Graph 1.1
Relationship between the number of regional and local governments and the territorial size of countries



Note: The graph presents a scatterplot illustrating the relationship between the number of local and regional governments (with the latter expressed in natural logarithms) and the logarithm of total land area. The analysis is divided into two panels, A and B. Panel A includes 86 countries, 13 of which belong to LAC. Panel B analyzes 129 countries (29 of which are from LAC). Kosovo was excluded due to a lack of data on land area. For El Salvador, Haiti, Peru, and the Dominican Republic, which have two types of local governments, the lower tier was used in the analysis. In Panel A, the correlation coefficient between the two variables is 0.24, and the R^2 value from the regression line (represented by a dotted line, calculated only for LAC countries) is 0.06. In Panel B, these values increase to 0.57 and 0.32, respectively.

Source: Authors based on data from the World Bank (2024c), CAF (2025), and OECD-UCLG (2016)

3 Tables A.1.1 and A.1.2 in the chapter appendix, available in the online edition of the RED, illustrate these differences.



Santo Domingo Este municipality in the Dominican Republic is the most populous local government in the Caribbean.

Special arrangements in subnational territorial organization

Indigenous autonomies

Most LAC countries have indigenous and Afro-descendant populations (De la Mata et al., 2022). The Andean countries, Central America, and Mexico have the highest proportions of indigenous populations, while Afro-descendant populations are more concentrated in Brazil, Cuba, Colombia, Panama, Trinidad and Tobago, and Suriname. Box 1.1 highlights the significant spatial concentration or segregation of both groups (Albina et al., 2024).

At least seven countries in the region have institutional arrangements granting varying degrees of autonomy to indigenous populations over their territories. In some cases, these arrangements allow local authorities to be elected by residents without national government involvement, thereby qualifying them as autonomous governments under the framework used in this report; in other cases, such provisions are not included. Typically, indigenous autonomies include special rights regarding territorial management, such as land ownership rights.

At least seven countries in the region have institutional arrangements that provide specific degrees of autonomy for Indigenous populations over their territories

In Bolivia, Dominica, Guyana, and Nicaragua, autonomous indigenous governments are part of the foundational levels of territorial organization described earlier. Bolivia has established the region's most advanced framework for indigenous autonomy through its 2009 constitutional reform, which introduced the Indigenous Originary Peasant Autonomy (AIOC). This reform allows municipalities to transition into these autonomous entities, enabling them to restructure their authorities and governance based on a self-drafted statute, which must be approved by residents through a referendum (Political Constitution of the State, 2009). Since the implementation of the AIOC framework, three such autonomies have been established: Charagua Iyambae in Santa Cruz, Uru Chipaya in Oruro, and Raqaypampa in Cochabamba (Niedzwiecki and Pietro, 2020). In Dominica and Guyana, indigenous autonomies function as local governments. Dominica has a single indigenous government, the Carib Council (CLGF, 2018). In Guyana, the 75 Amerindian village councils constitute more than half of the country's local governments. Lastly, in Nicaragua, the only two regional-level governments are autonomous indigenous territories, officially recognized in 1988: the North Caribbean Coast Autonomous Region and the South Caribbean Coast Autonomous Region (UCLG, n.d., b).

In Chile, Colombia, and Panama, indigenous autonomy arrangements exist but are not classified as autonomous governments under the definition used in this report. In Chile and Colombia, indigenous communities are governed under special regimes, such as the Rapa Nui people in the Chilean municipality of Easter Island and the more than 180 Emberá indigenous reserves in Colombia (IWGIA, 2019). In Panama, there are six indigenous comarcas, four corresponding to provincial administrative divisions and two to corregimientos. In the provincial comarcas, governance is shared between a locally elected indigenous authority and an authority appointed by the national government.

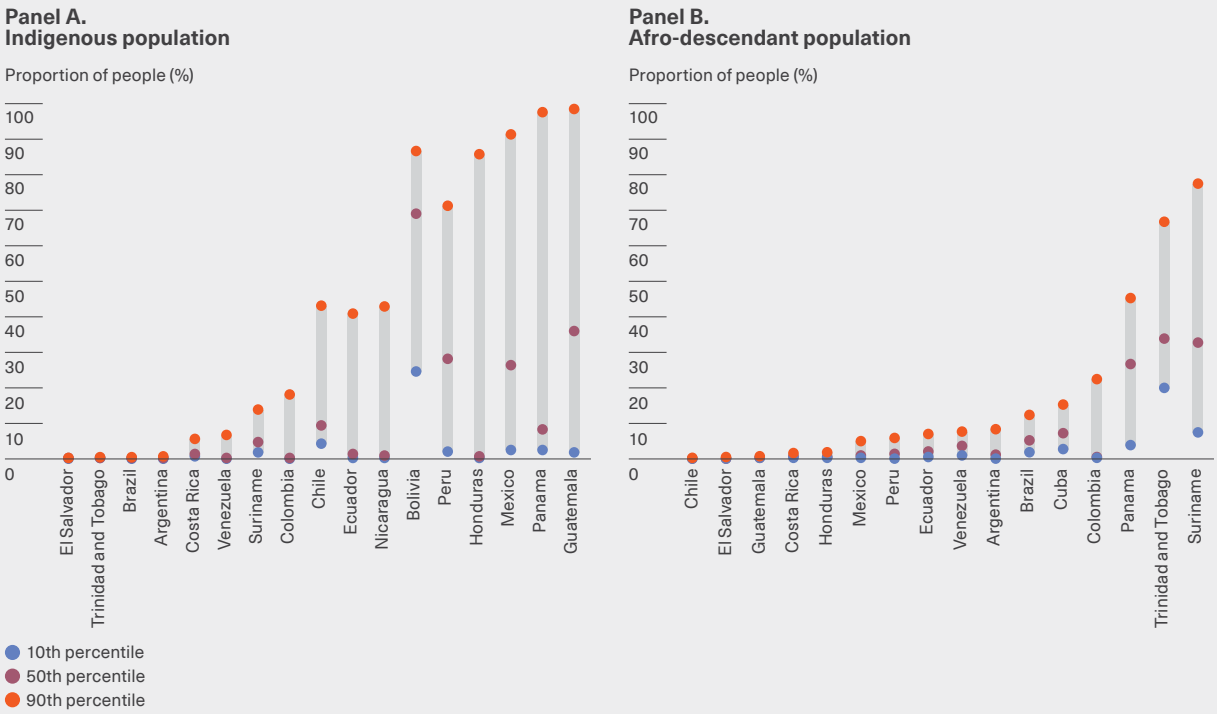
Territories of national capital cities

The region features a diverse range of institutional arrangements for territories that host national authorities. Beyond serving as the seat of national governments, capitals often hold a significant share of the population and an even greater proportion of economic activity, as will be discussed later.

Box 1.1
Distribution of Afro-descendant and Indigenous populations in the territory

In Latin America and the Caribbean, Afro-descendant and indigenous peoples exhibit significant spatial concentration or segregation (Albina et al., 2024). Graph 1 shows that in Guatemala and Panama, 10% of municipalities have indigenous populations exceeding 95%, while in another 10%, this proportion is below 5%. Similar patterns of pronounced spatial segregation, albeit to a lesser degree, are found in Bolivia, Chile, Ecuador, Nicaragua, and Peru. In Suriname, segregation of Afro-descendant people is particularly evident: 10% of districts are home to nearly 80% or more of the Afro-descendant population, while another 10% of districts have less than 7% of this group.

Graph 1
Proportion of Indigenous and Afro-descendant populations in local government territories



Note: The figure shows selected percentiles for the distribution of indigenous population (Panel A) and Afro-descendant population (Panel B) in the local governments of 17 LAC countries. The 10th, 50th (median), and 90th percentiles were calculated. The figure also highlights the distance between the 10th and 90th percentiles for each country, which are ordered by this value. In Peru, both sublevels of local government (provinces and municipalities) were considered, while in El Salvador, only the lower level was included. In Antigua and Barbuda, the point corresponding to the 50th percentile represents its single local government.

Source: Authors based on CAF (2025).

A common arrangement in federal countries is the creation of a special jurisdiction for the capital, granted constitutional status and powers comparable to those of regional governments, but with a territorial scope akin to that of a local government. Examples include the Autonomous City of Buenos Aires, Mexico City, the Capital District in Venezuela, and the Federal District in Brazil. Similar to those federal countries, Colombia also follows this model, with its Capital District granted special status and powers equivalent to those of departments. In Venezuela, the authority of the Capital District is appointed by the president and is therefore not considered in this report. However, the Libertador municipality, which overlaps territorially with the Capital District and is governed by an elected mayor, is included.

The capital cities of Paraguay, Peru, and the Dominican Republic also have special arrangements, but their powers are more comparable to those of local governments than regional ones. In these three cases, the special districts hosting the national authority are not subordinate to any regional government.

The governance of capital city territories often involves special institutional arrangements, as is the case with capital districts in federal countries

In Antigua and Barbuda, as well as the Bahamas, the capitals are directly administered by the national government and therefore lack local or regional entities to govern them. In the rest of the countries, the territories hosting capitals do not hold special status.

Different types of jurisdictions at the same level of government

In four countries in the region, local governments are subdivided into two types of jurisdictions at the same level. In the Dominican Republic, municipal districts serve as subdivisions of certain municipalities. In Peru, the entire territory of provincial municipalities is divided into district municipalities. Similarly, in Haiti, communes are composed of their respective communal sections, while in El Salvador, recently created municipalities include municipal districts.

In another four countries—Argentina, Belize, Guyana, and Trinidad and Tobago—there are different types of local governments that are not nested within one another.

Bolivia has introduced innovations in its territorial organization laws in recent decades. In addition to creating the AIOC, one notable innovation is the establishment of regional autonomous governments. To date, only one has been created: the Regional Autonomous Government of Gran Chaco. This entity, with authorities elected by its residents and substantive powers, could be considered an additional level of government, positioned between the local and regional levels. However, in this report, it is classified as part of the regional level, as its primary responsibilities align with those assigned to departments under the Constitution. When an autonomous region is established, departments transfer some of their powers to the new entity.

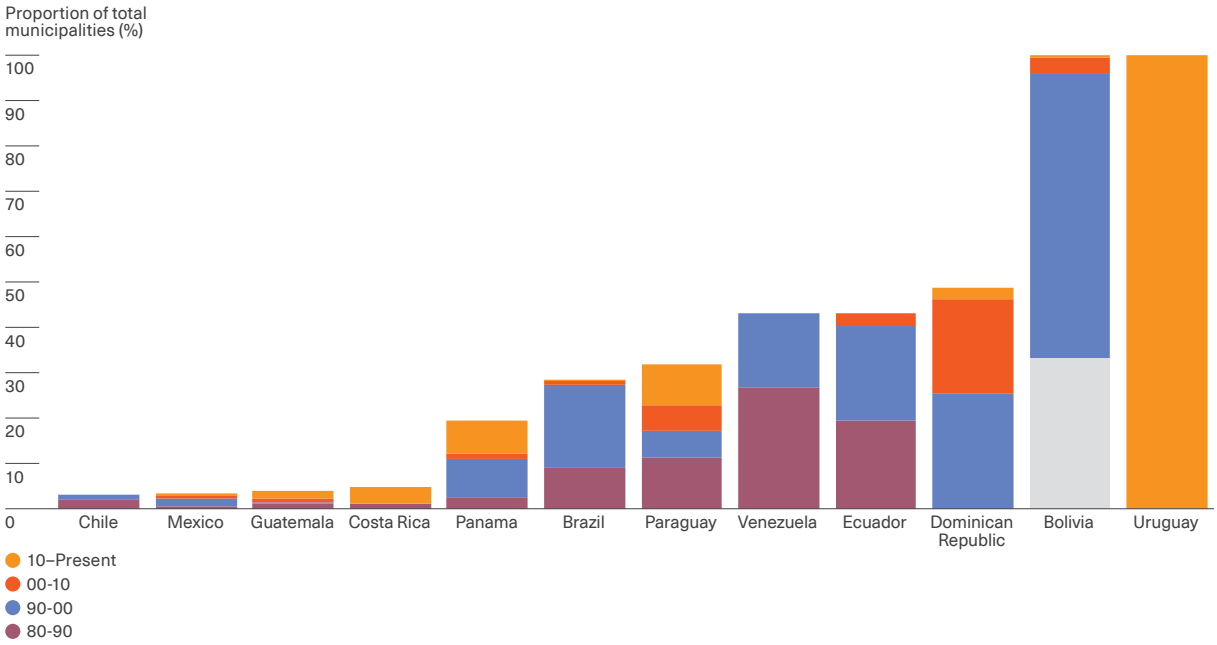
Origins and recent evolution of territorial organization[4]

In most Central and South American countries that gained independence from Spain or Portugal in the 19th century, the number of government levels originated during that time and was established in their first national constitutions. This contrasts with several Caribbean countries and Belize, which gained independence in the second half of the 20th century and defined their subnational government structures during that period.

The primary change in territorial organization over the 20th and early 21st centuries has been the creation of new jurisdictions. This evolution has varied significantly over time, levels of government, and countries. The creation of new units has often been tied to key milestones, particularly constitutional reforms. At the government level, this reorganization has been much more dynamic at the local level than at the regional level.

At the regional level, the number of units and their boundaries have remained largely unchanged since the 19th century. For instance, most regional governments in the four federal countries were established during that time. Colombia, however, stands out as an exception. Currently the country with the most regional governments in the region, it created five of its 33 departments in the 1960s and added nine more in the 1990s (Political Constitution of Colombia, 1991).

Graph 1.2
Proportion of current municipalities created in the last four decades



Note: The graph illustrates the proportion of current local governments created in the periods 1980–1990, 1990–2000, 2000–2010, and from 2010 onward. In Bolivia, the creation dates of its 113 oldest municipalities could not be identified (represented in gray in the corresponding bar). The sources used for this figure are listed in the appendix of the online edition of RED.

Source: Authors based on data from technical and methodological documents of national population censuses.

4 The drafting of this section drew on a wide range of bibliographic sources, listed in the appendix available in the online edition of the RED.

The growth in the number of local governments was particularly dynamic during the 1980s and 1990s, coinciding with the broader decentralization process, which, as discussed in the next chapter, also brought greater autonomy. Graph 1.2 illustrates the proportion of existing local governments created in 12 countries during the 1980s, 1990s, 2000s, and the period from 2010 to 2024. In some countries, such as Chile, Costa Rica, Guatemala, and Mexico, the number of local governments remained relatively stable, while others experienced significant increases. The scale of municipal creation in this latter group merits closer examination; it is explored in the following section.

In the Dominican Republic, around 80 local governments—both municipalities and municipal districts—were created during the 1990s. This process accelerated further in the following decade but stabilized after 2010. Venezuela is another example of a significant expansion of local units during the last two decades of the 20th century, particularly in the 1980s, when around 40% of its current 335 municipalities were established.

Two other countries, Bolivia and Panama, stand out for their creation of new local units after 1990. In Bolivia, the 1994 Popular Decentralization Law required the entire national territory to be divided into municipalities, whereas previously, there 168, all limited to urban areas. This reform resulted in the creation of 198 new jurisdictions that year (Faguet, 2003). Similarly, Panama and Paraguay have consistently established new municipalities every decade since the 1980s and have the highest proportion of local entities created after 2010, excluding Uruguay. Uruguay is a unique case: the municipal level was only introduced with the 2010 Political Decentralization and Citizen Participation Law, which initially created 89 municipalities. By 2023, an additional 38 had been added (Law No. 18653, 2010).

Some countries not shown in Graph 1.2 have also experienced significant increases in the number of local governments over the past century. In Colombia, approximately one-fifth of the country's current municipalities were established during this period (DANE, 2012). A similar proportion applies to the total number of district and provincial municipalities created in Peru between 1961 and 2024 (INEI, 2018; UNDP, 2006). Both countries align with the previously mentioned trend of relative stability in the number of local government units during the 21st century.

Demographic change and territorial organization

Population growth has been one of the factors driving the trend of creating new local entities. In LAC, population growth rates exceeded the global average until the late 20th century, leading to an 80% expansion between 1980 and 2023 (United Nations, 2024). This demographic dynamic increased the need for greater capillarity in government structures. However, this factor will weaken in the near future, as the region has undergone a rapid demographic transition in recent decades, and the population growth rate is now moderate and declining.

In this regard, the experience of developed countries that underwent demographic transitions before LAC offers some lessons. In those cases, population decline in certain areas and stagnant population growth have driven processes of local government consolidation over the past half-century. In Japan, the so-called "Great Heisei Consolidation" reduced the number of local jurisdictions from 3,232 to 1,727 between 1999 and 2010. Similar processes occurred in countries such as Denmark, France, Greece, Sweden, and the United Kingdom, where more than half of the municipalities in each country were merged into others (Bideau, 2020; Fox & Gurley, 2006).

The only notable case of consolidation in LAC is very recent: El Salvador with the 2023 approval of the Special Law for Municipal Restructuring. This reform converted the country's 262 local entities into districts, which were then grouped into 44 new units called municipalities (Legislative Decree No. 762, 2023).



Established in 2021, the municipal commission of Uquía in Jujuy, Argentina, is one of the region's newest local governments.

This consolidation process in OECD countries has led to an increase in the size of their municipalities. However, it is important to highlight that, on average, they remain significantly smaller than those in LAC when comparing federal countries from both regions, whereas they are similar in size when comparing unitary countries (OECD and UCLG, 2016). The median municipality size in OECD federal countries is only 4,119 inhabitants, whereas in the four federal countries of LAC, it rises to 15,244. Within these four, Argentina's median municipal size is comparable to the OECD average, while Venezuela is an outlier, with more than 34,000 inhabitants in the median municipality. This means that, regardless of the effects demographic transition may have on territorial organization in the coming decades, municipalities in some LAC countries are already large compared to those in the OECD.

Given the accelerated pace at which municipalities were created throughout the region, its impacts merit examination. Dahis and Szerman (2024) studied Brazil's extensive municipal creation process, which occurred mainly between 1988 and 1996 through the subdivision of existing jurisdictions. They found that this process improved local service provision in the newly created municipalities. This evidence from Brazil is consistent with a recent study from India, which found that smaller local governments improve access to public services (Narasimhan and Weaver, 2024). In contrast, evaluations of subdivision experiences in Indonesia and Uganda present a less optimistic perspective on their effects (Cassidy and Velayudhan, 2024; Cohen, 2024). These studies underscore the critical importance of the capacities of new governments and highlight that the impacts vary across different dimensions of development.

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The scale of new municipality creation in Latin America and the Caribbean over recent decades contrasts with the consolidation process observed in several OECD countries

Territorial challenges and global trends

This edition of the RED explores the challenges faced by local and regional governments in Latin America and the Caribbean, shaped by the region's distinct territorial characteristics and contemporary global trends. This section highlights challenges tied to two key territorial features—large development gaps and urban population concentration—as well as two global trends: climate change and biodiversity loss on one hand, and digital transformation on the other. Examining these challenges provides a framework for addressing the report's cross-cutting themes and introducing its chapters.

Both the significant development gaps within countries and the demographic concentration in cities are closely linked to the spatial distribution of the population. This distribution is shaped by the physical features of each country, such as climate and altitude, as well as historical factors, including the locations of settlements and roads during pre-Columbian and colonial times. It is characterized by vast areas with very sparse populations and relatively small regions with high demographic density (see Figure 1.2).[5]

5 Population concentration in small areas reaches its extreme in megacities, but it is also a broader phenomenon. Figure 1.2 highlights the main zones where such concentration occurs: Brazil's Atlantic coast, the Andean region in Colombia and Ecuador, Argentina's humid Pampas, and Mexico's central valley.

Figure 1.2
Population density in LAC



Note*:* The figure illustrates population density (inhab/km²) across territories with local governments in LAC. For Argentina, Bolivia, Paraguay, and Uruguay, regional-level data were used, while Belize, Guatemala, and Suriname are represented by administrative divisions that do not constitute governments. Data on population or area at the subnational level are not available for the Bahamas and Haiti.

Source: Authors based on CAF (2025) data.

Large, sparsely populated areas are often inhospitable, remote, or heavily forested that are difficult to access or environmentally protected, limiting human settlement. In South America, some of the most extensive areas include Tierra del Fuego (Argentina and Chile), the Amazon (Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname and Venezuela), and the Gran Chaco (Argentina, Bolivia, Brazil and Paraguay). In Central America, the Mosquitia rainforest (Honduras and Nicaragua) stands out, although most countries in the region feature tropical rainforests with low population density and limited accessibility, such as the Darién in Panama and the Maya Biosphere Reserve in Guatemala. In Mexico, vast deserts in the northern states of Sonora and Chihuahua dominate the landscape.

These large, sparsely populated areas contribute to the broader phenomenon of low population density across the region. With an average of only 32 inhabitants per square kilometer (inhab./km^2), LAC's population density is two-thirds that of Africa, one-third that of Europe (excluding Russia), and slightly over one-fifth that of Asia. Within LAC, South America has the lowest density at 25 inhab./km^2, while Central America's density is comparable to Europe's, and the Caribbean's matches Asia's. Mexico occupies an intermediate position, with 65 inhab./km^2. This low density amplifies the challenges faced by subnational governments, particularly the higher costs of providing services to a dispersed population.

The subnational organization of government in Latin America and the Caribbean operates across a territory characterized by vast areas with very sparse populations and a concentration of people in large cities

Challenges of high urbanization and megacities

LAC ranks second among the world's regions in terms of urbanization, slightly behind North America and ahead of Europe, Asia, Africa, and Oceania (Ch et al., 2021; Moreno-Monroy et al., 2021; United Nations, 2018). The region's urbanization rate grew rapidly during the second half of the 20th century and has continued to increase in the 21st century, albeit at a slower pace (see Figure 1.3). By 2025, approximately 82% of the region's population—about 560 million people—will live in urban areas. By 2050, this rate could reach 88%, representing around 680 million city residents.

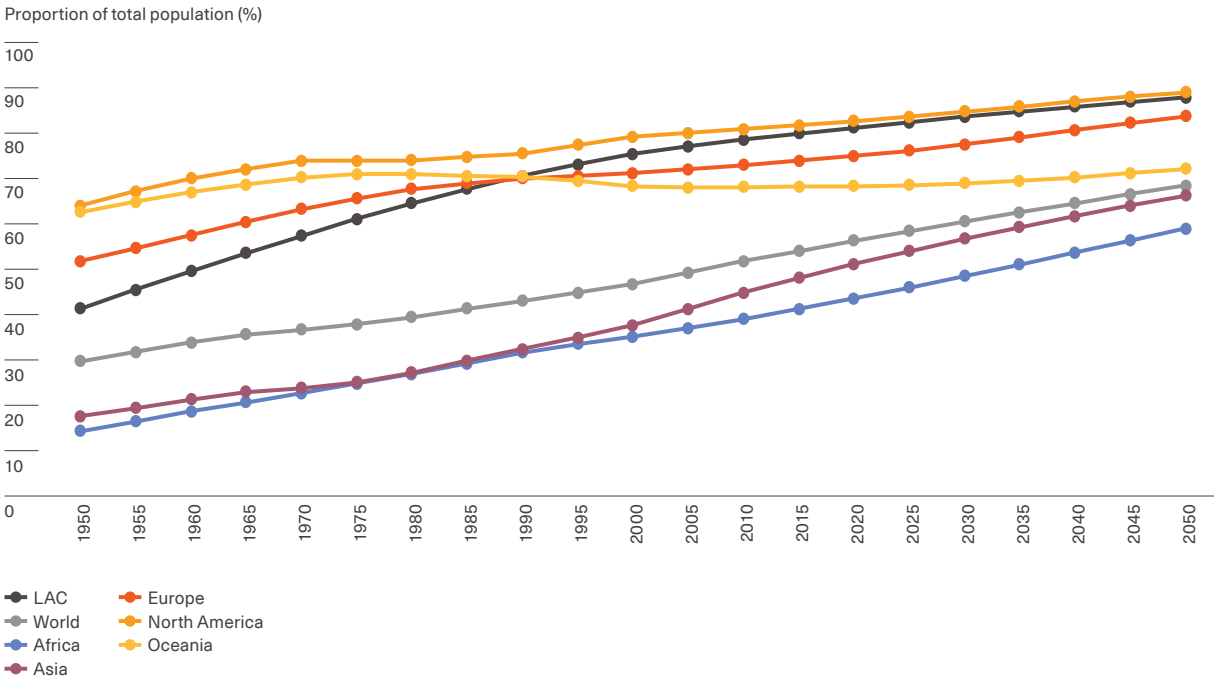
As a consequence of the high urbanization rate, urban local governments are responsible for a substantial portion of their countries' populations. In the region, 3,476 local governments have a city with at least 50,000 residents within their jurisdiction (Schiavina et al., 2019). These governments represent only one-fifth of all local governments but are tasked with responsibilities impacting nearly two-thirds of their countries' populations. With national urbanization rates and population numbers projected to increase, the number of residents under these governments' jurisdiction will continue to grow.

The flip side of this demographic concentration in a small number of urban jurisdictions is the overwhelming majority of local governments that serve very few residents. When municipalities are ranked by population size, the median municipality in LAC has only 10,000 inhabitants. In other words, half of the region's local governments manage populations below that threshold.

As seen in the 2017 Report on Economic Development, the challenge of urban management lies in maximizing the benefits of density while minimizing its costs (Daude et al., 2017). The benefits of density are tied to greater labor productivity and access to goods and services that facilitate economies of scale and shorter distances (Alves and López, 2021a, 2021b). The primary costs relate to urban transportation congestion, including

longer commute times, noise and air pollution, traffic accidents, and rising land prices, which make housing unaffordable and contribute to the growth of informal settlements (Alves, 2021b). Urban planning is a key tool in the effort to maximize the benefits of density while minimizing its costs, a topic that will be explored in the next chapter.

Graph 1.3
Evolution of the urbanization rate by region



Note: The graph shows the evolution of the urbanization rate in LAC, Africa, Asia, Europe, North America, Oceania, and the global average between 1950 and 2050. The urbanization rate for LAC includes only the 33 member countries of CELAC.

Source: Authors based on United Nations data (2018).

The population is concentrated in urban municipalities, with a predominance of a few very large cities

Another aspect of population concentration presents unique challenges for certain local governments. This aspect relates to the fact that population concentration occurs not only in a small number of urban municipalities but is also dominated by a few very large cities. On average, the largest city in each LAC country accounts for nearly one-third of the national population. This concentration peaks at around 40% in Asunción (Paraguay), Santiago (Chile), San Salvador (El Salvador), and Santo Domingo (Dominican Republic), and exceeds 50% in Montevideo (Uruguay), Paramaribo (Suriname), and San José (Costa Rica).



The canton of Samborondón, in Ecuador, belongs to the metropolitan area of Guayaquil, one of the largest urban agglomerations in the region.

In larger countries, this concentration is distributed among a few major urban centers rather than a single city.[6,7]

The implications of this concentration of urban populations in a handful of very large cities are twofold. First, the territories of these cities often suffer from significant administrative fragmentation, with multiple local governments operating within a single metropolitan area. This poses coordination challenges, which will be examined in Chapter 6 of this report. Second, the scale of these cities means that some local governments must manage services for millions of residents, further complicating efforts to address the previously mentioned agglomeration costs. For instance, achieving efficient mobility in megacities requires managing large-scale public transportation systems, which involve substantial capital investments and present challenges in terms of management and financing. Chapter 6 will delve into how local governments handle urban transportation, while Chapter 5 will cover the investment and financing issues critical to enabling mass transit infrastructure.

Challenges of development gaps within countries

LAC faces substantial development gaps between jurisdictions within the same country (Alves, 2021a; De la Mata et al., 2022; Moscovich, 2015). The subnational government database accompanying this report, detailed in Figure 1.1, serves as a valuable resource for documenting these disparities, which are analyzed throughout the report. This section highlights several of these gaps and focuses on the main challenges they present for local and regional government management.

Panel A of Graph 1.4 illustrates that in several countries, the average per capita income in the wealthiest regional governments is at least twice as high as that in the poorest ones. For instance, in Peru, per capita income surpasses USD 480 in the Callao department but falls below USD 220 in Ucayali. Panel B focuses on poverty incidence, revealing disparities exceeding 30 percentage points between regional governments within the same country.[8]. Among the regions with the highest poverty rates (over 45%) are Chiapas in Mexico, Maranhão in Brazil, San Martín and Ucayali in Peru, and Chocó and La Guajira in Colombia.

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The existence of vast territorial inequalities means that the availability of resources and capacities is highly uneven among subnational governments

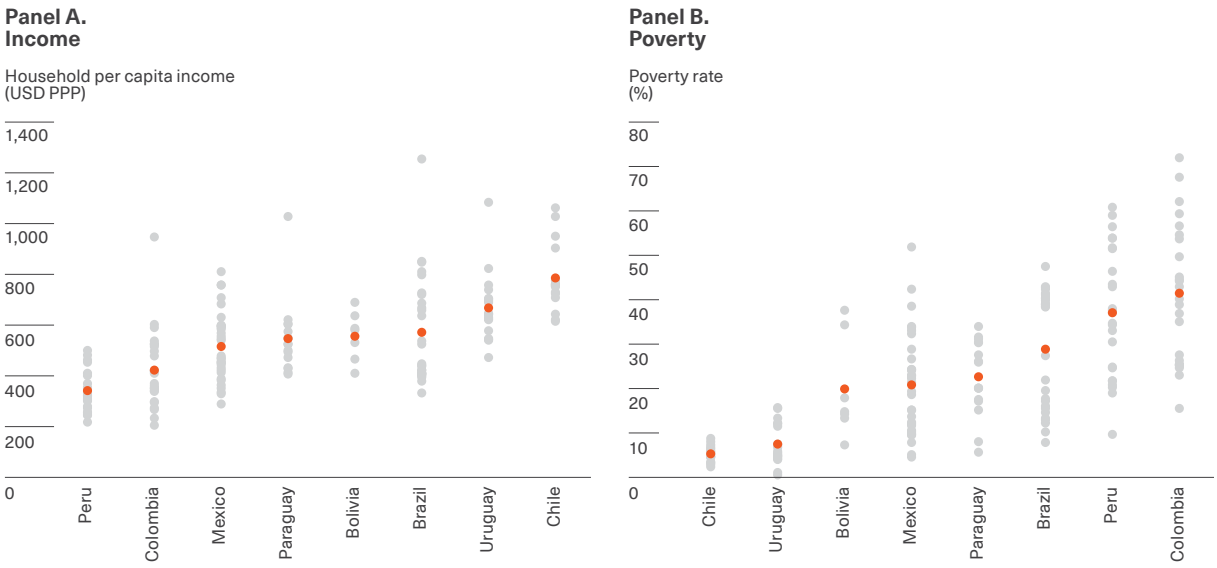
In Brazil, Chile, Colombia, Paraguay, and Uruguay, the jurisdiction with the highest income level is the one containing the national capital. In all of these countries except Brazil, this jurisdiction is also the most populous, leading to a degree of concentration of national income that exceeds the already high levels of population concentration described earlier.

6 Population concentration in a few large cities in LAC is higher than in other regions of the world, whether considering one, two, or even up to five of the largest cities in each country. The proportion of the population concentrated in LAC's principal cities exceeds the global average by 6 to 8 percentage points, depending on the number of cities considered. This difference remains robust even when controlling for population size and land area of the countries.

7 To calculate these indicators, the population residing in cities with more than 50,000 inhabitants, as identified by Schiavina et al. (2019), was divided by the total population of the country in 2015, using World Bank data (2024d).

8 The figure of USD 6.85 per day represents the median value of national poverty lines in upper-middle-income countries, according to the World Bank classification (2024b). All the countries listed in Table 1.2 are classified as at least upper-middle-income, except for Bolivia, which is categorized as lower-middle-income (World Bank, 2024b).

Graph 1.4
Poverty incidence and average household per capita income in regional governments



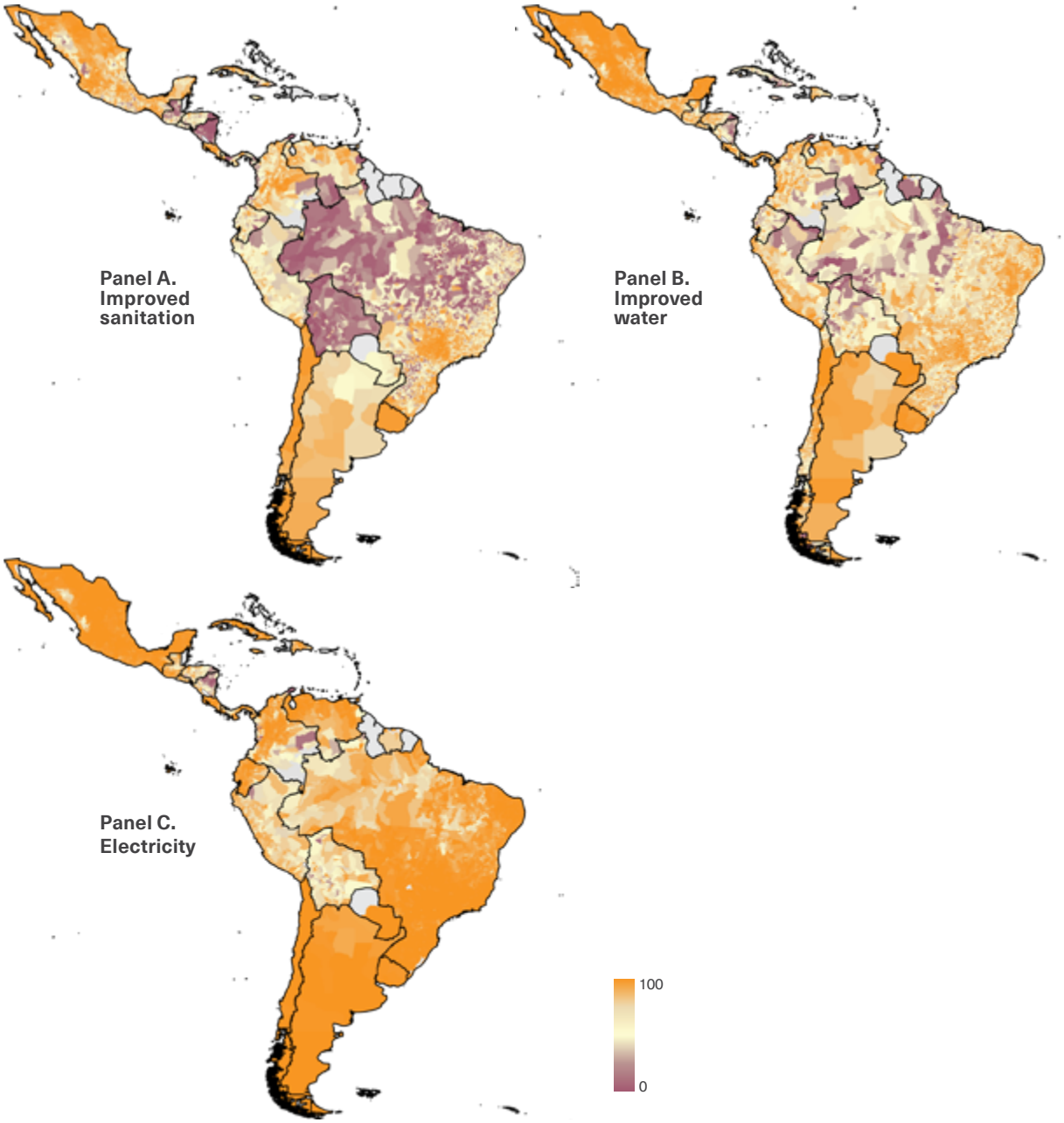
Note: The graph shows, at the regional government level, the average household per capita income (Panel A) and the poverty incidence (Panel B), adjusted for price differences between countries using a purchasing power parity (PPP) index and a threshold of USD 6.85 per day. The data are based on household surveys from 2022, except for Bolivia (2021) and Paraguay (2023). In orange, the national average is highlighted. Data for all regional entities are unavailable for Bolivia (seven of nine entities), Colombia (24 of 33), and Paraguay (16 of 18).

Source: Authors based on household survey data.

The maps in Figure 1.3 also reveal significant disparities in adequate access to essential services such as water, electricity, and sanitation, which are critical to achieving Sustainable Development Goals. These gaps are smallest for electricity, the most widely accessible service, followed by water and then sanitation. The maps highlight regions where deprivation in these areas is most pronounced, sometimes crossing national boundaries. For instance, the maps for water and sanitation access clearly show such patterns in the Amazon region, which includes municipalities in the Brazilian state of Amazonas, southern Venezuela, northern Bolivia, and the Peruvian Amazon. A similar pattern of service deficits is observed in the Mosquitia region, shared by eastern Honduras and northern Nicaragua.

The vast territorial inequalities within countries result in highly uneven resource availability and capacities among subnational governments (Moscovich, 2015). These disparities arise from differences in territorial productivity, natural wealth, and revenue-raising capacity. Coupled with the national government's economies of scale in tax collection, these factors explain the existence of fiscal transfer mechanisms worldwide, particularly to support subnational governments in poorer regions. Such transfers create a discrepancy between subnational governments' expenditures and revenues, referred to as the "vertical fiscal imbalance." These fiscal challenges will be explored in Chapters 3 to 5.

Figure 1.3
Proportion of households with access to improved sanitation, water, and electricity



Note: The figure provides a geographic representation of the proportion of households with access to improved sanitation (defined as connections to public sewer systems, septic tanks, or ventilated and improved latrines), improved water sources (public networks, protected wells or springs, bottled water, or tanker delivery), and electricity (via the national grid or alternative sources such as private generators or solar panels). Data are shown at the local government level, except for Argentina, Paraguay, and Uruguay, where regional government data are used. Territories of countries for which no data is available, were not analyzed, or do not have a subnational government are shaded in grey. The information is drawn from the most recent population and housing censuses in each country, except for sanitation data in Paraguay, which comes from household surveys.

Source: Authors based on CAF (2025) and household survey data.

Another way to mitigate the impact of territorial inequalities on public service provision is to grant greater powers and autonomy to subnational governments with stronger capacities, while the national government provides services in territories with lower institutional development. This form of asymmetric decentralization can be implemented progressively over time, starting with governments that have greater resources and then extending to the rest, allowing the latter to benefit from the lessons learned by the former. The progress of asymmetric decentralization in the region will be explored in Chapter 2, which examines the roles and levels of autonomy of subnational governments in Latin America and the Caribbean.

Challenges of global trends

Some global phenomena present significant challenges for subnational governments, particularly climate change, biodiversity loss, and the need to leverage digitalization to strengthen their capacities.

In the case of environmental challenges, while many policies related to climate change and ecosystem conservation are defined at the national level in international coordination forums, their effects are felt in specific territories, directly impacting the responsibilities of regional and local governments (Brassiolo et al., 2023).

●●

The consequences of global warming manifest in subnational territories and directly impact the work of regional and local governments

There are three key areas where the interaction between environmental issues and subnational governance is particularly pronounced. The first is territorial planning. Increasing the resilience of cities to events such as floods, storms, and heat waves—whose frequency and intensity are likely to increase—requires the incorporation of adaptation measures and nature-based solutions into urban planning. Additionally, territorial planning is crucial for biodiversity protection, as zoning and land-use policies directly affect issues such as deforestation and ecosystem degradation.

The management of natural resources, particularly water, is the second area where climate change intersects with subnational governance. Projections suggest that many parts of the region will experience reduced precipitation, increased aridity, and greater risks of desertification in the coming decades, particularly in northern South America, Central America, Mexico, and the Caribbean. This poses a threat to freshwater availability, involving subnational governments responsible for water provision in several countries (see Chapter 6). Water stress also demands improved watershed management, a complex task that requires interjurisdictional cooperation, as watercourses are shared and utilized by multiple municipalities. Figure 1.4 illustrates this with a map of Mexico's Lerma River. The river runs through 45 municipalities spread across five states, while its watershed spans more than 150 municipalities in six states.

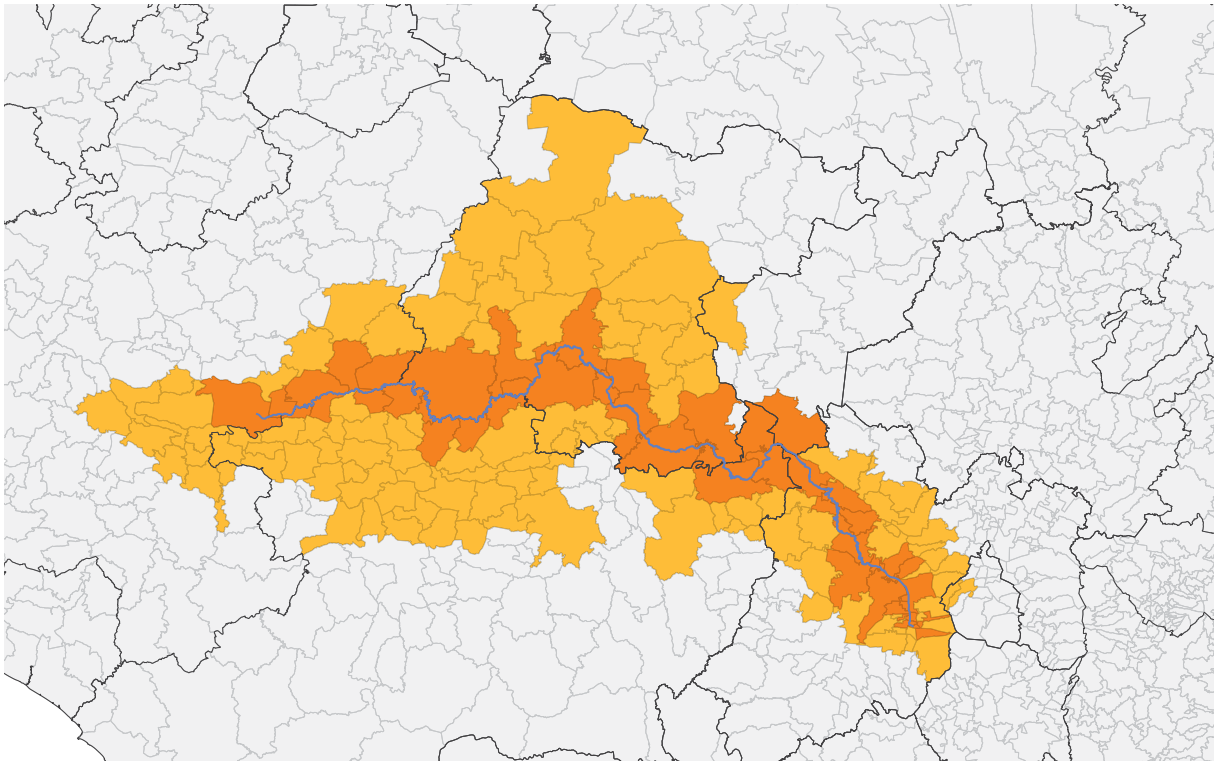
To tackle the challenges of climate change and biodiversity loss, subnational governments require, among other things, financial resources. A positive development, as documented in this report, is that municipalities and states in the region have already begun utilizing innovative instruments such as green and social bonds to finance environmental impact projects.

A third area of action for subnational governments in addressing the climate crisis is their role in the energy transition. As detailed in RED 2024, electrifying urban public transport fleets is one of the most efficient strategies to lower carbon dioxide (CO_2) emissions while also reducing noise pollution and emissions of other gases and particulates.

Chapter 6 will show the pivotal role local governments play in managing urban transport. Promoting sustainable urban mobility—including public transit and active transportation options over private car use—further reduces emissions and delivers additional social benefits. Lastly, building regulations, often influenced by local governments, can support emission reductions by establishing energy efficiency standards for new and existing structures (Álvarez et al., 2024).

Another global challenge is equipping subnational governments with the skills needed to embrace digitalization and, in doing so, strengthen their capacities. Chapter 8 of this report will delve into how the adoption of digital tools can accelerate and enhance administrative processes in public functions, such as budget management, administrative recordkeeping, and public procurement. The main difficulty lies in the highly uneven baseline conditions for adopting these tools. Wealthier municipalities and states tend to adopt digital solutions more quickly, and this uneven pace can result in incompatible systems. National governments have a critical role to play in this area by establishing standards and platforms that ensure interoperability while also lowering entry costs for municipalities with fewer resources.

Figure 1.4
Course of the Lerma River through Mexican municipalities



Note: The blue line represents the course of the Lerma River. The 45 municipalities crossed by the river are highlighted in orange, while the 112 municipalities within the adjacent watersheds are shown in yellow. The thicker black lines indicate state boundaries.

Source: Authors based on CAF (2025) and INEGI (2006, 2010).

Subnational governments face the challenge of having the necessary competencies to adopt digitalization and thereby strengthen their management capacities

Digital transformation is not only about improving traditional public-sector processes, it also involves developing innovative applications to enhance citizen engagement and territorial management. Subnational governments, particularly local ones, are well-positioned to lead these efforts due to their proximity to the public. Innovation in this area can take many forms, including the development of electronic channels for administrative procedures, the creation of informational and transactional applications for citizens, and the establishment of monitoring centers for public safety, traffic, or natural disaster management.

The concept of digital transformation attracts interest from governments at all levels, but some aspects are more complex than others. While the initial investment in physical and digital infrastructure—such as computers, data storage centers, GPS equipment, and sensors—is costly, it is relatively straightforward. The greater challenge lies in achieving governance and cultural changes to enable proactive use of these tools, such as integrating data analysis into urban planning, resource management, or policy evaluation. This highlights the critical, cross-cutting issue of organizational capacities in subnational governments, a recurring theme throughout this report.



Metropolitan Municipality
of Lima, Peru.

Roles of local and regional governments

- Degree and evolution of local and regional governments' autonomy
- Patterns in the allocation of functions across government levels
- Urban planning and local government functions
- Responsibilities in education, health, and security
- The roles of subnational governments and Sustainable Development Goals

2

Key messages

1 The autonomy of regional governments in Latin America and the Caribbean (LAC) increased in the 1980s when more began to have democratically elected authorities and in the 1990s with expanded responsibilities. However, their autonomy remains lower than that of their OECD counterparts, especially in terms of tax collection and borrowing.

2 Local governments have a core set of responsibilities, such as constructing and maintaining local infrastructure and public spaces, managing transportation, and collecting solid waste. These tasks are particularly important in cities, with urban planning playing an integrating role.

3 In the Caribbean, Central America, Paraguay, and Uruguay, local government roles are generally limited to these core functions. Meanwhile, local governments in Brazil, Chile, Colombia, and Peru enjoy broader powers, including responsibilities in primary education and health.

4 The policy scope of regional governments varies more across countries than that of local governments. In Argentina, Brazil, and Mexico, they take on more responsibilities than in other LAC countries, with substantive mandates in education, health, and security.

5 Evidence indicates that the capacity of local and regional governments determines whether decentralization has positive or negative effects. Without sufficient local governance capacity, decentralization risks deteriorating public policies.

6 Asymmetric decentralization can help close gaps and foster learning across jurisdictions by granting greater powers to governments with higher capacities. Despite its potential benefits, this type of decentralization is uncommon in the region, with Colombia being a notable exception.

Roles of local and regional governments[1]

Introduction

Chapter 1 of this report described local and regional governments and their roles in the governmental structure of Latin America and the Caribbean (LAC). This chapter examines the level of autonomy and the responsibilities of these governments.

Describing subnational government autonomy is a complex task for two reasons. First, contemporary states perform multiple and diverse functions, and the level of autonomy of subnational governments varies depending on the function and even within the same function. For example, in several countries, regional governments are responsible for primary education but not higher education; within the primary level, they manage infrastructure and teaching staff but do not determine content or curricula. Second, overlapping responsibilities among different levels of government and discrepancies between *de jure* (legal) and *de facto* (actual) assignments of these responsibilities are common (Allain-Dupré, 2018).

The theoretical mechanisms explaining differences in local and regional government autonomy across countries are similar to those introduced in Chapter 1. That chapter presented the fundamental tension between economies of scale and geographic distance in explaining decentralization levels. It also highlighted the main advantages of decentralized governance: access to local information and citizen engagement, which improve public services. In addition to explaining these theoretical mechanisms, Chapter 1 emphasized the challenge of decentralizing responsibilities in a region marked by significant territorial inequalities. This chapter will also address these forces that influence/shape decentralization levels and present key challenges, with a focus on three critical functions: education, health, and security.

1 This chapter was written by Guillermo Alves and Gustavo Fajardo, with assistance from Facundo Lurgo.

Autonomy of local and regional governments in Latin America and the Caribbean

This section assesses the autonomy of local and regional governments using two synthetic indices, one for each level. These indices have two advantages. First, they provide an overall view of autonomy levels, simplifying the complexity posed by the numerous functions, subfunctions, and tasks. Second, both indices enable comparisons of current autonomy levels in LAC countries with those of other regions and track their evolution over recent decades.

The autonomy of regional governments

The Regional Authority Index (RAI) measures the legal autonomy of regional or intermediate-level jurisdictions in 81 countries from 1950 to 2018 (Hooghe et al., 2016; Hooghe and Marks, 2016). This broad sample includes countries where regional authorities are elected (i.e., autonomous governments as defined in this report) and others where they are not elected. The index is calculated for each regional government, as it allows for documenting differences in autonomy levels within the same country—a phenomenon known as asymmetric decentralization.

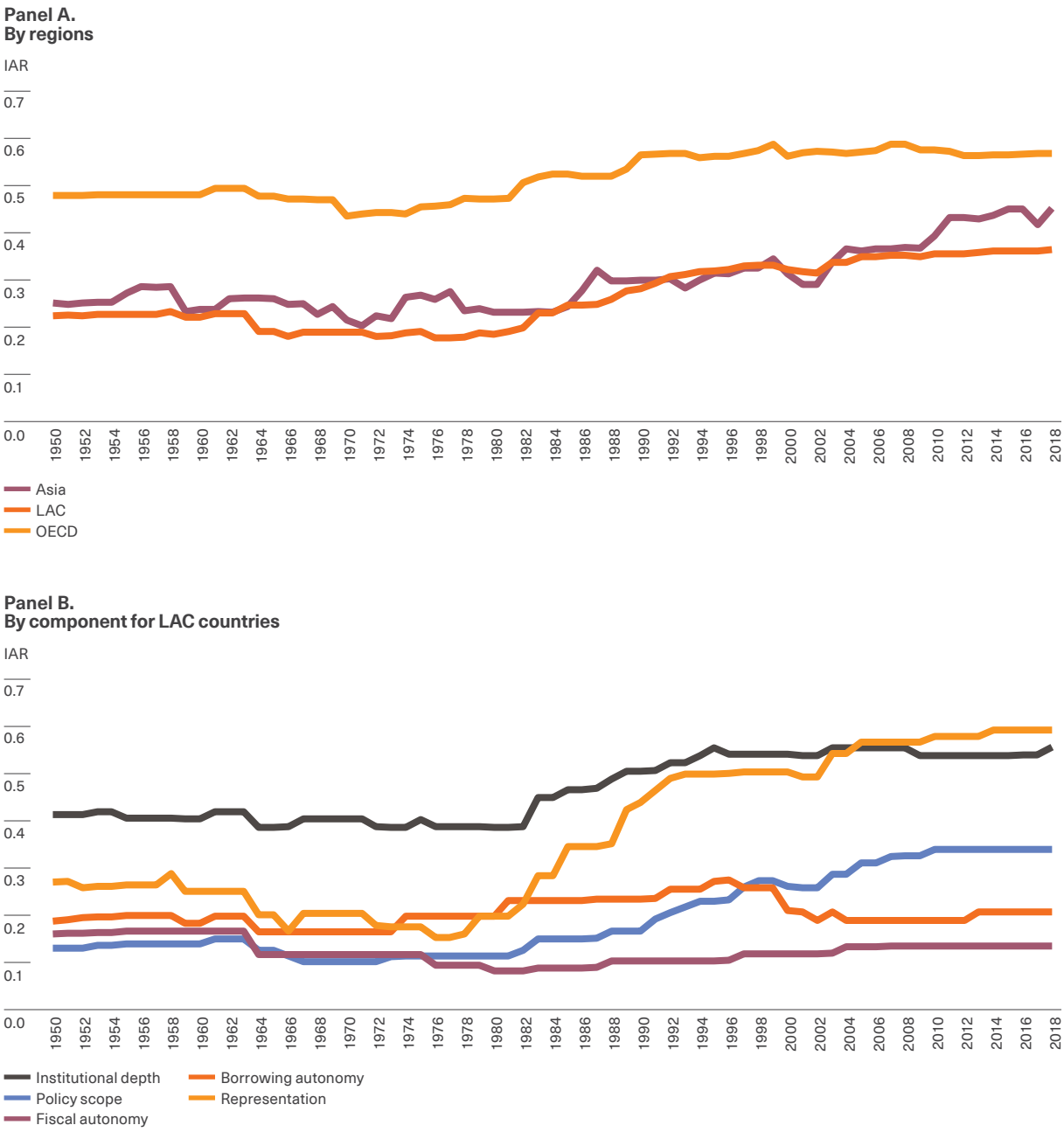
The following analysis focuses on the autonomy component of this index ("self-rule") rather than the component measuring participation in national governance ("shared rule"). This autonomy component of the RAI assesses five dimensions: the extent to which jurisdictions have a general-purpose administration free from central government veto (institutional depth), the range of policies under their control (policy scope), their ability to make decisions on taxation matters (fiscal autonomy), their power to borrow without national government restrictions (borrowing autonomy), and whether they have legislative and executive authorities elected by the residents of their territories (representation).

Panel A of Graph 2.1 shows the evolution of the RAI from 1950 to 2018 for the average of countries in Latin America and the Caribbean, the Organisation for Economic Cooperation and Development (OECD) excluding LAC members, and Asia excluding OECD members. The autonomy of regional authorities in Latin America and the Caribbean declined in the latter half of the 1960s, reaching its lowest point in the 1970s. Since the early 1980s, there has been a clear upward trend, which continued strongly in the following decade and leveled off after 2000. Throughout the analyzed period, regional jurisdictions in LAC had substantially less autonomy than those in the OECD. The comparison with Asia shows a very similar trajectory until the late 2000s, after which the gap with the OECD closed significantly in Asia.

The autonomy of regional governments in Latin America and the Caribbean increased significantly during the 1980s and 1990s

The RAI shows that asymmetric decentralization is less prevalent in Latin America and the Caribbean than in developed countries. In the latter, differences in regional autonomy are linked to two main factors. In Belgium, Spain, and Italy, asymmetric decentralization corresponds to strong regional identities, often including linguistic differences. In other cases, several instances of regional autonomy involve remote island territories, such as Greenland in Denmark or Puerto Rico in the United States. According to the RAI, the most notable example of asymmetric decentralization at the regional level in LAC is Bogotá, Colombia, due to its greater tax-raising autonomy.

Graph 2.1
Evolution of the self-rule component in the Regional Authority Index (RAI)



Note: The graph shows, in Panel A, the evolution of the self-rule component of the RAI for the average of LAC (covering 20 countries), Asia (11 countries), and the OECD (20 countries) from 1950 to 2018. Panel B focuses on the dimensions that make up the index value for the group of LAC countries. The scale of values has been adjusted to range from 0 to 1. Only countries with complete data for the entire series were included. The index was calculated using the first level of regional government (tier 1 in the original database), except for Ecuador in 2018, where the second level (tier 2) was used to maintain comparability. This adjustment was necessary because, in that year, "provinces" (*provincias*) and "Galápagos" moved to the second level, while the first level was exclusively occupied by a new administrative division: Special Territorial District of the Amazon (*Circunscripción Territorial Especial Amazónica*).

Source: Authors based on Hooghe et al. (2016) and Hooghe and Marks (2016).

Panel B of Graph 2.1 illustrates the evolution of the index's five dimensions. The factors driving the increase in autonomy for regional jurisdictions in LAC varied considerably between the 1980s and 1990s. In the 1980s, the increase was primarily due to advancements in political representation, as regional jurisdictions began to have democratically elected authorities. By contrast, in the 1990s, the rise in the index was mainly attributed to regional governments expanding their policy scope and, to a lesser extent, greater institutional depth.

Graph 2.2 compares the five dimensions using the averages of 21 LAC countries, 31 OECD countries, and 17 Asian countries in 2018. The current levels of the dimensions where regional authorities in LAC gained autonomy during the 1980s and 1990s—institutional depth, policy scope, and political representation—are similar to those in Asia but still lag behind the standards set by the OECD. The largest gap with the OECD is in fiscal autonomy and borrowing autonomy. While fiscal autonomy in LAC has remained stagnant, borrowing autonomy increased slightly but consistently from the 1970s until the mid-1990s, when it experienced a sharp decline in a few short years. Chapter 4 will explain how this decline was a response to subnational debt crises that affected Argentina, Brazil, and Mexico in the 1990s (Waibel and Liu, 2010).

Graph 2.2
Self-rule dimensions in the Regional Authority Index (RAI) in 2018 by region



Note: The graph shows the scores for the dimensions of the self-rule component of the RAI for the average of the OECD (31 countries), LAC (21 countries), and Asia (17 countries) in 2018. The score scale for each category was adjusted so that the minimum and maximum values are 0 and 100.
Source: Authors based on Hooghe et al (2016) and Hooghe and Marks (2016).

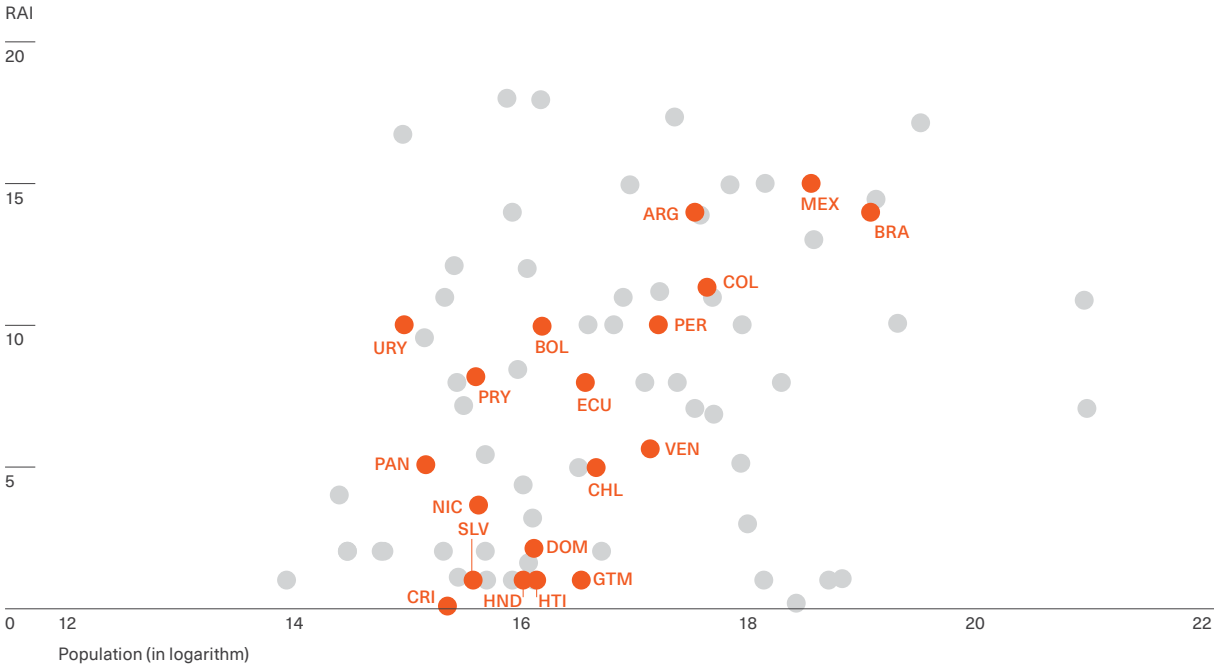
Graph 2.3 highlights the significant differences in the autonomy of regional authorities across countries in Latin America and the Caribbean. Argentina, Brazil, and Mexico—three of the four federal countries—have the highest values. The regional governments of these countries do not reach the global maximums observed in Belgium, Canada, and Switzerland, as they lack authority over immigration and citizenship matters and face borrowing restrictions imposed by national governments. The other federal country in Latin America and the Caribbean is Venezuela. Its regional governments, known as governorships, have

considerably lower autonomy levels compared to their peers in other federal countries and even fall below several unitary countries.

A second group of countries, in terms of the autonomy of their regional governments, includes Bolivia, Colombia, Ecuador, Peru, Paraguay, and Uruguay. This is followed by a third group made up of Chile, Nicaragua, Panama, and Venezuela, where regional authorities have very limited autonomy. Nicaragua deserves special mention, as its two regional governments, the North and South Caribbean Coast Autonomous Regions, have autonomy levels similar to those in the second group. However, the RAI calculated for Nicaragua as a whole is lower because the index weights regional jurisdictions by population, and these two regions account for less than 10%, while the rest of the country has no elected regional authorities. Finally, the remaining six Central American and Caribbean countries for which the RAI is computed have regional authorities with minimal or no autonomy.

Graph 2.3 also shows a positive relationship between the RAI and a country's population, underscoring the crucial role of scale in decentralization, explored in depth in Chapter 1. The RAI also strongly correlates with a country's territorial size (see Table A.1 in the online appendix). Chapter 1 explained how the vast distances of larger territories create the need for a regional level of government. This analysis confirms that larger territories also demand greater autonomy for regional entities. Lastly, the data reveals a positive link between regional autonomy and country GDP per capita (see Table A.1). Historically, as national per capita income rises, countries tend to increase spending on functions more suited to decentralization, such as education and health (Hooghe y Marks, 2016).

Graph 2.3
Self-rule component of the Regional Authority Index (RAI) and country population in 2018



Note: The graph shows the relationship between the self-rule component of the RAI and the natural logarithm of each country's population, including a total of 77 countries (19 from LAC).

Source: Authors based on World Bank (2024d), Hooghe et al. (2016), and Hooghe and Marks (2016).

These correlations between the RAI and a country's population, size, and wealth are significantly stronger in Latin America and the Caribbean compared to the rest of the world. Chapter 1 also noted this pattern among subnational units, reinforcing the hypothesis that decentralization in Latin America and the Caribbean is more functionalist than in other regions. This concept suggests that observed decentralization is driven more by principles of governmental efficiency and the exercise of authority—such as the influence of scale and distance—and less by factors related to community identity (Hooghe and Marks, 2016). As discussed in Chapter 1, this pattern may be linked to the impact of the conquest and colonization process on the development of territorial governance structures in Latin American and Caribbean countries. This process established subnational structures focused on governmental efficiency, while simultaneously weakening the autonomy of Indigenous peoples.

The autonomy of local governments

The Local Autonomy Index (LAI) developed by Ladner et al. (2023) measures local government autonomy. This index uses a methodology similar to the RAI but incorporates additional dimensions that are more relevant to local governments. For example, it evaluates how freely local governments can use the transfers they receive and the importance of these funds in their budgets. Like the RAI, the analysis focuses on the autonomy component (self-rule). However, the LAI's informational potential is more limited, as it is only available for four LAC countries (Argentina, Chile, Colombia, and Mexico) and covers a shorter period, from 1990 to 2020.

Globally, local government autonomy, as measured by the LAI, increased on average during the 1990s and 2000s, followed by a positive but more moderate trend in the next decade (Ladner et al., 2023). Although the LAI did not significantly increase during this period for the four Latin American and Caribbean countries studied, at least four others—Bolivia, Brazil, Colombia, and Peru—implemented significant decentralization processes that improved local government autonomy (Faguet, 2004; Moscovich, 2015).

The LAI is higher in countries with a higher GDP per capita but does not correlate with territorial size or population (see Table A.2 in the online appendix). Similar to the regional composite index, LAI autonomy levels are higher in OECD countries than in LAC, primarily because OECD countries have greater powers over taxation and borrowing. However, there are no substantial differences in the range of policies managed or in their effective discretion over those policies.

Subnational governments in Latin America and the Caribbean have less autonomy than those in the OECD due to their limited capacity to make decisions on taxation and borrowing

The country-specific analysis in the LAI reveals two key points. First, municipalities in Chile and Mexico have very low autonomy levels. These local governments have limited functions, which are strictly defined, and they lack control over the tax rates they collect (Carrera, 2021; Cravacuore, 2021). Second, local governments in Argentina have varying levels of autonomy depending on their province. This asymmetry in decentralization stems from the country's strong federal system, which grants provinces the authority to decide on government decentralization within their territories.

Among the region's unitary countries, Colombia stands out as a prominent example of asymmetric decentralization at the local level. This type of decentralization is explicitly provided for in the country's Constitution. As will be discussed later in the description of decentralization in education and health, municipalities in Colombia have significantly different responsibilities in these two areas of public policy, depending on their institutional capacity.



The municipality of San Pablo la Laguna, Guatemala, is one of the local jurisdictions with the highest proportion of indigenous population in the region.

The functions of local and regional governments

Strong, consistent patterns lie behind the complexities of assigning tasks across government levels. Table 2.1 provides a non-exhaustive selection of government functions, organized by the level to which they are typically assigned. The first row lists functions managed exclusively by national governments, with participation by regional governments increasing in the subsequent rows, followed by local governments.

Regional governments have significant policy responsibilities in the areas of education, road infrastructure, health, and safety

The two middle rows of the table contain functions that show the most variation in terms of the controlling government level. In contrast, the functions listed in the top and bottom rows display limited variation, with making them more of an exception than the rule. Regional governments handle tasks in the central rows, where decentralization varies most widely across countries, while local governments typically manage a core set of functions in the bottom two rows. This pattern confirms greater heterogeneity among countries in the functions assigned to regional governments compared to those assigned to local governments.

Functions exclusively handled by national governments, such as defense, international trade, and immigration, are rarely decentralized because they operate on a national scale. In the second row, national governments play a dominant role, with regional or local participation being uncommon. For example, Brazil's public higher education system includes an extensive network of federal universities, although some state universities exist, particularly in wealthier states. Among these, the University of São Paulo (USP) stands out as one of the region's leaders in scientific output (Scimago, 2024).

Electricity distribution is another function in which national governments play a predominant role, with limited participation from subnational governments. Regulatory oversight is generally exercised at the national level, and most public companies delivering this service are national entities. However, some local and regional governments participate in managing certain public or cooperative electricity distribution companies. For instance, in Colombia, the electricity distribution company for the Meta Department includes regional and local governments as shareholders (EMSA, n.d.).

Regional governments play essential roles in providing education, healthcare, and public safety services in several countries. These functions are critical to public well-being, and the substantial variation in decentralization levels across countries justifies their dedicated analysis in specific sections of this chapter. Regional governments also have important responsibilities in managing infrastructure, particularly in federal countries and larger unitary states. For instance, 58% of Mexico's road network is under state government jurisdiction (Instituto Mexicano del Transporte, 2023).

Education, health, safety, water, and sanitation are the functions that show the greatest variation in assigned government levels across countries, as they can be managed by any of the three levels of government. Like education, health, and safety, the provision of water and sanitation is crucial for public well-being and involves substantial local government involvement, which is why it will be analyzed in detail in Chapter 6.

The last two rows of the table show functions typically managed by local governments. As discussed in Chapter 6, regional or national governments only occasionally participate in managing urban transport. They may also assist with the final disposal stage of solid waste management when its scale extends beyond the local level.

Table 2.1
Distribution of functions by government levels broken down by typical responsibility

Always National	Defense and foreign relations	International trade Immigration
Mostly national	Technical and higher education	Social assistance and protection Electricity transmission
Mostly regional or national	Secondary education Regional road infrastructure	Health beyond primary care
Local, regional, or national	Preschool and primary education Water and sanitation	Security Primary health care
Mostly local	Urban transport	Waste disposal
Always local	Urban planning and land use regulation Licenses or permits for economic activities Cultural activities, sports, and local events	Maintenance and cleaning of public spaces Garbage collection Urban infrastructure: roads, lighting, and parks

Note: Education and health refer to the public provision of these services.

Functions exclusively managed by local governments include local land use planning, public space maintenance, provision and upkeep of local roads and urban infrastructure, and solid waste collection. These functions are essential to urban local governments, which, as noted in Chapter 1, are where most of the region's population is concentrated. Given their importance, these functions are discussed in more detail in a specific section of this chapter.

Another function exclusive to local governments is granting permits, licenses, and authorizations for economic activities within their jurisdictions. These licenses influence the costs of starting and operating businesses, which is a determinant of territorial productivity levels (Álvarez et al., 2018; Alves and López, 2021a). Typical examples include permits that require compliance with safety and hygiene standards, such as food safety regulations, for businesses involved in food preparation. Other important licenses include construction permits and authorizations for public markets or fairs operating in public spaces.

The policy responsibilities of subnational governments increase with the size of the country and are lower in functions with greater complexity

The middle rows of Table 2.1 leave many functions unassigned to a specific level of government. The detailed analysis of decentralization in education, health, and safety, presented later, reveals two main principles that govern this assignment: the degree of decentralization increases with the size of the country and decreases with the scale or complexity of the function.

Urban planning as an integrator of urban local government functions

Urban planning is the process of designing and regulating land use and construction within a city. Land and construction include residential buildings as well as commercial and industrial facilities, along with transportation infrastructure, recreational areas, and basic public services, such as water, energy, and sanitation. In this way, urban planning plays an integrative role in the various functions that form the core responsibilities of urban local governments, outlined in the bottom two rows of Table 2.1.

A key tool in urban planning is the master or land-use plan. These plans define the types of permissible land use (residential, commercial, or industrial) and the allowable size of buildings, including their height. They also set the boundaries of urban areas, paying special attention to preserving areas of ecological or heritage value and demarcating risk zones for natural hazards such as floods or earthquakes.

Good urban policy, including planning, can be conceived to maximize the benefits and minimize the costs associated with high population concentrations in cities (Daude et al., 2017). Benefits include the increased productivity generated by agglomeration economies, as well as access to employment, education, health, culture, and recreation opportunities (Alves and López, 2021b). The two main costs are longer commuting times and the rising cost of housing.

Urban planning has three fundamental roles in minimizing the negative effects of population density on transportation times and housing affordability, on the one hand, and maximizing access to the opportunities for well-being and productivity that cities offer, on the other.

The first essential role of urban planning is to promote the abundant production of housing. As discussed in Chapter 1, cities in the region will face a growing demand for new housing due to population growth and urbanization rates. Additional factors driving this demand include smaller household sizes and the natural depreciation of the housing stock.

To ensure the abundant production of affordable housing, it is essential that land-use regulations support this goal by defining building size, height, and other aspects of building morphology (Baum-Snow and Han, 2024; Saiz, 2010). Revitalization plans for central areas are also crucial, as they increase housing supply by leveraging existing infrastructure without expanding the urban footprint. Additionally, as outlined in Chapter 8, local governments require a series of procedures and permits that affect production times and costs. This is another way they influence housing affordability and the production costs of urban economic activities.

The second role is to ensure that the locations designated for residential buildings in the master plan are equipped with public services (water, sanitation, etc.) and are close to educational and health facilities, as well as recreational spaces such as parks and public squares. If only a few areas in the city have these attributes, both commuting times and housing affordability will be negatively affected. Commuting times will increase as people must travel farther to access opportunities, and housing with services will become scarce and thus expensive. Beyond the master plan, coordination between this plan and infrastructure investments in water and sanitation, schools, hospitals, parks, and public squares is essential for this role of urban planning.

The third fundamental role of urban planning is to integrate master plans with transportation infrastructure. In large cities, not all economic and social opportunities are within close proximity to residential areas. This is particularly relevant for accessing employment, as well as more complex social infrastructure, such as universities and hospitals. Therefore, accessing these opportunities requires an urban transportation system that enables people to reach them within a short time (Vanoli and Anapolsky, 2023). Chapter 6 addresses the specific challenges of the urban transport sector, while this section emphasizes its coordination with land-use planning.

Successful urban planning is that which generates abundant affordable housing with public services, including transportation

One particularly notable way to illustrate the necessary integration between transportation and land-use planning is through transit-oriented development. This concept suggests that land-use regulations should promote higher density in areas with access to mass public transportation. This density includes not only residential buildings but also commercial properties and employment-intensive economic sectors.

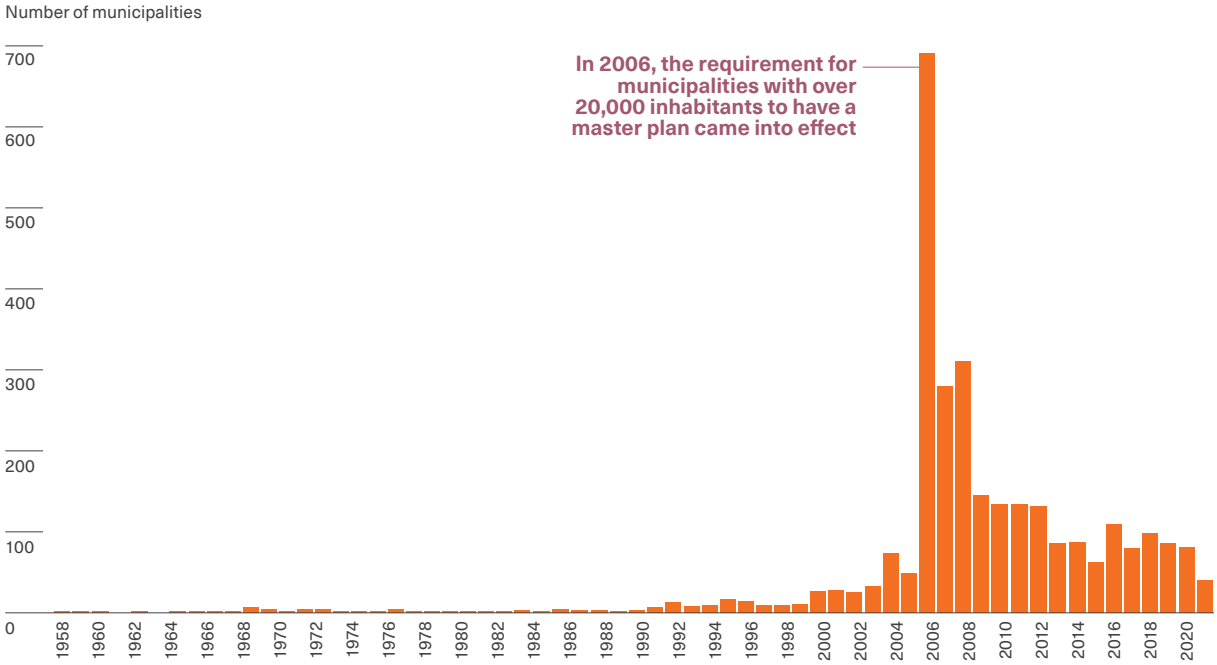
Estimates suggest that implementing this approach could have increased welfare gains in one of the region's most iconic transportation projects: the TransMilenio bus rapid transit system in Bogotá. As discussed in more detail in Chapter 6, this project succeeded in enhancing welfare and economic activity. However, it is estimated that these welfare gains could have been 44% higher if the government had sold densification rights near the bus stops (Tsivanidis, 2023). This densification and value capture strategy would also have enabled the recovery of up to one-fifth of the initial investment.

In addition to these three central roles of planning, as noted in Chapter 5, the regulations included in urban plans have revenue implications (OECD and Lincoln Institute of Land Policy, PKU-Lincoln Institute Center, 2022). As illustrated by the TransMilenio example, urban infrastructure projects offer revenue potential that requires appropriate land-use regulations to unlock this potential. Another typical revenue opportunity associated with land-use planning arises when a real estate developer seeks to build beyond the regulated height limit or construct housing on rural land. In such cases, the local government may grant an exception in exchange for a payment. Brazil's Additional Building Potential Certificate (CEPAC) is one of the world's most notable examples of this type of instrument.

Given the importance of urban planning as a guide for key policies of city governments, it is worth questioning the quality of its implementation in the region. Limited data suggests that this quality is low, and many local governments in the region lack a master or land-use plan altogether.

In Brazil, a 2006 mandate required municipalities with more than 20,000 inhabitants to have a master plan. As a result, the proportion of municipalities with a plan rose from just 14% in 2005 to 53% in 2021, reaching almost 90% among those with more than 20,000 inhabitants in the latter year. Graph 2.4 shows the approval years of municipal master plans and highlights how, in 2006, nearly 700 municipalities created their master plans. This case exemplifies a broader role of the national government in building capacities in local governments. In addition to establishing the requirement by law, the federal government, through its Ministry of Cities, deployed a series of support tools to help local governments formulate their master plans, including a guide for their development and review (Ministry of Regional Development, 2022).

Graph 2.4
Brazilian municipalities by year of creation of their master plan



Note: The graph shows the annual trend in the number of Brazilian municipalities that developed their master plan for the period 1958–2021. This data is based on processing the legislation and planning instruments module from the 2021 MUNIC survey.

Source: Authors based on IBGE (2021).

In Mexico, systematic information is also available on the number of municipalities with urban plans through the National Census of Municipal Governments and Territorial Demarcations, conducted in 2023 (INEGI, 2023a). Slightly less than half of the 2,469 municipalities had some type of urban development plan at the time of the census.[2] This proportion is much higher among more populous municipalities, which tend to be more urban and thus have a stronger justification for creating a plan. Among Mexican municipalities with over 50,000 inhabitants, 17% do not have an urban development plan—a relatively low proportion, but one that could be improved, as this is a minimum requirement for implementing urban planning that fulfills the roles outlined above.

CAF Action.
Scan the QR code to see CAF's urban planning projects.

2 To calculate these values, local entities with urban development or ecological land-use plans or programs were included, whether applied to the municipality, territorial demarcation, or city. Partial, special, and project-specific plans were also considered.

Three key functions of local and regional governments: Education, health, and safety

Focusing on education, health, and safety clarifies which level of government holds responsibility for these functions in each country in Latin America and the Caribbean[3]. There are two reasons for choosing these functions out of the various governmental responsibilities. First, as shown in Table 2.1, local and regional governments participate in these functions, but the extent of their involvement varies significantly across countries. Describing their decentralization patterns in detail thus provides valuable insight into the responsibilities of local and regional governments in LAC. Second, these three functions are among the most essential for public well-being, each linked to a specific Sustainable Development Goal (SDG), and they represent major challenges in the region (Álvarez et al., 2020; Berniell et al., 2016; De la Mata et al., 2022; United Nations, n.d.; Nussbaum, 2013). Additionally, as a consequence of these two reasons, education, health, and safety occupy a substantial portion of subnational government budgets, as discussed in Chapter 3.

The role of local and regional governments in public education provision

The first column of Table 2.2 indicates which level of government holds the primary legal responsibility for managing public primary education in 15 countries in the region. As noted earlier, country size is a key determinant of decentralization in this area. In smaller countries, the provision of primary education falls exclusively under the national government's responsibility. This is the case for all Central American and Caribbean countries, as well as Ecuador, Paraguay, and Uruguay. In larger countries, varying levels of decentralization are observed. Notably, even in the largest and most decentralized countries, the national government retains a regulatory role, with particular influence over educational content.

●●

The overlap of functions between levels of government and the differences between legal and actual responsibilities can impact the quality of education

In countries where subnational governments have responsibilities in providing public primary education, the way these responsibilities are distributed is highly complex and heterogeneous. Differential or partial decentralization is common, where some tasks are decentralized and others remain under national control. In Bolivia, for example, the Popular Participation Law passed in 1994, transferred the physical infrastructure of schools to municipal governments but kept the management of teaching, administrative, and technical staff, as well as curriculum development, under national control (Gorostiaga, n.d.; Rivas and Scasso, 2020). In other countries, responsibilities are not clearly defined, leading to overlaps. This is the case in Peru, where the decentralization process assigned functions to both local and regional governments in managing primary education, resulting in significant overlap and discrepancies between de jure and de facto management (Apostolou et al., 2010). This lack of clarity regarding responsible authority can negatively impact quality.

3 The academic references and official documents consulted in the drafting of this section can be found in the appendix available in the online version of the RED.



The municipality of Santiago, in Chile, is one of the most densely populated local governments in the region.

Decentralization can also be asymmetric, as illustrated by the case of public education in Colombia, where responsibility falls on certain local governments but not on others. In Colombia, public primary education is managed by Certified Territorial Entities (ETCs), which include all departments, municipalities with over 100,000 inhabitants, and those municipalities that have demonstrated the necessary technical, administrative, and financial capacity to take on this responsibility.

This asymmetric design of educational decentralization in Colombia has enabled an evaluation of its effects by comparing the development of municipalities with fewer and more than 100,000 inhabitants. Elacqua et al. (2021) find that municipalities with greater autonomy achieved better results by hiring more qualified teachers. However, Brutti (2020) shows that within this group, the effect was not uniform, and a quality gap emerged between those with higher and lower baseline development levels. The findings of both studies support the hypothesis that local government capacity determines whether decentralization has positive or negative effects on public policy outcomes. This evidence also reinforces the challenge, discussed in Chapter 1, regarding the potential impact of decentralization on widening well-being gaps in the region.

In four other countries, responsibilities are clearly assigned, either at the local level (in Brazil and Chile) or the regional level (in Argentina and Mexico). The case of Chile requires two clarifications. First, while municipalities are responsible for the public provider subsector, publicly funded education provided by private entities also plays a significant role in the system. Second, Chile is undergoing a reform process that reduces the degree of decentralization in public primary education provision. Under this process, municipalities are being replaced by deconcentrated entities called Local Public Education Services (SLEP), which operate on a larger geographic scale. The SLEP serves as an example of a deconcentrated, rather than decentralized, government entity, as they have some autonomy but remain administratively dependent on the national Ministry of Education (Rivas and Scasso, 2020).

Table 2.2
Primary responsibility for the provision of education, health, and safety

Responsibility	Primary education	Secondary education	Primary healthcare	Hospitals	Police
National	El Salvador, Guatemala, Honduras, Nicaragua, Panama, Paraguay, Dominican Rep., and Uruguay				
National with local participation	Bolivia				Bolivia, Costa Rica, Ecuador, Peru, and Venezuela
Regional	Argentina and Mexico	Argentina, Brazil, and Mexico	Mexico and Peru	Argentina, Colombia, Mexico, and Peru	
Regional con local participation	Colombia and Peru	Colombia and Peru	Argentina and Colombia		Argentina, Brazil, and Mexico
Local	Brazil and Chile*	Chile*	Bolivia, Brasil and Chile	Brazil	

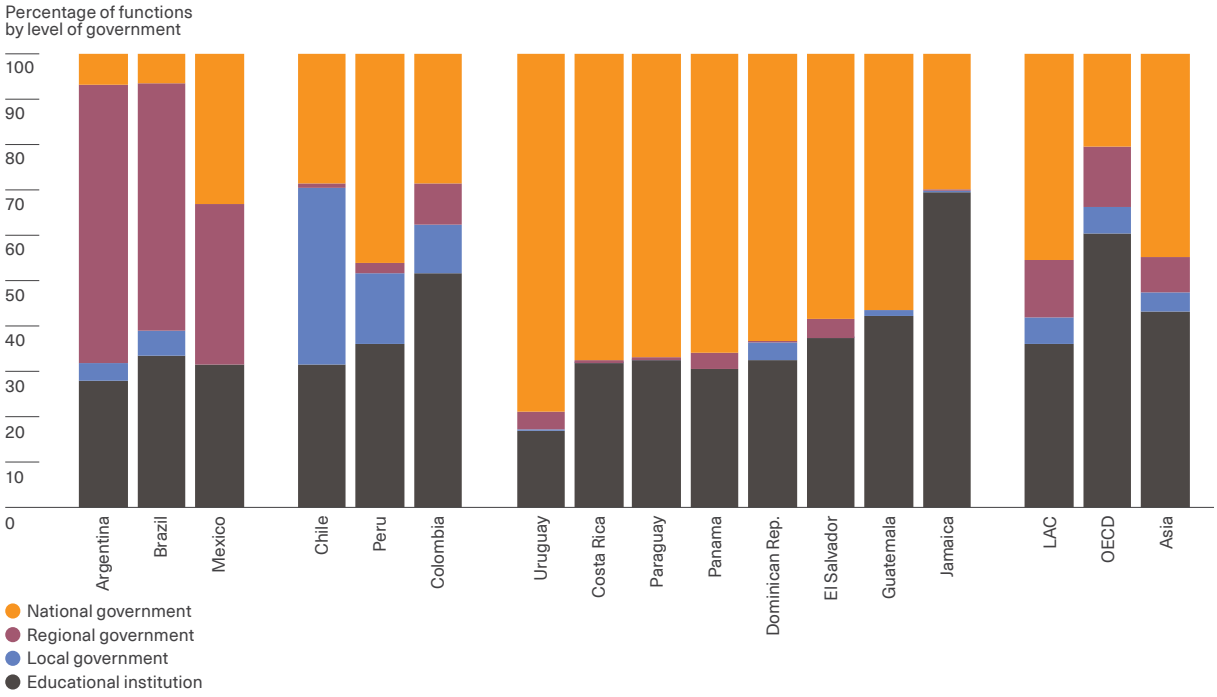
Note: **Chile is currently undergoing a reform process.*

Source: Authors based on references provided in the chapter appendix available online.

To analyze decentralization in secondary education, data was drawn from the school principal survey included in the 2022 Programme for International Student Assessment (PISA). This standardized assessment investigated who holds responsibility for educational management decisions across 12 key dimensions (OECD, 2022). These dimensions include, for example, hiring teachers, evaluating students, and deciding which courses are offered. Principals reported, for each of the 12 dimensions, whether the responsibility lies with a local, regional, or national authority, the school's teachers, the principal, or a governing entity of the school. Although PISA surveys both public and private schools, the analysis here focuses on the former. A key advantage of this survey is that it provides insight into the de facto dimension of autonomy, contrasting with the de jure perspective summarized in Table 2.2.

Graph 2.5 shows, for each country, the percentage of responses that assign responsibility to the school, the local government, the regional government, or the national government across the 12 dimensions collected by PISA. In this graph, the "educational institution" category aggregates responses attributing responsibility to teachers, the principal, and the school's governing entity. The task distribution across these four levels in the average of Latin American and Caribbean countries is very similar to that in 19 Asian countries outside the OECD. The main difference between these two regions and the OECD is that in the latter, educational institutions (i.e., schools) play a much larger role.

Graph 2.5
Management responsibilities for secondary education according to PISA 2022 data



Note: The graph shows, for 14 LAC countries and the average of the OECD group (28 countries) and Asia (19 countries) in 2022, the percentage of 15-year-old students attending public schools where management responsibilities fall on government authorities at the local, regional, or national level, or on the educational institution themselves. The values are calculated by averaging 12 categories of functions. For Guatemala, responses in the regional government category are assigned to the national government, as the regional entity in that country is deconcentrated.

Source: Authors based on data from PISA 2022 (OECD, 2022).

The Latin America and Caribbean average masks significant differences between countries, which can be divided into three groups. The first group, consisting of Argentina, Brazil, and Mexico, assigns a greater proportion of tasks to regional governments than to the other three actors. The role of regional governments is particularly strong in Argentina and Brazil, where only 6% of tasks are managed at the national level. Their role is somewhat less dominant in Mexico, where the federal government handles nearly a third of the tasks.

The strong role of Argentine provinces in managing public education is due to the transfer of educational institutions previously under national government control, which took place between 1992 and 1994. The transferred institutions served 55% of the country's students. Galiani et al. (2008) analyzed the effects of this decentralization process by comparing the educational outcomes over time of the transferred institutions with those already under provincial control. The authors found that decentralization improved average results on standardized math and language exams across the country. However, as seen with Colombia's local-level reform, this regional-level decentralization episode had negative effects on poorer municipalities with fewer resources.

In Chile, Colombia, and Peru, the proportion of tasks assigned to local governments is higher than in other countries. However, the role of these local governments in this second group is more moderate compared to the role of regional governments in the first group, with only Chile surpassing the other three actors. In Colombia, the educational institutions hold the dominant role, while in Peru, the national government does. In Peru, PISA data suggest that de facto responsibilities, at least in secondary education, may contradict the de jure dominant role of regional governments as shown in Table 2.2.

In a third group—consisting of Costa Rica, El Salvador, Guatemala, Jamaica, Panama, Paraguay, the Dominican Republic, and Uruguay—the combined proportion of tasks handled by local and regional governments never exceeds 5%. As a result, the national government overwhelmingly dominates the management of public secondary education, handling more than 50% of tasks in each country. The only exception is Jamaica, where educational institutions take on the largest share of tasks across all countries in the region.

The role of local and regional governments in health service provision

In line with the established pattern between decentralization and country size, local and regional governments in Paraguay and most Central American and Caribbean countries have very limited or no involvement in public health service provision.[4] In these countries, there are varying levels of deconcentration of health services, which occurs in geographic areas larger than those of subnational governments (such as in Belize, Costa Rica, El Salvador, Jamaica, Nicaragua, and Trinidad and Tobago), within the same geographic area but with parallel structures (as in Honduras and Paraguay), or sometimes at the level of individual health facilities, as seen in Suriname.

Some cantons in Ecuador and departments in Uruguay manage primary care facilities alongside national services. Unlike the overlap of undefined responsibilities seen with primary education in Peru, this overlap occurs because two different government levels provide the same service within the same territory. The challenges of decentralization with overlapping services differ from those associated with poorly defined responsibilities. Here, the primary challenges involve coordination and the potential for diseconomies of scale due to the presence of multiple service units.

4 The public sector also plays a key role in funding and regulating health services, including social security systems (Álvarez et al., 2020). Local and regional governments have minimal or no involvement in these tasks.

In Argentina, Bolivia, Brazil, Chile, Colombia, Mexico, and Peru, subnational governments play significant roles in managing public health

In Argentina, Bolivia, Brazil, Chile, Colombia, Cuba, Mexico, and Peru, local and regional governments play significant roles in managing public health, although with substantial variation across countries and levels of service provision. In the first four countries, local governments are responsible for primary care, while other government levels provide secondary and tertiary services. In Colombia, at the local level, there is a system of asymmetric decentralization similar to that in education, where only certified municipalities are responsible for primary healthcare in their territories. These more complex services are managed by regional governments in Argentina and Colombia, and by national governments in Bolivia and Chile. In Mexico and Peru, regional governments are responsible for health services at all levels.

As with education, Brazil shows the highest levels of decentralization in public health. Brazilian municipalities not only manage primary care but also operate hospitals with support from the regional level. In 2015, 4% of public hospitals in Brazil were federal, 25% were operated by the states, and 70% were municipal (Tikkanen et al., 2020). A constitutional amendment requiring municipalities to allocate at least 15% of their budgets to health led to increased investments in health infrastructure and staffing, significantly reducing infant mortality. The authors also found that municipal capacity played a key role in the outcomes of this reform (Clarke et al., 2024).

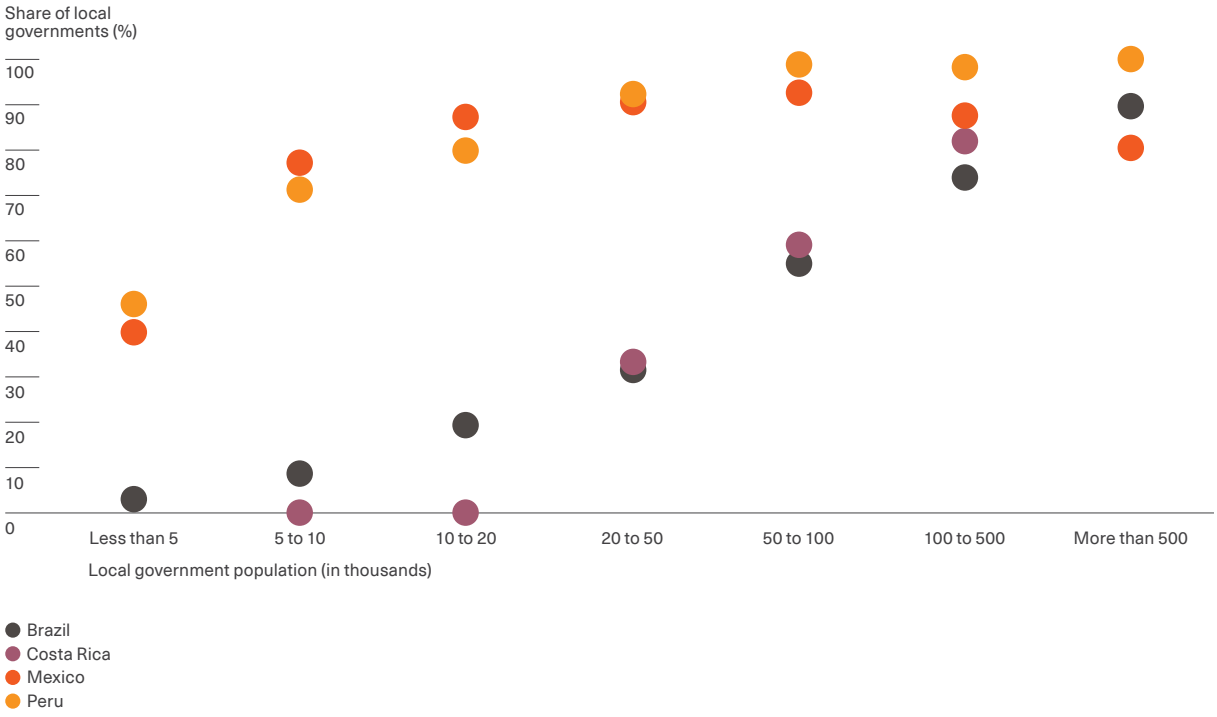
The role of local and regional governments in police force management

The degree of decentralization in police forces is lower than in education and health. Of the 32 LAC countries analyzed, only Argentina, Brazil, and Mexico assign primary police responsibilities to subnational governments (e.g., provinces or states), aligning with their federal structures. In Bolivia, Costa Rica, Ecuador, Peru, and Venezuela, the police are nationally managed, though local governments may control smaller, less powerful police forces. In the remaining countries, only national police forces exist. Additionally, certain territories within Argentina, Brazil, and Mexico have local police forces with limited powers, operating alongside the primary subnational police forces.

The presence of local police forces illustrates another case of asymmetric decentralization, as not all municipalities have their own police institution. Of the four countries with available data, Mexico and Peru have the highest proportion of local governments controlling police forces. In 2019, 1,805 out of 2,455 municipalities in Mexico had their own police, known as the Municipal Preventive Police (INEGI, 2023a). In Peru, 1,153 out of 1,891 municipalities had public surveillance and security services known as *serenazgo* in 2023 (INEI, 2023b). In Costa Rica, this proportion is slightly lower, with 34 out of 82 cantons maintaining local police (UNGL, n.d.), and in Brazil, where just over 1,000 municipalities—approximately one-fifth of the total—have municipal guards (IBGE, 2021).

Graph 2.6 illustrates that municipal security forces are more commonly found in larger municipalities across these four countries. In Brazil, local police forces were present in over half of the municipalities with populations exceeding 50,000 and in 90% of those with more than 500,000 residents. In Costa Rica, no municipal police forces exist in any of the 13 cantons with populations under 20,000; however, they are present in 13 out of 22 cantons with populations between 50,000 and 100,000, as well as in nine of the 11 cantons with populations over 100,000.

Graph 2.6
Proportion of local governments in Brazil, Costa Rica, Mexico, and Peru with police forces by population size



Note: The graph shows the percentage of local governments with police forces (also known as civil or urban guards), categorized by population size.
Source: Authors based on CAF (2025), IBGE (2021), INEGI (2023a), INEI (2023b), and UNGL (n.d.).

Local police forces have a more limited scope of action compared to their higher-level counterparts, generally focusing on prevention and surveillance rather than enforcement, in line with restrictions on carrying firearms. For instance, members of urban patrols or local guards in municipalities within the provinces of Buenos Aires, Córdoba, and Santa Fe are prohibited from carrying firearms. Similarly, in Ecuador, municipal police forces, known as *Cuerpos de Control*, are restricted to less-lethal weapons—batons, chemical irritants, and conducted energy devices (tasers). However, in Costa Rica, municipal police are allowed to carry firearms, and this is common in larger municipalities in Brazil. In 2019, data from Brazil's MUNIC survey on basic municipal information indicated that firearm use was authorized in 45% of municipalities with populations between 100,000 and 500,000, and in 70% of those with over 500,000 inhabitants.



The municipality of São Paulo, in Brazil, is the local government with the largest population in Latin America and the Caribbean.

The capacities of local and regional governments and the sustainable development goals

This chapter has shown that local and regional governments in Latin America and the Caribbean have responsibilities in key sectors essential to the well-being of the population. The overview of their responsibilities across each country reveals a strong alignment with several sector-specific Sustainable Development Goals (SDGs) as well as broader, cross-cutting goals.

In a highly urbanized continent, improving the quality of life in cities is a fundamental development challenge. This challenge is encapsulated in SDG 11: "to make cities inclusive, safe, resilient, and sustainable." Across all countries, local governments are responsible for a core set of urban tasks, including urban transportation management, with land-use planning serving as an integrating focus. Consequently, these governments play a primary role in achieving this SDG. As discussed in greater detail in Chapter 6, in some countries, local governments are also responsible for providing water and sanitation services, which correspond to another specific SDG (SDG 6).

Specific SDGs also exist for education, health, and security (SDGs 4, 3, and 16, respectively). As highlighted in previous sections, these are areas where local and regional governments in some countries play a significant role.

These are the most direct connections between the SDGs and the sector-specific responsibilities of local and regional governments discussed in this chapter. However, the discussion in this chapter and throughout the report demonstrates that the roles of these governments also align with other SDGs. For instance, Table 2.1 highlights critical subnational responsibilities in infrastructure investments (SDG 9) and in regulations and permits impacting economic growth (SDG 8). Additionally, land-use planning and infrastructure investments are essential for climate change adaptation (SDG 13) and terrestrial ecosystem protection (SDG 15). Finally, local and regional governments can undertake actions to promote gender balance (SDG 5) among their officials and elected authorities, as discussed in Chapter 7.

Progress on several SDGs in the region critically depends on the outcomes of policies managed by local and regional governments. Studies cited in this chapter further indicate that these outcomes are contingent on the institutional capacities of these governments (Brutti, 2020; Clarke et al., 2024; Elacqua et al., 2021; Galiani et al., 2008). These studies also highlight an additional implication: disparities in capacities within countries can cause decentralization to widen existing well-being gaps, sometimes leading to a decline in public service quality in the most disadvantaged areas. This potential reinforces the call to strengthen the capacities of subnational entities.



City Hall of Quito, seat of municipal government
of the Metropolitan District of Quito

What subnational governments spend on and how they spend it

- The level and composition of subnational government spending in Latin America and the Caribbean.
- Budgetary rigidities faced by subnational governments.
- Mechanisms to improve the quality of subnational government spending.



Key messages

1 Decentralization in Latin America has increased public spending managed by subnational governments, although it remains below the OECD average. Decentralized countries, such as Brazil and Argentina, exhibit a high share of subnational spending, unlike centralized states, such as Chile and Ecuador, where the role of these governments is more limited.

2 Subnational government spending per capita varies widely across the region. In general, per capita spending decreases as population size increases, reflecting economies of scale.

3 Some countries allow subnational governments to borrow without explicit authorization or guarantees from the central government, complementing this option with financial sustainability rules. These include debt and expenditure composition limits, externally verified financial projections for early corrective actions, and central government intervention mechanisms—such as expenditure controls—in cases of insolvency.

4 Spending floors in key areas, such as health and education, can enhance the coverage of these basic services. However, their effectiveness depends on the quality of governance and on combining regulations with local autonomy in the use of resources.

5 Public procurement, which accounts for a significant portion of subnational government spending, is vulnerable to inefficiencies and corruption. Competitive procurement methods, such as framework agreements and auctions, can improve efficiency by reducing cost overruns and discretion. However, they may also increase administrative rigidity, underscoring the need for a balance between control and flexibility, tailored to local capacities.

6 Central government audits, especially when conducted randomly and independently, are effective tools for reducing corruption in subnational governments. Internal controls offer more direct preventive potential and can be effective if independence and professionalization are ensured.

7 Results-based financing aligns resources with specific goals, incentivizing subnational governments to maximize the efficiency and impact of public spending. Its effectiveness depends on factors such as autonomy in fund management, technical support for policy implementation, and clearly defined performance metrics.

What subnational governments spend on and how they spend it[1]

Introduction

The decentralization process in Latin America and the Caribbean (LAC) has redefined the role of subnational governments, expanding their responsibility for public service delivery and resource management. This shift has led to an increase in their share of total public spending, with significant variations between countries and levels of government. Analyzing how and on what these governments spend provides key insights into the progress and challenges of decentralization, as well as its implications for the well-being of the population and the efficient use of public resources.

This chapter delves into the composition of subnational spending, highlighting differences across countries and levels of government. The findings should be interpreted in the context of the complexities of subnational public finance data, described in Box 3.1. The chapter examines the priorities of regional governments in sectors such as education, health, and social protection, as well as the focus of local governments on administrative expenses, community infrastructure, and housing. These differences help identify the responsibilities and priorities associated with each level of government within the framework of decentralization.

Budgetary autonomy is a crucial aspect of decentralization, enabling subnational governments to allocate and manage resources according to local priorities. However, it also presents incentive challenges. Subnational authorities may make decisions driven by short-term goals, prioritizing popularity and reelection prospects, with the assumption that any shortfalls will eventually be covered by the central government. This could lead to issues such as underinvestment in infrastructure, overstaffing, or excessive borrowing.

1 This chapter was written by Pablo Brassiolo and Rodrigo Cifuentes, with assistance from Pedro Di Plácido and Rodrigo Fernández.

Box 3.1
Complexities in subnational public finance data

The primary sources of information for analyzing subnational public finances in Latin America and the Caribbean (LAC) are budget execution reports published by governments on the websites of ministries of finance or specialized agencies. For instance, in Mexico, the National Institute of Statistics and Geography provides fiscal data for states and municipalities through the System of National Accounts. In Peru, the Ministry of Economy and Finance publishes detailed budget execution data for regional and local governments. In Brazil, the National Treasury Secretariat collects fiscal data for states and municipalities. In some cases, this is complemented by public debt information, enabling a more comprehensive analysis of subnational finances. While these sources provide broad access to fiscal information, they also face limitations such as a lack of harmonization in budget classifications across countries, methodological changes within individual countries, and differences in temporal coverage.

These limitations not only complicate the interpretation of available data but also present significant challenges regarding access and processing. Budget classifications vary significantly across countries, as each follows its own criteria for recording fiscal information. For example, in some cases, data are organized by object of expenditure, requiring conversion into a standardized economic classification system across countries using respective budget classification manuals. Additional challenges arise from data formatting, as some data are presented in formats less conducive to manipulation and analysis. In some instances, it is also necessary to combine information from multiple databases.

This diversity poses a significant challenge to cross-country analyses of subnational public finances in the region. To address these challenges, the authors of this report undertook processes to reclassify and harmonize data. These efforts made it possible to compare the magnitude and composition of fiscal variables across subnational governments, identify regional patterns, and delve into key areas such as spending, public investment, and fiscal revenues. Understanding the limitations in data coverage, heterogeneity, and accessibility is critical for accurately interpreting the findings and recommendations presented in this report.

In most countries in the region, subnational governments face various restrictions on their autonomy. One limitation stems from regulations that dictate the use of certain funds, such as transfers from the central government allocated for specific purposes. Additionally, constitutional or legal mandates in some countries establish minimum spending requirements in specific sectors. Furthermore, subnational governments typically need central government authorization to incur debt, and in cases where this is not required, borrowing is subject to quantitative limits and expenditure composition constraints. Finally, in financial crises, central government support is often contingent on the implementation of a fiscal adjustment program.

Tools to promote the efficient use of public resources at the subnational level include public procurement regulations, control mechanisms, and incentives for better spending. Public procurement represents a significant portion of subnational government spending, covering everything from routine acquisitions to large-scale infrastructure projects. Its importance lies not only in the scale of resources mobilized but also in the challenges of ensuring efficiency and transparency. This chapter explores tools such as competitive procurement methods and framework agreements, analyzing their potential to reduce resource mismanagement, particularly in contexts with limited institutional capacity.

As for control mechanisms, the chapter examines both external controls, specifically audits conducted by higher-level government entities, and internal controls implemented by subnational entities themselves. These mechanisms aim to prevent the misuse of public resources, strengthen accountability, and ensure transparency in governance. However, their design and application face significant challenges, including the need to ensure political independence, minimize unintended effects, and strike an appropriate balance between oversight and administrative flexibility, particularly in public procurement processes.

Lastly, the chapter explores incentives to enhance the efficiency of subnational spending, such as results-based financing. This approach links resource allocation to the achievement of specific targets, creating incentives for more efficient, results-oriented public management. The chapter addresses both the opportunities offered by this strategy and the challenges it poses, including the need for robust monitoring and evaluation systems that allow for performance measurement and effectively link it to budget allocation.

Expenditure levels and composition

The magnitude of subnational spending

The share of subnational spending in total public expenditures in Latin America and the Caribbean has nearly doubled over the past 40 years (Radics et al., 2022), coinciding with the progress of decentralization. Despite this increase, subnational spending remains low compared to countries in the Organisation for Economic Co-operation and Development (OECD), with notable variability across countries in the region.

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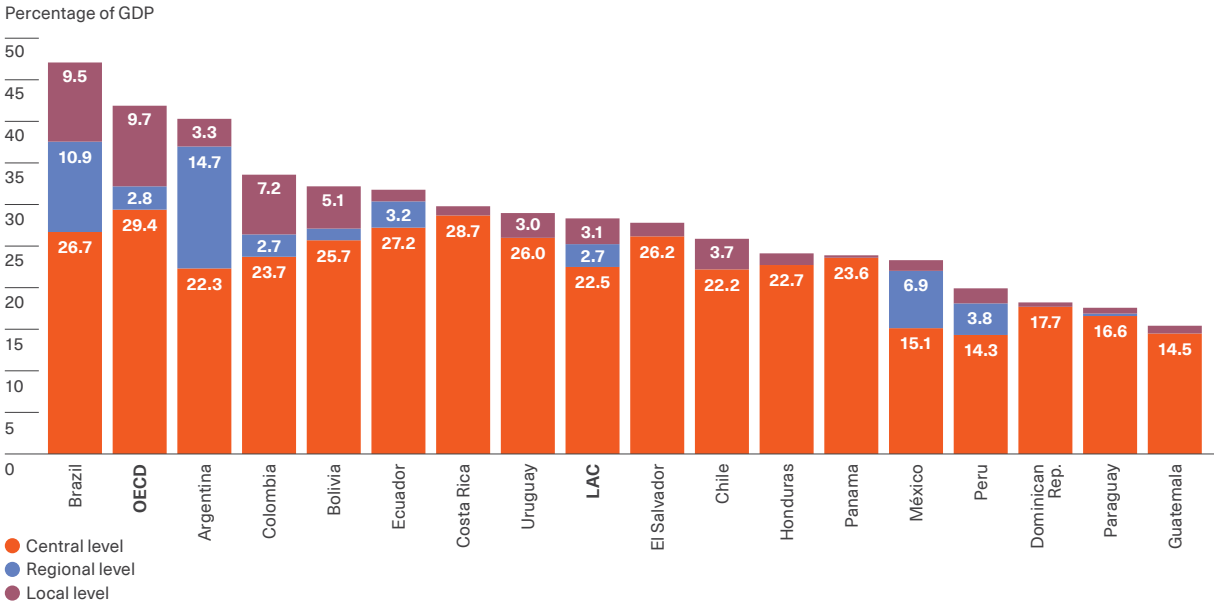
Subnational spending remains low compared to OECD countries and shows considerable variation among countries in the region

Graph 3.1 illustrates public spending broken down by government level as a percentage of GDP in Latin America and the Caribbean. On average, subnational governments in the region included in the sample spend 5.8% of GDP, significantly less than the 12.5% recorded in OECD countries.

The magnitude of subnational spending varies significantly across countries, reflecting differing degrees of decentralization. This is evident in the proportion of total public spending executed by regional and local governments in each country. In federal countries like Argentina, Brazil, and Mexico, subnational governments execute a higher share of total public spending compared to other countries in the region. In contrast, unitary countries such as Chile, Ecuador, and Uruguay exhibit lower levels of decentralization and subnational spending. Bolivia, Colombia, and Peru occupy intermediate positions, with subnational participation higher than in other countries in the region. In Central American and Caribbean countries, public spending is predominantly concentrated at the central government level.

An additional aspect, not reflected in the graph, is that the proportion of total spending executed by subnational levels has remained stable over the past decade. This suggests a lack of significant progress in the decentralization process in recent years.

Graph 3.1
Public spending by government level in 2022



Note: Data for Peru and Panama corresponds to 2021, while data for Honduras corresponds to 2020. For this graph, IMF data was used for the central level of Ecuador and the Dominican Republic, while national sources were used for their subnational governments. In Panama, national sources were used for central-level data, while IMF data was used for local-level information. For Argentina, Bolivia, and Uruguay, only national sources were used for all levels of government.

Source: Authors based on national sources for Argentina (MECON, 2023b), Bolivia (UDAPE, 2023a), Ecuador (BCE, 2023), Panama (INEC, 2023a), and the Dominican Republic (DIGEPRES, 2023); for Uruguay (MEF (Uruguay), 2023; OTU, 2023a); and for other countries, IMF (2024a).

The composition of subnational spending

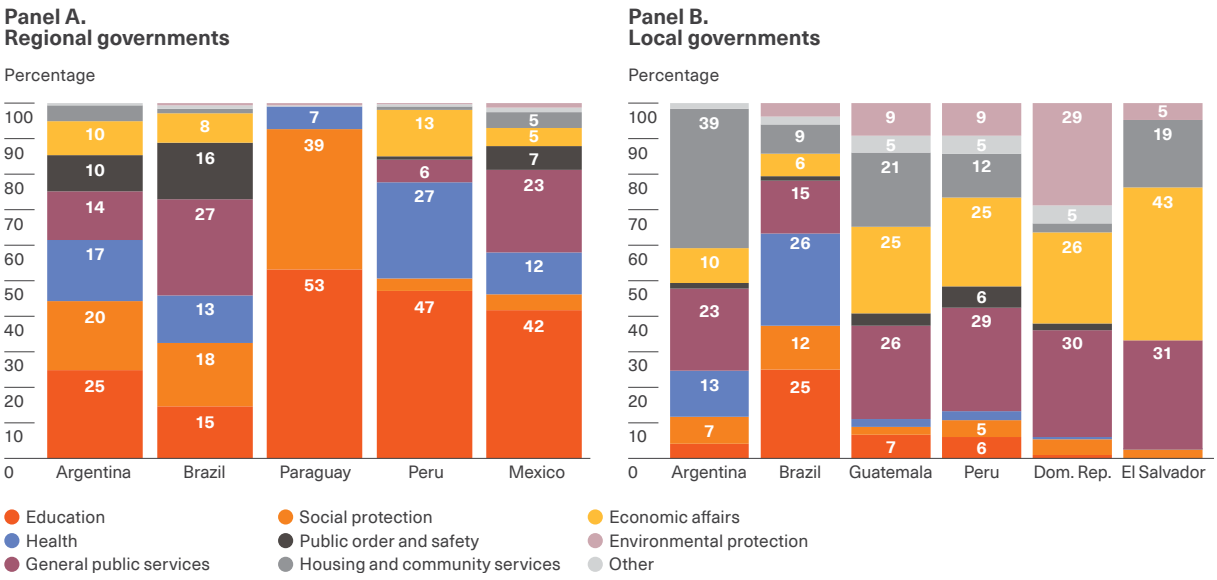
An analysis of subnational spending by economic function reveals substantial differences across countries and levels of government. At the regional government level, education is the primary area of expenditure in most countries, accounting for between 15% in Brazil and 53% in Paraguay (Graph 3.2, Panel A). Health also plays a significant role, ranging from 7% in Paraguay to 27% in Peru. Social protection represents up to 39% of expenditures in Paraguay and approximately 20% in Argentina and Brazil, including household transfers such as pensions for public employees, disability benefits, subsidies for families with dependent children, and other forms of support aimed at mitigating economic and social risks. In Brazil and Mexico, around a quarter of regional budgets are allocated to general public services, which include administrative and operational expenses such as salaries for government staff in executive and legislative roles and the maintenance of public buildings.

At the local government level, spending patterns differ significantly from those observed at the regional level (Graph 3.2, Panel B). Most local governments allocate a substantial share of their budgets to general public services, primarily covering administrative salaries and operational expenses, which account for 15% to 31% of total spending. Expenditures on housing and community services are also significant but vary widely across countries, ranging from just 2% in the Dominican Republic to 39% in Argentina. This category includes urban and community development as well as essential services such as potable water and street lighting. Spending on

"economic affairs," which encompasses productive sectors like transportation, communications, and energy, exceeds 25% of total expenditures in four of six countries, reaching 43% in El Salvador. Environmental protection also represents a notable share of local spending, particularly in the Dominican Republic (29%), and includes activities such as wastewater management, urban drainage services, and biodiversity conservation.

The comparison between government levels highlights clear patterns that reflect distinct competencies, consistent with the descriptions in the previous chapter. In Argentina and Brazil, both regional and local governments allocate budgets to education and health. However, provinces in Argentina bear a larger share of these expenditures, while municipalities in Brazil play a greater role. In Peru, almost all spending on education and health falls under regional governments, with minimal local participation. Some functions appear exclusive to a specific government level: environmental protection, housing, and community services are typically the responsibility of local governments. Subnational spending on public order and security is generally low, except in federal countries, where it accounts for 7% in Mexico and 16% in Brazil.

Graph 3.2
Functional composition of subnational government spending



Note: Spending functions correspond to the United Nations' Classification of the Functions of Government (COFOG) one-digit categories, except for "other," which groups "recreation, culture, and religion" and "defense." Data reflects the most recent year with available information. Data for Argentina does not include the "environmental protection" category.

Source: Authors based on IMF (2022) for El Salvador and national sources for the other countries (see Table A.3.1 of the appendix available in the online edition of the RED).

An alternative way to categorize subnational spending is by distinguishing between current expenditures, capital expenditures, and debt services. Table 3.1 presents this breakdown for regional (Panel A) and local (Panel B) governments in eight countries with available information. For regional governments, spending is primarily focused on operational and administrative activities, with more than 80% allocated to current expenditures in countries such as Argentina, Brazil, Colombia, Mexico, and Uruguay. In these countries,

personnel expenses are significant, alongside social security and current transfers.[2] In contrast, capital expenditures represent a smaller share, indicating lower direct investment in infrastructure. Bolivia stands out as an exception, with 53% of regional spending directed toward capital investments. Debt service costs are moderate in most countries, except in Brazil, where they reach 6.9% of total expenditures.

Local governments exhibit a similar pattern in the distribution of spending, with current expenditures dominating, although this varies by country. For example, in Peru, 55% of local government spending is allocated to infrastructure investment, contrasting with the general trend. Bolivia, Guatemala, and Honduras also stand out, with capital expenditures accounting for around or exceeding one-third of total spending. Within current expenditures, most resources are directed toward salaries and the purchase of goods and services. Local-level debt service payments are generally low, with exceptions like El Salvador, where they represent nearly 16% of total spending.

Table 3.1
Economic classification of subnational spending

Panel A. Regional governments

	ARG	BOL	BRA	COL	MEX	PRY	PER	URY
Current expenditures	**84.3**	**45.3**	**84.8**	**87.3**	**90.6**	**68.7**	**73.8**	**83.0**
Personnel	40.4	16.7	31.5	31.8	20.5	12.5	45.3	51.5
Social security	11.7		17.3				7.2	
Current transfers	21.6	6.2	17.6	33.2	65.0	47.2	0.04	
Other current expenditures	10.6	22.4	18.3	22.3	5.0	9.1	21.2	31.6
Capital expenditures	11.4	53.1	8.4	8.9	4.6	31.3	25.0	14.5
Debt service	4.3	1.6	6.9	3.8	4.8	0.0	1.2	2.5
Total expenditures	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Panel B. Local governments

	ARG	BOL	BRA	CHL	COL	CRI	SLV	GTM	HND	MEX	PRY	PER	DOM
Current expenditures	**82.1**	**64.3**	**89.5**	**93.0**	**85.9**	**70.6**	**59.8**	**62.7**	**54.6**	**71.2**	**74.1**	**43.8**	**67.7**
Personnel	44.7	20.8	43.2	48.5	18.9	37.2	34.9	29.4	29.5	35.9	20.6	8.7	35.0
Social security			7.8	0.9									
Current transfers	6.2	5.6	0.4	21.2	9.0	10.6	0.7	2.1	2.2	8.2	14.8	0.9	4.0
Other current expenditures	31.1	37.9	38.1	22.4	58.0	22.8	24.2	31.2	22.9	27.1	38.6	34.2	28.7
Capital expenditures	18.1	34.3	9.6	5.1	11.2	25.9	23.7	33.4	42.1	26.1	23.8	55.1	25.7
Debt service		1.4	0.9	1.9	2.9	3.5	16.5	3.9	3.3	2.8	2.1	1.1	6.6
Total expenditures	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Note: The values correspond to 2022. For Uruguay's regional governments, it is not possible to distinguish between current and capital transfers, which make up 5% of total spending. Consequently, percentages have been adjusted to exclude these items.

Source: Authors based on national sources (see Table A.3.1 of the appendix available in the online edition of the RED).

2 Personnel expenditures generally include salaries for public sector employees, the state's contributions to social security as an employer, and other forms of compensation. Social security expenditures cover payments to retired public sector employees, as well as social benefits such as bonuses and subsidies for disability, maternity, and support for socially vulnerable populations.



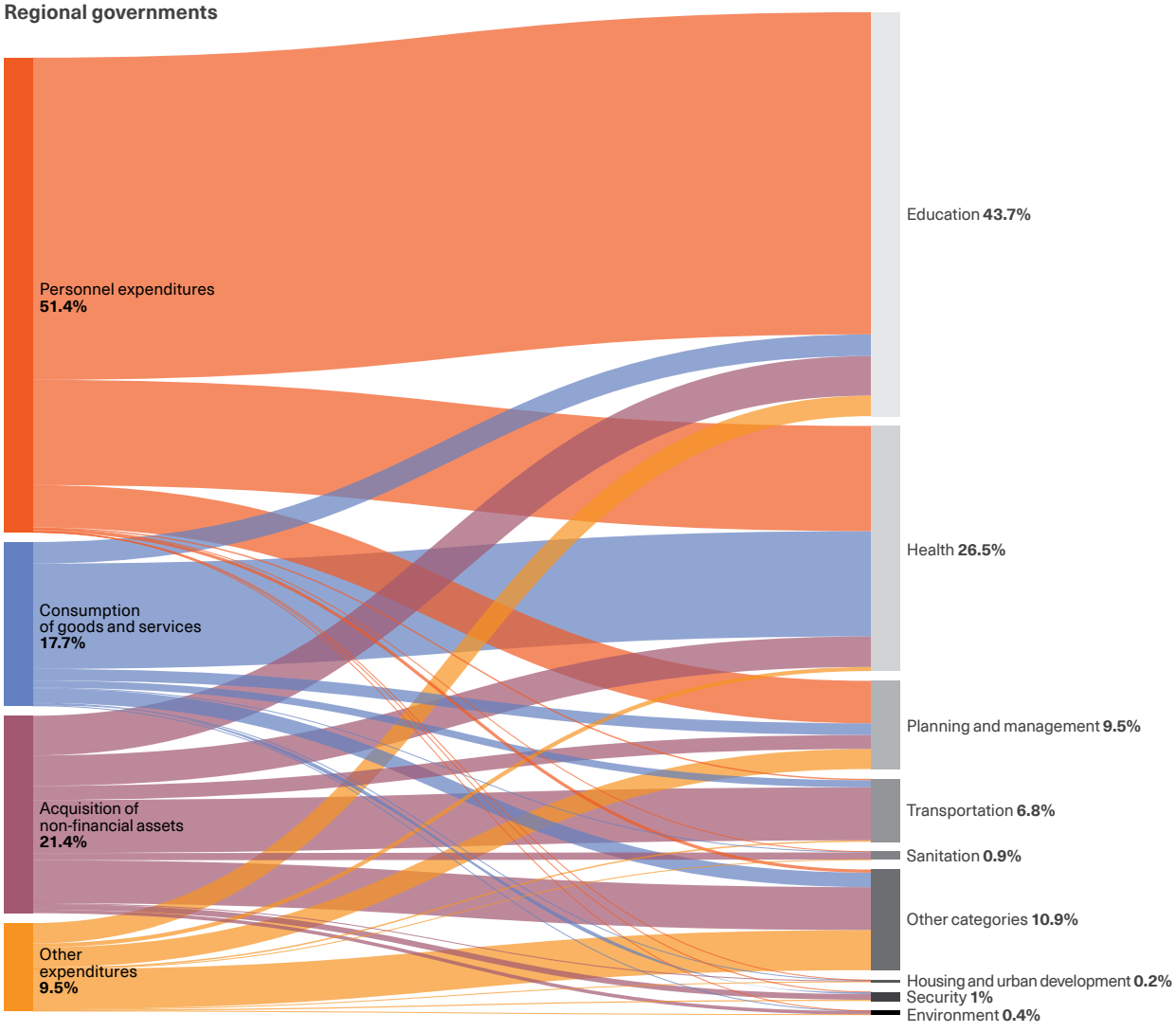
With 10.149 inhabitants, the municipality of Huasco, in Chile, has a population close to the median among local governments in the region.

The combination of economic and functional classifications of subnational spending provides an interesting perspective on resource allocation at these levels of government, revealing, for example, how personnel expenditures are distributed across sectors, or which functions are prioritized in capital investments (see Graph 3.3).

In Peru, regional governments allocate more than half of their budget (51%) to personnel expenses, primarily for salaries in the education, health, and planning and management sectors, which include public administration officials. Public investment, or the acquisition of non-financial assets, accounts for 21% and is distributed across education, health, transportation, and other sectors. Consumption of goods and services represents 18% of the budget, mostly directed toward health, including hospital supplies such as equipment, medical products, and pharmaceuticals.

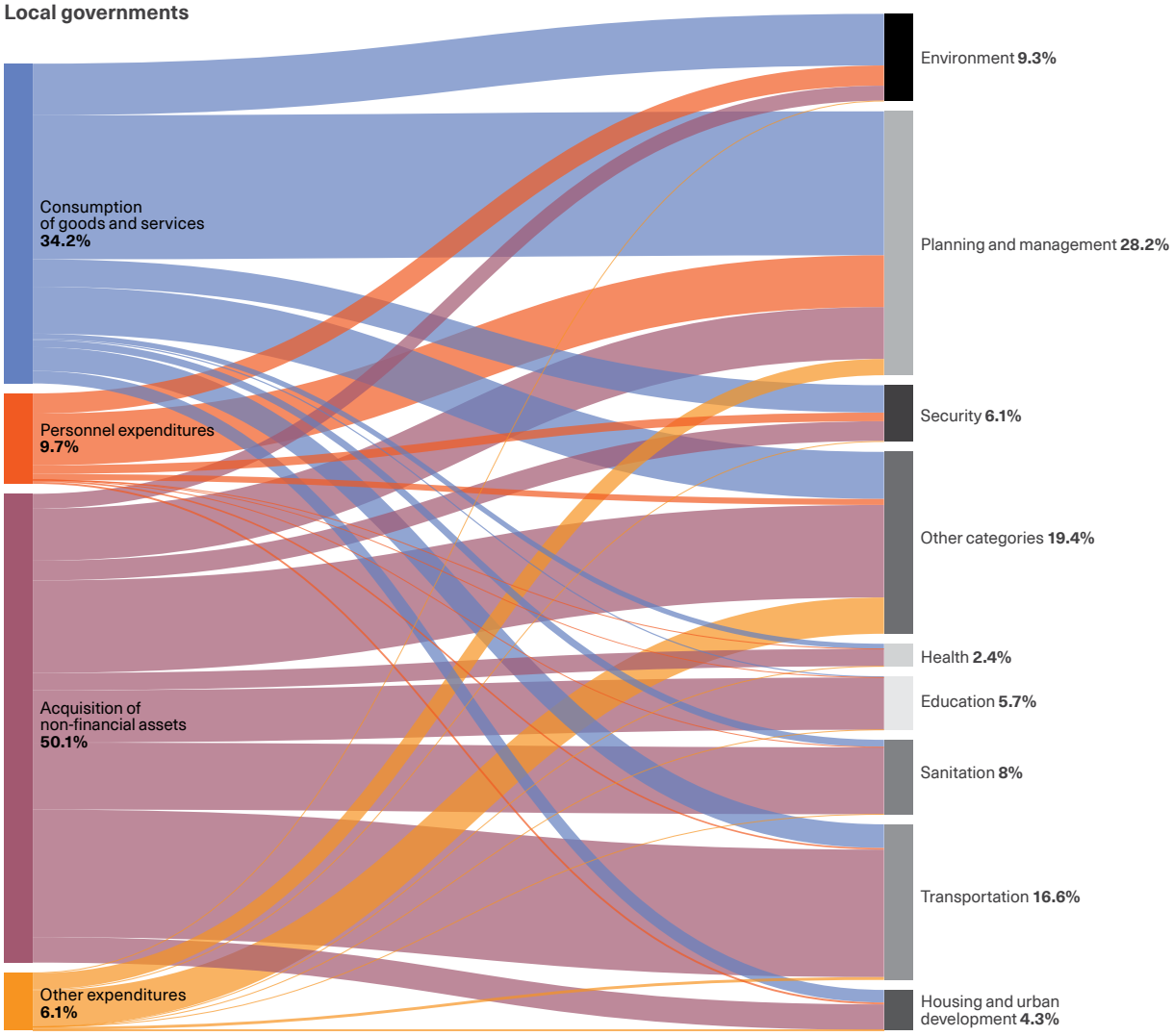
Graph 3.3
Composition of spending in Peru by function and economic classification in 2023

Panel A.
Regional governments



Continued on the next page →

Panel B.
Local governments



Note: Combines economic classification with purpose and function classification for 2023.
Source: Authors based on data from MEF of Peru (2024a).

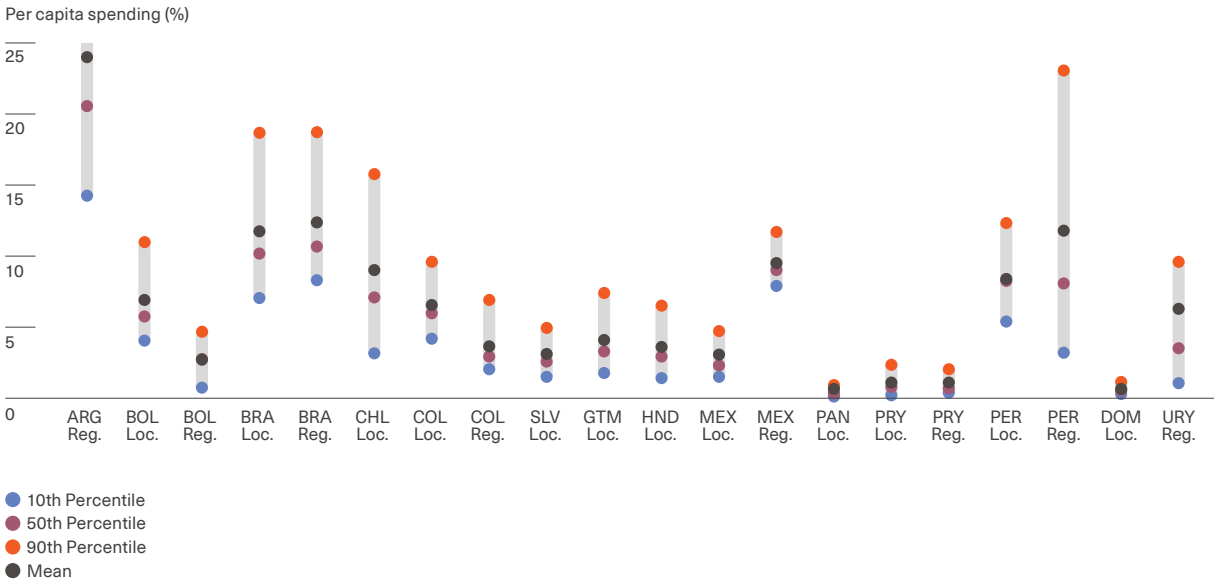
At the local level in Peru, personnel spending is lower, not exceeding 10% of the budget, and is primarily allocated to planning and management (e.g., salaries of municipal officials). Public investment is the largest component of local spending (approximately 50% of the total) and is distributed across sectors such as transportation, sanitation, education, and health (see Chapter 4 of this report). Consumption of goods and services accounts for 34% of total expenditure, largely directed toward planning and management, including essential supplies for the functioning of the State.

Heterogeneity in spending

Subnational government spending per capita exhibits significant heterogeneity both across and within countries (Graph 3.4). Across countries, the average per capita spending of Paraguay's regional governments is equivalent to 1.1% of the country's per capita GDP, compared to 24% in Argentina. Among local governments, the range is narrower, from 0.7% in Panama and the Dominican Republic to 11.8% in Brazil. Within individual countries, spending per capita also shows notable variation. This variation is minimal among local governments in Panama and the Dominican Republic but considerably greater for regional governments in Argentina and Uruguay, as well as local governments in Peru and Chile.

Subnational government spending per capita exhibits significant heterogeneity across countries and within each country

Graph 3.4
Distribution of per capita spending at the regional and local levels



Note: The graph displays the mean and the 10th, 50th, and 90th percentiles of public spending per capita, expressed as a percentage of national per capita GDP and adjusted for purchasing power parity (PPP), for regional and local governments in countries with available data. The data correspond to 2022, except for Bolivia, for which information from 2021 is used. The vertical axis has been truncated for visualization purposes.

Source: Authors based on IMF data (2024b, 2024d) and national sources (see Table A.3.1 of the appendix available in the online edition of the RED).

This section examines the extent to which variation in subnational spending can be linked to two factors. The first is the population size of each jurisdiction, as economies of scale may influence the services provided by subnational governments.[3] The second factor is the GDP level of each jurisdiction, which helps assess the extent to which subnational government spending is redistributive within a country. Subnational GDP data is available for only a subset of countries.

Table 3.2
Elasticity of per capita spending with respect to population and per capita GDP by jurisdiction

Country	Level of government	Observations	Population	GDP per capita
Argentina	Regional	24	-0.37***	0.50***
Bolivia	Regional	9	-0.63***	-0.48
Brazil	Regional	27	-0.23***	0.31**
Colombia	Regional	32	-0.83***	-1.56***
Mexico	Regional	32	-0.09**	0.18***
Paraguay	Regional	17	-0.78***	n.a.
Peru	Regional	25	-0.31***	-0.21
Uruguay	Regional	19	-0.25**	0.10
Bolivia	Local	336	0.12***	n.a.
Brazil	Local	5545	-0.20***	0.21***
Chile	Local	345	-0.36***	n.a.
Colombia	Local	1102	-0.16***	0.09***
Dominican Republic	Local	393	-0.34***	n.a.
El Salvador	Local	237	-0.21***	n.a.
Guatemala	Local	340	-0.52***	n.a.
Honduras	Local	272	-0.50***	n.a.
Mexico	Local	2385	-0.15***	n.a.
Panama	Local	83	-0.28***	n.a.
Paraguay	Local	240	-0.71***	n.a.
Peru	Local	1890	-0.24***	n.a.
Rep. Dominicana	Local	393	-0.34***	n.a.

Note: The dependent variable is per capita spending in PPP-adjusted dollars, divided by national per capita GDP. Variables in the regression are logged. Observations reflect the full sample. Outliers were removed for local-level regressions by excluding values below the 2nd and above the 98th percentiles of both variables. For regional-level regressions, the most populous jurisdictions in Argentina, Brazil, Colombia, Mexico, Paraguay, Peru, and Uruguay were excluded in population regressions, while the lowest-GDP jurisdictions in Mexico and Uruguay were excluded in GDP regressions. The abbreviation "n.a." refers to unavailable data. ***Significant at 1%. **Significant at 5%. *Significant at 10%.

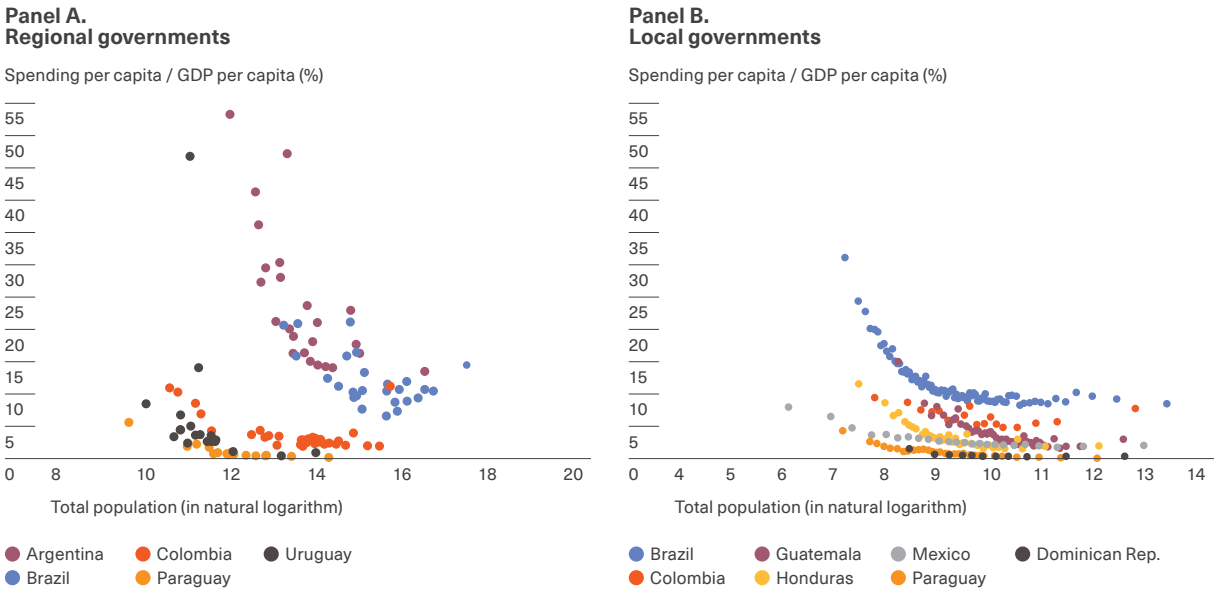
Source: Authors based on IMF data (2024b, 2024d) and national sources (see Table A.3.1 of the appendix available in the online edition of the RED).

3 Another possibility for the association between spending and population size is the connection of population size to a third variable that serves as a policy objective. For example, if less populated areas have higher levels of poverty, per capita public spending might be higher to address this situation. Another possibility is the objective of increasing the population in certain areas, for instance, for sovereignty purposes. High per capita public spending may aim to attract additional population.

The elasticity of per capita spending with respect to population size is negative and significant for regional governments across all eight countries analyzed, indicating the presence of economies of scale. A similar result is observed for local governments in 11 of the 12 countries with available data (Table 3.2), except for one where the elasticity is positive and significant. Elasticity values, however, vary widely, ranging from -0.83 to 0.12, reflecting differences in the intensity of economies of scale across countries. One consistent trend in the data is that per capita spending by regional governments declines more sharply with population increases compared to local governments. The average elasticity for regional governments is -0.34, while for local governments, it is -0.30.

The linear estimation, however, obscures an interesting relationship, as illustrated in Graph 3.5, which excludes some countries for clarity: in certain cases, economies of scale clearly level off at a specific population threshold, beyond which per capita spending stabilizes. One interpretation of these results is that governments require a minimum structure to operate effectively (Martínez et al., 2024). This pattern is evident in five of the eight regional governments and eight of the 12 local governments analyzed. For the remaining cases, the relationship is either consistently decreasing as population increases (e.g., regional governments in Peru and Bolivia and local governments in Chile and Peru) or remains constant (e.g., regional governments in Mexico and local governments in El Salvador and Panama).

Graph 3.5
Per capita spending and population



Note: Per capita spending is measured in PPP-adjusted dollars, divided by national per capita GDP. Panel B shows the average for groups of municipalities generated using the 'binscatter' algorithm by Cattaneo et al. (2024).

Source: Authors based on IMF data (2024b, 2024d) and national sources (see Table A.3.1 of the appendix available in the online edition of the RED).

The second factor analyzed is the elasticity of per capita spending with respect to the per capita GDP of each jurisdiction. This analysis helps determine the extent to which subnational spending, whether regional or local, is redistributive across different countries. Data on jurisdiction-level GDP is available for seven of the eight countries with regional government spending data and only two of the 12 countries with local government spending data.

For regional governments, a wide range of results is observed. In Colombia, elasticity is negative and significant, indicating that jurisdictions with higher per capita GDP have lower per capita spending. This suggests that subnational spending is progressive in relation to the distribution of per capita GDP. In Bolivia, Peru, and Uruguay, elasticity is not statistically different from zero, which also signals progressive spending, as all residents effectively receive similar levels of spending from their regional government regardless of their jurisdiction's GDP. In other countries, such as Argentina, Brazil, and Mexico, regional governments show elasticities of per capita spending relative to per capita GDP ranging from 0.18 (Mexico) to 0.5 (Argentina). An elasticity below 1 indicates some degree of redistribution, though this diminishes as elasticity approaches 1.

For local governments, data is more limited. In Colombia and, to a lesser extent, Brazil, per capita spending shows a weak correlation with local GDP, indicating a significant degree of redistribution at the local level.

Fiscal balances

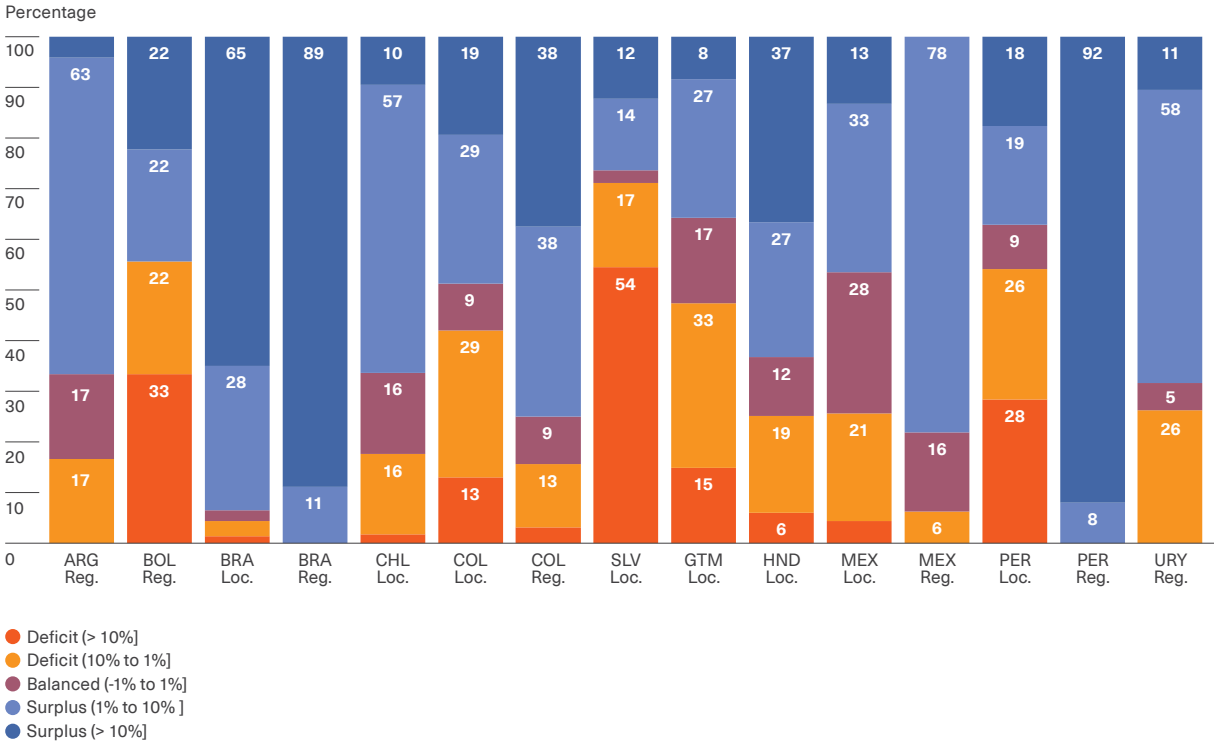
The fiscal balances of subnational governments are a key indicator of their capacity to fund public services, manage decentralized responsibilities, and ensure financial sustainability. Fiscal conditions across the region exhibit significant variation, shaped by differences in legal frameworks that determine subnational governments' authority to collect revenue and decide on expenditures, their administrative capacities, and their access to intergovernmental transfers.

Graph 3.6 offers a comparative snapshot of fiscal balances in 2022 for several countries in Latin America and the Caribbean, highlighting substantial variability both between and within countries in the fiscal performance of subnational governments. In some cases, subnational jurisdictions demonstrate relatively strong fiscal positions. For example, over 65% of regional governments in Peru and state and municipal governments in Brazil reported surpluses exceeding 10% of their revenues. Conversely, most local governments in El Salvador experienced deficits in 2022. In the other countries, subnational fiscal balances are highly diverse, with governments spanning the entire range of fiscal results.

It is important to note that fiscal balances reflect both subnational governments' capacity to manage their resources as well as their adherence to fiscal rules that limit deficits or promote the generation of surpluses. While the absence of deficits in some entities may be influenced by these rules, it often also signals a comfortable fiscal position, enabling them to meet obligations without resorting to borrowing.

The following section will delve deeper into the role of these fiscal rules and their impact on financial sustainability.

Graph 3.6
Percentage of subnational governments in Latin America and the Caribbean with deficit, balanced, and surplus fiscal balances in 2022



Note: Data for Bolivia corresponds to 2021. Fiscal balances are presented as a percentage of each jurisdiction's total revenues.
Source: Authors based on countries' budget execution data (see Table A.3.1 of the appendix available in the online edition of the RED).

Budgetary constraints and autonomy

The share of subnational governments in aggregate spending is an imperfect indicator of their responsibilities, as it does not fully reflect their autonomy to plan, allocate, and execute budgets (Ter-Minassian, 2020). Several factors constrain subnational governments' autonomy in allocating resources. These include budget rigidities, which make it challenging to adjust mandatory expenditures such as salaries, pensions, and debt servicing. On the other hand, some regulations dictate both the amount and allocation of spending, such as earmarked transfers and spending floors that mandate minimum levels for priority areas. Finally, fiscal restrictions, such as fiscal responsibility laws, are meant to prevent excessive borrowing or unsustainable spending patterns. While these measures are intended to ensure fiscal sustainability, they often limit the flexibility of subnational governments to respond to specific circumstances.

Budgetary rigidities and fiscal sustainability

Some public spending components are difficult to modify or adjust due to institutional, legal, contractual, or other restrictions, limiting governments' ability to alter expenditures in the short term. Wages, pensions, and public debt servicing are among the most inflexible categories, often influenced by macroeconomic and demographic trends (Cetrángolo et al., 2009; Olaberria and Herrera, 2020).

●●

Spending rigidity limits the autonomy of subnational governments and poses challenges to fiscal sustainability

These rigidities not only limit subnational governments' autonomy but also pose challenges for fiscal sustainability, especially during recessions. Revenue declines in these periods worsen financing needs due to the inflexibility of mandatory expenditures like wages and pensions. To mitigate such risks, some countries have established limits through fiscal responsibility laws. For instance, in Brazil, states and municipalities are required to cap personnel expenditures at 60% of net current revenues (Bornhorst et al., 2019).

In addition to constraining subnational governments' autonomy in resource allocation, spending rigidities pose significant challenges for fiscal sustainability, particularly during recessions. Revenue declines during such periods exacerbate financing needs due to the inflexibility of mandatory expenditures, such as wages and pensions. To mitigate these risks, some countries have implemented limits in their fiscal responsibility laws. In Brazil, for instance, states and municipalities are required to cap personnel expenditures at no more than 60% of net current revenues (Bornhorst et al., 2019).

The share of expenditures allocated to personnel, social security, and debt servicing varies significantly across countries and levels of government. In the countries included in Table 3.1, personnel spending averages 31% of total expenditure at both regional and local levels. Social security expenditures are higher in federal countries like Argentina and Brazil, where subnational governments typically manage their own systems. Debt servicing payments average around 3% of total expenditures at the regional level and 4% at the local level. Together, these relatively rigid components of subnational public spending represent 43% and 36% of the total expenditures of regional and local governments, respectively.

Constraints on spending amounts and allocations

Spending autonomy can also be limited by regulations governing the use of specific funds, such as revenues from non-renewable natural resources or transfers from higher levels of government with earmarked allocations. Graph 3.7 shows that the share of earmarked resources in subnational spending varies widely across countries. In Argentina, Brazil, and Uruguay, where subnational governments have more autonomy in resource allocation, the share of earmarked resources is lower. In Chile, Colombia, Guatemala, and El Salvador, a larger share of resources is earmarked. Bolivia stands out, with 80% of regional government spending financed by earmarked resources, mostly allocated to investment. These funds are primarily used for infrastructure, followed by education and health (see Chapter 5).

Budget floors are another limitation on spending autonomy, as they set minimum spending amounts or percentages for specific sectors like education and health. These regulations aim to ensure compliance with constitutional or legal obligations and are justified by the merit-good nature of these sectors or as mechanisms to address time inconsistency issues (Cetrángolo et al., 2009)[4]. While these measures

4 Merit public goods are those that provide additional social benefits not always recognized by individuals. This justifies their financing or regulation by the state to ensure broader access. Examples include basic education, public health, and other social expenditures.

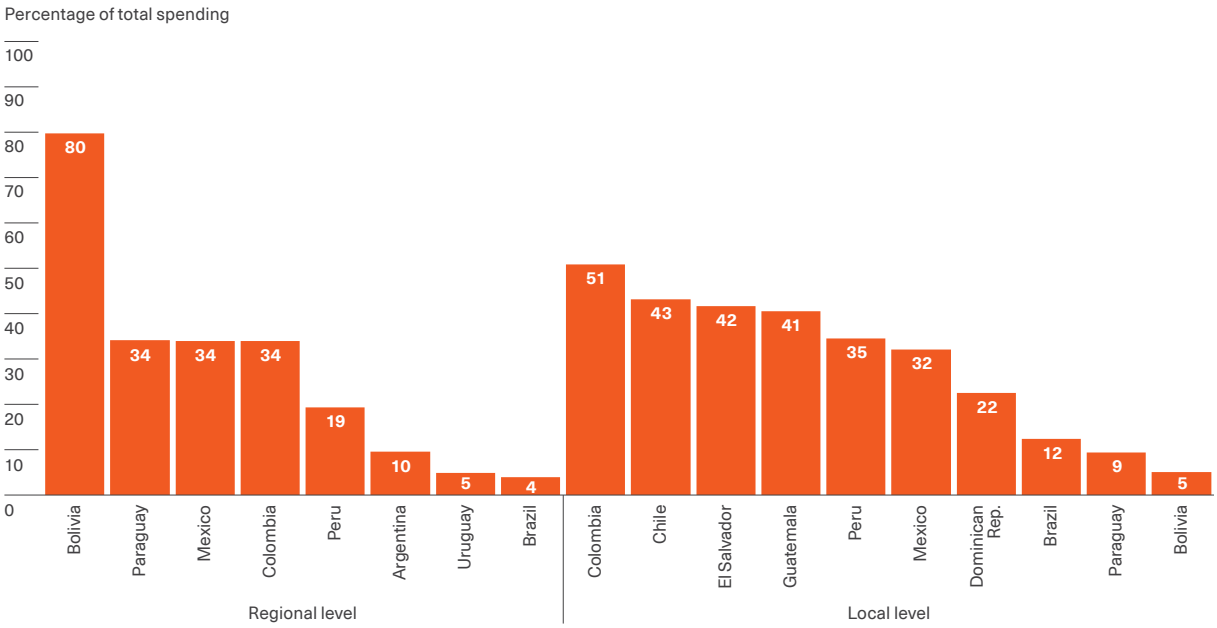
may limit subnational governments' ability to adapt spending to local needs, they ensure minimum resource allocations for priority areas, which can yield significant benefits if well-implemented.

Spending floors ensure a minimum allocation of resources to priority areas, which can yield significant benefits if implemented effectively

For example, Brazil's Constitution mandates minimum spending levels for health and education to ensure consistent investment in these essential sectors for social well-being. States must allocate 12% of their revenues to health, while municipalities must allocate at least 15%. Both levels of government are required to invest 25% of their revenues in education.

A study by Clarke et al. (2024), commissioned for this report, shows that introducing spending floors for health in Brazilian municipalities significantly increased sectoral spending, particularly in jurisdictions that had previously allocated less than the mandated percentage. Additional resources were used mainly for healthcare infrastructure, personnel recruitment, and administrative costs, leading to expanded primary care coverage and improved access to municipal hospitals. This investment in health reduced infant mortality, particularly neonatal deaths and those caused by perinatal conditions, demonstrating the positive impact of targeted public spending in priority areas.

Graph 3.7
Earmarked transfer revenues as a percentage of total subnational spending in Latin American and Caribbean countries, circa 2023



Note: Data correspond to 2019 for El Salvador, 2021 for Bolivia, 2022 for Brazil, Chile, Colombia, Guatemala, and Mexico, and 2023 for Argentina, Paraguay, Peru, the Dominican Republic, and Uruguay.

Source: Authors based on national sources (see Table A.3.1 of the appendix available in the online edition of the RED).

The study highlights two key lessons. First, although the new regulations established minimum spending requirements for health, municipalities retained autonomy to decide how to allocate resources within the sector, which was critical to the measure's success. Second, the results were uneven across the country. In municipalities with high levels of corruption, the positive effects of increased health spending were less pronounced.

Conversely, municipalities with stronger management practices and better institutional capacity made more effective use of additional resources, achieving superior health outcomes. Brazil's experience shows that spending floors, when combined with flexibility in resource allocation and supported by strong governance, can improve access to critical services and generate positive impacts on social well-being.

Rules for the sustainability of subnational finances

The trend toward granting subnational governments greater financial autonomy has been accompanied by restrictions aimed at addressing the challenge of fiscal discipline at this level of government. This challenge can be summarized as a tendency toward over-indebtedness, based on the expectation that a financial rescue will come from a third party or that the responsibility can be passed on to another authority in the future. While this issue has been extensively studied at the central government level, it also exists at the subnational level and can, as will be explained below, be even more pressing.



The trend toward granting subnational governments greater financial autonomy has been accompanied by restrictions aimed at addressing the challenge of fiscal discipline at this level of government

One approach to address this problem has been to prohibit, through high-level legislation (e.g., in the constitution), the central government from providing financial aid to subnational entities, thereby discouraging excessive borrowing. However, this prohibition is not always credible for at least two reasons.

First, a subnational government's default can impact the central government's creditworthiness. Rodden (2002) argues that this may happen if the subnational government relies heavily on transfers from the central government. In such cases, the central government is perceived as responsible for covering the financial contingencies of the subnational entities that depend on it. Failing to do so could be interpreted as a sign of financial weakness at the central level.[5]

Second, the population of the subnational jurisdiction is part of the electorate for the central government, meaning voters may reward national candidates who offer to ease their financial burden.

Finally, the expectation of a bailout exacerbates the level of over-indebtedness among borrowers. To address this issue, some countries, regardless of their progress in decentralization, have retained control over subnational borrowing, requiring central government authorization for any new debt (see Chapter 4). Others, particularly but not exclusively federal countries, have permitted subnational financing under specific rules.

Some countries have experienced financial crises triggered by subnational debt. The following sections examine three such cases—Brazil, Colombia, and Mexico—and the characteristics of the rules they adopted. Before delving into each case, it is important to highlight key lessons from

5 Empirical evidence aligns with the existence of rules limiting subnational government borrowing in countries where their financing relies more heavily on transfers (von Hagen and Eichengreen, 1996; Rodden, 2002).

these experiences. First, successful rule-based frameworks for controlling subnational debt growth (as in Colombia and Mexico) can be summarized in three key components: (1) limits on borrowing and expenditure composition; (2) forward-looking information systems to enable early corrective action; and (3) a resolution mechanism (backed by the state) that includes a fiscal adjustment program in cases where subnational governments face financial distress. However, it is essential to consider the costs of the information and monitoring systems required by such frameworks.

Some countries have experienced financial crises stemming from the indebtedness of subnational jurisdictions

Second, Brazil's experience underscores the importance of credible rules and the need to evaluate their effects at different points in the economic cycle.

Rules for subnational governments in Brazil

The decentralization drive initiated by Brazil's 1988 Constitution triggered a subnational debt crisis a decade later. Subnational debt rose from 7% of GDP in 1991 to 20% in 2002, becoming unsustainable for issuers. The central government carried out bailouts between 1998 and 2001. At the same time, the Fiscal Responsibility Law (LRF) was enacted in 2000, establishing limits on spending and borrowing for both federal and subnational governments (states and municipalities).

In Brazil, subnational government debt increased from 7% of GDP in 1991 to 20% in 2002, becoming unsustainable for issuers

Initially, the LRF focused on two limits: (1) personnel spending as a percentage of current revenues and (2) the maximum level of debt subnational governments could incur relative to net current revenues (Arreaza et al., 2022).

While this framework successfully reduced subnational debt during the first decade of the 21st century—a period of economic growth—it failed to do so during the subsequent decade, when Brazil experienced recessions in 2014 and 2016. This led to a new subnational financial crisis in 2016 and another costly federal bailout.

Medas et al. (2019) attribute this failure primarily to two factors. First, the enforcement of compliance with the established limits was not rigorously applied by those responsible. The authors, along with others, argue that the belief that the federal government would ultimately bail out insolvent subnational entities was never fully dispelled.

Second, the design of the rule introduced procyclicality in personnel spending, which proved difficult to manage. During periods of economic expansion, higher tax revenues across all levels of government enabled increased personnel spending. However, when the economic cycle reversed and revenues declined, reducing personnel spending became challenging due to legal restrictions on terminating labor contracts.[6]

6 One solution to this problem is to define spending minimums based on trend income rather than current income and to establish a stabilization fund to absorb fluctuations in expenditures throughout the economic cycle. Nonetheless, there is consensus that other elements of Brazil's fiscal rule require attention, a discussion beyond the scope of this section.

Box 3.2
Debt restructuring laws for subnational governments

The existence of a well-defined, transparent, and enforceable bankruptcy process strengthens the credibility of the commitment to avoid bailouts and ensures that those involved in a financially unsustainable situation bear the associated costs. This, in turn, provides appropriate ex-ante incentives for both lenders and borrowers.

A bankruptcy law for subnational governments cannot simply be an extension of corporate bankruptcy laws, as subnational entities have unique characteristics. In particular, most of their assets cannot be seized, and they must continue operating since the provision of essential public services cannot be interrupted during the financial recovery period. This presents a challenge in determining the resources necessary to maintain operations. The more resources allocated to essential services at the expense of debt repayment, the longer the adjustment period will be.

Many subnational debt restructuring laws have been enacted in response to financial distress (Canuto & Liu, 2013). The urgency of managing crises often leads to laws being designed ad hoc, taking into account the relative strengths of a country's institutions at a given moment. Colombia's Law 550 of 1999, for example, assigns the subnational bankruptcy process to the Superintendence of Companies, expanding its jurisdiction to oversee these governments for this purpose. A different approach was taken in Hungary, where the 1996 municipal bankruptcy law placed the administration of these processes under the judiciary (Canuto & Liu, 2013). Both countries have successfully resolved their initial crises and established financially sustainable conditions for subnational governments. This underscores the fact that the most effective institutional designs depend on the specific characteristics of each country.

Rules for subnational governments in Colombia

Colombia's 1991 Constitution promoted fiscal decentralization, granting subnational jurisdictions (departments and municipalities) more resources and greater autonomy over their use. However, the lack of incentives for fiscal discipline and access to borrowing led to a 320% increase in subnational debt between 1992 and 1997, forcing the central government to undertake a costly bailout (Fedelino, 2010). This prompted the adoption of fiscal discipline measures, which successfully restored economic health in the early 2000s (Pérez-Valbuena, Melo-Becerra et al., 2024).

The fiscal rule framework in Colombia includes several elements. The "Traffic Light Law" (1997) sets borrowing limits based on two indicators: one of solvency (the ratio of interest payments to operational surplus) and one of sustainability (the ratio of total debt to current revenues). If the solvency indicator is below 40% and the sustainability indicator is under 80%, the entity can take on new debt without requiring authorization from the Ministry of Finance. Otherwise, authorization is needed.[7]

Another important measure for overcoming a high debt scenario in Colombia was the introduction of debt restructuring agreements under Law 550 of 1999. When departments and municipalities face payment defaults, they can voluntarily enter into these agreements, which impose spending restrictions. Laws that regulate these debt restructuring schemes are essential for incentivizing sound financing management of subnational governments (see the Box 3.2). Additionally, in 2000,

7 The solvency indicator threshold for these purposes was raised to 60% in 2003.



The State of Amazonas in Brazil is the largest regional government by land area in Latin America and the Caribbean.

limits were established on the ratio of operating expenses to freely disposable current revenues.

Since 2003, subnational governments have been required to present a 'medium-term fiscal framework,' consisting of a financial plan that demonstrates their debt repayment capacity, as certified by a credit rating agency. Under this regulation, jurisdictions may only access central government financing for short-term liquidity needs and are prohibited from taking on new debt if they are in default on loans granted or guaranteed by the central government.

Evidence indicates that the introduction of these rules has succeeded in maintaining subnational financial sustainability (Chamorro and Urrea, 2016; Sánchez and Zenteno, 2011). Their implementation has also ensured that operational spending limits reduce the likelihood of deficits without compromising the provision of public goods (Carreri and Martínez, 2024). However, there is room to advance toward what are referred to as "second-generation" fiscal rules. One key improvement is the inclusion of "escape clauses" within these rules to better address crises. This need became evident globally during the COVID-19 pandemic, when some regulatory restrictions had to be lifted. These clauses aim to facilitate adjustments in an orderly and predictable manner.

In Colombia, evidence shows that subnational financial sustainability has been achieved through the introduction of fiscal rules, which have reduced the risk of deficits without compromising the provision of public goods

Rules for subnational governments in Mexico

Mexico underwent a fiscal decentralization process in the 1990s and 2000s. Initially, the regulatory framework relied on market mechanisms. However, by 1996, subnational debt had reached 2.2% of GDP, and these governments were unable to service it, prompting a federal bailout. During the global financial crisis, subnational debt rose again, from 1.6% of GDP in 2007 to 2.9% in 2017.

In 2016, the Law on Financial Discipline for Federal Entities and Municipalities (LDF) was enacted, introducing controls on subnational debt. This law was made possible by a constitutional reform passed in 2013.

In Mexico, the 2016 Financial Discipline Law for Federal Entities and Municipalities (LDF) was enacted, establishing controls on subnational government debt

The system establishes a debt limit framework based on sustainability indicators that determine whether a subnational government can take on financial obligations. Additionally, a debt registry and a contracting mechanism were created to ensure borrowing is done at the lowest cost.

The framework also includes a series of spending rules. If subnational governments can access debt, it may only be used for investment purposes (the "golden rule"). Personnel spending is subject to a maximum growth rate, current surpluses must be saved, and non-productive expenditures must be adjusted in the event of deficits.

Similar to Colombia, Mexico's framework establishes information standards, including fiscal framework projections for five years at the state level and three years at the municipal level. Finally, in cases of insolvency, a debt restructuring mechanism is in place, with federal government guarantees conditioned on the implementation of fiscal adjustment measures.

In this way, Mexico's fiscal rule shares elements with Colombia's framework. Empirical evidence shows that the rule has been effective in containing subnational government debt (Del Castillo and Cabral, 2024).

Public procurement

Public procurement is the process by which public sector organizations acquire the goods and services needed to provide public services. These purchases range from the routine acquisition of supplies essential for an organization's day-to-day operations to large-scale infrastructure projects.[8]

Procurement accounts for a significant portion of subnational government expenditures in Latin America and the Caribbean, as shown in Graph 3.8. On average, nearly half of local government spending and about one-third of regional government spending is allocated to procurement. Among local governments, Peru records the highest share of spending on procurement, reaching 86% of total expenditures, followed by Bolivia at over 70%. For regional governments, Bolivia also stands out, allocating more than 60% of its budget to procurement.[9] The high share of procurement in total spending in these countries is primarily due to the significant role of public investment, which is included in procurement expenditures.

Public procurement management is one of the areas of public administration most susceptible to inefficiency and waste. These issues can arise even from well-intentioned actions by public officials, due to factors such as a lack of technical skills to negotiate better terms, an absence of incentives to minimize costs, or excessive regulatory burdens that hinder streamlined and efficient processes. Such conditions can result in the purchase of inputs that are more expensive or of lower quality than what could be obtained in the market. Bandiera et al. (2009) found that approximately 80% of excess spending on generic goods procurement in Italy was attributable to these types of inefficiencies. In such cases, the quality of public services provided with these inputs may also suffer.

Wasteful spending can also stem from corruption, where public officials intentionally exploit discretion in decision-making to gain direct benefits, such as illicit rents. Public works contracting is particularly susceptible to corruption due to the high value of contracts, the difficulty of verifying every detail of construction quality, and the specificity of projects, which limits the number of suppliers capable of executing them (Fajardo et al., 2019). These conditions create incentives and opportunities for collusion between public officials and companies, often resulting in increased costs for the state. A well-known regional example is the Odebrecht case, where the company paid bribes to secure contracts or renegotiate terms to its advantage, leading to cost increases of up to 40% over initial project estimates (Campos et al., 2021).

●●

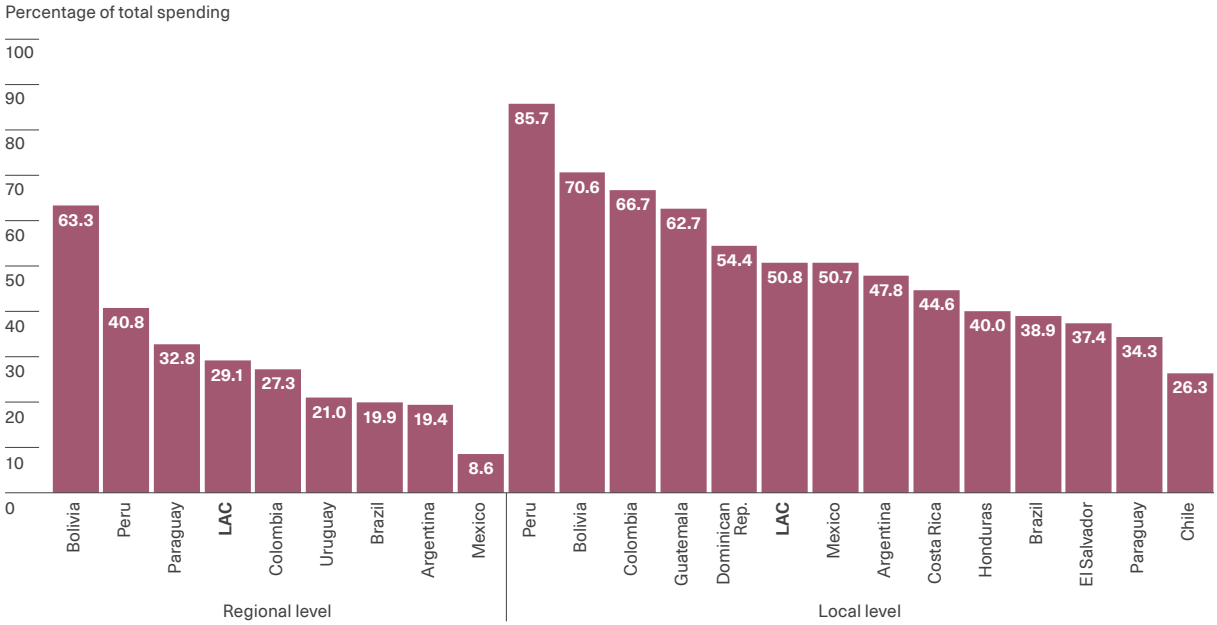
Public works contracting is particularly susceptible to corruption

Such circumstances underscore the importance of clear and effective public procurement regulations aimed at improving process efficiency and reducing opportunities for corruption through transparency and control mechanisms. These norms and mechanisms are particularly relevant for subnational governments, where technical capacity and resources for procurement management are often limited.

8 In this chapter, the terms purchases and procurement are used interchangeably to refer to public procurement, encompassing both the acquisition of goods and services and the contracting of public works.

9 These figures are derived from the categories "consumption of goods and services" and "acquisition of non-financial assets (or gross capital formation)" in government budget executions. They are not directly comparable to OECD data based on the System of National Accounts (SNA). For more details on the methodology used to estimate public procurement expenditures and the differences with the SNA, see the methodological note in Graph 3.8.

Graph 3.8
Public procurement as a percentage of total subnational government spending in Latin America and the Caribbean, 2022



Note: Public procurement is estimated as the sum of the consumption of goods and services and the acquisition of non-financial assets (gross fixed capital formation) according to government budget execution. This approach aligns with OECD (2024) criteria and IMF Government Finance Statistics, encompassing a broader range of countries than those available in the IMF database. The methodology follows the Government Finance Statistics Manual (GFSM), which provides an accounting framework for evaluating fiscal policy but differs from other systems like the System of National Accounts (SNA). Unlike GFSM, SNA also includes the costs of goods and services financed by the government, such as subsidies or transfers for goods and services consumed by other sectors.

Source: Authors based on countries' budget execution data (see Table A.3.1 of the appendix available in the online edition of the RED).

Given that procurement represents a significant portion of subnational spending, any improvement in its management can have substantial impacts on spending quality and the delivery of public services. Centralized regulatory and support systems for procurement, such as digital platforms or standardized procurement modalities, can be particularly beneficial for subnational entities. Adopting these practices can optimize costs, reduce corruption risks, and improve transaction transparency.

One key element of public procurement systems to enhance spending efficiency is defining different procurement modalities, including two notable ones: framework agreements and auctions.

Framework agreements. These are among the most used modalities and involve agreements with suppliers to provide generic products under pre-established conditions to any purchasing entity within the system. Their aim is to simplify and expedite repetitive purchases of highly standardized goods or services. Framework agreements promote automatic decision-making, reducing discretion among purchasing entities and, consequently, minimizing both resource waste and corruption opportunities.

Using framework agreements can generate significant procurement cost savings. For example, Bandiera et al. (2009) demonstrated that Italy's central procurement agency significantly reduced price differences for identical products and

achieved substantial savings when purchasing generic goods through these agreements. By centralizing price negotiations, this modality also reduces inefficiencies stemming from a lack of technical skills or incentives to minimize costs at the local level—an especially relevant outcome for subnational governments with limited capacities. These results suggest that expanding the coverage of public procurement systems to subnational entities and implementing framework agreements for the widest possible range of generic goods could effectively improve subnational spending efficiency.

Framework agreements are available in the public procurement systems of most Latin American and Caribbean countries, though their use is not always mandatory. A 2018 survey found that national public procurement agencies in 10 of the 15 countries analyzed offer centrally negotiated framework agreements (Graph 3.9).[10] Of these, such agreements are mandatory at all levels of government in two countries (Ecuador and Guatemala), mandatory only for central governments in six countries (Chile, Colombia, Costa Rica, Honduras, Mexico, and Paraguay), and voluntary in the remaining two (Brazil and Uruguay) (OECD, 2024c).[11]

Despite their availability, a key challenge in many countries is encouraging broader use of this tool, particularly at subnational levels. In Peru, for instance, public procurement through framework agreements accounted for just 1% of local government procurement spending and 5% for regional governments. This limited use is partly due to a preference for more flexible modalities (e.g., direct contracting for smaller amounts) and institutional limitations that hinder adequate planning to leverage these agreements (Contraloría General de la República, 2023).

Auctions. Auctions are effective mechanisms for promoting competition and achieving better conditions for acquiring goods and services procured less frequently. One particular type is reverse auctions, where the purchasing entity specifies the required goods or services and awards the contract to the lowest-priced bid. This modality is especially effective in reducing costs in contexts with many suppliers. However, a key requirement for maximizing its benefits is defining precise specifications for the goods and services. Without this, focusing solely on price may result in suboptimal outcomes if factors like quality are not adequately considered (Lalive and Schmutzler, 2015).

Framework agreements and auctions improve procurement efficiency and are further enhanced by digital tools

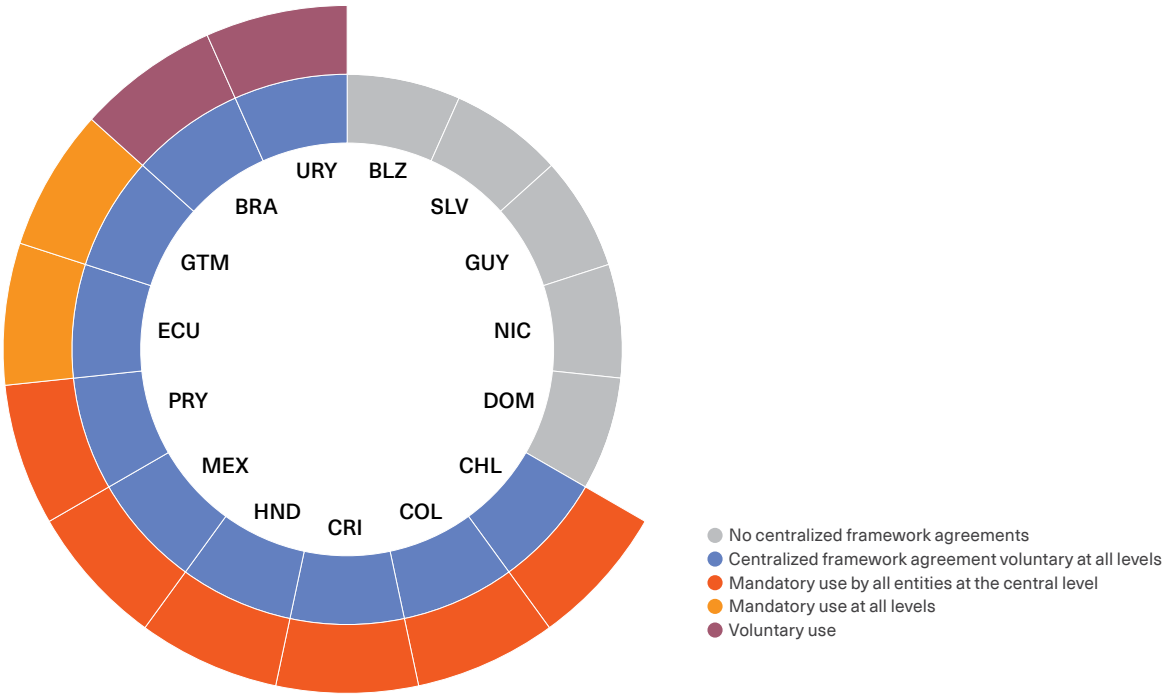
Framework agreements and auctions improve procurement efficiency and are further enhanced by digital tools. Framework agreements are key to setting up electronic catalogs that provide access to standardized goods and services at pre-established prices, simplifying purchases and increasing transparency. Electronic reverse auctions facilitate competitive processes online, optimizing supplier participation and reducing costs. Both tools are often integrated into public procurement portals that manage all stages of contracting, from announcements to awards and contract monitoring.[12]

10 The five countries where central public procurement agencies did not offer framework agreements at the time of the survey are Belize, the Dominican Republic, El Salvador, Guyana, and Nicaragua.

11 While it is desirable for framework agreements to be mandatory for purchases by subnational entities, their mere existence, even when their use is voluntary, can generate cost savings for public sector organizations that carry out these transactions independently, due to informational externalities (Lotti et al., 2024).

12 For an analysis of the impact of these digital tools on subnational procurement, see Chapter 8.

Graph 3.9
Availability and coverage of centralized framework agreements in Latin America and the Caribbean by government level



Source: Authors based on OECD (2020a).

A critical aspect of public procurement system design is balancing control and flexibility. While procurement rules limit discretionary decision-making by purchasing entities, they can also result in costs in terms of administrative inefficiency if they impose excessive rigidity on the process. This rigidity can lead to additional costs in delivering public services or encourage the use of exceptions to bypass rules. In fact, one of the region's ongoing challenges is reducing overreliance on exceptions while maintaining an appropriate balance between control and flexibility (Izquierdo et al., 2018).

Uniform application of centralized rules to all subnational entities, without considering their varying technical and administrative capacities, is another common issue. This approach, while aimed at standardizing procedures and ensuring compliance, may place a disproportionate burden on smaller or resource-limited subnational governments that struggle to meet the requirements intended for entities with greater institutional capacity.

For example, in Brazil, it has been documented that resource-constrained governments struggle to pay suppliers within the timelines set by regulations. This problem stems from centralized rules that, when uniformly applied, create an outsized administrative burden for smaller municipalities lacking the technical and operational capacity to manage complex procurement processes (Dahis et al., 2023). The lack of flexibility in regulations makes it difficult for these municipalities to adapt their procedures to their actual capacities, often leading to delays in budget execution and, consequently, in payments to suppliers. These delays further discourage the participation of small

suppliers, especially local ones, for whom such lags translate into higher financial costs.

In Peru, the lack of flexibility in regulations has significant consequences, such as the frequent use of exceptions. According to a study by the CGR of Peru (2023), procurements without formal process —defined as direct purchases below certain thresholds—accounted for one-third of subnational government procurements in 2022. While this mechanism was designed to address exceptional situations or low-value needs, its administrative flexibility has led to widespread use. However, the study reveals that this modality has often been misused, particularly through contract splitting to circumvent the regular processes mandated by regulations.

These examples highlight how excessive control combined with inflexible regulations can lead to negative outcomes, especially for smaller subnational governments or those with limited capacities. Possible solutions to strike a balance between control and flexibility include simplifying procedures for low-value purchases, reassessing thresholds for simpler procurement methods, and implementing more streamlined processes for recurring purchases. These measures could help mitigate inefficiencies while maintaining transparency in public procurement.

Finally, one of the most important findings from the study by Bandiera et al. (2009), mentioned earlier, is that the majority of cost overruns in the procurement of generic goods in Italy stem more from inefficiencies in procurement processes than from corruption. The widespread use of centralized procurement agreements effectively addresses the former issue but not the latter. This suggests that encouraging subnational governments to adopt centralized public procurement systems could significantly reduce procurement cost overruns. However, such measures must be complemented by ex post controls, such as external audits, which will be discussed in the next section.

Other controls and incentives: Audits and results-based financing

Control Mechanisms

Rules that limit public officials' authority in resource use may prove insufficient if not complemented by effective corrective and preventive controls. Even when regulations are in place, officials may find ways to circumvent them, such as splitting contracts to keep them below thresholds that require more rigorous procurement processes or invoking exceptional conditions to enable discretionary decisions. Controls can be carried out by internal government entities or by a higher jurisdiction.

External audits

One key tool to strengthen oversight of fund use at the subnational level is central government audits, whose effectiveness as an anti-corruption mechanism has been widely documented.

One of the most notable examples is Brazil's audit program, launched in 2003 and operated by the Comptroller General of the Union (CGU) to detect and reduce corruption in municipal governments through random verification processes. The CGU selects municipalities through a public lottery to

review the management of federal funds allocated to local projects. Audit results are published in the media and shared with judicial and law enforcement authorities.

This program has proven to be an effective instrument for reducing corruption in audited municipalities. Avis et al. (2018) found that the decline in corruption was mainly driven by officials' heightened perception of legal costs, rather than by electoral pressure alone. In audited municipalities, the incidence of corrupt practices fell by nearly 8% compared to non-audited ones, with even greater reductions in municipalities audited multiple times. Key mechanisms included judicial accountability, exposing officials to potential investigations and legal sanctions, and the public dissemination of audit results, which reinforced social and political pressure against corruption.

Central government audits are an effective tool for reducing corruption at the subnational level

The program's success factors include the CGU's autonomy and the randomness of the audit selection process, which limits political interference and enhances credibility. Additionally, extensive media coverage of audit results, particularly in areas with access to local radio and television, maximized the program's impact by increasing pressure on corrupt officials. Moreover, the presence of judicial districts in audited municipalities significantly increased the likelihood of audit findings leading to legal actions, strengthening the program's deterrent effect. Avis et al. (2018) found that municipalities with judicial districts were 35% more likely to see legal consequences from audit findings, reinforcing the deterrence of corruption through potential judicial sanctions.

However, external audits have a limited capacity to strengthen other areas of public management, such as resource planning, accounting, and transparency. This limitation arises because, although audits detect violations, the penalties resulting from them are often lighter than those imposed for corruption cases, reducing their deterrent effect. This conclusion is supported by the study of De La O et al. (2023), which evaluated the impact of national and state audits on municipalities in Mexico regarding compliance with regulations governing the use of resources from the Municipal Social Infrastructure Fund (FISM). Although municipalities have discretion in the use of these funds, they are required to adhere to programmatic rules (defining priority sectors), accounting standards (e.g., documenting and justifying all expenses), and transparency requirements (such as sharing the annual project plan with the Ministry of Social Development and reporting expenses to the Ministry of Finance). The authors found no significant effect of audits on compliance with these guidelines.

External audits may also have unintended consequences for public management. Gerardino et al. (2024) found that in Chile, audits focusing on public procurement discouraged the use of competitive bidding, instead favoring less-regulated direct contracts. This occurred because competitive bidding processes were more likely to be audited, increasing the chances of detecting potential violations, which in turn made officials more reluctant to use them. This finding underscores the importance of designing control mechanisms that enhance transparency and efficiency without discouraging competitive practices, particularly in subnational governments with limited capacities.

Internal controls

Internal supervision, unlike external oversight, has the potential to be a more direct and therefore more effective strategy for preventing the misuse of public resources. In a study commissioned for this report, Toral (2024) highlights significant disparities in the formalization and professionalization of internal control systems among local governments in Brazil. While most municipalities have internal control units, many of these lack political independence and dedicated functions for auditing and anti-corruption, which significantly hinders their ability to enforce accountability.

The study also found that legislative reforms aimed at strengthening internal control led to an increase in the number of auditors, addressing one of the primary weaknesses in Brazil's municipal internal control units: insufficient staffing.[13] It also linked these reforms to reductions in municipal workforces and increases in the proportion of civil service contracts (as opposed to temporary contracts more vulnerable to political influence). Therefore, internal controls can play a crucial role in reducing the clientelist use of public employment. Together, these findings emphasize the need to strengthen internal control systems in the region to enhance accountability and efficiency in public administration.

Political independence is crucial for internal control units to avoid conflicts of interest that can arise when auditors depend on the local authorities they are tasked with overseeing. When mayors have the authority to appoint auditors, those auditors may feel pressured to soften their evaluations to maintain good relationships or secure their positions, thereby compromising the transparency and objectivity of oversight. To address this issue, Italy implemented a reform in 2011 that centralized the selection of municipal finance auditors, assigning them randomly through a national system. While the reform increased central government intervention and reduced subnational autonomy, Vannutelli (2022) found that it significantly improved municipal fiscal performance, including greater tax collection capacity, the achievement of budget surpluses, and higher debt repayment rates, aligning with national fiscal objectives.

This example illustrates how intergovernmental relationships are fundamental to designing effective control systems. When subnational governments face institutional constraints, studies by Avis et al. (2018) and Vannutelli (2022) highlight that centralized support can be effective in ensuring transparency and accountability. For instance, in Brazil, the CGU operates as a centralized body to audit municipalities, achieving significant reductions in corruption. Similarly, the reform implemented in Italy, which centralized and randomized the assignment of municipal auditors, improved local fiscal performance. These cases underscore how central governments can play a crucial role in control systems, though they also raise the challenge of balancing this support with subnational autonomy.

Incentives for improved spending: Results-based financing

Results-based financing is a public management tool aimed at improving the efficiency of expenditures. This approach allocates resources based on specific performance targets for the delivery of goods and services, thereby creating incentives to optimize the use of public funds. In Latin America and the Caribbean, the adoption of this strategy has been notable. According to Pimenta et al. (2023), a survey of 24 countries in the region found that 14 of the 17 respondents use some form of results-based financing. Progress has been made in establishing performance frameworks, developing monitoring and evaluation systems, improving budget transparency, implementing quality-of-expenditure assessments, and adopting training strategies. While these developments reflect a growing interest in enhancing public management by incorporating performance indicators into resource allocation, significant challenges remain that limit the strategy's effectiveness.

One of the main barriers is the weak integration of monitoring and evaluation systems with budgetary processes, which hinders the use of performance outcomes to guide resource allocation. Additionally, performance evaluations are often limited in scope and lack sufficient institutionalization, reducing their influence on budgetary decisions.

13 According to an assessment of the organizational structure of municipal control units in Brazil, 83% of these units have fewer than five employees (World Bank, 2022a).

Although the use of results-based financing is widespread, empirical evidence on its effectiveness remains limited. A notable example is Ceará, a state in Brazil, where, since 2007, part of the revenue from a state consumption tax (Imposto sobre Circulação de Mercadorias e Serviços [ICMS]) has been distributed to municipalities based on their performance in education, health, and environmental indicators, with a strong focus on education metrics.[14] According to Loureiro et al. (2020), this system incentivized local authorities to prioritize improvements in education quality, achieving significant results in both performance and equity. Since its implementation, Ceará has recorded the largest increase in the national education quality index among Brazilian states, rising from the bottom rankings to becoming a leader. Additionally, disparities in educational outcomes among different regions and socioeconomic groups within the state have narrowed.

Loureiro et al. (2020) attribute the success of Ceará's system to three key factors: the autonomy of municipalities to allocate funds and manage schools; the relative importance of ICMS funds in municipal revenues, particularly in poorer municipalities; and the technical support provided by the state government, which strengthened the capacity of municipal education departments to implement educational policies. These elements suggest that Ceará's model could be adapted to other contexts, provided that performance metrics are tailored appropriately, technical capacity for monitoring is ensured, and local specificities are taken into account.

14 Ceará allocates one-quarter of its consumption tax revenue to municipalities, distributing 72% based on education indicators, 20% on health indicators, and 8% on environmental indicators.



Seat of government for the municipality of La Plata,
Buenos Aires, Argentina.

How subnational governments invest and finance their investments

- Level and composition of subnational public investment in Latin America and the Caribbean.
- Challenges in the efficiency of planning and executing subnational projects.
- Financing mechanisms and regulation of subnational government borrowing.
- Strategies to improve intergovernmental coordination and strengthen institutional capacities.



Key messages

1 Public investment in Latin America and the Caribbean (LAC) varies significantly across and within countries. Federal systems, such as Argentina and Brazil, tend to decentralize public investment more than unitary systems. Additionally, there are stark territorial disparities in per capita investment levels.

2 Subnational public investment reveals significant disparities influenced by economies of scale, local wealth, and infrastructure gaps. Larger municipalities spread investment costs across more inhabitants, while smaller ones show higher per capita investments. Furthermore, investment appears aligned with both economic capacity and efforts to reduce basic deficiencies.

3 Intergovernmental coordination is essential to ensure that subnational investment aligns with national strategies and to avoid inefficiencies and duplications. Formal coordination mechanisms, earmarked transfers, and co-financing strategies are used to achieve alignment, but challenges remain.

4 The efficiency of subnational investment is constrained by reduced institutional capacities in project planning, selection, and execution. Strategies to address these challenges include continuous staff training, technical assistance, advisory support for governments, and professionalization of investment management.

5 Subnational public investment is financed through transfers, own-source revenues, and borrowing. Borrowing mobilizes the capital needed for infrastructure and distributes costs across generations, but its misuse can lead to fiscal insolvency. A robust institutional framework is essential to promote responsible borrowing and ensure fiscal sustainability.

6 The design of capital transfers must balance flexibility, predictability, and stability to align national and subnational priorities, prevent cost overruns and political distortions, and reduce volatility. This balance enables effective planning and enhances the efficiency of public investment.

7 Regulating subnational government borrowing involves balancing fiscal sustainability with the promotion of public investment. Rigid rules guarantee fiscal discipline but may limit investments, while greater regulatory flexibility provides adaptability but comes with risks of debt misuse and abuse. Achieving this balance requires context-specific regulations, transparency, and effective oversight mechanisms.

How subnational governments invest and finance their investments[1]

Introduction

Public investment is crucial for driving economic growth and achieving the Sustainable Development Goals (SDGs). However, its impact depends not only on the volume of investment but also on its profitability and efficiency. Inefficiencies in project execution can result in cost overruns, delays, and suboptimal quality of outputs. Additionally, poor project selection can limit the contribution of investments to growth and equity. Evidence indicates that the impact of public investment is significantly diminished in countries with low project management efficiency (Cavallo and Daude, 2011; Furceri and Li, 2017; Gupta et al., 2014; Izquierdo et al., 2018).

In this context, improving the efficiency of public investment is a top priority. Achieving this requires institutional frameworks that enable the proper selection, evaluation, and execution of projects.

With the advancement of decentralization in Latin America and the Caribbean (LAC) in recent decades, an increasing proportion of public investment is planned and executed at subnational levels of government. While decentralizing public investment can yield benefits, it also entails risks. Among the potential benefits are better alignment of resources with local needs and preferences, a reduction in territorial disparities, and increased accountability.

However, decentralizing public investment also presents several challenges. First, the small size of many subnational governments in the region may result in projects being undertaken at suboptimal scales. Second, subnational jurisdictions often lack the technical capacities of central governments, which can diminish the effectiveness of their initiatives. Third, insufficient coordination among subnational governments, as well as between these and central governments, may lead to externalities and the duplication of resources. Finally, the

1 This chapter was written by Pablo Brassiolo, with assistance from Pedro Di Plácido.

limited fiscal capacity of subnational governments can constrain investment levels and heighten dependence on central government transfers. While borrowing offers a potential solution to ease fiscal constraints, it also introduces risks of insolvency, underscoring the need for robust regulatory frameworks.

Level and composition of subnational public investment

This section explores both the scale of investments managed by subnational governments in LAC and the sectors to which these resources are allocated. It examines variability in subnational participation across countries and changes in sectoral priorities resulting from decentralization.

How much subnational governments invest and in what

The share of subnational governments in public investment spending across LAC varies widely by country and governance system, as shown in Graph 4.1. Among federal countries, Argentina and Brazil exhibit the highest levels of subnational public investment, accounting for 62% and 69% of total public investment, respectively. Mexico, also a federal system, shows lower decentralization, with subnational governments responsible for 33% of the total. In these countries, regional levels of government often lead subnational investment.

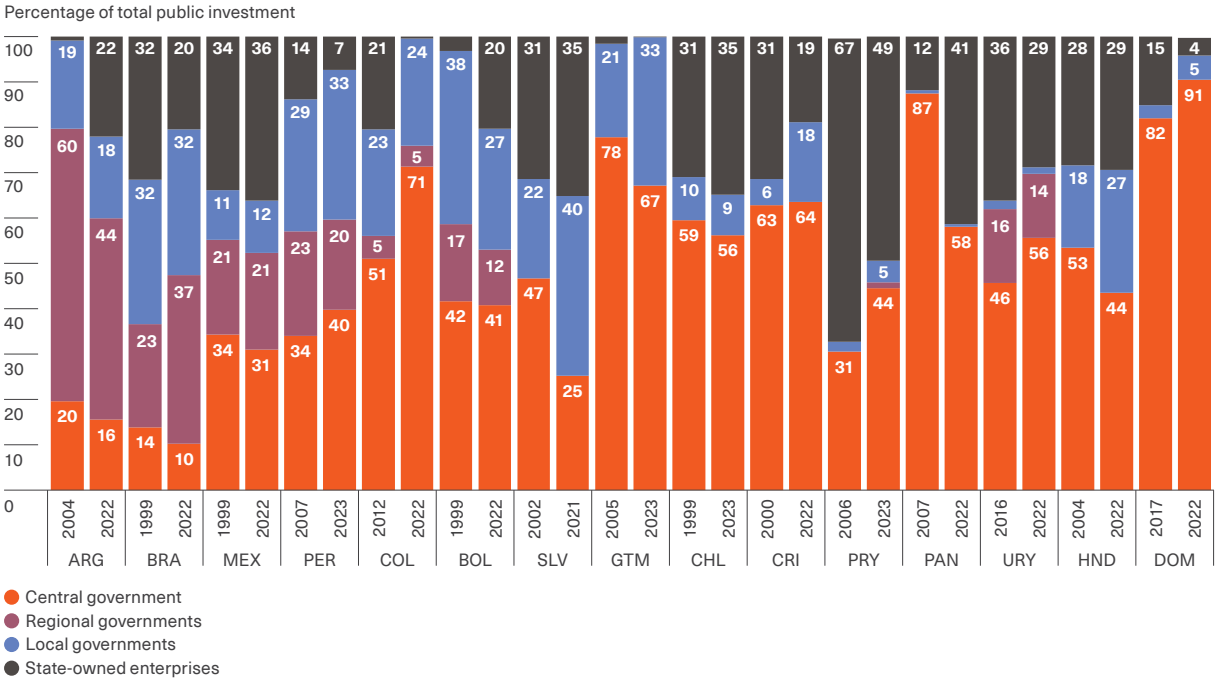
In unitary countries with a high degree of decentralization, such as Bolivia, Colombia, and Peru, subnational investment represents 39%, 29%, and 53% of total investment, respectively. In these cases, local governments carry out the majority of investments. While Peru and Colombia have increased the delegation of responsibilities over the past two decades, Bolivia has seen a decrease in subnational participation. In Paraguay and Uruguay, also unitary countries but with less decentralization, only 6% and 15% of public investment is executed by subnational governments, respectively.

In countries with only two levels of government, such as Costa Rica, Guatemala, El Salvador, and Honduras, local governments play a significant role in public investment, with shares ranging from 18% to 40%. These countries have also experienced increases in local investment share, from 9 percentage points (p.p.) in Honduras to 18 p.p. in El Salvador. By contrast, in other two-level government countries, such as Chile, Panama, and the Dominican Republic, public investment remains heavily concentrated at the national level.

State-owned enterprises also play a significant role in public investment, contributing an average of 23%.[2] Their importance varies: in Colombia, their role is minimal, while in Paraguay, they account for 49% of public investment. In Panama and Bolivia, state-owned enterprises have absorbed a substantial share of investments. In contrast, their share has decreased in Brazil and Paraguay, as responsibilities have shifted to regional governments in Brazil and to the central government in Paraguay.

2 In most countries, public investment data from state-owned enterprises do not specify the level of government to which they belong, so they are treated as a separate category. Similarly, in many countries, public investment is channeled through public entities, which are decentralized bodies of the executive branch that perform administrative functions or provide public services. Unlike state-owned enterprises, they do not produce market goods or serve as financial auxiliaries (Armendáriz et al., 2019). Investment by public entities is included under central government investment.

Graph 4.1
Execution of public investment by government level



Note: The graph shows the percentage composition of public investment by government level for the earliest and most recent years available in various Latin American and Caribbean countries. The Y-axis refers to public investment in the non-financial public sector, which includes central, regional, local governments, and state-owned enterprises. The "central government" category includes the central administration and public entities. In Costa Rica, local government investment includes capital formation and machinery and equipment. In Guatemala, the "state-owned enterprises" category includes both national and municipal enterprises. El Salvador, Peru, and the Dominican Republic have two levels of local government. For the first two, the data refer to the lower level, while for the latter, both levels were considered.

Source: Authors based on Armendáriz et al (2019) data and national sources (see the detailed list in Appendix Table A.4.1 in the online edition of RED).

Shifting public investment to subnational levels through decentralization can alter its sectoral composition, as investment priorities differ across levels of government. Faguet (2008) illustrates this with the example of Bolivia, where the composition of public investment changed significantly following decentralization reforms in the mid-1990s. Before the reforms, the central government primarily prioritized transportation, hydrocarbons, and energy projects. After the reforms, investment priorities shifted toward education, water and sanitation, and urban development—areas largely managed by departmental and municipal governments.

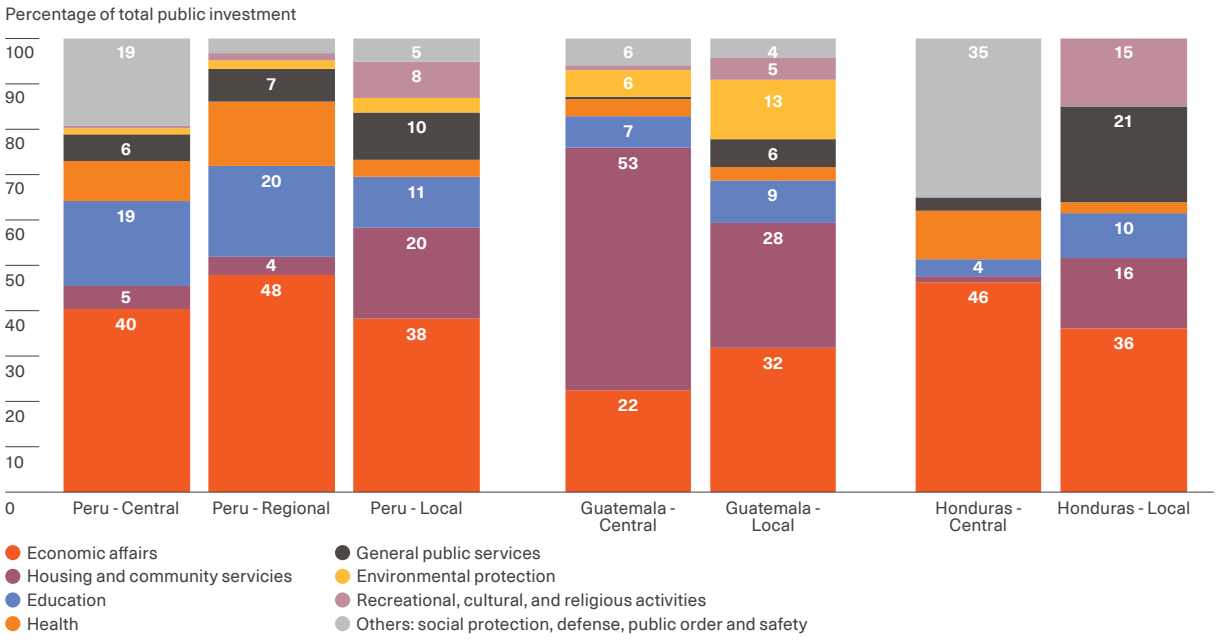
Graph 4.2 illustrates the functional composition of public investment in Honduras, Guatemala, and Peru.[3] In these countries, the "economic affairs" category—which includes productive infrastructure projects in transportation, energy, and communications—accounts for a substantial share of investment at both national and subnational levels, reaching or exceeding 40% in some cases. An exception is Guatemala's central government, which allocates the majority of its investment to housing and community services, including housing projects and water and sanitation works. This sector

3 These are the only countries for which information on subnational investment broken down by function was available. In Paraguay, data is only available for regional governments, which account for just 1% of total investment, and thus it was not included.

is also significant for local governments, with shares ranging from 16% in Honduras to 28% in Guatemala.

Investment in education and health, including the construction and equipping of schools and hospitals, occurs across all levels of government. Peru stands out in the subnational sphere, with regional governments dedicating 34% of their total investment to these areas. Other subnational investment priorities include recreational, cultural, and religious activities, such as building plazas and parks, which are more prominent at the local level, as well as general public services, such as constructing and maintaining public buildings. Environmental protection investment is significant only in Guatemala, where local governments allocate 13% of their resources to this sector.

Graph 4.2
Public investment by function in selected countries and government levels



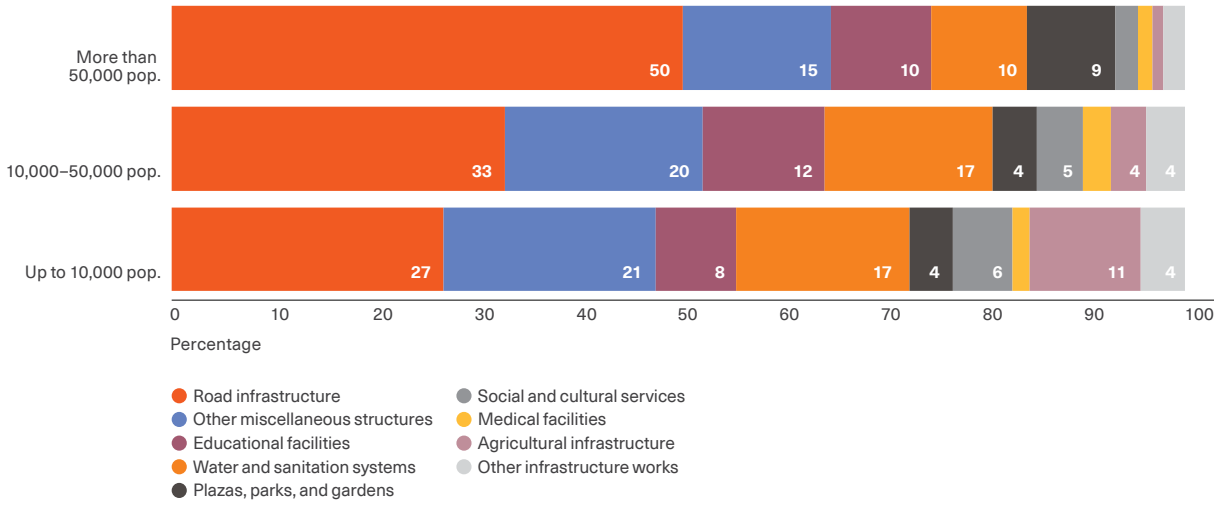
Note: Investment functions correspond to the United Nations Classification of the Functions of Government (COFOG) one-digit categories, except for "others," which includes "social protection," "defense," and "public order and safety." Data correspond to 2023 for Peru and Guatemala, while for Honduras, 2022 data were used.

Source: Authors based on data from MEF of Peru (2024e), MINFIN (2023a), and SEFIN (2023).

Subnational governments primarily focus their public investment on public works projects. In Peru, for example, more than 80% of municipal investments are allocated to the construction and improvement of infrastructure across various economic sectors.[4] Large urban municipalities prioritize road infrastructure, while smaller and rural municipalities allocate a relatively larger share of their resources to other areas, such as water and sanitation systems and agricultural infrastructure (see Graph 4.3).

4 The remaining 20% corresponds to various types of acquisitions, including buildings, vehicles, machinery, and other non-financial assets.

Graph 4.3
Composition of public works spending in Peru by municipality size, 2022



Note: Percentages represent the share of each type of infrastructure within total public investment.
Source: Authors based on INEI (2023b).

Distribution of subnational investment across territories

One distinctive feature of subnational public investment is the significant variation in investment amounts across regions and localities within countries. This is illustrated in Graph 4.4, which depicts the average and the 10th, 50th, and 90th percentiles of per capita public investment by governments at the same level within a given country. Each government's investment amount is derived from its executed budget, reflecting expenditures on non-financial assets. To facilitate cross-country comparisons, per capita investment is expressed as a percentage of GDP per capita.

In some countries, disparities in investment efforts among governments are stark. For instance, comparing regional-level public investment in Argentina and Brazil—two countries with high decentralization—reveals greater dispersion in Argentina. There, a regional government at the 90th percentile invests five times as much per capita as one at the 10th percentile, compared to three times as much in Brazil.

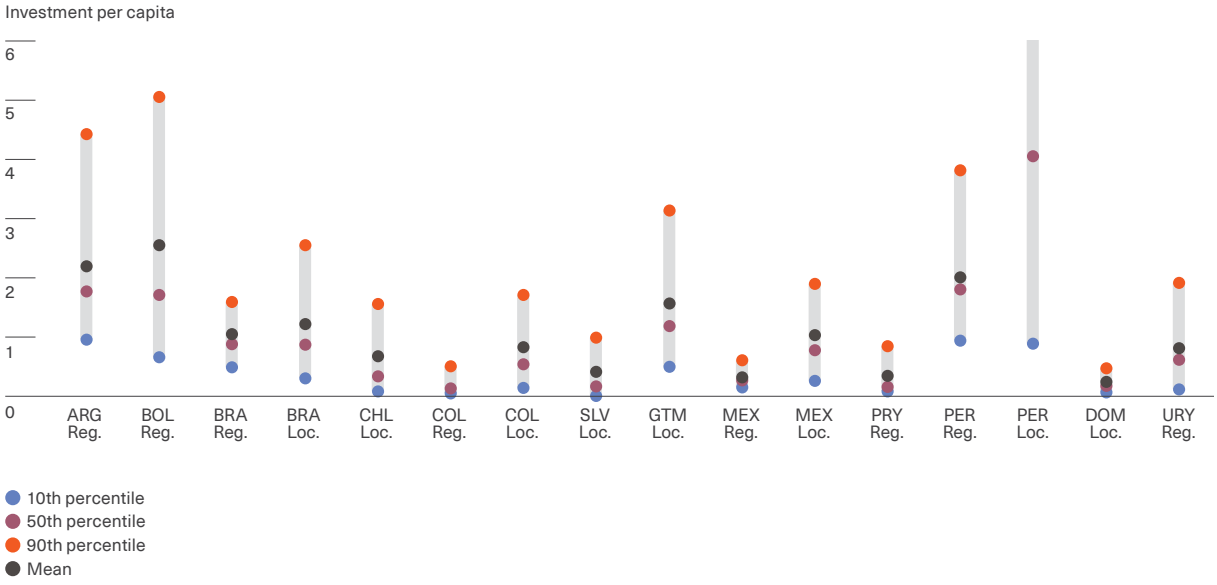
At the local level, Peru stands out for its high level of investment carried out by districts. The disparity is striking: a municipality at the 90th percentile invests 20 times more per capita than one at the 10th percentile. In Colombia, where local governments also manage a considerable share of total investment, this difference is smaller but still significant at 12 times.

Another aspect of the territorial distribution of subnational investment is the disproportionately high per capita investment levels observed in some governments. In nearly all countries, the average per capita investment exceeds the median (50th percentile), indicating that a few governments with very high investment levels skew the overall average. This pattern often occurs in governments

with small populations, where fixed costs for certain projects result in higher per capita investments.

The role of economies of scale in driving territorial disparities in subnational investment is evident in how larger municipalities concentrate a significant share of the population and do not execute a proportionate share of public investment. For instance, in Colombia, Medellín and Cali together account for 11% of the national population but manage only 7.5% of local investment. Similarly, in Mexico, Tijuana and León, representing 3.2% of the national population, receive just 1.7% of total investment. This common regional pattern underscores how larger municipalities benefit from economies of scale, distributing project costs across a larger number of inhabitants.

Graph 4.4
Variation in subnational governments' public investment per capita



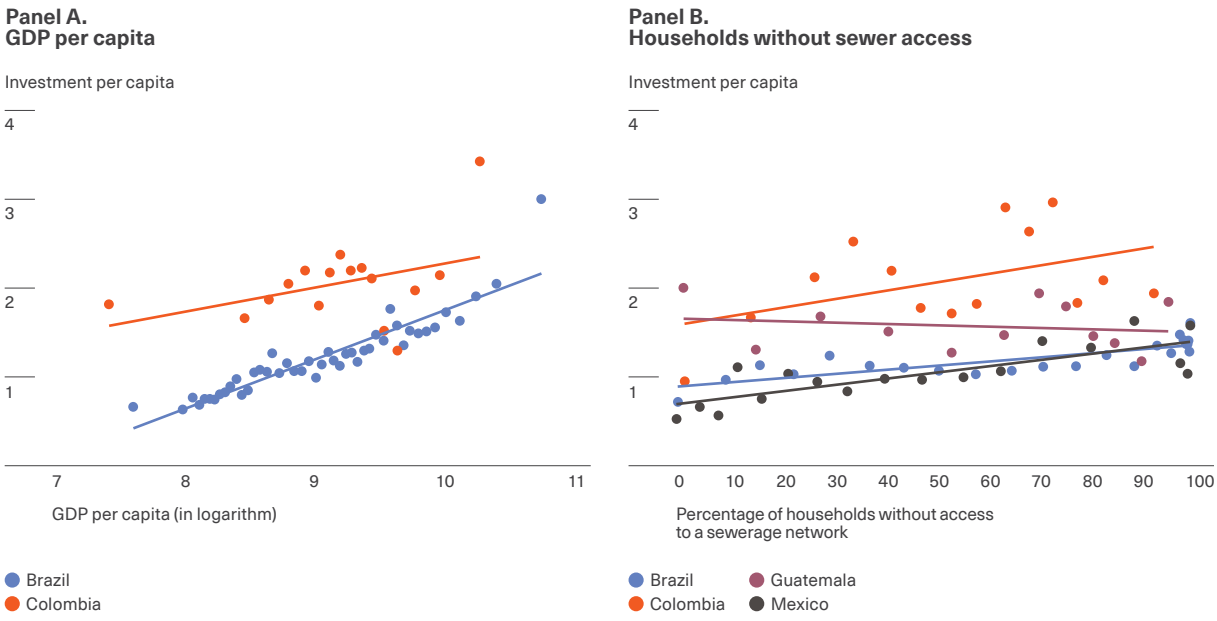
Note: The graph shows the mean and the 10th, 50th, and 90th percentiles of per capita public investment, expressed as a percentage of national GDP per capita and adjusted for purchasing power parity, for regional and local governments in a selection of countries with available data. The data corresponds to 2022.

Source: Authors based on IMF data (2024b, 2024d) and national sources (see detailed list in Appendix Table A.4.1 in the online edition of RED).

Other variables linked to the distribution of subnational public investment include territorial wealth and infrastructure gaps. As shown in Graph 4.5, per capita investment correlates positively with GDP per capita among local governments in Brazil and Colombia (Panel A), as well as with the percentage of households lacking access to sewer networks in local governments in Brazil, Colombia, and Mexico, but not in Guatemala (Panel B).

The positive correlation with local income levels may reflect several factors, including greater fiscal capacity in wealthier municipalities, the ability to undertake larger-scale infrastructure projects, or increased efficiency in obtaining funding. Similarly, the association between public investment and the percentage of the population without sewer access supports the idea that local investment often targets basic infrastructure gaps. Local governments with significant deficits in essential services, such as sewer access, appear to receive or allocate greater resources to address these needs. Together, this evidence suggests that per capita local investment levels may be influenced by both economic capacity and the magnitude of service deficits, reflecting a potential focus on economic development and reducing inequalities.

Graph 4.5
Correlation of public investment with GDP per capita and sewer access in local governments



Note: The variable for per capita investment is expressed as a percentage of national GDP per capita and adjusted for purchasing power parity. The correlations between per capita public investment and GDP per capita in Panel A and the percentage of households without sewer access in Panel B are presented on a logarithmic scale. Each point represents a group of local governments clustered according to the methodology proposed by Cattaneo et al. (2024).

Source: Authors based on IMF data (2024b, 2024d) and national sources (see detailed list in Appendix Table A.4.1 in the online edition of RED).



In the Miraflores district, Peru, all households have access to improved sanitation facilities.

Efficiency of subnational public investment: Institutional determinants and mechanisms for improvement

One of the most critical aspects of maximizing the impact of public investment is the efficiency with which different stages of the project cycle are managed. However, measuring this efficiency is complex, and most available studies focus on the national level. This section first examines the efficiency of subnational public investment in Latin American and Caribbean countries using currently available metrics. It then analyzes the institutional arrangements governing subnational public investment cycles, highlighting strengths and weaknesses to identify opportunities for improvement.

Efficiency of subnational investment in Latin America and the Caribbean

The efficiency of public investment is closely linked to the quality of institutions managing the project cycle, from planning to implementation. Various indices have attempted to measure this efficiency, focusing on different aspects of institutional frameworks. One of the earliest tools was the Public Investment Management Index (PIMI) developed by Dabla-Norris et al. (2012). This index assessed the effectiveness of management processes in 71 developing economies, documenting significant differences across countries. In Latin America and the Caribbean, Brazil ranked second overall, followed by Colombia (third), Peru (sixth), and Bolivia (seventh).[5]

More recently, Armendáriz and Contreras (2016) applied the PIMI to 16 countries in the region, reaching similar conclusions about efficiency disparities. Bolivia, Chile, the Dominican Republic, and Peru emerged as the top-performing countries. However, like the original study, this analysis was limited to the national level and excluded evaluations of subnational management.

The only study to apply the PIMI at the subnational level is Aguilar et al. (2020), which examined regional governments in Argentina and Mexico. This study concluded that subnational investment management is inefficient across all stages of the project cycle, with particularly notable weaknesses in planning, evaluation, and auditing. Additionally, it found significant variability in efficiency among subnational units within the same country. Key factors contributing to this inefficiency include a lack of intergovernmental coordination and the limited capacities of subnational governments.

In summary, while significant progress has been made in measuring public investment efficiency, developing consistent and comprehensive indicators remains a challenge, particularly at the subnational level.

Another method for assessing the efficiency of subnational public investment is to evaluate the actual performance of implemented projects. This approach focuses on the impact of investment rather than the characteristics of the processes that lead to these results.[6] A useful resource for this evaluation is the World Bank's Independent Evaluation Group, which analyzes the results of projects financed by the institution. Each project

5 The other countries in the region included in the study are Barbados, Belize, El Salvador, Haiti, Jamaica, and Trinidad and Tobago, all of which rank below the average in the public investment efficiency classification.

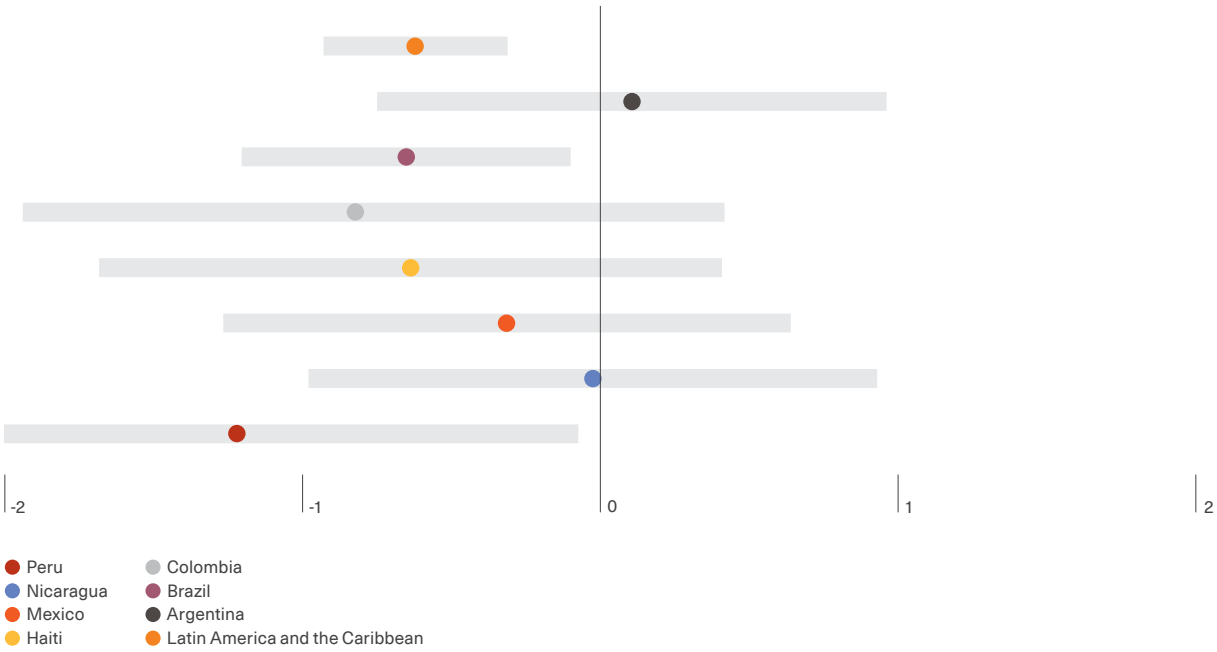
6 Disadvantages include a possible lack of representativeness of the projects for which this measure is available and the fact that focusing on the actual performance of investments may not provide sufficient information about the causes of those results.

is rated on a qualitative scale ranging from "highly unsatisfactory" to "highly satisfactory."[7]

According to this rating, the quality of subnational public investment in Latin America and the Caribbean is lower than that of projects executed by central governments. As shown in Graph 4.6, controlling for project characteristics reveals that subnational projects tend to receive lower ratings. This trend is consistent in countries with at least 20 evaluated projects, although the differences are statistically significant only in Brazil and Peru. Two exceptions are Argentina, where subnational projects perform slightly better, and Nicaragua, where no differences are observed.

Subnational projects are poorly planned, exhibit weaker strategic alignment, and rely on less robust feasibility studies

Graph 4.6
Relative efficiency of projects executed by subnational governments



Note: The graph presents coefficients (with 90% confidence intervals) of a binary variable indicating whether a project was executed by a subnational government (value 1) or the central government (value 0). The coefficients are estimated using ordinary least squares regressions for both the full sample of Latin American and Caribbean countries and for individual countries with at least 20 evaluated projects. The number of projects per country ranges from 24 (Nicaragua) to 84 (Brazil). The analysis is limited to physical and social infrastructure projects for economic development, encompassing a total of 431 projects in the region, including 173 executed by subnational governments. Although the dataset does not explicitly identify the level of government responsible for project execution, this information was inferred from project descriptions. The dependent variable evaluates project performance on a scale from 1 to 6, where 1 corresponds to "highly unsatisfactory" and 6 to "highly satisfactory." All regressions control for project size and the type of legal agreement. The analysis for the full sample also includes binary variables for each country.

Source: Authors based on World Bank data (2023).

7 This rating is based on an evaluation of aspects such as the relevance of the design and objectives of the projects, the results achieved in relation to the stated objectives, and the efficiency in the use of resources to achieve these objectives.

Possible explanations for these gaps include poorer planning, weaker strategic alignment, and less robust feasibility studies for subnational projects. This is evident when considering project design ratings, which evaluate the likelihood of achieving planned development outcomes. Controlling for these design ratings reduces—but does not eliminate—the efficiency gap between government levels, suggesting that planning challenges in subnational projects are a key factor affecting their efficiency from the outset of the investment cycle.

Institutional arrangements and management of subnational investment cycles

The efficiency of decentralized public investment is influenced by three key factors: 1) The autonomy of subnational governments in executing investment spending; 2) the effectiveness of intergovernmental coordination; and 3) the capacities of subnational governments to manage resources and projects.

This section examines these aspects based on the institutional arrangements that regulate subnational public investment in seven countries in the region: Argentina, Brazil, Chile, Colombia, the Dominican Republic, Mexico, and Peru. The analysis draws on studies such as Capello and Caullo (2024), which was commissioned for this report.

Varying degrees of subnational autonomy

Significant differences exist in the degree of autonomy with which subnational governments manage public investment (see Panel A of Table 4.1). Autonomy tends to be higher in federal countries, where subnational governments execute the majority of public investment.

In Argentina, provinces have the ability to create their own public investment systems, allowing them to independently plan, evaluate, and coordinate projects.

In Brazil, states enjoy significant autonomy in planning and executing investments, which is facilitated by various institutions. For instance, in São Paulo, the Secretariat of Economy and Planning defines strategic priorities through the multi-year plan, allocates resources, and oversees project implementation. However, this autonomy is constrained when investments are financed with federal funds, as states must align their projects with national priorities, meet specific requirements, and submit to central government oversight mechanisms.

Autonomy tends to be higher in federal countries, where subnational governments execute the majority of public investment

In Mexico, state and municipal governments are responsible for formulating, evaluating, executing, and operating investment projects. In states, the Ministry of Finance coordinates the project portfolio and monitors its progress. Nevertheless, their autonomy is limited by financial dependence. Most federal entities rely on federal resources to carry out infrastructure projects, with exceptions like Mexico City and some states. Fund transfers often restrict autonomy by being tied to specific purposes, such as exclusively financing basic infrastructure for populations in extreme poverty or requiring specific agreements whose funding is less stable and aligned with federal objectives and specific demands.

In unitary countries, public investment is more centralized, with subnational governments having less participation in decision-making processes.

In Chile and the Dominican Republic, subnational involvement is mainly limited to small projects and the maintenance of central-level works. In Chile, regional and municipal initiatives are evaluated and overseen by the Regional Ministerial

Secretariats; however, local public investment is nearly nonexistent. In the Dominican Republic, municipalities often have planning offices, such as Santo Domingo's Municipal Planning and Programming Office, which manages municipal plans and local projects. In both countries, subnational roles are restricted by limited financial autonomy, stemming from weak revenue collection capacities and constraints on accessing financing.

Table 4.1
Characteristics of subnational public investment organization in selected countries

Dimension/ Country	Argentina	Brazil	Chile	Colombia	Mexico	Peru	Dominican Republic
Panel A. Subnational autonomy							
National governing body for public investment	National Directorate of Public Investment (SNIP)	Various institutions	Ministry of Social Development and Family (MDSF)	National Planning Department (DNP)	Secretariat of Finance and Public Credit (SHCP)	General Directorate of Public Investment (DGIP)	National Directorate of Public Investment (SNIP)
Subnational governing body for public investment	Provincial public investment offices*	Various institutions	Regional Ministry Secretariat of Social Development and Family	Planning Secretariat	Finance Secretariat*	No	Municipal planning and programming offices*
Subnational autonomy	High	High	Low	Moderate	Moderate	Moderate	Low
Panel B. Intergovernmental coordination							
Formal mechanisms for public investment coordination	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Earmarked transfers	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Centralized long-term public investment plan	No	Multi-Year Plan 2024–2027	No	Visión Colombia 2050	National Development Plan 2019–2024	National Strategic Development Plan to 2050	National Development Strategy 2030
Panel C. Strengthening subnational capacities							
Training for subnational governments	No	Yes	Yes	Yes	No	Yes	Yes
National programs to strengthen subnational public investment management	No	No	Yes	Yes	No	Yes	Yes

Note: The asterisk (*) indicates that it may vary between subnational units.

Source: Authors based on Capello and Caullo (2024).

Peru presents a different scenario. Since 2007, subnational governments have managed a significant portion of public investment spending and have greater autonomy to design, evaluate, and execute projects within the framework of the National Public Investment System (SNIP). The implementation of the Invierte.pe platform in 2016 aimed to better direct investment toward closing social gaps, moving away from the focus on social profitability that characterized the previous SNIP system. Although subnational governments retain autonomy to manage their assigned projects and budgets, their decision-making capacity is constrained by national policies and guidelines, limiting their flexibility to independently address local needs (Alcázar and Jaramillo, 2022).

In Colombia, departments and municipalities enjoy a degree of autonomy in managing public investment, particularly since the decentralization reforms of the 1990s. However, this autonomy is conditioned by methodologies and guidelines established at the national level, as well as by their reliance on transfers from the central government, particularly in smaller municipalities. One example is the General System of Participations, which allocates national resources to subnational governments but imposes minimum spending quotas on social sectors such as education, health, and sanitation, thereby restricting their ability to prioritize investments in other sectors (Alcázar and Jaramillo, 2022).

In summary, subnational autonomy in public investment varies significantly across countries, depending on the institutional and regulatory context. The cases analyzed reveal a recurring tension between subnational governments' capacity to define investment projects and the need to align with national criteria and priorities. This tension is shaped by factors such as financial dependence on national transfers and central guidelines that limit flexibility in addressing local needs.

Mechanisms for intergovernmental coordination of public investment

Intergovernmental coordination is essential to align efforts across levels of government and maximize the impact of investment spending, avoiding fragmentation, inefficiencies, and duplication that could undermine the effectiveness of public investment. This challenge is particularly critical in countries where subnational governments have greater autonomy, but it is also present in more centralized contexts. To address this, countries have implemented various formal coordination mechanisms, such as earmarked transfers, institutional frameworks for public investment alignment, and long-term national infrastructure plans, which provide strategic guidelines to integrate local and national priorities (see Panel B of Table 4.1).

In Argentina, the National Public Investment System (SNIP) establishes coordination mechanisms to promote the integration of provincial systems into a national framework. The National Directorate of Public Investment (DNIP), as the governing body, fosters this integration through technical support, specific agreements, and invitations for provinces and the City of Buenos Aires to join the SNIP and implement compatible systems within their jurisdictions.[8] Additionally, it has a dedicated department to manage relations with provinces, aiming to unify public investment planning across the country. Despite these efforts, many subnational jurisdictions have not joined the national system and continue to maintain their own investment plans and project banks.

In Brazil, one of the most decentralized countries in the region in terms of public investment, coordination between levels of government faces significant challenges due to system fragmentation. The federal government plays a key role through discretionary transfers, such as grants or agreements, which finance individual projects in collaboration with states and municipalities. These grants are primarily managed by Caixa Econômica

8 According to official data, 17 provinces have incorporated initiatives into the Public Investment Project Bank, which is part of the SNIP. Additionally, 230 municipalities and communes have adopted provincial public investment systems (DNIP, 2018).

Federal and are formalized through agreements between ministries and subnational governments. However, the fragmentation of these transfers and the limited technical capacity at the local level have reduced their effectiveness, creating administrative burdens as ministries manage numerous small-scale projects, prioritizing regulatory compliance over efficiency and outcomes.[9] Furthermore, the absence of central guidelines for project selection and evaluation results in low-quality investments, cost overruns, and delays. To address these issues, Brazil has initiated reforms aimed at centralizing project selection, creating a long-term national investment plan, and establishing a national project bank (IMF, 2018).

In Mexico, public investment coordination between levels of government faces significant challenges, despite the existence of a formal framework regulating fiscal relations, such as the Fiscal Coordination Law. This law sets rules for the distribution of federal transfers to subnational governments, including those intended to finance investments in specific sectors and agreements negotiated on a case-by-case basis. However, while this framework provides general guidelines, it does not translate into effective mechanisms for planning and strategically aligning public investment. Earmarked transfers and agreements are often delayed due to complex processes, such as project approval by the SHCP, leaving local governments with less than half the year to execute their projects. Moreover, there are no formal instruments to coordinate investment plans between the federal government and subnational entities, leading to duplication of efforts and inefficiencies (Curristine et al., 2019).

Intergovernmental coordination also presents challenges in countries with an intermediate level of public investment decentralization. In Peru and Colombia, initiatives such as Territorial Pacts and Intergovernmental Coordination Councils have sought to strengthen collaboration, but their implementation has been uneven. National resource transfers also aim to align subnational projects with national priorities. In Colombia, part of the General System of Participations must be allocated to priority sectors such as drinking water and sanitation. Similarly, in Peru, competitive funds like the Territorial Development Investment Fund (Invierte) co-finance projects aimed at reducing infrastructure gaps.

In countries with more centralized public investment, such as Chile, Regional Councils play a key role in approving and overseeing regional development plans and programs. They ensure that investment decisions reflect both local priorities and national objectives. Additionally, the National Regional Development Fund serves as an essential mechanism for channeling central government resources toward regional projects, promoting coordination between levels of government, and improving the effectiveness of public spending.

In countries with more centralized public investment, such as Chile, Regional Councils play a key role in approving and overseeing regional development plans and programs

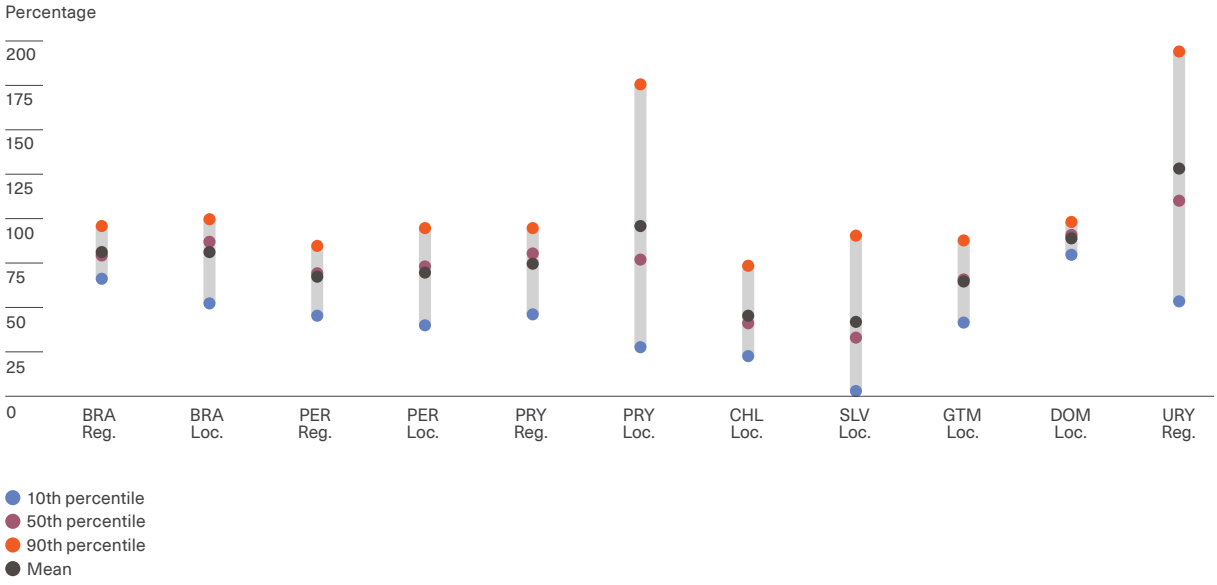
Lastly, an element that fosters intergovernmental coordination is the existence of a common framework for planning, executing, and monitoring public investments. Of the seven countries analyzed, five have long-term national infrastructure plans that guide investment in key sectors and promote collaboration between levels of government. In contrast, Argentina and Chile lack such plans. In Argentina, planning is limited to a three-year horizon, while in Chile, planning is decentralized across various ministries, reflecting a more fragmented approach compared to the integrated strategies observed in other countries.

9 An example of this fragmentation is the Ministry of Health, which currently manages more than 38,000 small projects across states and municipalities. This situation limits the ministries' capacity to focus on strategic programs or larger-scale initiatives (IMF, 2018).

Institutional capacities for managing subnational public investment

One indicator of subnational governments' limited capacities to manage investment is their difficulty in executing budgeted spending, as shown in Graph 4.7.[10] Across all countries in the sample, there is significant variation in the percentage of investment executed during the budgeted year. Cases such as Chile and El Salvador stand out for their poor performance, with half of local governments managing to execute only about 40% of their planned investments. Furthermore, in countries with data available for both local and regional levels, there is greater variability in budget execution at the local level compared to the regional level.

Graph 4.7
Percentage of budgeted public investment spending executed



Note: The graph shows the percentage of budgeted public investment spending executed in various Latin American and Caribbean countries. The data is disaggregated, with each point representing different percentiles (P10, P50, P90) and the average percentage values for regional and local government levels, represented by different colored points. Data from 2022 is used for all countries.

Source: Authors based on data from national sources (see the detailed list in Table A.4.1 in the appendix available in the online edition of RED).

10 The low capacity for planning and executing investment became evident in the case of Andean countries such as Bolivia and Peru, with the increase in investment funds derived from the exploitation of natural resources (Frank, 2013).

Another indicator of subnational weaknesses is the lower technical quality of investment proposals submitted by regional and local governments, many of which fail to meet minimum required standards. In Peru, an evaluation of project feasibility declarations revealed significant deficiencies in their formulation, particularly in the quality of the technical information provided. These findings underscore the need to strengthen the technical capacities of subnational governments, especially in the preparation of pre-investment studies and the presentation of relevant information, to improve the feasibility and quality of their investment projects (MEF of Peru, 2021).

Faced with this situation, countries have implemented various initiatives aimed at strengthening subnational governments' capacities (Panel C of Table 4.1). One key approach is the continuous training of personnel, which aims to equip officials responsible for managing public investment projects with the necessary skills and knowledge. In most of the countries analyzed, national governments offer training programs for subnational officials, although the scope and focus vary. In Brazil, Chile, Colombia, the Dominican Republic, and Peru, national agencies regularly provide training on project formulation and evaluation, using virtual platforms and various modalities. Conversely, in Argentina, training is exclusively targeted at national officials, while in Mexico, the program of the Center for Studies for Socioeconomic Project Preparation and Evaluation under the SHCP has shown no recent activity.

Another key approach is technical assistance and ongoing advisory support for subnational governments. This support includes project identification, the preparation of feasibility studies, and the management and oversight of project execution. Both national institutions and international organizations play a critical role in providing this support, promoting the adoption of best practices at the local level. Box 4.1 highlights various initiatives by CAF — Development Bank of Latin America and the Caribbean — aimed at improving the quality of infrastructure investment, from project selection and technical support in planning and execution to the promotion of sustainable practices.

Some countries have implemented national programs specifically designed to strengthen the management of subnational public investment. Chile has developed a continuous improvement system to promote excellence in regional management, while Colombia has adopted an associative model to foster synergies among territorial entities. Peru stands out with its Ejecuthon program, which offers targeted technical assistance to improve the execution of priority investments. In the Dominican Republic, the Ministry of Economy supports the creation of participatory structures and municipal and regional development plans.

Peru launched the Con Punche Gerentes program in 2023 to improve the levels of investment spending execution by regional and local governments

In the same vein, Peru launched the Con Punche Gerentes program in 2023 to improve the levels of investment spending execution by regional and local governments. Aimed at professionalizing management, the initiative involves hiring specialized managers for the investment cycle and assigning them to regional and local governments with high investment budgets. These managers are tasked with meeting specific goals related to project execution to remain in their positions. The program reinforces meritocracy and establishes an evaluation mechanism managed by the national civil service authority to ensure greater dynamism in public spending execution and contribute to economic reactivation at the regional and local levels.[11]

11 Extracted from the Sub-directorate of Communications and Institutional Image (2024).



The municipality of Medellín, in Colombia, is part of the metropolitan area of the same name, one of the largest urban agglomerations in the region.

Box 4.1
CAF's actions to enhance the quality of investment in road infrastructure

The quality of road infrastructure investment depends on the proper selection of projects, which is key to maximizing social and economic benefits. CAF has developed an index that prioritizes road projects based on their impact on poverty reduction, regional integration, and their adaptability to technological innovations. When applied by subnational governments, this index can help strengthen their capacities to prioritize strategic investments that address local needs.

Efficient planning and execution are also crucial to minimizing losses associated with delays or unforeseen events. CAF has implemented the Pre-Investment Program for Regional Integration Infrastructure, which supports the planning and management of road infrastructure through technical assistance and nearly USD 10 million in cooperation. This program helps countries strengthen their capacities to manage higher-quality infrastructure projects.

Regarding environmental dimensions, CAF has adopted a proactive approach by promoting sustainable practices in the construction and maintenance of road infrastructure. This includes the publication of the Good Practices Guide for Adapting Roads to Climate Change and the development of a Road Infrastructure Quality Index to measure contributions to sustainable development. These actions not only aim to reduce environmental impacts but also to build countries' capacities to implement more efficient and sustainable technologies.

Source: Maris (2023).



CAF in Action.
Scan the QR code to learn more about CAF's impact on road infrastructure.

Financing investment and subnational government borrowing

In simplified terms, subnational governments rely on three main sources of financing for public investment: earmarked transfers from higher-level governments, own-source revenues, and borrowing (debt).[12] Transfers are typically the primary source, as own-source revenues are often limited.[13] Borrowing, on the other hand, allows subnational governments to mobilize additional resources to finance necessary infrastructure, but it is subject to regulations designed to ensure fiscal sustainability.

Borrowing offers two key advantages. First, it provides access to large sums of capital needed for infrastructure projects that would otherwise

12 Chapter 5 provides a detailed analysis of the instruments available to subnational governments for generating own-source revenues.

13 For instance, only 5% of local public investment in Peru is financed with resources collected by municipalities (Jiménez et al., 2020).

be unattainable for subnational governments. Second, it spreads the cost of such projects over their useful life, enabling future generations—also beneficiaries of the infrastructure—to contribute to its financing. However, irresponsible use of debt can lead to fiscal insolvency, with consequences for both subnational governments and the country's macroeconomic stability. Therefore, a robust institutional framework that promotes responsible borrowing and maintains debt at sustainable levels is crucial.

Transfers as a source of investment financing

Transfers from central governments are an essential source of financing for subnational governments in Latin America and the Caribbean, as highlighted in Chapter 5. Some transfers are specifically allocated for capital expenditures, either through revenues derived from royalties, canons, and taxes on hydrocarbons, or through dedicated funds designed to finance investment projects. These resources enable subnational governments to drive local development and close infrastructure gaps.

Graph 4.8 illustrates the distribution of net capital transfers as a percentage of public investment among subnational governments in a group of countries. These transfers exclude amounts sent to other public entities or the private sector for the same purpose. This distinction is particularly relevant for regional governments, as they often receive capital transfers from national governments but also allocate resources to fund capital expenditures of local governments within their jurisdiction.

At the regional level (Panel A of the graph), the importance of net capital transfers as a source of investment financing varies significantly between countries. In Argentina and Brazil, most regional governments are unable to fully fund their public investment through net capital transfers, and in many cases, these transfers are even negative, as they send more resources than they receive. Mexico occupies an intermediate position, with more than half of regional governments fully financing their public investment through capital transfers.

At the local level (Panel B of the graph), net transfers are always positive, but their importance as a source of investment financing varies widely across countries. In Brazil, the capital transfers received by most municipalities are insufficient to cover their total investment spending. In contrast, in Colombia, Guatemala, and Honduras, most local governments receive transfers that exceed their investment needs. Chile and Peru fall into an intermediate category, with about half of local governments receiving capital transfers that are less than their total investment.

Given the importance of capital transfers as a primary source of financing for subnational public investment in many countries, their design is critical to ensuring efficient use of these resources. Three key aspects stand out in this regard: conditionality, discretionality, and volatility.

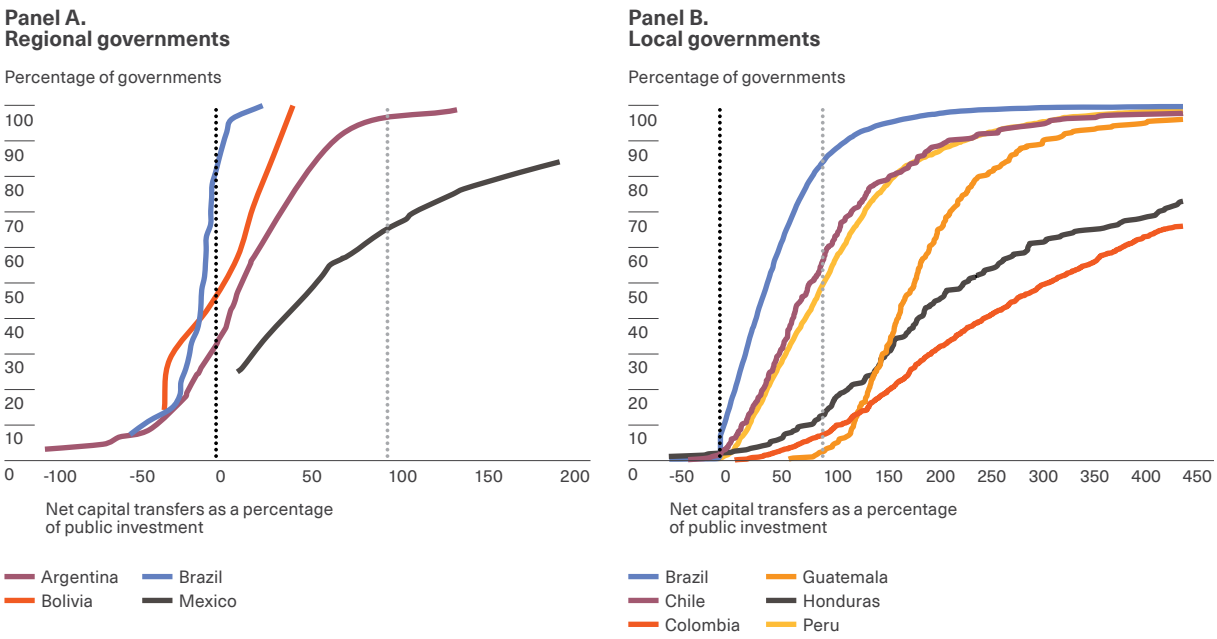
As discussed in the previous section, linking capital transfers to specific purposes can be a key mechanism to align national and local priorities. However, such conditionality may limit the autonomy of subnational governments and, in some cases, affect the efficiency of public investment. When transfers are overly restrictive or accompanied by complex administrative processes, as seen in Mexico and Brazil, they can generate cost overruns, delays, and reduced adaptability to local needs. Striking a balance between aligning national objectives and preserving the flexibility of subnational governments is crucial to improving the quality and effectiveness of public investment.

Additionally, the discretionary nature of a significant portion of these transfers can hinder long-term planning and strategic resource use. In Argentina, for example, 61% of capital transfers to regional governments between 2005 and 2023 were discretionary, reducing their ability to plan strategically and opening the door to potential distortions due to political criteria in allocation

(Capello et al., 2024). In Brazil, as previously mentioned, discretionary transfers managed through federal agreements and grants face similar issues, contributing to greater uncertainty in resource allocation and limitations on public investment efficiency.

Lastly, the lack of stability in transfers complicates the planning and execution of investment projects, particularly when variations in received amounts cannot be anticipated. This uncertainty may arise even when transfers are governed by pre-established rules if the funds depend on volatile sources such as revenues from natural resources or economic cycles. Jiménez et al. (2020) show that the volatility of natural resource-based transfers in Peru is one of the main causes of high variability in local public investment in the country. Although not exclusively designed for public investment, stabilization mechanisms such as Colombia's Savings and Stabilization Fund and Mexico's Stabilization Fund for Federal Entities' Revenues can help mitigate this volatility, facilitating more stable planning.

Graph 4.8
Net capital transfers as a percentage of public investment



Note: The graph shows the distribution of net capital transfers as a percentage of public investment spending executed during the same fiscal period. Data corresponds to 2022, except for Bolivia, where 2018 data is used. Net capital transfers are calculated as the difference between amounts received for this purpose from higher-level governments and amounts sent, for the same purpose, to lower-level governments, other public entities, or the private sector. The black dashed line at zero indicates the point where net capital transfers are neutral, while the grey dashed line represents a reference threshold where transfers exceed a specific share of public investment.

Source: Authors based on national data sources (see the detailed list in Table A.4.1 in the appendix in the online edition of RED).

Characteristics and regulation of subnational government borrowing

Borrowing is a fundamental tool for financing public investment projects that require significant upfront resources. However, its use is regulated in most countries to mitigate fiscal risks and ensure financial sustainability. In this context, before describing the main characteristics of subnational government borrowing in the region, it is essential to review the key aspects of these regulations.

Controlling borrowing has been one of the primary motivations for designing subnational fiscal rules in the region. These rules initially emerged in response to over-indebtedness during the decentralization of revenue collection and expenditure execution, which left many countries facing serious fiscal risks in the 1980s and 1990s. Colombia was one of the first countries to adopt subnational fiscal rules in 1997, responding to debt levels exceeding 6% of GDP. In the early 2000s, Argentina and Brazil also implemented their own rules, as subnational debt approached 20% of GDP. Over time, these rules evolved to address a broader range of objectives, including economic stabilization and the promotion of public investment (Pérez-Valbuena et al., 2024).

In broad terms, regulations for subnational government borrowing typically involve administrative controls, such as authorization requirements, and specific rules, such as quantitative limits and conditions on debt denomination. These regulations are detailed in Table 4.2. In most countries, subnational governments are required to obtain approval from the central government to issue debt. This approval often includes the provision of a sovereign guarantee, which facilitates access to better financing terms. In contrast, Chile prohibits subnational government borrowing except in exceptional cases explicitly authorized by law.

In some countries where subnational borrowing is allowed, the authorization requirements can be so stringent that they significantly hinder access to financing in practice. Peru is a notable case, where subnational governments can only borrow with the approval of the Ministry of Economy and Finance (MEF), a rarely granted authorization. To date, the Metropolitan Municipality of Lima has been the only exception.

Another factor that limits subnational access to certain forms of financing, even in the absence of explicit legal restrictions, is that national governments may have little incentive to provide guarantees for such debt. In these cases, creditors might consider extending loans without such guarantees. Although this remains an infrequent practice, institutions like CAF have begun implementing this approach in the region, offering direct financing to subnational governments based on an evaluation of their creditworthiness and the revenues generated by the projects themselves. For example, in 2024, CAF advanced the structuring of non-sovereign guarantee credit operations in Colombia, benefiting the cities of Santiago de Cali, Cartagena de Indias, and the department of Valle del Cauca, for a total amount of USD 150 million.

Regarding debt denomination, most countries do not impose restrictions on the currency, allowing subnational governments to issue external debt subject to the previously mentioned approvals. However, Mexico stands out as an exception, requiring subnational debt to be denominated in local currency and explicitly prohibiting the contracting of debt in international credit markets, thereby mitigating exchange rate risks.

In some countries, such as Argentina, Colombia, the Dominican Republic, and Mexico, subnational governments are allowed to issue bonds in capital markets. In Mexico, this is conditional on the bonds being denominated in local currency. In Peru, while subnational bond issuance is generally not permitted, the MEF exceptionally authorized the Metropolitan Municipality of Lima to issue a bond in the international market in 2023. The bond, intended to finance public investment projects, is denominated in local currency, reducing exchange rate risk.

Table 4.2
Regulations on subnational government borrowing (debt)

Country	Prior authorization	Currency restriction	Access to capital markets	Requires a sovereign guarantee	Purpose of funds	Borrowing	Early warning system	Sanctions for noncompliance
Argentina[a]	MEF	No	Yes	No	Investment	Debt service ≤ 15% of net current revenue (NCR)	No	Prohibition on contracting new debt
Bolivia	MEF, MPD, Legislative Assembly	No	No	Not specified	Investment	Total debt ≤ 200% of prior year's CR; Debt service ≤ 20% of prior year's CR		Financial restructuring
Brazil	SH, Federal Senate	No	No	No	Investment	Debt stock ≤ 200% of NCR for states (120% for municipalities) Debt service ≤ 11.5% of NCR for states (15% for municipalities) New borrowing ≤ 16% of NCR for states (7% for municipalities)	No	Prohibition on contracting new debt and fiscal adjustment; suspension of voluntary transfers
Chile[b]	MH	–	–	–	–	Prohibited, except for exceptions authorized by law	–	–
Colombia	MHCP (except for specific exceptions)	No	Yes	No	Investment, refinancing	Total debt ≤ 100% of CR Interest payments ≤ 60% of OS	Yes	Prohibition on contracting new debt
Ecuador[b]	MEF	No	No	Not specified	Investment	Total debt ≤ 200% of CR Debt service ≤ 25% of CR		Prohibition on contracting new debt and fiscal adjustment
El Salvador	Council and Legislative Assembly	No	No	Not specified	Investment	Total debt ≤ 170% of CR for the previous year; New debt service ≤ 60% of OS for the previous year	No	Debt restructuring
Mexico	Local legislature and registration with SHCP	Local currency (MXN)	Yes	No	Investment, refinancing, or, restructuring	Total debt ≤ 200% of FDI (freely disposable income) Debt service ≤ 15% of FDI Short-term obligations ≤ 12.5% of TI	Yes	Sanctions for public officials
Paraguay[b]	MEF and Municipal Board	No	Yes	No	Investment, refinancing, emergencies	Debt service ≤ 20 % de CR	No	Not specified
Peru[b]	MEF	No	No	No	Investment	Total debt ≤ the average of CR (current revenues) over the last 4 years	Yes	Prohibition on contracting new debt and fiscal adjustment
Dominican Republic	MH and Congress	No	Yes	Not specified	Investment (except multilateral entities)	Not specified	No	Not specified
Uruguay[a, b]	Departmental Board and Legislative Branch	No	No	Not specified	Investment	Not specified	No	Suspension of transfers and corrective measures

Note: MEF refers to the Ministry of Economy, the Ministry of Economy and Finance, or the Ministry of Economy and Public Finance; MPD to the Ministry of Development Planning; SH to the Secretariat of Finance; SHCP to the Secretariat of Finance and Public Credit; MH to the Ministry of Finance; and MHCP to the Secretariat of Finance and Public Credit. CR stands for current revenues; NCR, net current revenue; FDI, freely disposable income; TI, total income; and OS, operational savings. a/ Refers to the intermediate level of government. b/ Indicates that there are exceptions to the listed debt rules. In Chile, municipalities sometimes accumulate accounts payable with suppliers or engage in lease-back operations with banks, which are not classified as public debt (DIPRES, 2024a). In Ecuador, if borrowing resources are allocated to potable water, sewerage, and solid waste management projects, the stock and debt service limits may increase to 300% and 40%, respectively. In Paraguay, internal debt only requires approval from the Municipal Board. In Peru, the borrowing rule for governments less than four years old is defined in terms of the prior year's current revenues; sovereign guarantees are required for external debt. In Uruguay, the Constitution (Art. 301) prohibits departmental governments from issuing public debt or contracting loans with international organizations or foreign governments without legislative approval. They may contract other loans with approval from the Departmental Council by an absolute majority or by two-thirds if the term exceeds the government period.

Source: Authors based on information provided by CAF's Directorate of Macroeconomic Studies and current legislation.

Financing public investment projects is, in almost all cases, a fundamental condition for the use of resources obtained through borrowing operations

Financing public investment projects is, in almost all cases, a fundamental condition for the use of resources obtained through borrowing operations. In certain cases, borrowing is also permitted for other specific purposes, such as debt restructuring or addressing emergencies, among other exceptions.

Most countries establish clear limits to mitigate the risks associated with excessive debt levels. These restrictions are typically defined through specific financial metrics, such as the ratio of debt service to current revenues, the debt stock relative to annual revenues, or annual payments in relation to available income. In some cases, failure to comply with these limits can result in sanctions, such as a prohibition on contracting new debt or the implementation of fiscal adjustment plans. For example, in Argentina, the province of Buenos Aires exceeded the debt service limit of 15% of net current revenues in 2018 and 2019, reaching 17.2% and 18.3%, respectively. However, by 2023, all provinces were in compliance with the limits. In Peru, 63 out of 1,891 local governments failed to meet the total debt balance limit in 2023 (MEF of Peru, 2024d).

Some countries, such as Colombia, Mexico, and Peru, have implemented tools to monitor subnational public finances, including tracking dashboards and early warning systems. These tools enable the monitoring of key risk indicators, the generation of periodic reports on subnational fiscal performance, and the detection of signs of financial stress before crises materialize, allowing for corrective actions. In the case of Mexico, evidence shows that its early warning system has been particularly effective in controlling state-level indebtedness (see Box 4.2).

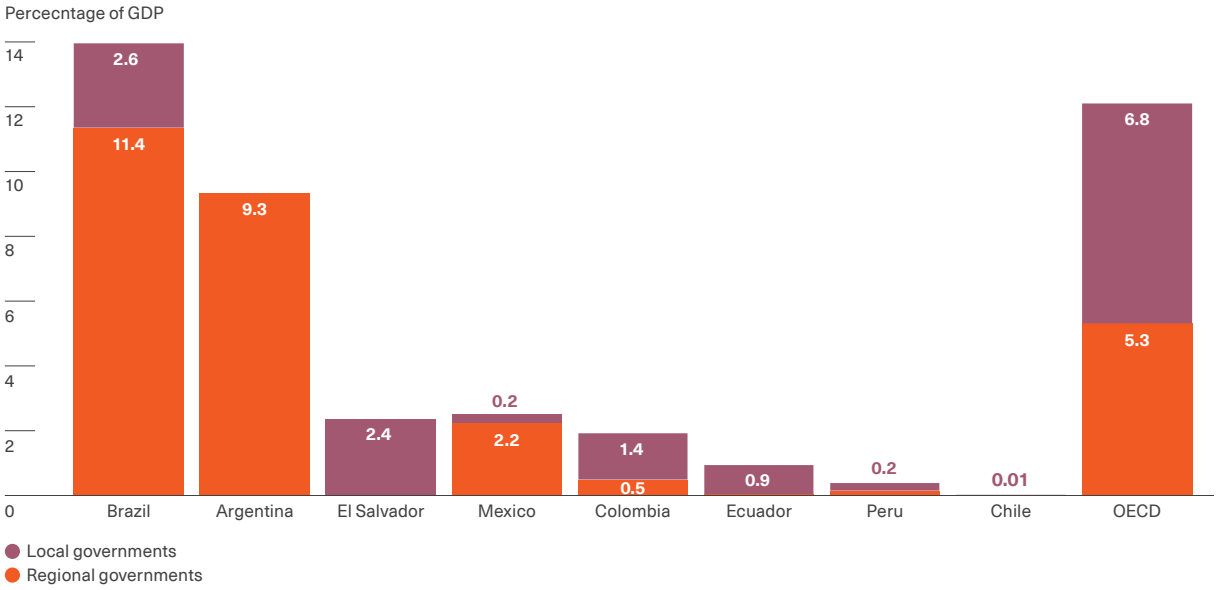
These regulations impact both the level and composition of subnational debt. Graph 4.9 shows the level of public debt held by subnational governments in a group of countries in the region with available data. Subnational debt levels in Latin America and the Caribbean vary widely, ranging from near nonexistence in countries where it is prohibited or heavily restricted, such as Chile and Peru, to 14% of GDP in Brazil. With the exception of Argentina and Brazil, subnational debt in most countries in the region is significantly lower than the average for countries in the Organisation for Economic Co-operation and Development (OECD), which stands at approximately 12% of GDP.

Box 4.2
The early warning system for subnational debt in Mexico

The early warning system established by Mexico's Secretariat of Finance and Public Credit (SHCP) requires each state to provide quarterly information to a unified registry on three financial indicators: 1) the percentage of total public debt relative to the sum of unconditional federal transfers and own-source revenues, 2) the percentage of debt service relative to available unconditional income, and 3) the percentage of short-term obligations relative to total income. Based on this data, the SHCP classifies states into three categories—green, yellow, and red—indicating, respectively, sustainable, risky (under SHCP observation), and unsustainable levels (which may require corrective measures). According to Del Castillo and Cabral (2024), this system has effectively curbed subnational debt, reducing public debt by an average of 4% during the 2013–2020 period.

Source: Authors' calculations based on Del Castillo and Cabral (2024) and Saxena (2022).

Graph 4.9
Subnational public debt by government level



Note: OECD represents the average for member countries. The measure is the debt stock as a percentage of GDP for 2023 in all countries. The data for Bogotá D.C. is included at the local level, following the original source.

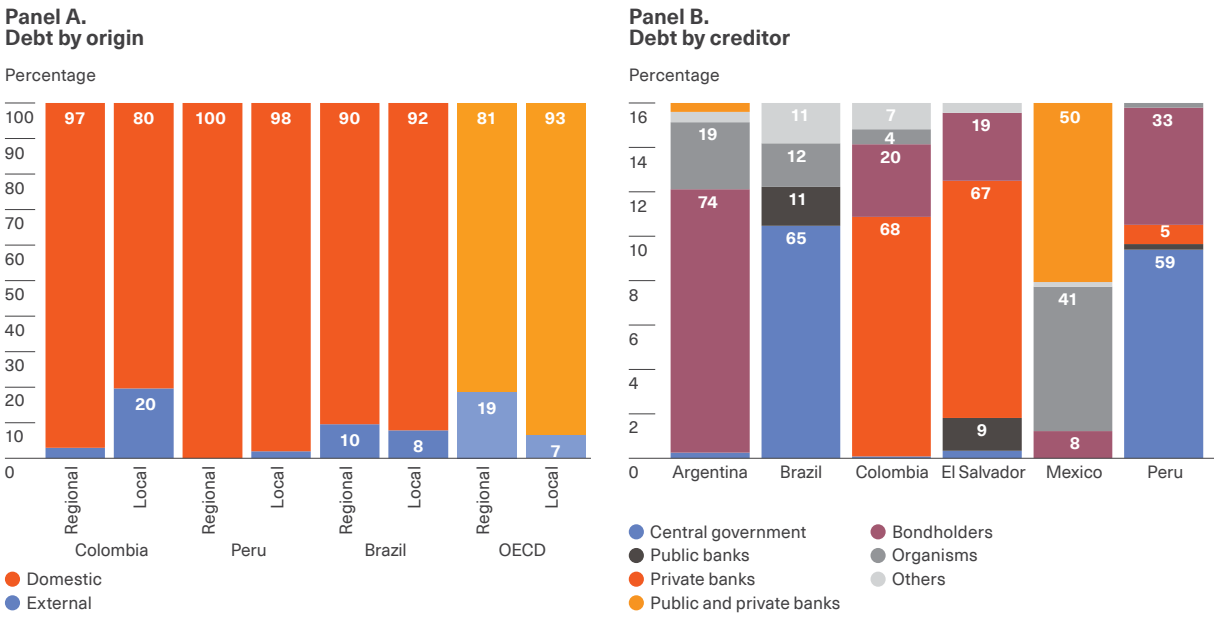
Source: Authors based on IMF (2024c) and national sources (see the detailed list in Table A.4.1 in the appendix available in the online edition of RED).

Graph 4.10 illustrates the composition of subnational debt in selected countries, distinguishing between external and domestic debt (Panel A) and by type of creditor (Panel B). While most countries allow regional and local governments to access external financing under certain conditions, subnational debt is predominantly domestic. In Colombia, external debt accounts for 3% of the total debt of regional governments and 20% of local governments, whereas in Brazil, these figures are 10% and 8%, respectively. In some cases, all external debt corresponds to loans from multilateral organizations, as seen with local governments in Brazil. In Peru, subnational debt is almost entirely of domestic origin.

The limited proportion of external debt in the region reflects restrictions imposed by central governments. For instance, in countries like Mexico, subnational governments are explicitly prohibited from borrowing in foreign currency. This concentration of domestic debt is also observed in OECD countries, though in these countries, external debt accounts for 19% of total regional government debt.

Significant variations also exist among countries regarding the type of creditor for subnational debt. In countries like Brazil and Peru, the majority of subnational debt originates from the central government, accounting for 65% and 59% of the total, respectively. In contrast, in Argentina, bonds represent the primary source of subnational financing (74%). Meanwhile, in El Salvador, Colombia, and Mexico, private financial institutions account for the majority of subnational debt.

Graph 4.10
Composition of subnational public debt by origin and creditor type



Note: The graph breaks down the composition of subnational government debt for 2023 by origin (domestic and external) and creditor type, both measured as percentages of each country's total debt. The category "private banks" includes other private financial institutions, such as credit unions.

Source: Authors based on national sources (see the detailed list in Table A.4.1 in the appendix available in the online edition of RED).

More recently, innovative instruments such as green and social bonds have also begun to gain traction as sources of financing for public investment. Several subnational governments have issued bonds with these characteristics to finance projects with environmental and social benefits in areas such as renewable energy, clean transportation, water management, health, education, and social housing. Mexico has been a pioneer in issuing green bonds at the local level. The first bond of this type was launched by Mexico City in 2015 to fund sustainable infrastructure projects. Argentina has also entered this market, with local governments like Córdoba and Godoy Cruz issuing bonds for projects such as LED lighting, solar panels, and sewer network optimization. Additionally, provinces such as La Rioja and Jujuy have issued green bonds to finance large-scale solar and wind generation projects. Colombia has a robust regulatory framework for issuing green and social bonds, enabling municipalities and decentralized entities to fund public infrastructure projects using these instruments.

Another valuable tool for financing subnational public investment is trusts. Essentially, a trust allows subnational governments to transfer resources to a fiduciary entity, which manages the funds according to specific objectives, such as the construction and maintenance of public infrastructure. This structure facilitates financing by pooling resources from various sources, such as government transfers, tax offsets, or own-source revenues, thereby generating stable resource flows. With these flows as collateral, trusts can obtain additional financing through bond issuance or loans from development banks, enhancing their capacity to execute large-scale projects. Furthermore, trusts enable the hiring of professional management and oversight to ensure that execution adheres to established timelines,



Altamira, in the Brazilian state of Pará, is the largest municipality by area in Latin America and the Caribbean.

costs, and quality standards, thereby reducing the risks of inefficiency and corruption.

Recently, CAF granted a long-term loan to a trust established by the municipality of Canelones, Uruguay, which includes the use of a financial currency swap. This innovative instrument allowed the municipality to access long-term financing in the same currency as its revenues for its program to improve public spaces and sustainable mobility, mitigating exchange rate risks for the parties involved. The operation provided important lessons for CAF, which will strengthen its ability to offer financing to its shareholder countries.

One advantage of trusts is that they can facilitate joint access to credit for subnational governments. In Mexico, the Municipal Infrastructure Fund (FIM) plays this role, providing financing for infrastructure projects such as roads, water and sanitation systems, and urban equipment. The fund, which is supported by federal and local contributions and managed by a fiduciary bank, improves municipalities' credit profiles and reduces financing costs.

Like trusts, another mechanism that facilitates financing against future revenues is tax-for-investment agreements, such as Peru's Obras por Impuestos program (see Box 4.3). These tools can be useful for financing priority projects and mobilizing resources in the short term, but both present significant risks. Among the main challenges are the lack of transparency in their implementation, the accumulation of contingent liabilities that are not always adequately reported, and the potential for their use to bypass the limits established in debt regulatory frameworks. Therefore, their use should be accompanied by strict controls, transparent reporting, and rigorous evaluation of their fiscal sustainability (Saxena, 2022).

Box 4.3
Tax works agreements

Tax works agreements allow the private sector to finance infrastructure projects in exchange for deducting the cost of the works from their tax obligations. In Peru, the Works for Taxes program enables private companies to finance and execute public investment projects. For subnational projects, companies receive a Regional and Local Public Investment Certificate (CIPRL) for the amount invested, which is applied to their income tax payments. Once the project is completed, the Ministry of Economy and Finance (MEF) deducts up to 30% of the annual transfers to the regional or local government until the CIPRL amount is fully covered. This mechanism allows subnational governments to finance public investment using future transfers.

Between 2009 and 2023, 95 regional governments and 349 local governments used this modality to finance investment projects across sectors such as transportation (29% of total projects), education (27%), sanitation (12%), security (11%), and others (21%).

Source: Authors based on information from ProInversión (2024).

Striking a balance between subnational debt control and public investment sustainability

A central concern is how subnational debt regulation and, more broadly, fiscal rules affect public investment. This concern is justified: investments are more discretionary than other expenditures, such as personnel salaries or debt servicing, making them more susceptible to fiscal restrictions. Additionally, during periods of fiscal adjustment, investment spending cuts tend to be less visible to voters than reductions in other areas, such as social transfers, increasing the likelihood that they will be targeted for fiscal consolidations. Moreover, the benefits of public investment typically materialize in the long term, incentivizing governments to prioritize current expenditures, which have a more immediate impact, over strategic investment projects, with negative implications for economic growth and equity.

Subnational debt control presents a clear trade-off. Stricter controls, such as imposing tight debt limits or intensifying approval requirements, promote fiscal discipline but can restrict the financing of public investment. Conversely, more flexible controls allow greater leeway to prioritize public investment projects, albeit at the risk of accumulating debt if not managed properly.

Regional evidence indicates that subnational fiscal rules have been instrumental in controlling debt, thereby preserving macroeconomic stability. However, challenges remain, including the lack of differentiated treatment for capital spending, the absence of countercyclical mechanisms, and restrictions on financing access for investment purposes (Jiménez et al., 2021).

One way to address the first challenge is through the "golden rule." This approach allows subnational governments to borrow exclusively for investment financing, maintaining a balanced current account and promoting long-term fiscal sustainability. In Colombia, a rule introduced in 2000 limits operating expenses to 80% of current revenues, reducing deficits without affecting investment. Carreri and Martínez (2024) show that this rule decreased the likelihood of operating and total deficits, primarily through reductions in operational expenditures, while maintaining the provision of essential public goods, such as education and potable water. This suggests that explicitly separating current and investment expenditures in regulations can improve fiscal sustainability, protect public investment, and ensure the provision of key local services.

While no evidence of creative accounting—such as reclassifying operating expenses as investment expenses to circumvent fiscal rules—was detected in Colombia, such regulations must be accompanied by strict oversight to prevent abuses. Data from Switzerland, for example, reveal that part of the increased investment recorded in cantons following the introduction of the golden rule resulted from creative accounting practices (Burret and Feld, 2018).

Another alternative to maintaining adequate levels of public investment during economic cycles is the introduction of escape clauses, which allow for a temporary relaxation of fiscal rules in extraordinary situations, such as severe economic crises or natural disasters. These clauses help preserve the credibility of fiscal rules by providing for justified exceptions, thus avoiding non-compliance or the outright suspension of regulations (Eyraud et al., 2020). For instance, the absence of escape clauses in Colombia's subnational fiscal rules led to their total suspension during the COVID-19 pandemic, with the conditions and timing for returning to the original measures defined discretionally (Pérez-Valbuena, Ricciulli Marin et al., 2024).

However, escape clauses require clear design to specify the circumstances under which they are triggered, their duration, and the conditions for returning to fiscal compliance. They should also include oversight mechanisms to prevent abuse. For example, in Brazil, these clauses require subnational governments to present a plan for returning to fiscal compliance within a specified timeframe (Eyraud et al., 2020).

Finally, the design of subnational debt regulations must account for differences in revenue-generation capacity among regional and local governments.

Jiménez et al. (2021) highlight that in regions with limited fiscal capacity, rigid debt controls could reduce investment in key areas, deepening territorial inequalities. Therefore, fiscal rules must adapt to local contexts, ensuring both fiscal sustainability and the development of subnational governments.

The need for more flexible debt control is greater in countries where access to credit determines investment levels. In many cases, subnational public investment depends on national transfers. In others, limited own resources make borrowing essential. For example, in Peru, declining revenues from natural resources reduced local investment, partially offset by other sources, though insufficient to maintain previous levels (Jiménez et al., 2020).

In summary, designing subnational fiscal rules involves balancing fiscal sustainability and public investment promotion. Rigid rules ensure fiscal discipline but may be overly restrictive, limiting necessary investments. On the other hand, flexible rules offer a more adaptive framework but carry risks of debt accumulation or misuse. Achieving this balance requires carefully designed rules tailored to subnational contexts, supported by mechanisms for transparency and accountability.



Municipality of Panama City.

Subnational government revenues: The role of taxes and transfers

- Structure of subnational government revenues in Latin America and the Caribbean.
- Characteristics of subnational tax revenues and action areas.
- Status of transfer systems and action areas.

5

Key messages

1 On average, 58% of subnational government revenues in Latin America and the Caribbean (LAC) come from transfers, while 42% originate from own-source revenues, though these figures vary significantly both between and within countries.

2 There is a positive relationship between the quality of public spending and its financing through own-source revenues, as tax payments increase citizens' interest in influencing spending decisions and ensuring they are effectively implemented.

3 Disparities in own-source revenues among subnational governments are substantial, particularly at the local level, and exceed those in developed countries. These inequalities are driven by differences in economic development and fiscal effort across jurisdictions.

4 A reform agenda for subnational tax revenues that includes reducing dependence on gross revenue taxes, increasing real estate tax collection, strengthening the role of new taxes, and improving fiscal coordination and cooperation across levels of government.

5 Transfers help reduce disparities in own-source revenues among subnational jurisdictions in LAC. However, inequality in total revenues remains much higher than in OECD countries due to broader initial gaps.

6 Reforming transfer systems in LAC requires strengthening their redistributive components, increasing incentives and capacities for own-source revenue collection, and improving government performance. Additionally, developing savings funds to mitigate the procyclical bias of transfers is necessary.

7 The rules for distributing royalties and the governance of natural resources should incentivize the extraction and production of critical minerals and hydrocarbons for the energy transition—such as copper, lithium, and natural gas in the areas where these deposits are located.

Subnational government revenues: The role of taxes and transfers[1]

Introduction

Subnational governments can finance themselves through their own revenue collection or with transfers from the national government. Each source has its advantages and disadvantages. A key advantage of financing with own-source revenues (OSR) is its positive impact on spending quality. For example, in Brazil, Gadenne (2017) shows that an increase in municipal tax collection is reflected in improvements in educational infrastructure, while increases in transfers have no similar impact. Martínez (2023) finds similar results in Colombia, examining a wider range of spending allocations and comparing the effectiveness of local tax revenues to that of revenues from natural resource extraction royalties.

The positive relationship between the quality of spending and its financing through own-source revenues is largely explained by the link between tax payment and political engagement—understood as citizens' interest in influencing spending decisions and ensuring they are effectively implemented. Many authors[2] agree that this results in greater accountability.

Decentralizing tax collection, which increases subnational governments' own-source revenues, can improve spending quality but requires careful design, coordination with national policies, and careful consideration of potential drawbacks. One such drawback is that regions with stronger economic bases tend to generate more tax revenue than poorer regions, leading to disparities in public service provision. Additionally, in some contexts, decentralizing tax collection can lead to administrative inefficiencies or trigger "races to the bottom," where jurisdictions lower taxes to attract

1 This chapter was written by Carolina Camacho and Ricardo Estrada, with assistance from Rodrigo Fernández and Daniela Goyheix.

2 Weigel (2020), Bates and Lien (1985), Hoffman and Rosenthal (1997), Moore (2004), Prichard (2015) and Bräutigam et al. (2008).

businesses or high-income individuals, reducing overall tax revenues.[3]

The payment of taxes contributes to increasing government accountability to citizens, thereby improving the quality of public spending

Fiscal transfers from national to subnational governments can mitigate inequality in terms of their capacity to provide public goods and services. Moreover, they are essential for addressing fiscal imbalances caused by the decentralization of responsibilities that require expenditures exceeding revenues generated by tax autonomy.

However, transfers can also produce undesirable effects, particularly by discouraging local revenue collection. Evidence indicates that this effect can be especially significant in contexts with weaker institutional development (Lago et al., 2024). For instance, Ferraz et al. (2024) find that a reduction in the transfers received by municipalities in Brazil leads to increased investment in fiscal capacity and local revenue collection, particularly in jurisdictions with greater political competition and mayors with higher levels of education. Another potential unintended effect is that transfers can contribute to the excessive growth of subnational governments and debt accumulation (Lago et al., 2024).

This chapter addresses two central objectives related to the challenges of tax collection and transfers. First, it analyzes how to improve subnational government revenue collection in Latin America and the Caribbean. This improvement involves strengthening tax administration in most cases and advancing the design of tax regimes to enhance efficiency, simplicity, and equity.

Currently, the tax systems of many subnational governments in the region are characterized by unnecessary complexity, taxes that significantly distort economic activity, and high levels of tax delinquency and evasion. The revenue agenda focuses on three key questions: What are the best taxes to collect at the subnational level? How can their design be harmonized to ensure that incentives and penalties generate the desired outcomes? And what interventions can improve coordination and cooperation across jurisdictions?

The second objective of the chapter is to analyze the challenges of intergovernmental transfer systems in Latin America and the Caribbean. Creating transfer systems that are more efficient, equitable, and transparent requires a careful analysis of instruments and local realities, addressing multiple tensions. The importance of transfers in subnational public finances and the opportunities for improvement within these systems in the region make this task essential.

Subnational government revenues

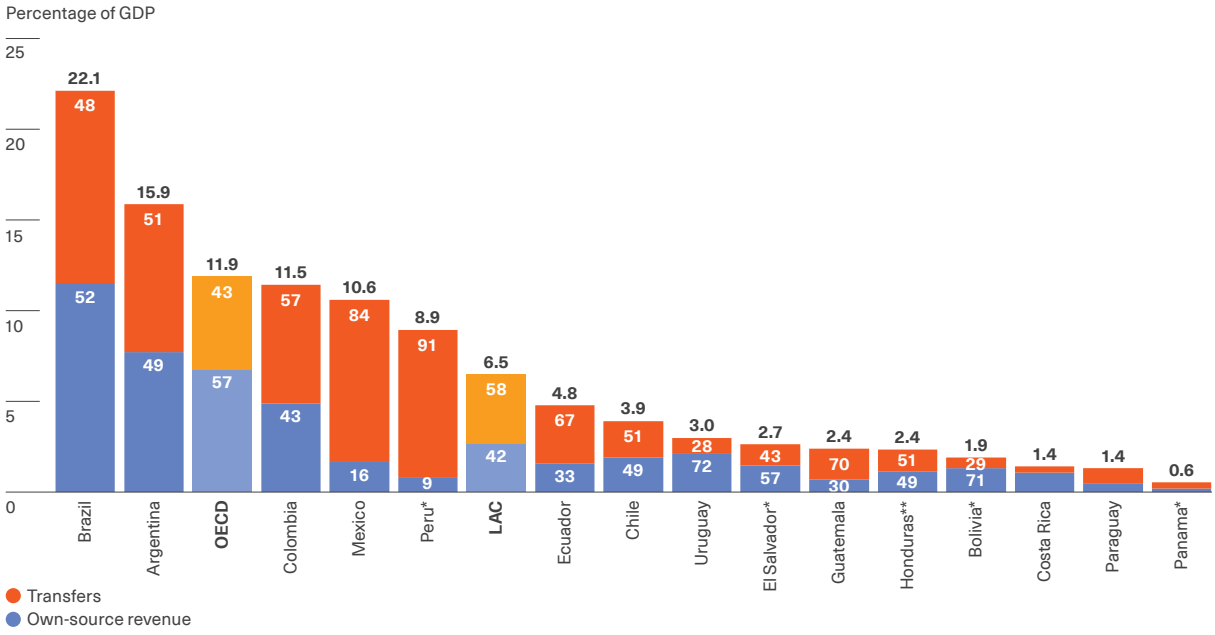
In Latin America and the Caribbean, subnational government revenues average 6.5% of national GDP. Across countries, transfers account for 58% of total revenues on average, exceeding own-source revenues, which represent 42%. However, both the magnitude of total revenues and the significance of transfers vary widely between countries (Graph 5.1).

3 The concept of a "race to the bottom" refers to the idea that the more lax the regulations in a competitive context for attracting investment, the lower the costs for investors, thereby increasing the location's appeal.

By comparison, subnational government revenues in OECD countries average 11.9% of national GDP. Of this, 43% comes from transfers, 15 percentage points less than the LAC average.

There is a clear association between the level of subnational government revenues and the degree of decentralization in a country. Among the five countries where subnational governments have the highest revenues, three are federal systems (Argentina, Brazil, and Mexico), and two are the most decentralized unitary states (Colombia and Peru).[4] In the other ten countries shown in Graph 5.1—all with smaller populations and unitary systems—subnational government revenues average only 2.4% of GDP.

Graph 5.1
Fiscal revenues of subnational governments in LAC countries, 2022



Note: The graph reports the total revenues of subnational public sectors as a percentage of national GDP. Following the IMF manual (2014), "own-source revenues" include tax revenue and non-tax revenue, such as property income; sales of goods and services; fines, penalties, and forfeits; and premiums, fees, and claims related to nonlife insurance and standardized guarantee schemes. "Transfers" include grants and transfers not elsewhere classified. Social security contributions and other social contributions are excluded. Data for Argentina, Brazil, Colombia, Mexico, Paraguay, and Peru pertains to subnational governments (regional and local). Data for Bolivia, Ecuador, and Uruguay covers regional governments. For Chile, Costa Rica, El Salvador, Guatemala, Honduras, and Panama, data pertains to local governments. * Indicates the latest available data is from 2021. ** Indicates the latest available data is from 2020.

Source: Authors based on national sources for Argentina (MECON, 2023b), Bolivia (MEFP, 2023a), and Uruguay (OTU, 2023b) and IMF (2024e) for other countries.

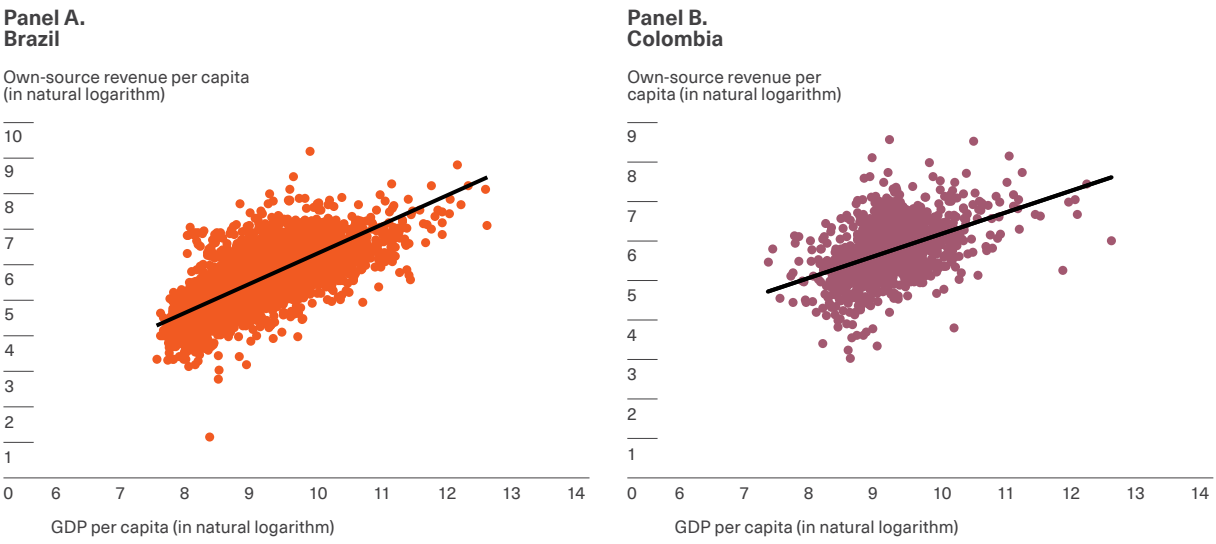
4 More information about the degree of decentralization in the countries of the region can be found in chapter 2 of this report.

Inequality in own-source revenues is due to differences in economic development and the fiscal effort of jurisdictions

Total revenue is roughly evenly split between own-source revenue and transfers in most countries. However, Ecuador, Guatemala, Mexico, and Peru stand out for their heavy reliance on transfers, which account for at least two-thirds of total revenue. In Peru, the high prevalence of transfers aligns with a low score on the fiscal dimension of the composite indices of autonomy analyzed in chapter 2 (Hooghe et al., 2016; Ladner et al., 2023).[5] This suggests that fiscal decentralization in Peru is more limited than the decentralization of responsibilities. The opposite is true in Bolivia, Costa Rica, and Uruguay, where the devolution of responsibilities is more limited than in Peru, but own-source revenue accounts for more than 70% of total revenue.

Subnational government revenues not only differ significantly between countries but also within them. These disparities in total revenues originate in inequalities in own-source revenues, which are closely linked to the per capita GDP of jurisdictions. For example, in Brazil, a 1% increase in a local jurisdiction's per capita GDP is associated with a 0.82% rise in its per capita tax revenues, while in Colombia, the increase is 0.54% (Graph 5.2). Additionally, there is considerable variation in own-source revenues among jurisdictions with similar GDP levels, indicating that revenue collection not only depends on economic development. This suggests that there are significant differences in fiscal effort across jurisdictions.

Graph 5.2
Own-source revenues and per capita GDP in local jurisdictions in Brazil and Colombia, 2022



Note: Transfers, credit disbursements, available cash balances, and social security contributions are excluded. For Brazil, the latest available GDP data is from 2021. Own-source revenue and GDP amounts are adjusted to purchasing power parity (PPP).

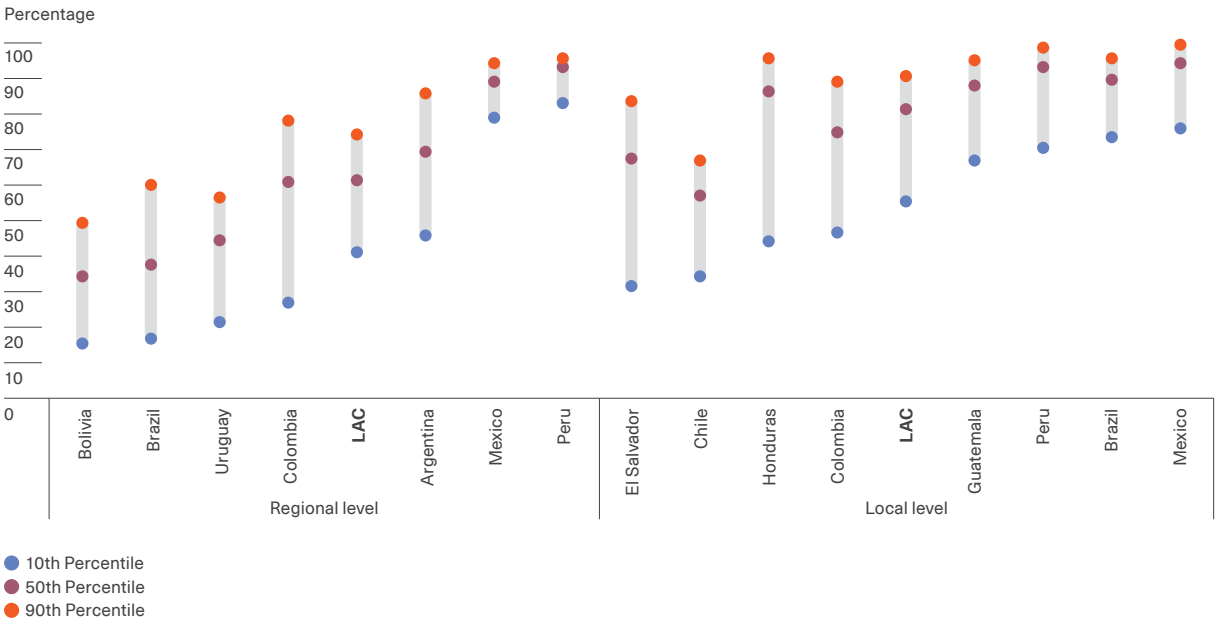
Source: Authors based on data from IBGE (2023b) and STN (2023d) for Brazil, and DANE (2023d) and DNP (2023c) for Colombia and IMF (2024d).

5 The fiscal autonomy dimension is very low at the regional level in Peru, according to the Regional Authority Index (RAI), with a score of 0 out of a maximum of 4.

Disparities in own-source revenues among subnational governments are substantial, especially at the local level, and greater than those observed in developed countries. On average, the Gini coefficient for inequality in per capita own-source revenues is 0.33 for regional governments and 0.46 for local governments. By comparison, the Gini coefficient for regional governments in OECD countries averages 0.18.

As detailed in subsequent sections on transfer systems, transfers partially reduce disparities in total revenues across jurisdictions. In line with this, the importance of transfers within the revenue structures of subnational governments also varies significantly within countries. On average, in Latin America and the Caribbean, the bottom 10% of regional governments in terms of transfer reliance derive at most 41% of their revenues from transfers, while the top 10% derive at least 74% (Graph 5.3). Transfers have even greater weight in the revenues of local jurisdictions, which receive, on average, 14.4 percentage points more of their revenues from transfers than regional jurisdictions.

Graph 5.3
Transfers as a percentage of total revenues of subnational governments in LAC, 2022



Note: Data for Bolivia corresponds to 2021.

Source: Authors based on national sources (details provided in Table A.5.1 in the appendix, available in the online edition of RED).

Structure of own-source revenues

Tax collection constitutes the majority of own-source revenues for subnational governments in Latin America and the Caribbean, accounting for 66% of these revenues.[6] On average, tax revenues represent 1.8% of GDP, significantly below the 5.3% average for OECD countries.[7]

The importance and composition of non-tax revenues for subnational governments vary across countries and levels of government. Generally, the largest share comes from administrative fees charged for services and the sale of goods and services, with much smaller contributions from fines and rents derived from government-owned properties (see Graph A.5.1 in the appendix available in the online edition of RED). In contrast, non-tax revenues in OECD countries are concentrated in the sale of goods and services and rents from government-owned properties. Except in Brazil and Colombia, non-tax revenues are more significant in countries with lower levels of own-source revenue generation.

Consistent with the observed patterns in total revenues, tax collection is highest in Brazil (9.9% of GDP), Argentina (5.1% of GDP), and Colombia (3.3% of GDP), followed by Chile, Nicaragua, and Uruguay. In ten other countries for which data is available, subnational government tax revenues are minimal, not exceeding 1.1% of national GDP.[8]

The composition of tax revenues by type of tax differs greatly between local and regional levels, both in LAC and OECD countries. At the local level, real estate tax is the main category in both regions, accounting for approximately 40% of total revenues in each (Graph 5.4). However, the higher overall revenues in OECD countries imply that real estate taxes represent 0.9% of GDP, compared to just 0.3% in LAC.

The second most significant category of local taxes shows greater variation, both between OECD countries and LAC as well as within the latter region. In the OECD, this category comprises taxes on income, profits, and capital gains of individuals and corporations, whereas, in LAC, these taxes are virtually nonexistent at the local level—except in Ecuador—and are similarly absent at the regional level.

Local governments in the region rely more heavily on other types of taxes. For example, in Brazil, Colombia, and Nicaragua, nearly half of local tax revenues come from taxes on the production, sale, transfer, leasing, and delivery of goods and rendering of services. This category includes a wide range of taxes, but business taxes levied on gross revenues (which do not deduct costs) account for the bulk of collections.[9] In Colombia, the most important tax is the industry and commerce tax (ICA), representing 36% of tax revenues; in Brazil, it is the tax on services of any nature (ISS), accounting for 47%; and in Nicaragua, it is the municipal license tax, making up about 15% of tax revenues. Meanwhile, in Chile, Costa Rica, and Paraguay, taxes on the use of goods, or on permission to use goods or perform activities play a prominent role. The largest source of revenue in this tax category in these countries comes from taxes on the use of goods other than vehicles.

The contrast between the OECD and LAC is even more pronounced at the regional level of government. In the OECD, taxes on income, profits, and capital gains of individuals and corporations constitute the main category, accounting for 37% of revenues, whereas these taxes are irrelevant in all LAC countries.

6 2022 data for 15 countries in the region, based on official sources.

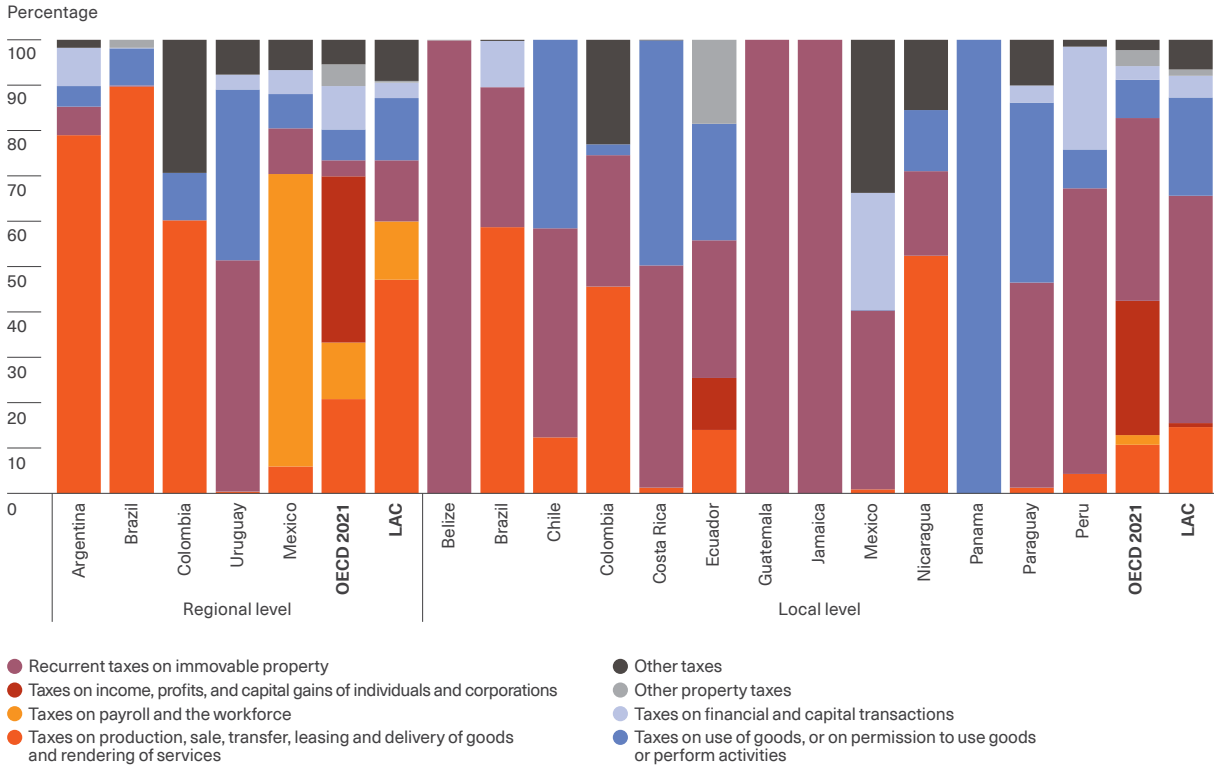
7 Excluding Latin American countries.

8 2022 figures for 15 countries in the region: Argentina, Belize, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Jamaica, Mexico, Nicaragua, Paraguay, Peru, and Uruguay.

9 Taxes in this category include value-added tax (VAT), sales taxes, excise taxes, and gross revenue taxes.

There are substantial differences among LAC countries regarding the primary regional tax. Taxes on goods and services dominate in Argentina, Brazil, and Colombia. In Argentina, 79.1% of revenues are concentrated in the gross revenue tax; in Brazil, 81.1% comes from the tax on the circulation of goods and transportation services (ICMS); and in Colombia, 46.1% comes from taxes on the consumption of alcoholic beverages, wine, and beer. Conversely, in Mexico and Uruguay, taxes on the production and sale of goods account for less than 6% of revenues. In Mexico, more than 60% of tax revenues come from payroll taxes, while in Uruguay, collections focus on real estate and vehicle taxes (Graph 5.4).

Graph 5.4
Composition of main tax revenue categories in total tax revenue, 2022



Note: The average in Latin America and the Caribbean is calculated as the simple average of percentages across countries. The OECD average represents the simple average of member countries. In the local government panel, Bolivia, El Salvador, and Honduras are excluded because the "other taxes" category accounts for over 50% of their revenues.

Source: Authors based on OECD (2023).

Opportunities for improving the tax structure of subnational governments

Reducing the weight of gross revenue taxes

The primary issue with the tax structures of subnational governments in many countries is the significant reliance on inefficient taxes, such as those levied on gross revenues. Gross revenue taxes have several flaws. Since they are applied to total sales rather than profits, they penalize businesses that would otherwise be profitable, creating inefficiencies. Additionally, because they do not allow deductions for intermediate goods, they encourage vertical integration of enterprises, putting small and medium-sized enterprises (SMEs) at a disadvantage.

Gross revenue taxes persist despite their general limitations due to political economy factors and their ease of collection. On one hand, they are relatively well-accepted by the public, as their impact on prices is not always obvious. On the other hand, they offer administrative and monitoring advantages over other taxes, such as real estate taxes. Their ease of collection stems from the direct valuation of the taxable base, which simplifies filing for taxpayers and oversight for authorities. They are also easy to verify through third parties and, by definition, have a broad tax base.

Gross revenue taxes persist despite their general limitations due to political economy factors and their ease of collection

In addition to the inherent flaws of gross revenue taxes, their application by autonomous subnational jurisdictions without coordination or harmonization mechanisms creates further distortions. Variability in rates and exemptions across jurisdictions leads to two key issues: (1) higher transaction costs for businesses operating nationally, as they must navigate different regulations across jurisdictions, and (2) a shift in investment toward sectors or locations with lower tax burdens. Argentina's gross revenue tax exemplifies this lack of coordination. Similarly, Brazil has long faced challenges with the ICMS, though it is currently undergoing reform.

In Brazil, the ICMS on transportation is levied on interstate sales of goods and accounts for 81% of subnational tax revenues.[10] ICMS collection occurs in the state of origin of the transaction, incentivizing states to reduce rates or introduce exemptions to attract more businesses. The tax rates vary widely, from 0% to 35%, depending on the jurisdiction and product. This variability can distort business location decisions, reducing overall efficiency and tax revenues across the system. Additionally, the ICMS is part of a more complex system involving five taxes on goods and services applied by three levels of government. In this context, overlapping tax bases and the inability to fully deduct intermediate input costs lead to cascading tax effects, distorting productive resource allocation.

In December 2023, Brazil enacted a comprehensive tax reform aimed at gradually addressing these issues by replacing the existing taxes, including the ICMS, with a dual Value Added Tax (VAT) system. The reform introduces two value-added taxes. The first is the subnational tax on goods and services (IBS), which, between 2026 and 2033, will replace the ICMS levied by states and the tax on services (ISS) levied by municipalities. The second is a federal tax: the contribution on goods and services (CBS), which will replace other federal taxes, such as the Social Integration Program (PIS), the tax on industrialized products (IPI), and the contribution for financing

10 Figures sourced from STN (2023d) for the year 2022.

social security (COFINS), between 2024 and 2027. Notably, the reform eliminates tax exemptions, such as those previously established under the ICMS by some states to attract investments. This change is expected to equalize tax conditions across Brazilian states, reducing distortions in investment decisions.

Increasing real estate tax collection

Real estate tax collection is not only low in several countries but it is particularly low in many jurisdictions within those countries. This is the case, for example, in Colombia, one of the region's leaders in real estate tax collection, where revenues are highly concentrated in major cities. In 2022, five cities accounted for 60% of real estate tax revenues.[11] Additionally, per capita revenue in rural areas was only half that observed in urban areas.

The limited collection of real estate taxes in the region is largely explained by the higher political costs associated with this tax compared to others. This is due to several factors. First, the tax is highly visible to taxpayers because of direct billing and significant payment amounts. Second, payment methods are often limited to a single annual installment, without adequately aligning with taxpayers' cash flow. Third, there can be a mismatch between presumed and actual payment capacity. For instance, when a homeowner occupies their property, the asset does not generate direct monetary income, potentially leaving the owner without the means to pay the tax. Fourth, cadastral valuations are often difficult for taxpayers to understand, and the widespread lag in updating taxable values can lead to sudden increases in obligations.

In this context, it is more politically costly for local governments to implement measures to increase real estate tax revenues than to raise other, less transparent taxes. Chacón and Sánchez (2020) show that mayors in Colombia have more incentives to increase industry and commerce taxes than real estate taxes, as the former carry lower political costs.

The collection of real estate taxes is low in several LAC countries and tends to be concentrated in a minority of jurisdictions within each country

In addition to political costs, real estate tax collection is challenging because valuing the tax base entails significant expenses. As a result, administrations face substantial delays in updating valuations, even though most countries require property values to be updated every five years.[12] These delays are also partially explained by a lack of administrative capacity or technological resources. A noteworthy example is the introduction of self-assessment for real estate valuation in Bogotá in 1993, which doubled tax collection as property owners declared values closer to market value (De Cesare et al., 2016).[13]

11 Bogotá collected 33.9% of real estate taxes, while Medellín, Cali, Barranquilla, and Cartagena collectively accounted for 23.3% (DNP, 2023c).

12 In 2019, only 5.7% of properties in Colombia had updated cadastral information, 66% had outdated information (with an average lag of 12.2 years), and 28.3% had no cadastral information at all (IGAC, 2019).

13 In 1994, Colombia's Constitutional Court declared the use of the self-assessment mechanism unconstitutional without a benchmark or point of comparison provided by the cadastral authority. Following the ruling, the self-assessment mechanism was maintained, but the benchmark was shifted to the value established by the cadastral authority, which constitutes the minimum valuation base. In practice, this has placed the full burden of property valuation back on the cadastre.

Box 5.1
Revenues from urban land value capture

Subnational governments have potential revenue opportunities through the capture of urban land value generated by actions such as infrastructure construction. In addition to real estate taxes, the following instruments can be used for this purpose: betterment levies, value added by regulations the sale of development rights, and charges for land readjustment or partial plans, which are fees in exchange for benefits or increased land use allowances.

According to Borrero Ochoa and Rojas Ruiz (2020), betterment levies are among the most traditional instruments in the region and have significant revenue potential. These are levies imposed on property owners who benefit from the construction of public works. The authors note that between 2007 and 2013, betterment levies accounted for only 0.16% of tax revenues in eight Latin American countries, with Colombia having the highest share (0.64%).

An example of charges or fees in exchange for benefits or increased land use allowances can be found in the municipality of Tres de Febrero (Argentina), which in 2020 introduced the Urban Development and Sustainable Habitat Fee. This fee is imposed on property owners benefiting from increases in land value due to enhanced development rights and changes in land use. According to Pino (2024), this is a noteworthy case, as revenues grew over the four years following its implementation, with funds allocated to improving urban infrastructure.

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Updating the taxable base value for real estate taxes is often delayed due to high costs and a lack of administrative and technological capacities

While the political and economic costs of broadening the tax base are critical determinants of valuation delays and, consequently, low collection rates, other factors also play a role. According to Chacón and Sánchez (2020), transfers reduce real estate tax collection in Colombian municipalities. Higher transfers decrease the incentives to incur the costs of updating cadastral records, limiting the increase in the tax base value. Additionally, owners of high-value properties can influence local governments, curbing the tax's progressivity, delaying cadastral updates, and hindering effective collection. Villaveces (2016) notes that one reason for the gap in real estate tax collection between urban and rural areas in Colombia is the delay in updating cadastral records in areas with high political concentration, where private landowners' interests can exert greater influence on public policy decisions.

In general, countries in the region have room to expand the collection of real estate taxes.[14] This tax can be strengthened through adjustments to make it more taxpayer-friendly and easier to collect. These adjustments include: 1) simplifying tax rates (reducing differentiation by activity) to facilitate monitoring (Sjoquist, 2004); 2) limiting exemptions and periodically reviewing exempt properties (Kelly, 2013); 3) aligning payment schedules with taxpayers' cash flow, introducing gradual payment methods, and using complementary information to address mismatches between presumed and actual payment capacity; and 4) Improving transparency by using valuations based

14 For details on real estate tax regulations, see Table A.5.2 in the appendix, available in the online edition of RED.

on observable parameters and drawing on lessons from cases such as Bogotá's self-assessment system, described above. Governments can also innovate by utilizing taxes and fees that capture extraordinary increases in urban land values, as detailed in Box 5.1.

The low and uneven collection of real estate taxes contrasts sharply with their advantages as a fiscal instrument for local governments. First, the tax base is immovable, simplifying the identification of the jurisdiction responsible for collection and limiting the tax's impact on economic activity. Second, taxpayers directly benefit from local public goods and services, as these often lead to increased property values. Third, real estate taxes function as an urban planning tool, enhancing the efficiency of land use and serving as a mechanism to encourage voter scrutiny of local authorities. In addition, when properly designed, the tax can be both progressive and transparent. It is progressive because property values tend to correlate with the wealth of their owners, having the potential to ensure that those with greater economic capacity contribute more. It is transparent because the combination of a clear and verifiable tax base with a simple structure makes it easy to understand, especially when technical methodologies are employed to define the taxable base (Ahmad et al., 2019).

A greater role for new taxes

As previously noted, the primary difference between the tax revenues of subnational governments in LAC and those of their OECD counterparts lies in the significant role of income taxes on individuals and corporations in the latter. This presents an opportunity for the region to increase subnational revenue from these taxes, though it is not without challenges. Since these are relatively complex taxes that require measures such as filing declarations, subnational collection must be coordinated with national systems. The difficulty in expanding subnational collection lies in the fact that the national collection of income tax on individuals in LAC has notable deficiencies compared to OECD countries (OECD et al., 2018).

Another category of taxes that requires strengthening includes those levied on consumption and activities that generate social costs. This includes the consumption of alcoholic beverages and sugary drinks, which impose burdens on healthcare systems. Taxes on alcohol consumption, for example, are widely applied by regional governments in Colombia. The implementation or expansion of taxes on sugary drinks has generally been considered at the national level. However, they also represent a viable alternative at the subnational level, as evidence suggests they do not result in significant tax evasion through cross-jurisdictional shopping (see, for instance, Powell and Leider (2020), in the case of Seattle in the United States).

An area with the potential to strengthen taxes that penalize behaviors with social costs is urban mobility. These taxes target the use of private motorized transport due to its environmental, congestion, and accident-related impacts. Such penalties include urban tolls, congestion charges, mileage-based fees, and parking fees. Revenue from these sources can be allocated to financing mass public transportation systems, which reduce pollution and congestion. The challenges of these systems are explored in chapter 6.

Using new tools to promote voluntary tax compliance

The political costs of imposing penalties for noncompliance with tax obligations often limit their use by authorities. Dunning et al. (2015) show that in Montevideo (Uruguay), tax delinquency rates are high, and debtors are repeatedly granted amnesties despite the government having sufficient information and monitoring capacity to identify and penalize nonpayment of local taxes. Similarly, Holland (2015) demonstrates how, in Bogotá, Lima, and Santiago, the enforcement of sanctions against unlicensed street vendors follows an electoral logic: sanctions tend to be weaker in districts where informal vendors hold greater electoral significance.

In this context, deploying incentives to encourage voluntary tax payment emerges as a cost-effective alternative to strengthen compliance with fiscal obligations.

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The use of incentives to encourage voluntary tax payment can be a cost-effective alternative to strengthen compliance with fiscal obligations

Among the strategies tested to promote voluntary tax compliance, one approach involves sending communications aimed at influencing tax morale—defined as motivations that are not necessarily tied to the expected costs of detection and punishment. Specifically, taxpayers appear motivated to conform to social norms[15] or to reciprocate the provision of public goods. For example, expanding the availability of public goods and making their funding through tax payments more visible can increase taxpayers' willingness to pay. Carrillo et al. (2017) find that building or renovating sidewalks in Santa Fe (Argentina) has broad and lasting positive effects on real estate tax collection.

A second set of interventions to encourage voluntary compliance involves offering monetary or social rewards (Dalton et al., 2021; Sjoberg et al., 2019). Existing evidence provides mixed results on their effectiveness (Bahl and Bird, 2008). Dunning et al. (2015) document the widespread use of rewards or lotteries in Argentina, Brazil, Colombia, Mexico, Peru, and Uruguay to incentivize timely payment of subnational taxes. However, they find that in Uruguay, a lottery for punctual taxpayers that exempts winners from paying taxes in the following fiscal year does not positively affect compliance. These findings lead the authors to question the general effectiveness of rewards and highlight their potential negative impact on taxpayers' intrinsic motivations,[16] particularly in contexts of persistent tax evasion.

In general, evaluations of various interventions aimed at inducing voluntary tax payment yield mixed results. This may be due to differences in intervention design or contextual factors, such as prevailing fiscal policies and the economic or political environment. Hence, it is crucial to accompany implementation with evaluations that take into account the specific context of the intervention. Broad and accurate information about taxpayers, along with effective communication technologies between citizens and tax authorities, is essential. These requirements involve costs, which can present a challenge for implementation. Nevertheless, the cost-benefit analysis of fostering a cooperative relationship with taxpayers proves more advantageous than relying on enforcement measures (Alm and Martínez-Vázquez, 2003).

15 Del Carpio (2014) finds evidence from Peru of an increase in tax collection when individuals who underestimated the tax compliance rate were informed about the actual rate.

16 Intrinsic motivation is defined as engaging in an activity for its inherent satisfaction rather than for any external consequence.



The Barbuda Council is one of the local jurisdictions with the highest proportion of Afro-descendant peoples in the region.

Coordination and cooperation with national authorities in tax policy

Failures in coordination and cooperation between national and subnational governments in the design and implementation of revenue instruments can create a burdensome environment for taxpayers. The multiplicity of tax levels, with differing rules and procedures, increases compliance costs and may lead to higher tax delinquency and evasion. Bahl and Bird (2008) emphasize that these complexities are especially pressing in developing countries, where tax administration capacity varies significantly between levels of government.

Fiscal coordination can allow for a degree of autonomy in setting tax rates without creating significant disparities between jurisdictions

To address inefficiencies, compliance challenges, and the risks of double taxation arising from a lack of coordination between national and subnational fiscal policies, recommended initiatives include tax harmonization, strengthening administrative capacity, and establishing institutional frameworks to enhance governance.

Tax harmonization involves aligning the definitions of taxable bases across government levels. It is also advisable to develop a coordinated framework to prevent significant disparities that could lead to tax competition or arbitrage, while still allowing a degree of autonomy in setting tax rates. For example, in the European Union, the design of the VAT is harmonized across member states, reducing compliance costs for businesses operating in multiple countries. Similarly, in Canada, the federal government and provinces coordinate the Goods and Services Tax (GST) and the Harmonized Sales Tax (HST) to maintain consistency nationwide, while still granting provinces some flexibility.

Strengthening intergovernmental fiscal bodies or councils can facilitate regular dialogue and coordination between government levels. These entities can help resolve conflicts, coordinate fiscal policies, and ensure the consistent application of tax laws.

Collaboration between central or federal governments and regional and local governments, as well as partnerships among jurisdictions, can promote the convergence of institutional capacities. For instance, regional or local governments could collect income taxes more effectively if the national government provided support with the necessary data infrastructure. Similarly, gathering cadastral information for collecting real estate tax at the local level could be made less costly with collaboration among jurisdictions, even when they are at the same government level. A concrete example is the Metropolitan Area of the Aburrá Valley, a public administrative entity that brings together ten municipalities in the department of Antioquia (Colombia). This organization acts as a coordinating body for territorial planning and has become a cadastral manager. Through this association, the member municipalities work together to manage and update cadastral records more efficiently, leveraging shared resources and joint technical expertise.

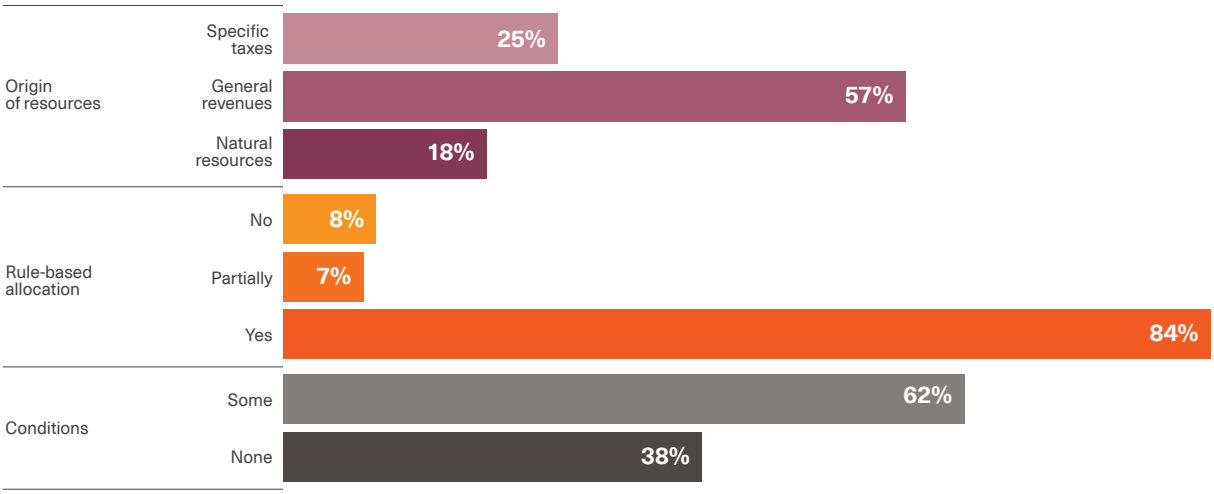
Collaboration between different levels of government and jurisdictions —through shared infrastructure and activities that leverage economies of scale—can reduce tax collection costs

How are transfer systems structured?

Fiscal transfer systems in Latin America and the Caribbean consist of multiple programs with varying objectives, allocation rules, and spending conditions. For this report, 38 transfer programs from national to subnational governments in 15 countries of the region were analyzed.[17] Each program represents at least 5% of the total amount of transfers to subnational governments in its respective country, based on the most recent available data, and together account for an average of 91% of total transfers in the countries studied. On average, in the nine countries with two levels of government, 58% of transfer funds go to the regional level and 42% to the local level, while in the six countries with only local governments, all transfers are allocated to the local level. In some countries, there are also transfers between subnational governments, of which there are two types (see Box 5.2).

Regarding the source of funds, on average, 57% of transfer amounts come from the national government's general revenues, 25% from the revenue sharing of specific taxes, and 18% from the exploitation and consumption of natural resources.

Graph 5.5
Characteristics of the main transfer programs to subnational governments



Note: The graph reports simple averages across countries for the distribution of total transfer amounts by the variables analyzed. Calculations are based on the programs listed in Table A.5.3 in the appendix available in the online edition of RED (excluding Trinidad and Tobago).

Source: Authors based on Radics et al. (2022), Miranda et al. (2017), ECLAC (2024), and national laws and official government data (details in Table A.5.1 in the appendix available in the online edition of RED).

17 See Table A.5.3. in the appendix, available in the online edition of RED.

Box 5.2
Transfers between subnational governments

Although less prominent, there are also transfer programs between subnational governments in the region. Table 1 lists the existing programs in five countries. These mechanisms can be classified as either vertical or horizontal transfers.

Vertical transfers exist in Argentina, Brazil, and Mexico, which are federal countries where local governments share in revenues from specific taxes collected by regional governments. In Argentina and Mexico, the criteria for allocating funds are determined at the regional government level, while in Brazil, national-level common indicators are also used. In all three cases, there are no spending conditions attached to revenues from shared specific taxes. In Mexico, regional governments also transfer resources from their general revenues to local governments, which are earmarked for spending on health, education, security, and infrastructure.

On the other hand, Chile and Paraguay, both unitary countries, have horizontal transfer programs between local governments. In Chile, the Municipal Common Fund seeks to reduce fiscal disparities among local governments. The fund's resources come from automatic contributions by municipalities, which include a portion of their revenues from real estate taxes, business licenses, vehicle registration fees, vehicle circulation taxes, and fines. Transfers are allocated through a rule-based procedure and are intended to finance service operations and infrastructure investment.

In Paraguay, the Special Fund for Paving and Complementary Works aims to finance local infrastructure through special contributions, primarily from property and vehicle owners. Spending is determined by the Five-Year Paving Plan, which is prepared by each municipality and approved by the fund.

Table 1
Main transfer programs between subnational governments

Country	Concept	Rules	Allocation criteria	Origin of resources	Type	Conditions on spending
Argentina	Provincial tax revenue sharing system	Partially	Each regional government establishes its own revenue-sharing regime based on agreements and regulations	Taxes	Vertical	None
Brazil	Municipal participation in state taxes	Yes	Vehicles registered in their territories, value added in operations, and local legislation	Taxes	Vertical	None
Chile	Municipal Common Fund	Yes	Equal shares, poverty, number of properties exempt from property tax, and own revenues	General revenues	Horizontal	Operating costs for services and infrastructure
Mexico	State participations	Yes	According to the State Fiscal Coordination Law of each jurisdiction	Taxes	Vertical	None
	State contributions	Yes	According to the State Fiscal Coordination Law of each jurisdiction	General revenues	Vertical	Health, education, infrastructure, and security
Paraguay	Special Fund for paving, stormwater drainage, sewerage, and complementary works, and special account	Partially	Five-year paving plan of each municipality	General revenues	Horizontal	Infrastructure

Source: Authors based on national laws, Radics et al. (2022), Miranda et al. (2017), and ECLAC (2024).

Intergovernmental transfer programs vary widely in design. Two key dimensions for understanding how they operate are: first, whether conditions are imposed on how recipient jurisdictions can use the resources; and second, the rules that determine how funds are distributed among recipient jurisdictions. The following subsections examine the advantages of different arrangements and the characteristics of the programs used in the region for each of these two dimensions. Finally, the extent to which transfers in the region equalize fiscal revenues across jurisdictions is explored, as the degree of equalization is one of the most significant outcomes of the rules governing transfer allocation.

Conditional and unconditional transfers

A primary way to classify transfers is by distinguishing between unconditional transfers, which grant subnational governments the autonomy to decide how to use the funds, and earmarked transfers, which restrict this autonomy by conditioning the use of allocated funds on specific purposes. Each program has its advantages. Unrestricted transfers allow subnational governments to better leverage their informational advantages about local territories. In contrast, earmarked transfers enable national governments to guide subnational spending toward national priorities and enhance the provision of local public goods with positive regional and national externalities (e.g., environmental policies).

On average, 38% of the resources allocated through the analyzed transfer programs are unconditional, while 62% are earmarked for specific expenditures. However, there are significant differences between government levels and countries. Regional governments generally have greater autonomy in deciding how to allocate expenditures compared to local governments. On average, 51% of the resources received by regional governments are unconditional, compared to just 27% for local governments (Graph 5.6). As might be expected, subnational governments in federal countries tend to have greater spending autonomy. Among unitary countries, there is substantial heterogeneity in the level of autonomy, which is not necessarily linked to the degree of decentralization. For example, among the two most decentralized unitary countries, Peru's subnational governments receive one of the highest proportions of unconditional transfers, while in Colombia, all transfers are conditional.

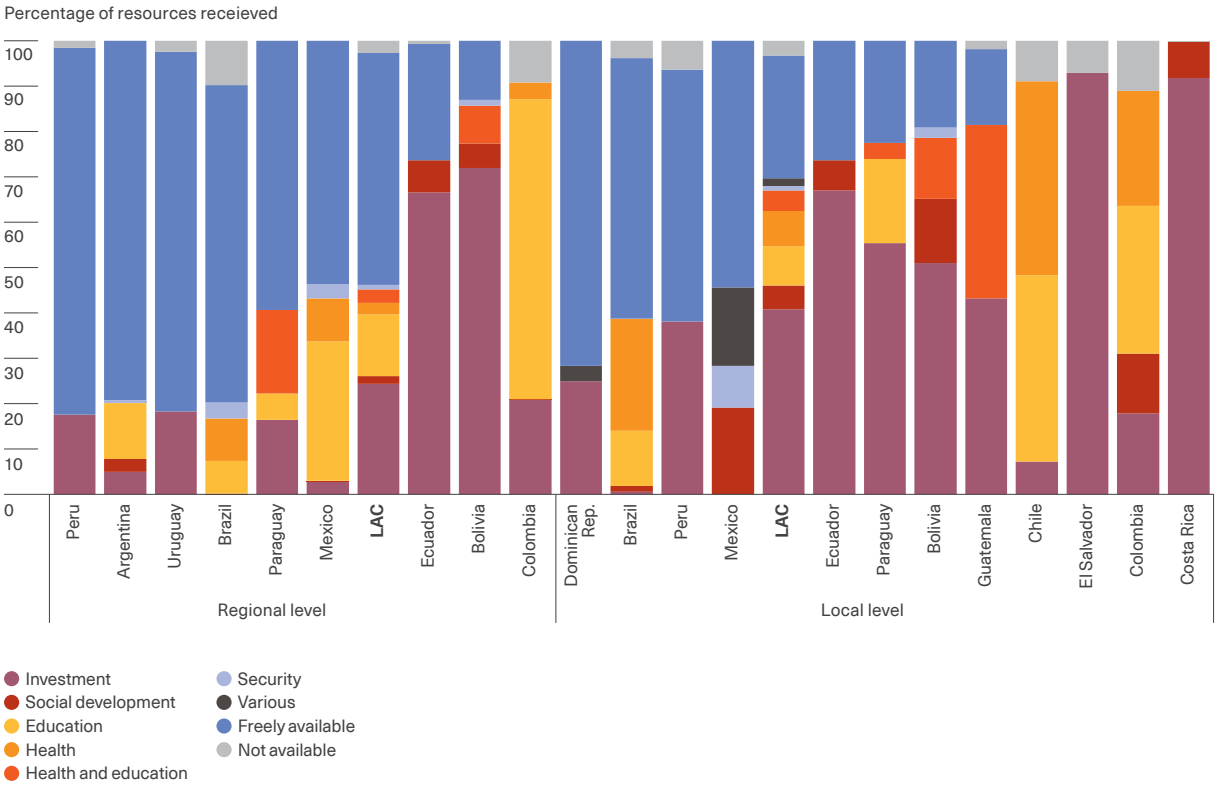
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On average, 38% of the resources allocated through the analyzed transfer programs are unrestricted, while 62% are earmarked for specific purposes

Due to concerns that transfers might be used to excessively expand subnational public employment, countries often impose significant restrictions directing funds toward investment expenditures. On average, 24% of the transfers received by regional governments and 41% of those received by local governments must be used for investment expenditures (without specifying a primary sector). Conditional transfers are closely associated with financing education and healthcare sectors in countries where these services have been decentralized (Argentina, Brazil, Chile, Colombia, and Mexico).

In general, there is a correlation between the source of funds and whether spending is conditional or unconditional. Programs funded by general revenues or natural resource revenues tend to impose conditions on how funds can be used, whereas those funded by the sharing of specific taxes are typically unconditional.

Graph 5.6
Transfers to subnational governments by key spending conditions in Latin American and Caribbean countries



Note: Percentages are based on an analysis of transfer programs in the region, using the most recent available fiscal data for each country. Most data correspond to 2022. The "investment" category includes programs that condition spending on infrastructure works and capital goods, without specifying a particular sector for the funds. Resources linked to specific sectors include programs that can be used for either current or investment expenditures. The graph does not specify amounts that must be allocated to investment within a specific sector.

Source: Authors based on Radics et al. (2022), Miranda et al. (2017), ECLAC (2024), and national laws and official government data (details in Table A.5.1 in the appendix available in the online edition of RED).

Rule-based and discretionary transfers

Transfers can be classified based on the mechanisms used for their allocation, distinguishing between rule-based transfers, which rely on predetermined indicators or formulas, and discretionary transfers.

Rule-based transfers are generally more transparent about the criteria used for allocation, offer greater predictability, and are less subject to political discretion. However, their use is limited by the availability and updating of relevant data. For example, a rule that prioritizes poorer jurisdictions requires up-to-date poverty data, which is often unavailable. In general, the effectiveness of these mechanisms depends on the relevance of the indicators used, the program's objectives, and the need to avoid creating undesirable incentives. For instance, programs that compensate jurisdictions

with low revenue levels may disincentivize fiscal effort, as transfers decrease when local revenues increase.

Rule-based transfers are generally more transparent about the criteria used for allocation, offer greater predictability, and are less subject to political discretion

Discretionary transfers, on the other hand, face the typical challenges associated with discretion. On the one hand, they provide greater flexibility in national fiscal management. For example, in the context of fiscal adjustment, discretion allows for raising taxes without automatically increasing transfers and facilitates reallocating expenditures to new priorities (Bahl, 2000). On the other hand, discretion increases the risk of favoritism in the allocation of transfers and the inefficient use of resources. Several studies show that increased transfers tied to political alignment benefit subnational governments electorally by increasing their reelection chances, without significantly improving the quality of public services or the population's well-being (Bonilla-Mejía and Higuera-Mendieta, 2017; Brollo and Nannicini, 2012).

On average, in the region, 84% of transferred resources are allocated using rule-based criteria, 7% partially using rule-based criteria, and 8% through discretionary means. Notable examples of discretionary allocation programs include Peru's ordinary resources (which account for around 60% of total transfers), Treasury-funded transfers in Paraguay (24% of total transfers), Argentina's current and capital transfers, and Mexico's decentralization and coordination agreements (around 10% of the total in both cases).

Transfer systems with some degree of discretionary allocation are often linked to financing specific projects or programs. In almost all cases, the allocation authority rests with the national government. An exception is Chile's neighborhood improvement and urban improvement programs, where the Subsecretariat for Regional and Administrative Development distributes the amounts defined in the budget regionally, and regional governments decide on the allocation of national transfers to local jurisdictions (Decree 946, 1993; Decree 829, 1998).

Are transfers equalizing?

The allocation criteria determine whether transfers tend to equalize revenues across subnational jurisdictions. This goal can be pursued directly by incorporating criteria into distribution rules that explicitly aim to reduce per capita fiscal revenue disparities. However, there are many other allocation criteria that, while not explicit, indirectly result in greater equalization of fiscal resources. For example, simple population-based distribution can achieve some level of equalization, although it is not the most progressive criterion.

Of the 33 rule-based transfer programs analyzed in this chapter, 11 (representing 35% of total transfer amounts) do not include explicit criteria for reducing inequality in fiscal revenues between jurisdictions.[18] In Bolivia, Paraguay, and the Dominican Republic, none of the studied programs include such criteria.

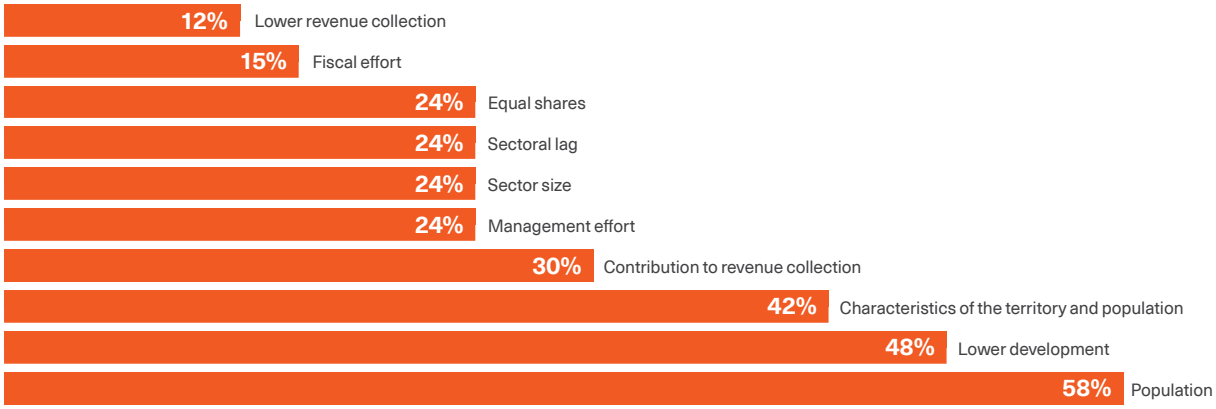
18 Most of the programs use multiple criteria for resource allocation, not just one.

On the other hand, half of the programs use criteria that allocate more resources to less developed areas (based on an inverse proportion to GDP per capita, poverty rates, unmet basic needs indices, etc.); one-quarter follow sectoral gap criteria, and 12% address lower levels of own-source revenue (Graph 5.7). All these criteria are progressive in the sense that they allocate more resources to jurisdictions with lower own-source revenues.

Beyond the criteria used in specific transfer systems, a broader question is whether the total transfers in a country reduce fiscal resource inequality between jurisdictions. In answering this question, it is important to note that disparities in own-source revenues among subnational governments in the region are substantial, especially among local governments, and much greater than those in developed countries. On average, in LAC, the Gini coefficient for per capita own-source revenue inequality is 0.33 for regional governments and 0.46 for local governments (Graph 5.8). By comparison, the average Gini coefficient for regional governments in OECD countries is 0.18.

Transfers reduce income inequality among jurisdictions in almost all analyzed countries in the region. On average, the Gini coefficient decreases from 0.33 to 0.22 for regional governments and from 0.46 to 0.30 for local governments, representing a reduction of about one-third in both cases. In OECD countries, transfers also reduce the Gini coefficient by approximately one-third, from 0.18 to 0.12. This indicates that relative to initial inequalities, transfer systems in Latin America and the Caribbean have an equalizing effect similar to that of OECD countries. However, final inequalities among jurisdictions are much greater in the region due to the wider initial gaps.

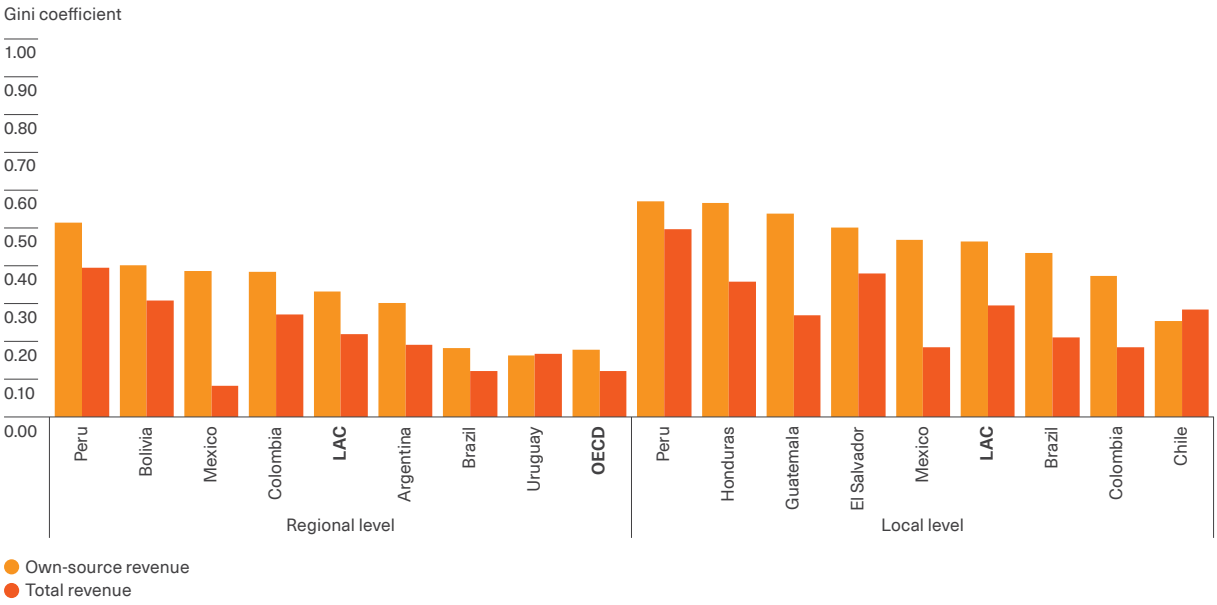
Graph 5.7
Rule-based transfer programs by allocation criteria



Note: The graph shows the percentage of transfer programs that consider each criterion. Calculations are based on the programs listed in Table A.5.3 in the appendix, available in the online edition of RED (excluding Trinidad and Tobago).

Source: Authors based on Radics et al. (2022), Miranda et al. (2017), ECLAC (2024), and national laws.

Graph 5.8
Gini coefficient of per capita fiscal revenues for subnational governments in Latin America and the Caribbean, 2022



Note: Data for Bolivia correspond to 2021. The averages for LAC and OECD are simple averages of the countries with available data for the most recent year. Mexico and Colombia are excluded from the OECD average calculation. Gini coefficients were calculated by weighting each jurisdiction's population.

Source: Authors based on OECD (2024a) and national sources (details in Table A.5.1 in the appendix available in the online edition of RED).

There are significant differences among countries in the region in terms of final income inequality and the redistributive role of transfers. Brazil and Mexico stand out for the significant role of transfers in reducing income inequality at both the regional and local levels, as do Honduras, Guatemala, and Colombia at the local level. As a result of these efforts, the level of inequality among regional jurisdictions in Brazil and Mexico is similar to or lower than that in the OECD. Conversely, regional inequality in Uruguay and local inequality in Chile are slightly higher for total revenues than for own-source revenues, indicating that transfers tend to exacerbate disparities. Finally, a combination of high inequality in own-source revenues and moderate redistribution creates very high levels of inequality in total revenues among regional and local governments in Peru and local governments in El Salvador, posing challenges to equity in public service provision in these countries.

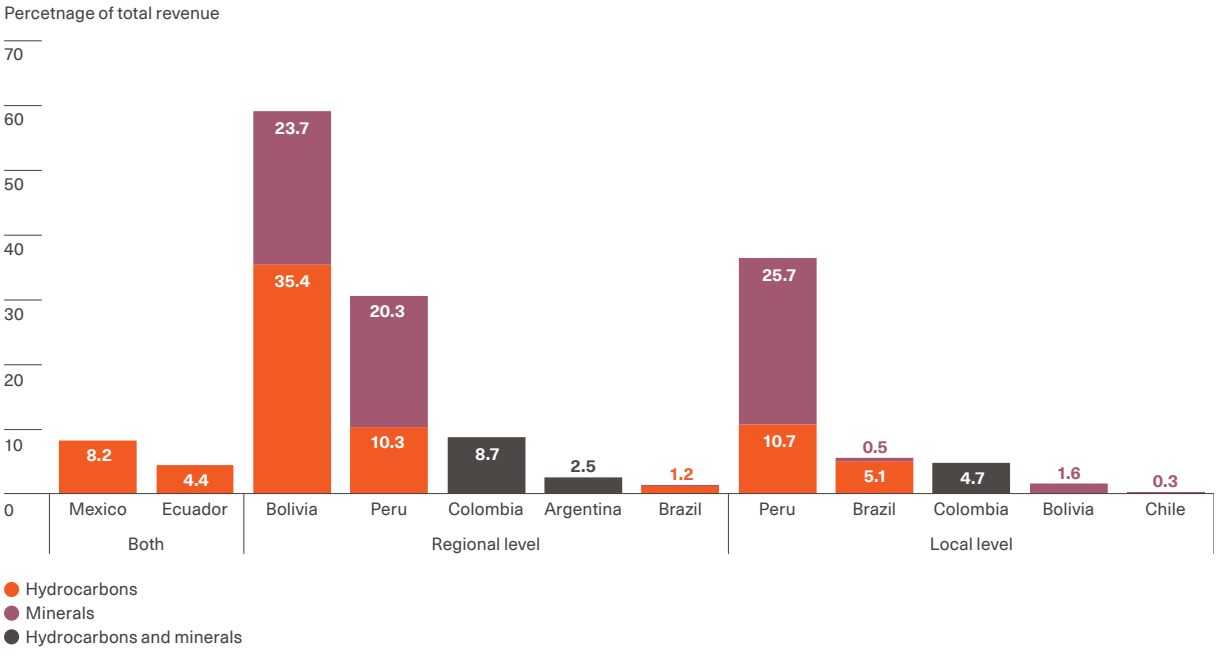
The data indicate that transfer programs in the region have the capacity to equalize resources among jurisdictions. This is positive, provided that equalization is one of the system's objectives. However, a concern is whether this uniformity is achieved through allocation criteria that create undesirable incentives, such as reducing the fiscal effort of subnational governments. While this is difficult to determine precisely, some findings suggest that such negative effects occur (Ferraz et al., 2024; Lago et al., 2024). Therefore, it is important that mechanisms strike a balance between equalization objectives and ensuring efficiency and incentives for subnational governments to strengthen their own revenue collection efforts. The following section explores this idea further.

Royalties and transfers to subnational governments from non-renewable natural resource exploitation

Revenue from royalties, rights, or canon linked to the exploitation of non-renewable natural resources (NNR) is significant for subnational governments in some Latin American and Caribbean countries, particularly in the Andean nations, as well as Argentina, Brazil, and Mexico. Royalties from NNR represent about 60% of the total revenues for regional governments in Bolivia; 35% for local governments and 9% for regional governments in Peru; and 9% for regional governments in Colombia. In the remaining analyzed countries, they account for less than 6% of the total revenues of corresponding subnational jurisdictions (Graph 5.9). After a significant increase starting in 2000, due to the commodity price boom, revenue from this source has experienced a period of relative stagnation and volatility over the past decade (Radics et al., 2022).

Revenues linked to the exploitation of non-renewable natural resources are significant for subnational governments in the Andean countries, as well as Argentina, Brazil, and Mexico

Graph 5.9
Revenue from non-renewable natural resource exploitation as a percentage of total revenues for subnational governments in Latin America and the Caribbean, 2022



Note: Data for Bolivia correspond to 2021. In Argentina, Bolivia, and Colombia, royalties are included; in Chile, mining patents; in Peru, royalties, canon, and its additional component (surcanon); and in Ecuador, oil revenues allocated to the Amazonian decentralized autonomous governments. In Argentina, local governments do not receive royalties, and no regional-level data were available for Chile.

Source: Authors based on national data sources (details in Table A.5.1 in the appendix available in the online edition of RED).

In most cases, the national government holds the authority to collect royalties and transfer a portion to subnational jurisdictions. The exception is Argentina, where these revenues are not transfers from the central government, as regional jurisdictions have the authority to grant permits and collect royalties from NNR exploitation.

The distribution of royalties among jurisdictions poses equity and efficiency challenges due to the high geographic concentration of NNR. On one hand, there are arguments for prioritizing producer jurisdictions. These jurisdictions face costs associated with facilitating sector activities, such as providing and maintaining infrastructure for companies and workers. Additionally, NNR exploitation can generate negative environmental externalities in local communities, which need to be addressed. On the other hand, concentrating royalties in producer jurisdictions creates income gaps between these areas and non-producer jurisdictions. These gaps can widen further if producer jurisdictions use the resources to lower taxes on businesses and individuals, leading to geographic relocation decisions that might not otherwise occur (Ahmad and Brosio, 2018).

Balancing these tensions is challenging, but it is crucial that the rules for distributing royalties and the governance of NNR incentivize exploitation in areas with deposits of critical minerals for electrification, such as copper and lithium, as well as natural gas, which, as a transition fuel, helps reduce greenhouse gas emissions compared to oil and coal. Promoting the exploitation of these resources is essential to seize the opportunities the energy transition presents for some countries in the region (Álvarez et al., 2024; Brassiolo et al., 2023). To achieve this, sector governance must prevent subnational governments from becoming obstructive actors.

In the region, distribution models vary between countries and have even evolved over time. In Colombia, the General Royalties System, created in 2011, initially prioritized resource allocation to producer jurisdictions. However, reforms introduced toward the end of that decade shifted the focus to distributive criteria. This change aligns with a regional trend toward prioritizing the redistributive component of royalties (Radics et al., 2022).

Some characteristics of royalty revenues pose additional governance challenges. First, they constitute income generated without the need to tax the population, potentially reducing fiscal effort and government accountability to citizens. Similar concerns arise with the high dependence on intergovernmental transfers for subnational government revenues. Studies of local jurisdictions in Brazil and Colombia indicate that royalty revenues have a limited impact on the quality of public services and population well-being (Ferraz and Monteiro, 2012; Martínez, 2023), while in Brazil, jurisdictions increase fiscal effort when transfer amounts are reduced (Ferraz et al., 2024).

The volatility of prices and the non-renewable nature of hydrocarbons and minerals have led to royalties-based transfers being conditioned on investment spending

Another key feature of these revenues is the high volatility of international prices for hydrocarbons and minerals, which creates challenges for the stability of subnational public finances. Price volatility—coupled with the non-renewable nature of hydrocarbons and minerals—has sparked discussions about how royalty revenues should be spent. A common concern is their use to finance current expenditures, especially when this leads to unsustainable spending levels in the face of declining international prices or resource availability. To address this issue, royalty transfers are often earmarked for investment spending.

While this approach has a clear rationale, it is not without flaws. First, when jurisdictions receive royalties earmarked for investment, they may reallocate resources originally intended for capital expenditures to current spending, causing current spending to increase regardless. Second, investment spending itself can become more volatile. Therefore, any royalty distribution system should ideally be complemented by the establishment of stabilization funds to prevent major fluctuations in resource availability.



The Nevis Island Assembly is the sole local government in Saint Kitts and Nevis.

How can transfer systems be improved?

Transfer systems in the region face a triple challenge in the way resources are distributed: ensuring the financing of decentralized services and tasks, reducing income inequality among jurisdictions, and simultaneously not disincentivizing fiscal effort or the development of administrative and revenue-collection capacities of regional and local governments.

One common criticism is the lack of programs with explicit fiscal equalization objectives (Miranda et al., 2017). In their most complete form, equalization transfers aim to close the fiscal gap between revenue-raising capacity and spending needs in jurisdictions. Since the allocation criteria depend not on actual revenue collection but on revenue-raising capacities, a well-designed system preserves incentives for administrations to generate their own revenues while contributing to more equitable access to public services. Promising examples of such programs exist in several OECD countries. However, their implementation is very challenging. They require quantitative estimates of revenue capacity and spending needs for each jurisdiction. This task demands extensive data and the development of capabilities that most budgetary institutions in the region currently lack. Another challenge of these mechanisms is the complexity of the resulting allocation formulas, which necessitates a high level of stakeholder acceptance to avoid controversies in their application (Dougherty et al., 2024; Lago et al., 2024).

Another arrangement that can improve incentives for recipient jurisdictions involves performance-based programs, in which transfers reward subnational administrations for progress on predefined indicators. Policy objectives worthy of such rewards can vary and do not necessarily focus on own-source revenue collection; the value of these mechanisms lies in their potential to encourage subnational governments to use resources efficiently. As with the fiscal equalization programs described earlier, implementation is challenging due to significant data requirements and vulnerability to manipulation in measurements (Dougherty et al., 2024).

Performance-based programs reward subnational administrations for progress on predefined indicators

In the region, there are no transfer programs explicitly designed to reward jurisdictional performance. However, one-quarter of the programs analyzed include at least one indicator related to management efforts. Notable among these are Ecuador's transfers for territorial equity, which account for 87% of the country's total transfers. Among the eight allocation criteria included in this program, four are linked to the performance of regional governments: reduction in the unmet basic needs (UBN) poverty index, tax collection relative to fiscal potential, current spending as a proportion of total revenues, and achievement of targets in development and territorial planning. Other programs in Guatemala, Mexico, and Colombia include criteria that reward the fiscal effort of jurisdictions to generate their own revenues. However, quantitative studies of the results achieved by these arrangements are lacking, which could provide valuable insights for understanding their potential.

An additional challenge for subnational public finances lies in cyclical fluctuations and the unpredictability of revenues. Tax collection is procyclical at both the national and subnational levels, as tax bases expand with economic activity. Therefore, while transfer programs are not the sole cause of the procyclical bias in subnational finances, they can exacerbate it (Sánchez, 2013; Bousquet et al., 2015; Ter-Minassian and Jiménez, 2016).

The creation of funds that accumulate resources during periods of growth to be used during downturns can mitigate the procyclical bias of transfers

Revenues from natural resource exploitation also introduce significant volatility in regions where they play an important role. Unlike general tax revenues, these fluctuations are more closely tied to international prices than to local economic activity or tax collection.

One way to reduce the procyclical bias of transfers is to establish funds that accumulate resources during periods of economic growth for use during economic downturns. However, such instruments are rare. An exception is Mexico's Stabilization Fund for Federal Entities, which aims to compensate for declines in the revenue-sharing allocations that regional governments receive from national government revenues, caused by reductions in economic activity or oil revenues. This fund is primarily financed through surpluses in national government revenues—particularly oil revenues—that exceed budgeted amounts, and it is activated when revenue-sharing transfers fall below the levels stipulated in the national budget (CIEP, 2023).

A similar case is that of national funds that transfer resources to subnational governments to address damages caused by natural disasters. In this regard, Mexico's Natural Disaster Fund (FONDEN), which operated between 1999 and 2018, provides a useful example. FONDEN's design was characterized first by its use of rules for resource allocation (primarily based on extreme weather indices), damage assessment, and expenditure control. Second, the fund was financed through the accumulation of resources from the federal budget, the purchase of reinsurance for excess losses, and the issuance of catastrophe bonds. Evidence shows that, compared to discretionary funds, FONDEN was more effective in supporting reconstruction efforts and reducing mortality in affected areas, due in part to its rapid response capabilities and its ability to prevent spending leakage (Del Valle et al., 2020; Del Valle, 2024).

The creation and strengthening of counter-cyclical transfer funds is an important policy area. In countries with limited fiscal space to increase national revenues or allocate additional resources to transfer systems, setting up these funds will require balancing guaranteed minimum transfer amounts with the allocation of a portion of current resources to reserve accumulation, likely necessitating an initial additional investment from national governments.

Reforming transfer systems involves addressing both technical and political challenges

As the above paragraphs illustrate, any reform of transfer systems involves significant technical challenges, including data systematization, capacity development, and monitoring objectives of these programs.

Beyond these, the political challenges may be even greater, as changing transfer system conditions creates tensions among stakeholders. For example, any reform that seeks to modify the criteria or parameters for transfer allocation while maintaining overall amounts will create "losing" jurisdictions relative to the status quo, which are likely to resist change. Similarly, reforms altering overall amounts or the discretion of distribution tend to provoke tensions between national and subnational governments. Consequently, such reforms typically require intense, high-level technical and political work to achieve broad enough consensus to ensure that the resulting frameworks are both effective and enduring.



Mexico City's seat of government.

Management of fee-based services and interjurisdictional cooperation

- Distribution of responsibilities in fee-based service provision across government levels
- Local capacities for regulating and modernizing bus systems
- Challenges faced by subnational governments in providing water and sanitation services
- Mechanisms for interjurisdictional coordination and metropolitan governance in the region

6

Key messages

1 Regional and, especially, local governments play multiple roles in the provision of fee-based services. In urban transport, they are heavily involved in regulation and planning, while in water and sanitation, they are engaged in direct provision.

2 Latin American and Caribbean cities have made strides in formalizing public transport, particularly in larger cities. A key factor in this shift has been the institutional development of local authorities. These successes must be reinforced and extended to other cities.

3 In many countries, the water and sanitation sector is fragmented across numerous operators, including local public administrations. Consolidating services and utilizing more autonomous organizations for provision could lead to efficiency gains.

4 Financial sustainability remains a challenge across various services. Strengthening the capacity to target subsidies effectively and improving transparency around these schemes and service costs are essential.

5 Regulatory uncertainty regarding which level of government has authority over a service undermines service quality. Frameworks should clearly define responsibilities and establish mechanisms for delegating operations.

6 Metropolitan authorities in the region remain underdeveloped. Strengthening these and other mechanisms for interjurisdictional coordination is crucial to addressing challenges stemming from administrative fragmentation.

7 When coordination is required to mitigate externalities, it should be promoted by central authorities. Evidence on the potential of basin authorities is encouraging, but several countries still lack adequate power.

Management of fee-based services and interjurisdictional cooperation[1]

Introduction

Fee-based public services, such as water and sanitation, electricity, and urban transport, are essential utilities provided to the public in exchange for a fee. Their coverage and quality have a direct impact on people's well-being and play a crucial role in achieving the Sustainable Development Goals (SDGs).

Subnational governments play a significant role in the provision and governance of some of these essential services, with this chapter focusing on two key sectors: urban transport and water and sanitation. Since the challenges faced by subnational governments in improving service provision are sector-specific, each is addressed in a dedicated discussion.[2]

In the case of public transport, the discussion focuses on the modernization of bus services due to their central importance in urban mobility systems. Over the past two decades, progress has been made in this area, particularly in the region's largest cities. However, the trend toward increasing private motorization continues. To counter this, the modernization of bus systems must be further deepened and expanded.

In the water and sanitation sector, while high levels of access to safe drinking water have been achieved, quality deficits and significant sanitation gaps remain. Additionally, climate change poses growing adaptation challenges due to water stress caused by shifting precipitation patterns. In this context, the goal of subnational governments—and the focus of this chapter—is to adopt service provision models that enhance efficiency to tackle the necessary improvements.

1 This chapter was written by Guillermo Alves and Gustavo Fajardo, with assistance from Pilar Toyos.

2 Solid waste management is another service for which subnational governments are often responsible. However, it receives less attention in this chapter due to its comparatively simpler governance and the even more limited availability of data for its analysis than in other sectors.

An overarching element in subnational management of fee-based services is the importance of interjurisdictional coordination mechanisms. Coordination is critical for two key reasons. First, the optimal scale for service provision often exceeds the jurisdictional boundaries of the entities responsible, particularly given the wide variation in size and population among subnational units (as outlined in Chapter 1). Consequently, establishing channels that enable jurisdictions to collaborate or delegate aspects of service delivery to larger-scale organizations is highly valuable. Second, the frequent occurrence of externalities—such as downstream river pollution from wastewater discharge—necessitates intergovernmental governance frameworks to address and resolve such issues effectively.

Coordination is particularly critical in metropolitan areas. As highlighted earlier in this report, Latin America and the Caribbean is a highly urbanized region, with a significant share of the population living in major cities. These urban areas are often administratively fragmented, with multiple jurisdictions sharing the same urban territory. To address this challenge and efficiently respond to urban needs, it is essential to coordinate the organization of public services, particularly transportation.

Collaboration among subnational jurisdictions goes beyond formal government arrangements and extends to creating spaces for discussing shared agendas and mutual learning. The importance of such forums is reflected in the existence of networks and associations, particularly among local governments, both within individual countries and at the international level.

Interjurisdictional cooperation among subnational governments extends beyond formal government structures. It also involves creating spaces for discussing shared agendas and mutual learning. The importance of these forums is evident in the presence of networks and associations, particularly of local governments, at both national and international levels.

The role of subnational governments in the provision of water, sanitation, and urban public transport

The following sections of this chapter explore how subnational governments can enhance the provision of urban transport, water, and sanitation services. To frame this discussion, it is first necessary to clarify the roles these governments have taken on in these two sectors.

The allocation of responsibilities for providing fee-based services across levels of government is typically tied to the territorial reach of the relevant infrastructure. Urban transport and waste management are primarily local responsibilities. By contrast, sectors with interconnected infrastructure networks, such as electricity, gas, or telecommunications, tend to favor centralized governance at the national level, leaving local and regional governments with a very limited role. The case of water and sanitation is more nuanced. It is possible to decentralize operations at the local level since these infrastructures are not interconnected across territories. However, concentrating operations among larger providers can offer economies of scale in managing technical, human, and resource inputs.

There is considerable variation across countries in the region—and over time—in terms of which government level is responsible for water and sanitation services.[3]

3 While water and sanitation services can be provided separately in some cases, the significant complementarities between them typically lead to their joint provision and regulation.

Decentralization efforts during the 1980s and 1990s (see Chapter 2) increased the responsibilities of subnational governments for these services in countries such as Colombia, Ecuador, El Salvador, and Peru, among others. Data from 22 countries in the region reveal a pattern similar to that observed in other sectors discussed in earlier chapters: decentralized responsibilities in federal countries and larger unitary states, with centralized authority in smaller unitary nations. Where decentralization has occurred, it is typically at the local level.[4] Notably, in nearly all countries, regulatory oversight remains at the national level, except in Argentina and Brazil, where regional regulators exist. In these cases, responsibility for service provision is delegated to local entities.

The allocation of responsibilities among government levels for the provision of fee-based services is linked to the territorial scope of each infrastructure type

The public sector—whether at the national or subnational level, depending on the country—has predominantly taken on the role of providing water and sanitation services, rather than delegating this responsibility to private entities. While past decades saw reform waves aimed at introducing private sector participation, many of these efforts were partially reversed through re-nationalization initiatives. Bolivia, Ecuador, and Uruguay have gone so far as to prohibit private capital in the sector. Conversely, Chile stands out with a model centered on private operators. Other countries fall in between, with a mix of operators of various legal structures. Two characteristics of the water and sanitation sector help explain the high level of public involvement: first, its nature as a natural monopoly due to the networked infrastructure required for service delivery, and second, the recognition of access to this service as a basic right, making universal access a key policy goal.

In urban transport, local governments, and occasionally regional governments, bear primary responsibility since these systems are city-specific. Urban transport encompasses various modes. On one end are rail-based and complex infrastructure systems, such as trains, subways, and cable cars. These systems operate through infrastructure networks that function most efficiently under a single operator, with state-owned enterprises (SOEs) managing most operations. This is the case for 15 of the 22 subway systems in the region. Such modes are almost exclusively found in the largest cities; for instance, 93% of the region's 1,200 kilometers of subway lines are concentrated in cities with a population exceeding 2 million people.

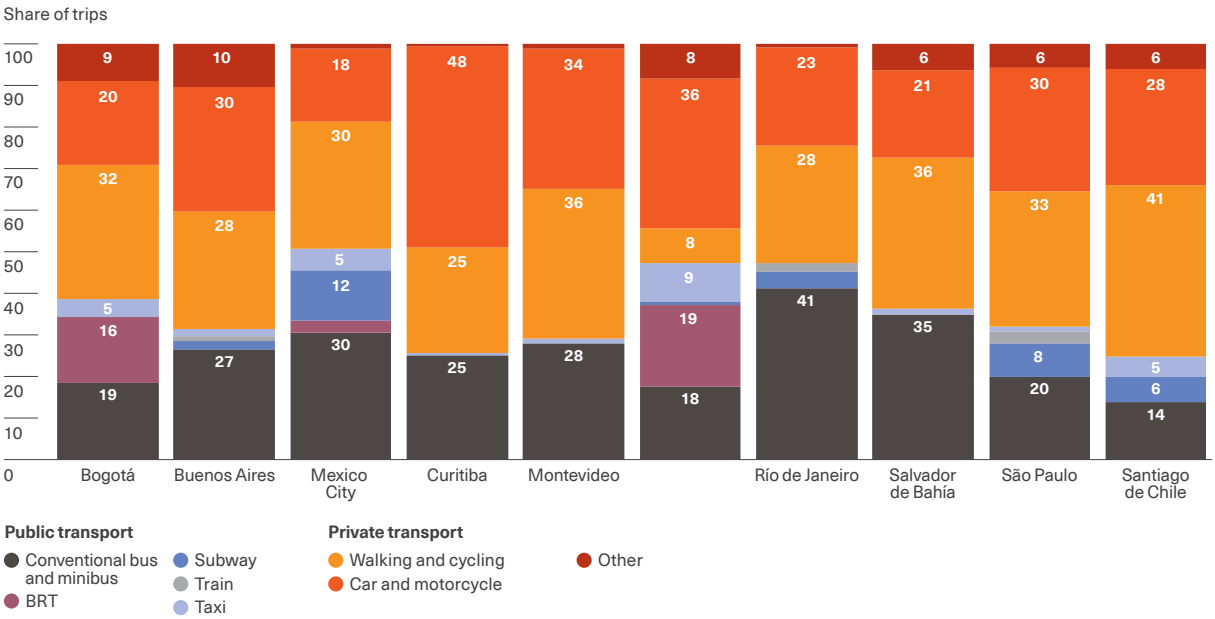
On the other hand, buses operate in all medium and large cities and are the predominant mode of transport, even in cities where other forms of public transit exist. In the ten cities with data on modal share from the Urban Mobility Observatory of Latin America and the Caribbean (OMU), conventional and bus rapid transit (BRT) systems account for a higher percentage of trips than any other public transport mode (see Graph 6.1). Given this prevalence, bus systems will be the focus of the discussion in the following section.

Unlike the water and sanitation sector, subnational governments in this subsector have primarily taken on regulatory and planning roles, with minimal involvement in direct service provision. This is highlighted by a self-conducted survey of transportation services in a sample of 46 cities, encompassing all regional capitals and a selection of other large cities. Graph 6.2 illustrates the predominant type of service provision for each mode within this sample:[5] private operators dominate bus systems, whereas public participation is more prevalent in other modes.

4 Responsibility for the provision of water and sanitation services falls to national governments in Barbados, Belize, Chile, Costa Rica, El Salvador, Haiti, Jamaica, Nicaragua, Panama, Paraguay, and Uruguay; to local governments in Bolivia, Brazil, Colombia, Ecuador, Guatemala, Honduras, Mexico, Peru, and Venezuela; and to regional governments in Argentina and the Dominican Republic.

5 The predominant type of service provision is not necessarily the only one. For example, in Bogotá, private bus operators are dominant, but some lines in the city's system are operated by La Rolita, a state-owned enterprise.

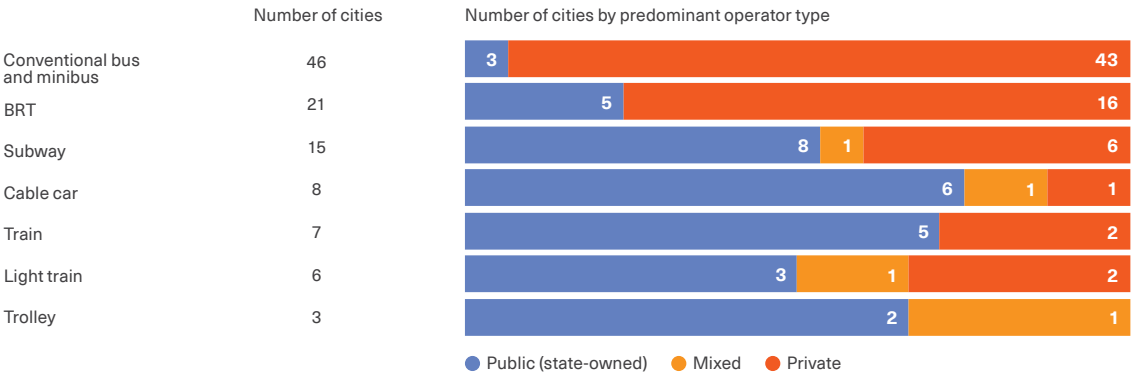
Graph 6.1
Distribution of transport modes in selected cities



Note: The graph shows the percentage distribution of trips by mode of transport in selected cities. The data comes from origin-destination surveys conducted in the cities and processed by the Urban Mobility Observatory (OMU), an initiative of CAF and IDB. The category "walking and cycling" includes trips made using electric scooters. The category "other" includes cable cars, school transport, trips by chartered buses, and informal transport, among others. The appendix to this chapter, available in the online edition of RED, provides more details about the modes included in the "other" category.

Source: Authors based on OMU (2024).

Graph 6.2
Predominant operator type by mode of transport in major cities of the region



Note: The graph shows the public passenger transport modes available in major cities in Latin America and the Caribbean in 2024. A total of 46 cities were analyzed, including all regional capitals and municipalities with over 1.5 million inhabitants (with a maximum of five additional municipalities per country). The full list of cities is available in the appendix to this chapter, which can be accessed in the online edition of RED.

Source: Authors based on the websites of the Mobility and Transport Secretariats in the analyzed cities.

The role of planning and regulating bus systems is critical, given the significant positive and negative externalities they generate. In the absence of adequate capacity to perform these functions, the transport services that spontaneously emerge in cities lead to poor-quality service. Therefore, strengthening these capacities is key for subnational governments to effectively fulfill their competencies.

Capacities for planning and regulating bus systems

In cities across Latin America and the Caribbean, high rates of informality and semi-formality persist in bus services. Estimates for cities like Bogotá, Mexico City, Panama City, Guadalajara, and Lima indicate that between 30% and 50% of trips are informal (Tun et al., 2020). Informal transport is highly flexible, adapting quickly to demand, which presents certain advantages for users. However, it also comes with significant drawbacks, including uncomfortable and unsafe vehicles, driver competition that exacerbates congestion and accident risks, and higher levels of pollution.

Modernizing the sector to transform informal services into formal systems is a complex and gradual process. Among the many changes required for this transformation, three elements stand out. The first is the corporate formalization of operators, consolidating fragmented ownership and loosely organized cooperatives into structured transport companies. This shift facilitates the establishment of contractual relationships with authorities. The second element is defining and enforcing quality standards for vehicle fleets and services. The third is financial consolidation, which involves centralizing revenues generated by the system and compensating providers based on contractual formulas, rather than allowing direct fare collection from users. This step is crucial for discouraging competition among drivers.

Building the capacity of local authorities in transportation management is essential to enable this transformation. In traditional systems marked by informality and minimal regulation, authorities typically perform only basic tasks, such as granting route permits to individual operators. In modern systems, authorities play a far more active role. Tasks include designing contracts that specify service parameters, selecting operators—ideally through competitive bidding processes—monitoring compliance with vehicle and service quality standards set out in contracts, implementing centralized fare collection platforms, planning routes, and defining necessary investments.

Developing capacities within local authorities is essential to drive the modernization of urban transportation

This capacity-building process requires substantial government investment in human and technical resources and often involves the establishment of new agencies to take on these responsibilities. Additionally, concurrent infrastructure investments are typically needed to support institutional reforms. BRT (Bus Rapid Transit) corridors have become increasingly popular in cities across the region and are frequently used to reorganize bus systems and encourage their formalization. Examples of this approach include Bogotá, Mexico City, Lima, Quito, and Santiago de Chile, among other cities (Tun et al., 2020). Box 6.1 provides evidence on the impact of BRT systems on service quality and urban development.

Box 6.1
Effectiveness of BRT

BRT corridors are present in 21 of the 46 surveyed cities in the region, as shown in Graph 6.2, although there is considerable variation among them in terms of length, characteristics, and operation. The most notable cases include Curitiba, where BRT began operating in the 1970s, and especially Bogotá's TransMilenio, launched in 2000.

In terms of effectiveness, the results have been positive. González and Silva (2024), analyzing data from 665 bus lines in Santiago, Chile, from 2016 to 2019, found that BRT corridors increase speeds, particularly during peak hours. In contrast, dedicated bus lanes (adjacent to lanes for private vehicle traffic) do not yield speed improvements, even when equipped with monitoring cameras. Additionally, Tsivanidis (2023) highlights that improvements in transportation systems provide benefits to overall well-being beyond reduced travel times. His model, applied to Bogotá, demonstrates that TransMilenio has contributed to both GDP and population growth in Bogotá between 2000 and 2026.

The case of Bogotá exemplifies the role of institutional reforms. Alongside the launch of the first TransMilenio corridors, a state-owned enterprise of the same name was established to manage and administer the system, taking on tasks such as defining routes, stops, and frequencies; conducting tenders for private operators and overseeing those contracts; and monitoring compliance and service levels. At a higher level, the District Department of Mobility, previously responsible for issuing route permits under the old system, now focuses on strategic planning and mobility legislation. At a lower level, there are more than ten private bus operators, each managing various routes. The initial phases were successful, although challenges have emerged in achieving a fully integrated system (Barbero, 2019).

The progress of the energy transition adds an additional investment demand for bus systems (Álvarez et al., 2024). Although the costs of electric mobility have decreased in recent years—partly due to the decline in battery prices—the electrification of public transport fleets remains a financing challenge, given the substantial upfront investment required for vehicle replacement. According to the digital platform ebusradar.org, as of 2024, there were over 6,000 electric buses in cities across the region, with Santiago de Chile and Bogotá leading the way. In Santiago's case, separating the ownership of electric buses from their operation was key to overcoming the financing challenge (Becerra & Galarza, 2022).

In Mexico City, a similar reform occurred with the establishment of Metrobús, the agency responsible for managing the city's BRT corridors. Unlike Bogotá, Mexico City features multiple transit modes that transport a significant number of passengers and are managed by separate agencies: the Sistema de Transporte Colectivo (STC) oversees rail, while the Sistema de Transporte Eléctrico (STE) manages light rail and trolleybuses. In such cases, coordination is crucial for both strategic and operational aspects, including compensation mechanisms to integrate payment systems and fare structures.

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In smaller municipalities, reforms should be tailored to their specific scale. From an institutional standpoint, governance typically requires fewer layers. However, it is still important for these municipalities to establish dedicated government units specifically focused on managing the transportation system—ideally separate from departments like traffic or public safety—and to strengthen capacity in their core functions, such as planning system parameters, tracking performance indicators, and managing contracts and concessions with operators. Moreover, in many medium- and small-sized cities, the scale may not warrant BRT corridors, so institutional reforms should proceed without relying on such infrastructure transformations. Nonetheless, other types of operational investments are crucial to support governance reforms and ensure their long-term sustainability, including enhancements to station and stop infrastructure.

The use of technology for modernization

Incorporating technology into public transportation services enables some of the key changes sought through sector modernization. Two tools stand out. The first is GPS (Global Positioning System) units. Real-time tracking of vehicles enables the development of performance indicators for operators (e.g., distance traveled or hours of active service) to assess compliance with contractual agreements. GPS also supports fleet management systems that can address service deficiencies in real time and provide information on arrival times and routes for users (e.g., on information displays at stops or mobile apps). In Brazil, 80% of municipalities with over one million inhabitants report equipping their buses with GPS devices, though this percentage decreases in smaller municipalities (see Graph 6.3).

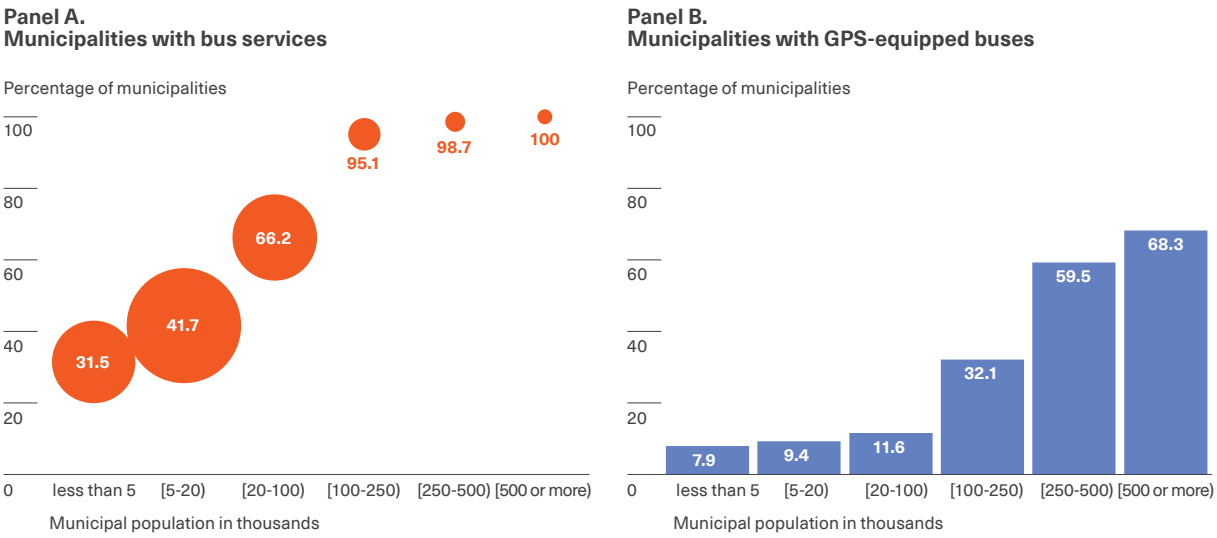
The other essential tool is electronic fare payment platforms. Cash payments are a hallmark of informal services. By enabling individual operators to directly collect fares from passengers, they encourage competition among vehicles along routes, negatively impacting service quality. Implementing some form of electronic payment is often necessary to curb this behavior. An additional advantage of electronic payment is that it enables the integration of fares, even across different subsystems. Naturally, fare and ticket integration also requires institutional coordination. For example, when different entities or companies oversee separate subsystems, a mechanism must be established to handle the corresponding revenue compensation.

In nearly half of the cities surveyed, conventional bus systems still do not accept electronic payments. In contrast, electronic payment is standard on BRT buses and other transportation modes (available only in some cities), primarily through reloadable cards, and to a lesser extent via QR codes or bank cards (see Table 6.1).

An additional benefit of electronic payment systems is their ability to facilitate consolidated financial management by channeling operating revenues into centralized funds. This centralized approach supports the implementation of cross-subsidies between routes or differentiated fares based on user type, time of travel, or geographic zone. It also provides data on usage levels and system-generated operating revenue, which is crucial for relating this information to costs and calculating technical fares—fares that would cover system costs, including vehicle depreciation and capital expenses.

Of course, technical fares do not necessarily align with what users pay. Fare policy also depends on factors beyond the costs of operating the systems.

Graph 6.3
Bus service availability and GPS usage for tracking in Brazilian municipalities by population size



Note: The graph depicts the status of bus passenger transportation in 2020. Panel A shows the percentage of municipalities reporting bus services (including those with intermunicipal buses) based on the Municipal Basic Information Survey (MUNIC), classified by population size. The bubble size corresponds to the number of municipalities within each population range. Panel B illustrates the proportion of municipalities that reported equipping vehicles with GPS devices relative to the total number that declared having buses in operation, according to municipal population size.

Source: Authors based on IBGE (2019, 2020).

Table 6.1
Availability of electronic payment methods by mode of transport

	Number of cities per mode	Percentage of cities with payment method		
		Rechargeable card	QR	Bank card
Bus	46	47.8	10.9	8.7
BRT	21	95.2	33.3	19
Subway	15	100	66.7	46.7
Cable car	8	87.5	12.5	12.5
Train	7	85.7	14.3	14.3
Light rail	6	100	33.3	0
Trolleybus	3	100	33.3	33.3

Note: The table presents the availability of electronic payment methods in public transportation in large cities in Latin America and the Caribbean in 2024. A total of 46 cities were analyzed, including all capital cities of the region and municipalities with over 1.5 million inhabitants (with a maximum of five additional municipalities per country). The full list of cities is included in the appendix to this chapter, available in the online edition of RED.

Source: Authors based on official government websites for mobility and transportation, transportation data from Moovit (2024), news articles, and other publicly available online sources.

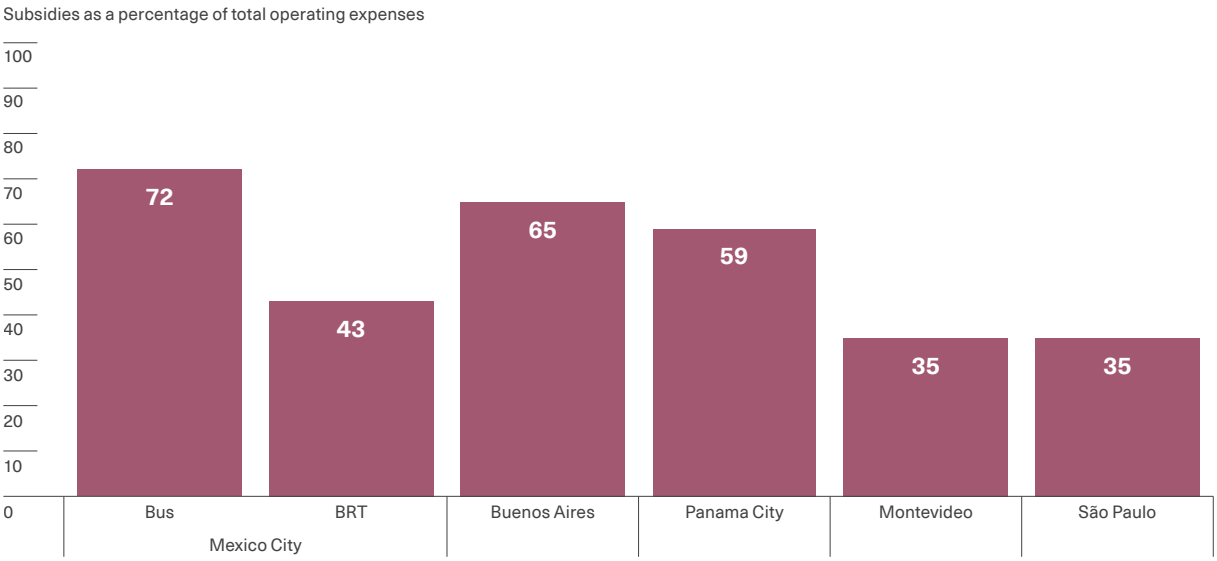
Fare policy in public transportation

Modernization reforms in bus systems incur costs for various reasons. Infrastructure investments, fleet renewal, and fare collection system implementation all require amortization. Additionally, operating expenses rise due to the establishment of regulatory institutions, maintenance of fleet quality standards, and compliance with labor and environmental regulations absent in informal services. These higher costs can affect the affordability of services for users.

Subsidies are frequently used in bus systems, as illustrated in Graph 6.4 based on data from Rivas et al. (2020). Their use is not limited to cities in the region; subsidies are also common and of similar magnitude in cities in higher-income countries. Public transportation subsidies primarily aim to improve affordability for low-income groups and encourage public transport use over private vehicles, which generate more negative externalities. Given the nature of these objectives, making precise recommendations about optimal subsidy levels is challenging. However, subsidies can burden public budgets, particularly for subnational governments. Therefore, authorities must carefully balance subsidy policies with fiscal sustainability.

Apart from determining subsidy levels, authorities must take into account certain implementation aspects. First, the capacity to target demand-side subsidies effectively, particularly those aimed at low-income individuals, needs improvement. Achieving this requires investment in mechanisms to accurately identify the target group. Contreras et al. (2018) evaluated such schemes in Bogotá and Buenos Aires, finding that the approach in Buenos Aires lacks progressivity, whereas in Bogotá it is progressive, albeit with an exclusion error of around 30%.

Graph 6.4
Operating subsidies for bus systems in selected cities, 2019



Source: Rivas et al. (2020).



The Central District of Honduras is the most populous local government in Central America.

Second, improving targeting capabilities could allow for a rebalance between supply-side and demand-side subsidies. Currently, a large portion of subsidies are allocated to the supply side as transfers to service providers. For example, in the TransMilenio system, supply-side subsidies accounted for 92% of the total between 2016 and 2019 (Rivas et al., 2020). While supply-side subsidies align with the objective of promoting public transportation use, shifting a greater share toward demand-side subsidies could more effectively address affordability goals.

Organization of subnational governments for water and sanitation provision

The importance of regulatory clarity

Regulatory frameworks decentralizing responsibilities in water and sanitation should meet two key conditions: first, explicitly naming the authorities responsible for decision-making in the matter; and second, establish mechanisms enabling these authorities to delegate operations or partner with others for service delivery.

The first condition is crucial for mitigating uncertainties about responsibilities and reducing the overlap of functions. In a recent study, Kresch (2020) estimates the costs associated with a lack of clarity on these issues in Brazil's water and sanitation sector. A 2005 legislative reform in Brazil granted municipalities definitive authority in this domain, ending decades during which many municipal operators faced the latent threat of expropriation by state-level companies established earlier with the purpose of absorbing municipal services. Eliminating the threat of expropriation led to nearly doubling investment levels. Within two years of the reform, municipal systems saw a 6% increase in connections and a 16% increase in network length, contributing to a reduction in infant mortality.

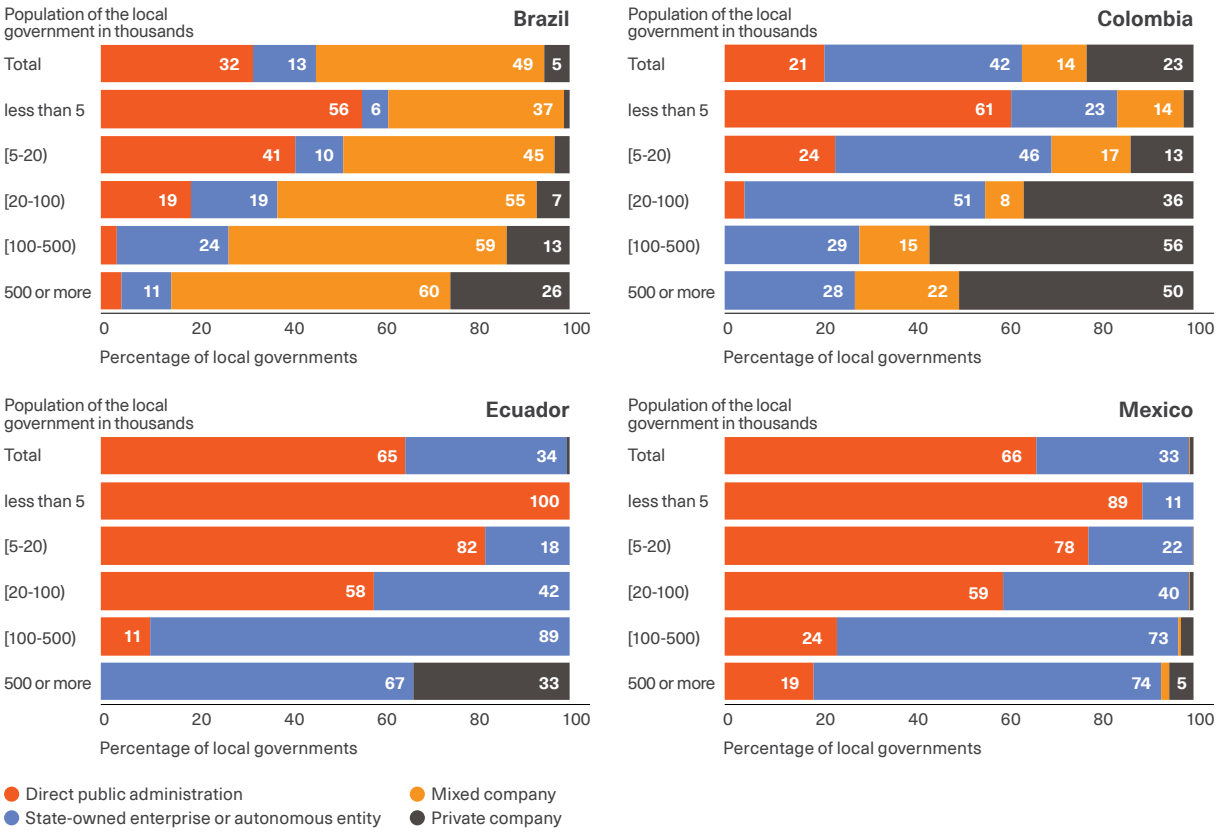
The second condition is particularly important in areas where local governments are responsible for service provision, as it enables them to choose the most effective method of delivery. For example, they might contract service delivery to a supranational organization if economies of scale are advantageous. In this regard, Brazil's legislative reform provides an additional lesson. Although the reform introduced a legal mechanism (concession contracts) that allowed municipalities to delegate service provision to state-level entities, most operations remained at the municipal level. The reasons behind this vary, including technical suitability and political dynamics. For instance, residents of wealthier municipalities may oppose integrating their water and sanitation services with those of poorer areas if they anticipate that such integration could lead to higher tariffs to support cross-subsidies. Data supporting this explanation show that municipalities that refused to merge with state providers at the time of their creation tended to have above-average income levels.

While pinpointing the exact causes is challenging, existing assessments indicate that the water and sanitation sector in many countries in the region is highly fragmented, with numerous small- or medium-scale providers (Arias et al., 2019). This fragmentation often leads to operational inefficiencies. Rud (2019) highlights that municipalities tasked with service provision frequently lack the resources and capabilities to deliver reliable and high-quality services, noting high staffing levels per connection as evidence of low productivity in the region.

The relationship between scale, provider types, and efficiency

To build on the observations from the previous section, it is important to note that the scale of operations is closely tied to the type of organization responsible for service provision. Graph 6.5 illustrates the distribution of sanitation service provider types across municipalities of varying sizes in four countries in the region. While differences exist—for example, private and mixed enterprises are more prevalent in Colombia and Brazil than in Ecuador (where private capital is prohibited) and Mexico—a common pattern emerges: smaller localities rely heavily on local public administrations (e.g., municipal water departments), whereas autonomous entities and enterprises (state-owned, mixed, and private) become increasingly dominant as municipal size grows, eventually prevailing in larger cities.

Graph 6.5
Legal type of sanitation providers by population category

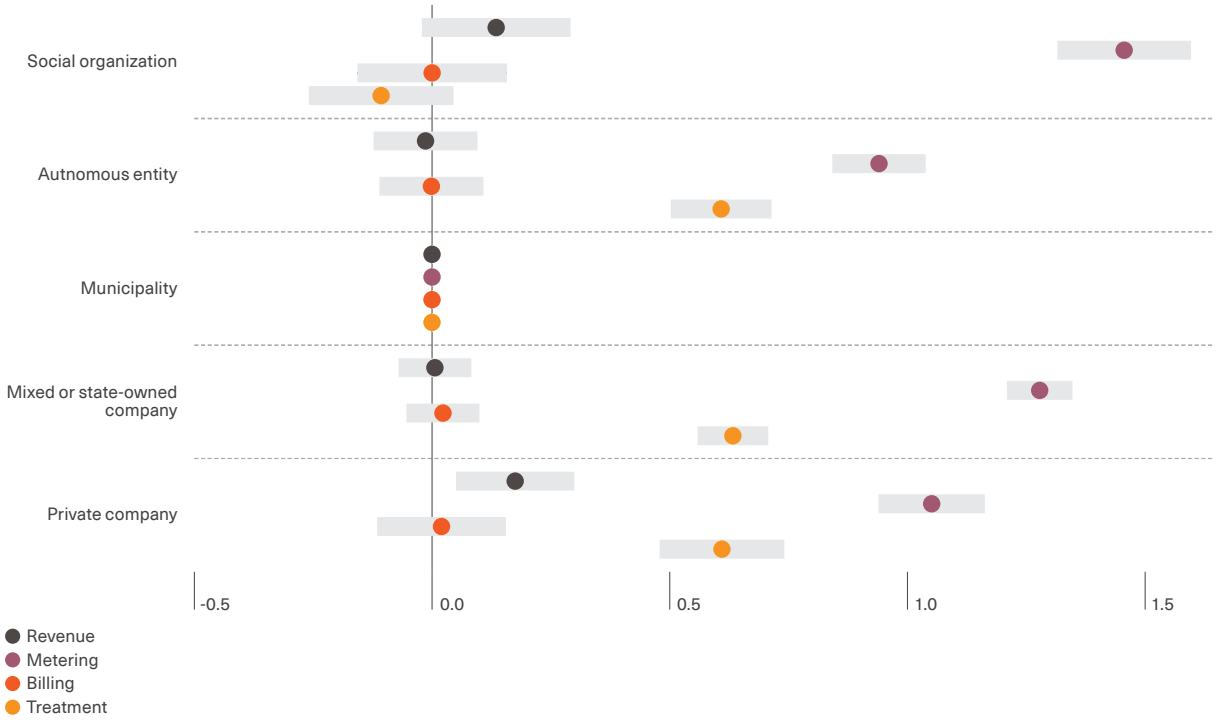


Note: The bars illustrate the distribution of sanitation service provider types by the population category of local governments. Service delivery by social organizations is excluded. Municipalities with more than one operator are counted multiple times; municipalities with no information on providers or where the provider is a social organization are omitted. Population categories are based on census data by municipality for the year of reference. The appendix of this chapter, available in the online edition of RED, includes definitions of provider types by country.

Source: Authors based on the following water and sanitation service provider databases: in Brazil, Ministry of Cities (2024); in Ecuador, INEC (2024); in Colombia, SSPD (2024); and in Mexico, INEGI (2021).

Given this, analyzing quantitative evidence on the relative efficiency of different service provision models is crucial. However, this task is challenging due to the limited availability of standardized and comprehensive data on operational service indicators for meaningful comparisons. The most reliable data source comes from Brazil's National Sanitation Information System (SNIS). Correlation analyses indicate that autonomous entities and enterprises—state-owned, mixed, or private—tend to achieve higher proportions of metered connections and treated water. Private companies also demonstrate better revenue-to-expenditure ratios. Among the indicators analyzed, billing efficiency is the only one where no significant differences are observed between service provision models (Graph 6.6).

Graph 6.6
Difference in performance indicators by type of water provider



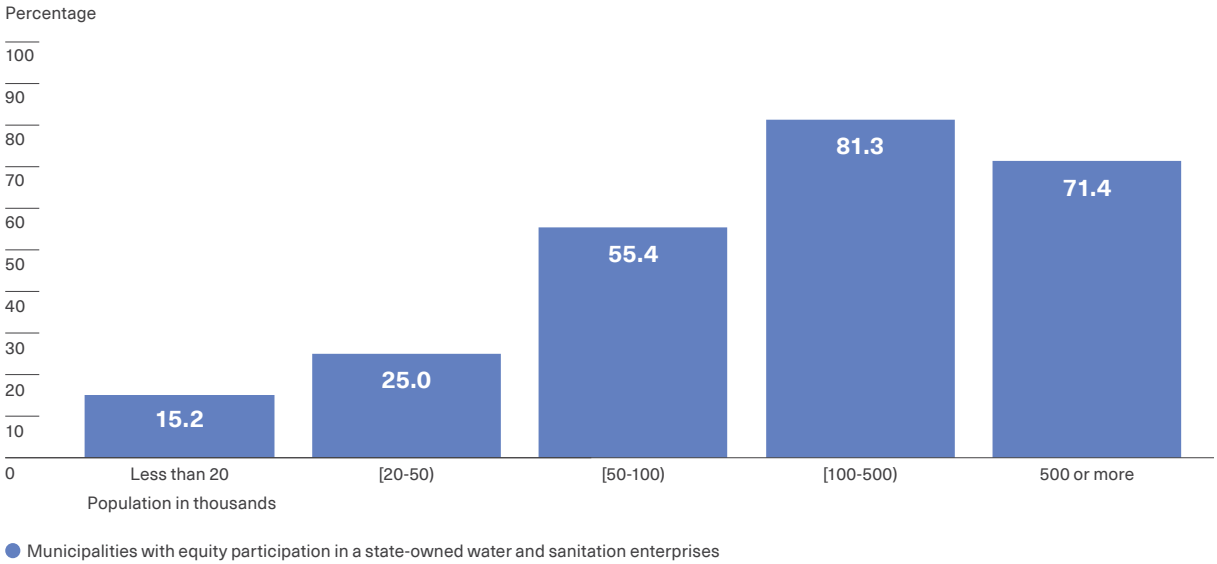
Note: For each indicator, the graph represents the difference between each type of provider and direct municipal provision (the baseline category), along with the confidence interval for that difference. "Revenue" refers to the ratio of revenue to operating expenses; "metering" indicates the percentage of metered connections; "billing" corresponds to the ratio of billed water to produced water; and "treatment" refers to the ratio of treated water to produced water. All dependent variables are expressed in standard deviations.

Source: Authors based on SNIS (Ministério das Cidades, 2024).

Given the close relationship between service provision models and municipality size, as discussed earlier, it is challenging to determine which of these two factors—operation scale or operator type—plays a more crucial role in service performance. Sector recommendations suggest working on both fronts: increasing provider size by consolidating smaller services and, in parallel,

developing professional, corporate-style entities to handle operations. Additionally, these two factors are interdependent, as outsourcing operations to SOEs represents an institutional investment that requires certain capacities—capacities that many smaller governments lack, as data from Peru illustrate. In Peru, provincial municipalities frequently partner to establish state-owned water and sanitation companies. However, as shown in Graph 6.7, the percentage of municipalities with equity participation in these companies strongly correlates with their size.

Graph 6.7
Percentage of Peruvian provincial municipalities with ownership in state-owned water and sanitation enterprises by population size



Source: Authors based on SUNASS (2022).

The reason why direct provision by government agencies tends to be less efficient is partly due to a lack of specific resources and capacities but also to limited budgetary and administrative autonomy. This can lead to political interference in operational and financial decisions, impacting tasks like payment collection, accounting practices, investment decisions, and personnel management, among others.

SOEs offer a greater degree of operational autonomy from political interference, though it is not guaranteed. Ensuring strong corporate governance is crucial. Assessments are particularly unfavorable in the water sector, where the corporate governance quality of SOEs lags behind that of their counterparts in the electricity sector (Andrés et al., 2011). Key deficiencies include a lack of independent directors and the absence of performance evaluation mechanisms. Recommendations on this matter apply to SOEs at both national and subnational levels and are outlined in the corporate governance guidelines

published by CAF — Development Bank of Latin America and the Caribbean — (Oneto and Rojas, 2024).

A specific risk of political interference is that tariff subsidies, which are common in this sector, might be applied at the expense of service provider revenues. The likelihood of this risk materializing increases when political autonomy is constrained. Evidence from Brazil supports this: average water service tariffs tend to be lower when services are delivered directly by government bodies compared to other types of providers. The cycle of delayed tariff adjustments and tolerance for non-payment, which causes operational deficits, reduced investment, and deteriorating service quality, has been documented in various circumstances and sectors (Burgess et al., 2020; McRae, 2015). Consequently, improving the management of tariff policy is another crucial task.

The application of subsidies in water and sanitation

Like in the transportation sector, governments often subsidize water and sanitation services. However, a key distinction is that subsidies in this sector primarily aim to improve affordability. From an environmental perspective, water consumption subsidies can be counterproductive, as they may incentivize overuse of the resource. This underscores the importance of carefully targeting subsidies to consumers who truly need them, not only to increase efficiency but also to enhance resource management in situations of water stress. This issue becomes even more pressing in the context of climate change, as discussed in the next section.

Chile and Colombia have two of the most widely analyzed tariff segmentation systems in the literature. Chile's system is based on a means-tested household registry, while Colombia employs a geographic stratification of households according to housing characteristics.[6] Evaluations of these programs indicate that both are progressive, though they experience errors of inclusion that create inefficiencies. This suggests that while there is room for improvement, these programs are preferable to the use of blanket subsidies (Contreras et al., 2018; Meléndez, 2008).

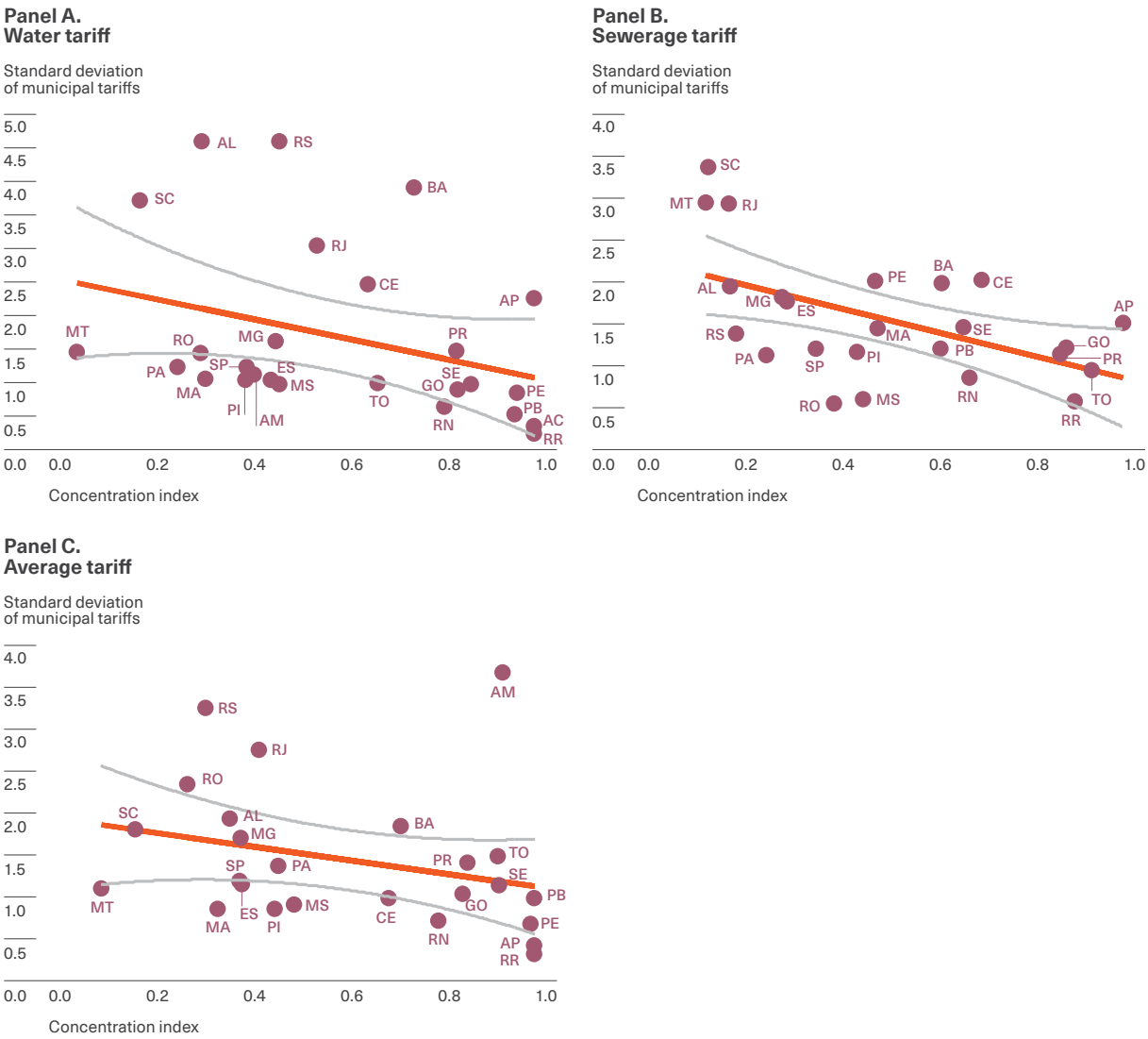
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From an environmental perspective, water consumption subsidies can be counterproductive, as they incentivize overexploitation of the resource

Finally, the territorial scale of providers can support the implementation of cross-subsidies between regions, transferring resources either from wealthier areas to poorer ones or from lower-cost areas to higher-cost ones. While evidence for this mechanism is limited, data from Brazil suggest that states with greater service fragmentation among providers also exhibit higher tariff dispersion, measured as the standard deviation of tariffs across municipalities within the state (see Graph 6.8).

6 In the case of Chile, it is a national government initiative, while in Colombia, the national statistics department is also involved.

Graph 6.8
Service concentration and tariff dispersion by state in Brazil, 2021



Note: The horizontal axis represents the Herfindahl-Hirschman Index (HHI) of providers in each state, based on the number of connections (1 indicates a single operator). The vertical axis shows the standard deviation of tariffs across municipalities. The orange line shows the results of a linear regression model estimated using ordinary least squares, where tariff dispersion serves as the dependent variable and the fragmentation index as the independent variable. The gray lines are the confidence intervals at 95%. The regression includes all Brazilian states and does not include the Federal District. The average tariff is calculated as the total annual billed amount divided by the total billed volume for water and sewerage services. More details on the implemented methodology can be found in the chapter appendix, available in the online edition of the RED.

Source: Authors based on data from SNIS (Ministério das Cidades, 2024).

Tariff policy and climate change adaptation

Climate change introduces an additional challenge to the already complex water and sanitation sector, with tariff policy serving as a critical tool for adaptive responses. During periods of water stress, raising tariffs becomes essential to signal resource scarcity to users. This underscores the need for well-targeted subsidies to support low-income users during such periods while preserving the ability to adjust tariffs to reflect scarcity. Another critical aspect is the universal implementation of consumption metering to ensure that billing reflects actual usage, allowing prices to act as an incentive.

Just as tariffs can adjust to water scarcity, they can also be used proactively by including special charges to fund resilience and adaptation projects (e.g., infrastructure for flood or drought management, wetland conservation, etc.). Operators and regulators in several countries throughout the region have begun to integrate these considerations. In Peru, the national regulator (SUNASS) includes climate risk assessments in its tariff-setting process. In certain regions of Chile, charges are added to offset drought-related costs and finance projects such as desalination plants or water reuse systems. In Costa Rica, payments for water services partially fund the country's renowned scheme of payments for ecosystem services, which supports watershed conservation efforts, among other initiatives.

Interjurisdictional coordination and cooperation

Often, the natural area of delivery of a utility service does not align precisely with the administrative boundaries of a local or regional jurisdiction. This is evident, for example, in Brazilian municipalities that delegate water operations to larger-scale providers. Likewise, there are numerous cases where horizontal or vertical cooperation could enhance efficiency, particularly in metropolitan areas where multiple jurisdictions coexist within the same city. These potential efficiency gains are not the sole justification for interjurisdictional coordination. An equally important reason is the externalities that actions in one jurisdiction can have on others.

In some cases, jurisdictions have inherent incentives to cooperate, such as when they identify potential efficiency gains through collaboration. In such cases, the main role of entities encouraging cooperation (e.g., the national government) is to provide the legal framework enabling subnational public institutions to partner. Depending on the importance of the case, financial incentives may also be offered. Conversely, when addressing externalities, intrinsic incentives for cooperation are typically lacking (due to the nature of externalities), requiring a more active approach to promote collaboration. This could involve establishing entities at a sufficiently broad geographic level to coordinate the decentralized actions of multiple jurisdictions.

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Interjurisdictional cooperation is especially beneficial in metropolitan areas where multiple administrative units coexist within a single city

Coordinating to reduce externalities

A common example of interjurisdictional externalities occurs in the management of water resources. These externalities often arise from wastewater disposal or water extraction rates: if upstream localities fail to account for the needs of downstream communities, they may pollute excessively or withdraw unsustainable amounts of water. Basin authorities seek to address these challenges by managing water use at the broader basin level, coordinating and regulating actions across multiple local, regional, and even national jurisdictions. Their objectives include monitoring water quality, preventing floods, protecting the environment, and allocating usage rights. With the growing risks posed by climate change, these organizations are increasingly tasked with reducing water system vulnerabilities to droughts and changing patterns.

Countries in the region usually have some type of basin organization or council. However, the leading authority for these bodies varies by country. In Peru, for example, the National Water Authority has spearheaded their implementation, while in Panama, they are coordinated by the Ministry of Environment. In both cases, these organizations function more as forums for dialogue than as planning and control bodies. This likely limits their impact, as the effectiveness of basin authorities depends largely on their technical capacity and the decision-making power delegated to them.

Basin authorities hold significant potential to enhance interjurisdictional coordination when water and sanitation services are decentralized

Evidence on the impact of these organizations in the region is limited. One of the most relevant studies is by Lipscomb and Mobarak (2017), focusing on Brazil, where sanitation services are decentralized to the municipal level. The study finds that river pollution levels (measured by biochemical oxygen demand) increase by 2% to 3% for every kilometer the river approaches the downstream municipal boundary, with the rate of pollution growth accelerating as it nears the boundary. This is an example of how externalities play out. In contrast, in rivers with active basin committees (153 at the time of the study), this effect disappears, meaning there is no increase in pollution near municipal borders. This finding underscores the significant potential of these organizations to enhance interjurisdictional coordination when water and sanitation services are decentralized. Moreover, it highlights the value of strengthening their roles and technical capacities as worthwhile investments.

Metropolitan governance

Interjurisdictional cooperation is particularly important in metropolitan areas, especially when urban agglomerations span multiple local administrative units. This overlap frequently arises from population growth and urbanization, which drive city expansion and the integration of previously distinct localities.

Administrative fragmentation of cities poses challenges across multiple areas, including territorial planning, operational coordination, and public service financing. Furthermore, depending on the governance models in place, income segregation—common in large cities—can result in disparities in the quality of services provided by different local governments.



Avenida General Paz marks the boundary between the Autonomous City of Buenos Aires and the Province of Buenos Aires, Argentina.

Various approaches have been adopted to address this, as some examples from outside the region show. In some cities, government units have been reorganized to reduce administrative fragmentation. One strategy has been the merger and elimination of preexisting units, as in the creation of the megacity of Toronto in 1998. Another involves establishing metropolitan governments that overlay existing municipalities, adding a layer of governance, exemplified by the Greater London Authority. A third approach is the creation of administrative units that geographically encompass a metropolitan area and hold the legal status of a regional government, as seen in the German city-states of Berlin, Bremen, and Hamburg.

However, such reorganizations are challenging to implement, as they often result in a loss of autonomy for pre-existing units, which tend to resist these changes. In some cases, these reforms are even reversed, as occurred in Montreal at the beginning of the century. Consequently, administrative fragmentation often persists in large cities, with governance challenges addressed either through formal cooperation agreements or informal channels. As will be discussed later, formal cooperation mechanisms can take various forms depending on the legal framework of each area and may be sector-specific or multipurpose.

In Latin America and the Caribbean, administrative fragmentation is predominant. Based on a definition of functional urban areas, the region has 53 cities with more than 1.5 million inhabitants (Moreno-Monroy et al., 2021), only three of which are entirely or almost entirely contained within the boundaries of a single local government: Brasília, Ciudad Juárez, and Manaus. In the remaining cities, at least 10% of the urban population lives outside the core municipality, and none have a politically autonomous metropolitan government above the local level.

The most consolidated cases are the Provincial Municipality of Lima and the Metropolitan District of Quito, whose local governments cover more than 80% of the city's population and hold special responsibilities that exceed those of standard local governments in their respective countries. Also notable is the case of Santiago, Chile, which is highly fragmented into local jurisdictions but has a regional government for its metropolitan area. However, Chile's regional governments are relatively new and currently have limited powers.

At the extreme end of fragmentation are Mexico City and Puebla, in Mexico, and São Paulo, in Brazil, each of which encompasses over 50 local administrative units. To illustrate, Figure 6.1 depicts the overlap of urban fabric (in orange) with administrative jurisdictions in two of the least fragmented cities (Manaus and Quito) and two of the most fragmented (Asunción and San José, Costa Rica).

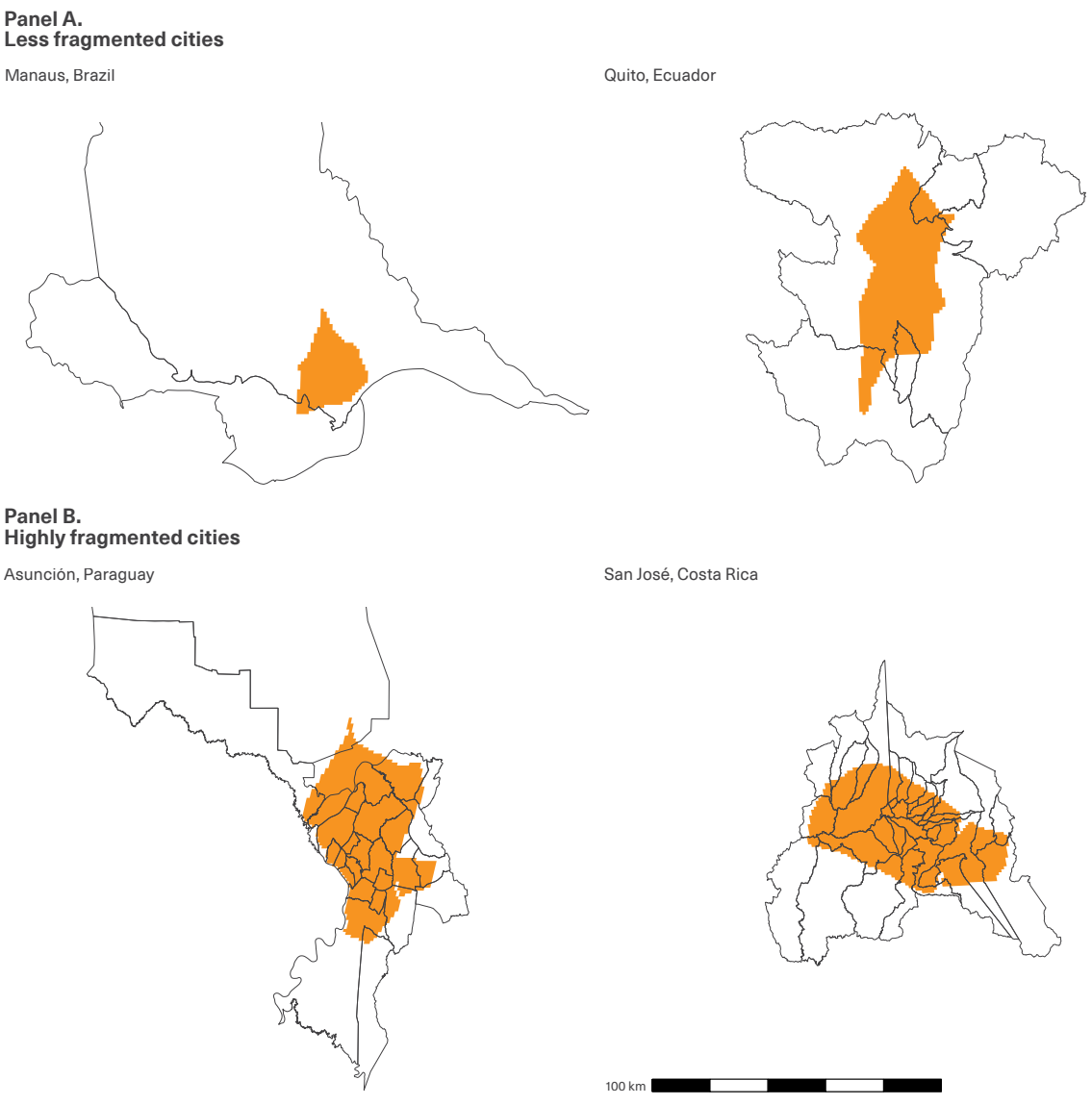
On average, the 53 cities in the set are divided across 17 jurisdictions, with one core jurisdiction housing 52% of the population. These levels of fragmentation are not unusual in international terms; in fact, they are lower than those observed in North American and European countries, according to data from the Organisation for Economic Co-operation and Development (OECD, 2024d). Fragmentation is often accompanied by segregation. Differences in income and economic activity also create disparities in the resources available to local governments. For example, within Bogotá, the disparity in municipal tax revenues reaches a ratio of 20:1 between the highest- and lowest-income municipalities.

Regarding the consequences of administrative fragmentation, empirical findings—though limited—tend to point to negative outcomes. Ahrend et al. (2017) analyzed productivity in cities across five OECD countries, including Mexico, and found that administrative fragmentation is harmful. Specifically, they estimate that doubling the number of jurisdictions within a metropolitan area correlates with a 6% decline in productivity. Similarly, Cataldo et al. (2023) reached qualitatively similar conclusions when examining wages and innovation in U.S. cities.

An important finding from these studies is that the impact of fragmentation depends on the institutional framework for city governance. For instance, Beghelli et al. (2020) found that, under similar levels of administrative fragmentation, U.S. cities expand spatially far more than their European counterparts—resulting in a substantial environmental cost—due to more decentralized planning. Overall, the literature indicates that the negative effects of fragmentation are lessened when formal cooperation mechanisms exist among a city's jurisdictions. Thus, the development of such arrangements is essential. One approach to achieving coordination is through the creation

of metropolitan authorities. The characteristics of these authorities—how they are established, their responsibilities, and their governance models—are typically regulated by national or state laws and differ significantly across countries. These authorities are generally not directly elected but are composed of representatives or delegates from the municipal and state governments involved.

Figure 6.1
Overlap of urban fabric and administrative boundaries in a sample of cities



Note: The urban fabric is shaded in orange, and the boundaries of subnational governments are marked with black lines. The figure shows two examples from the 10 most fragmented cities in the region (in terms of the number of administrative units within the city) and two examples from the 10 least fragmented cities, within the universe of cities with more than 1.5 million inhabitants. The selection of metropolitan areas is based on the spatial database by Schiavina et al. (2019), which defines functional urban areas in urban centers.

Source: Authors based on Schiavina et al. (2019) and CAF (2025).

Such authorities are common, especially in countries with numerous large cities, such as Brazil, Colombia, Mexico, and Argentina. However, Argentina lacks a national framework for metropolitan management, relying instead on provincial frameworks. Overall, the institution development and operational capacity of these authorities are generally limited, primarily due to their lack of autonomy. For example, these authorities often have responsibilities related to the creation of territorial planning instruments, but municipal governments retain autonomy over land use and perceive mandates to align local planning with metropolitan planning as a loss of political power (Costa et al., 2022).

Another indication of these bodies' relative weakness is their lack of fiscal autonomy. They are funded through contributions from states and municipalities, often without a standardized formula. For instance, in Argentina, each case operates under its own resource distribution arrangement. In contrast, Colombia has more explicit regulations regarding the funding sources for metropolitan authorities, including a 0.2% surcharge on real estate taxes.

The Valle de Aburrá Metropolitan Area (surrounding the city of Medellín) in Colombia stands out as the most successful example of a metropolitan authority's operational capacity. This success is particularly evident in areas such as territorial planning and the management of the metropolitan area's integrated transportation system. A key factor behind the strong performance of this authority is its ability to secure stable funding, particularly through the collection of environmental fees.

This underscores the importance of access to economic resources in building the capacities of metropolitan bodies. Furthermore, it is crucial that funding mechanisms establish the right incentives. In Mexico, a national fund was created to finance projects proposed by metropolitan authorities, but it has been criticized for encouraging the establishment of such jurisdictions primarily as a means to access resources, rather than fostering an authentic mission of metropolitan governance (Costa et al., 2022).

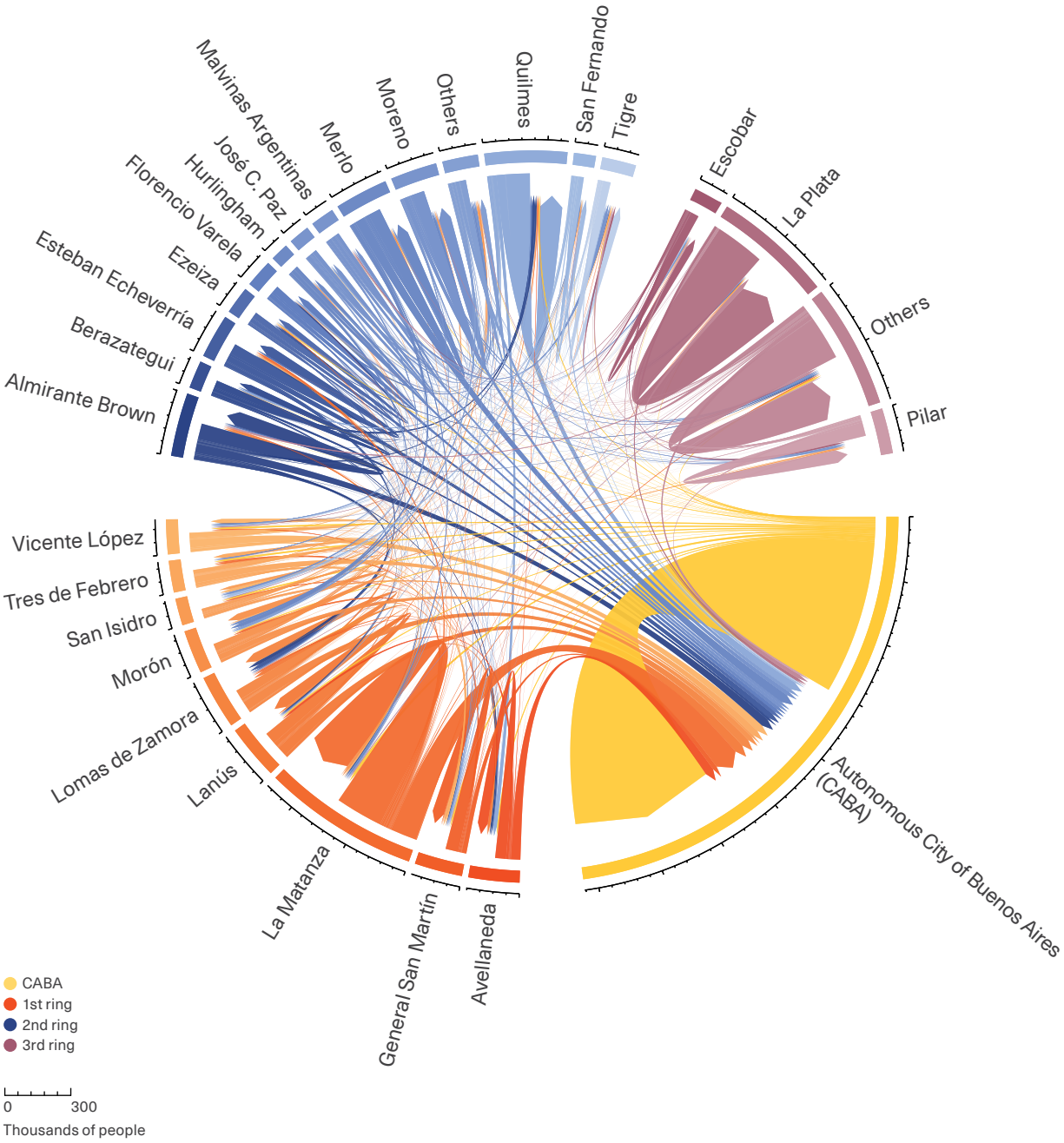
Given the overall underdevelopment of institutional frameworks, political will and leadership are crucial for the consolidation of metropolitan authorities. This is evident in the case of the Metropolitan Entity of Córdoba (Argentina). Established in 2022 by ten municipalities, including the provincial capital city Córdoba, this body has expanded rapidly and now includes 16 jurisdictions. Moreover, it has made significant progress on key strategic initiatives, including environmental management, disaster response coordination, the development of an integrated transportation system, and the creation of new green spaces.

Beyond metropolitan authorities, jurisdictions can collaborate through other coordination arrangements, which are generally more sector-specific. Transportation is one of the critical sectors for urban life in large cities and thus requires particularly strong coordination. Core city jurisdictions typically concentrate economic activity (especially formal employment) and receive daily commuters from surrounding predominantly residential jurisdictions.

Transportation coordination can fall under the purview of metropolitan authorities when they exist, as is the case with the Valle de Aburrá Metropolitan Area mentioned earlier. Alternatively, it can be managed by specific sectoral entities, such as the consortium Grande Recife, a state-owned enterprise created by a state law to oversee the operation of service providers.

In some cities, coordination remains precarious despite high levels of interconnection between jurisdictions within the transportation system. Buenos Aires is a notable example. The Autonomous City of Buenos Aires (CABA), the core jurisdiction of its metropolitan area, receives over 700,000 daily work commuters from neighboring municipalities, as illustrated in Graph 6.9. In this metropolitan area, bus lines are overseen by the national government, the provincial government, and CABA itself (although the transfer of responsibilities for some lines remains incomplete). Nevertheless, the lack of system integration authorities result in inadequate coordination.

Graph 6.9
Travel flows between jurisdictions in the Buenos Aires metropolitan area



Note: The diagram shows daily travel flows between jurisdictions in the Buenos Aires metropolitan area. The color of the line indicates the jurisdiction of origin, while the arrowhead represents the destination jurisdiction. The graph depicts one-way work-related trips made by the employed population, based on the 2018 Household Mobility Survey. A total of 4.5 million trips are represented. The rings refer to the concentric groups of municipalities surrounding the Autonomous City of Buenos Aires, ordered by proximity: the first ring is the closest, and the third is the farthest.

Source: Authors based on data from the Subsecretariat for Mobility Planning of the City of Buenos Aires (2022).

In other sectors, there are also potential benefits to intermunicipal cooperation. One such area is solid waste management, where collaboration is common and facilitates the standardization of recycling policies and certain environmental policies (Daude et al., 2017). In Brazil, the Confederação Nacional de Municípios (CNM, 2023) documents intermunicipal consortium efforts in areas like health and environmental management.

Unfortunately, systematic data on the use of cooperative arrangements is scarce, making it challenging to study their effects comprehensively. Mexico provides a partial exception, as data on the number of intermunicipal agreements is available. Using this data, Depetris-Chauvin et al. (2022) show that homicide rates in a municipality decrease with greater horizontal cooperation in security. Similarly, Muraoka and Avellaneda (2021) present partially positive evidence on cooperative agreements in El Salvador. Specifically, they find that such agreements improve the provision of certain services (such as electricity) but not others (such as water).

The available data does not allow these studies to delve into the specifics of cooperative agreements, making it challenging to fully understand the mechanisms through which they produce effects. As a result, it is difficult to generalize based on these findings. Even so, this literature offers a moderately positive view of the role of intermunicipal cooperation, as it provides flexibility in service delivery and enables subnational governments to pursue the most efficient arrangements.

In this regard, the main recommendation is to establish a clear framework that allows jurisdictions to harness the benefits of collaboration without legal uncertainties. This includes defining the legal forms that cooperation can take (e.g., forming intermunicipal consortia or signing collaboration agreements), the functional scope of these mechanisms, their financing structures and resource access, and the internal governance frameworks for decision-making.

Collaboration beyond formal governance

Cooperation among local and regional governments extends beyond formal governance structures. Association is also valuable in establishing common positions, fostering mutual learning, and seeking solutions. In countries with regional governments, organizations that bring together regional authorities are common, such as Mexico's National Conference of Governors (CONAGO) and Chile's Association of Regional Governors (AGORECHI). Associative activities are even more prevalent at the local government level, with municipal associations present in nearly every country. The Latin American Federation of Cities, Municipalities, and Municipal Associations (FLACMA) brings these national bodies together and represents them within United Cities and Local Governments (UCLG), a global organization. At the subregional level, there are other initiatives, such as Mercociudades, which is made up of local governments from the Southern Common Market (Mercosur) and the Union of South American Nations (UNASUR).

CAF Action.
Scan the QR code to learn more about the BiodiverCity initiative.

The BiodiverCities Network

This network, an initiative led by CAF, seeks to foster the integration of biodiversity into urban planning across cities in Latin America and the Caribbean. In a region that is both highly urbanized and rich in biodiversity, the BiodiverCities Network emerges as a response to the environmental and social challenges faced by cities and as an opportunity to develop and implement nature-based solutions through urban management.

The BiodiverCities Network aims to serve as a platform for knowledge exchange, experience sharing, and the dissemination of best practices among cities in the region. Its vision is to establish an urban management model where biodiversity is a central pillar and to strengthen the capacity of local governments to implement policies and projects that integrate biodiversity into urban planning.

Since its kick-off, the network has achieved significant progress in raising awareness and promoting the BiodiverCity concept. By August 2024, over 180 local governments in 17 countries had committed to integrating biodiversity into their urban planning policies. The network has hosted a series of national, regional, and international meetings to address key topics such as water resource management, green and blue infrastructure, sustainable tourism, and circular economy models. These events have provided participating cities with opportunities to share experiences and develop common strategies to tackle environmental challenges.

The network has participated in international forums, including the 27th and 28th Conferences of the Parties (COP) of the United Nations Framework Convention on Climate Change, as well as COP15 of the Convention on Biological Diversity. At these events, the BiodiverCities vision has been showcased on a global stage, emphasizing the importance of this approach in addressing climate change and biodiversity loss. The network has also progressed in incubating concrete projects aimed at nature-based urban transformation, facilitating the development of financeable initiatives aligned with the principles of sustainable urban development.



City Hall of Montevideo, seat of government
of the Department of Montevideo, Uruguay.

Who are the public officials of subnational governments?

- An overview of subnational bureaucracies
- Gender and ethnic gaps in public employment and elected positions
- Challenges in building high-quality subnational bureaucracies
- Regulatory framework
- Entry mechanisms for public service, wage premiums, and training
- Local electoral systems

7

Key messages

1 Bureaucracy is a critical dimension of state capacity. A quality bureaucracy consists of capable public officials motivated by public service, operating within a framework that prioritizes merit and promotes effort and the development of competencies.

2 Building high-quality bureaucracies at the subnational level can be more challenging than at the national level. Subnational institutions tend to be weaker, facilitating the political use of public employment, and many localities lack specialized human capital.

3 In Latin America and the Caribbean (LAC), there are few data sources with detailed information about public officials that identify the level of government in which they work. Only Bolivia, Brazil, Mexico, and Uruguay have national surveys that include this information.

4 Salaries in subnational governments are competitive. In Bolivia, Brazil, and Mexico, the subnational public sector offers an average wage premium of around 17% compared to formal private-sector employment. This wage premium is comparable to that of the national public sector.

5 Subnational governments in these countries have a smaller proportion of professional and technical positions and a larger share of elementary roles compared to national governments. Their officials are more likely to have temporary contracts, shorter tenures, and less likelihood of having tertiary education in managerial or professional roles.

6 The legal frameworks governing subnational public employment in the region establish merit as a cornerstone for recruitment, promotion, and retention in public service. However, this *de jure* framework often does not align with the *de facto* realities.

7 Countries in the region have legal provisions to control the wage bill of subnational jurisdictions, either through fiscal rules or more directly by regulating workforce size and salary structures.

8 Competitive local electoral systems promote the selection of better-prepared leaders and the development of professional bureaucracies because they limit the incentives and capacity of elected officials to sidestep merit and use public employment for political purposes.

Who are the public officials of subnational governments?[1]

High-quality bureaucracies and development: The subnational dimension

Bureaucracy is a cornerstone of state capacity. It encompasses the body of public officials within institutions and the rules and structures guiding their performance. A quality bureaucracy is defined by its skilled and motivated public officials who operate within a framework that prioritizes merit, encourages effort, and fosters the development of competencies. This definition aligns with the one adopted by Latin American and Caribbean countries in the Ibero-American Charter for the Public Service (CLAD, 2003).

A quality bureaucracy is defined by its skilled and motivated public officials who operate within a framework that prioritizes merit, encourages effort, and fosters the development of competencies

The consensus on the importance of bureaucracy quality for development has been long established, but the challenge lies in translating this into practice. Building professional bureaucracies is a complex process. For instance, evidence indicates that a significant gap in the quality of national bureaucracies persists today between developed and developing countries (Besley et al., 2022).

1 This chapter was written by Ricardo Estrada with assistance from Daniela Goyheix.

There are strong reasons to believe that establishing high-quality bureaucracies at the subnational level poses even greater challenges than at the national level. First, weaker institutions at the subnational level create conditions that favor the political use of public employment. Second, developing regional and local bureaucracies requires specialized human capital, which may be unavailable in many localities.

A high-quality bureaucracy must attract, select, retain, develop, and motivate capable individuals committed to their work and the public good. Central to this agenda are personnel policies related to recruitment, compensation, retention, and professional development. However, broader policies also influence the composition of bureaucracies through occupational decisions. For instance, anti-corruption policies affect the potential for illicit rent-seeking in public service and shape public perceptions of bureaucratic integrity. This, in turn, influences whether individuals with varying levels of integrity pursue public-sector employment (Brassiolo, Estrada, Fajardo and Vargas, 2021).

A high-quality bureaucracy must attract, select, retain, develop, and motivate capable individuals committed to their work and the public good

Bureaucracies operate under the leadership of public officials elected by citizens. These elected officials determine policies and make decisions that shape the bureaucracies they oversee. Extensive research highlights the role of institutions and electoral processes in shaping the profile and performance of leaders and their relationship with bureaucrats (Fajardo et al., 2019).

Measuring the quality of subnational bureaucracies presents significant challenges. For example, there is no established indicator that synthesizes bureaucracy quality. Available information on public officials' profiles and the characteristics of the processes that determine the bureaucratic career is limited, often focused on the national level, or fails to differentiate by level of government.[2] This chapter is developed within these constraints.

An overview of subnational bureaucracies

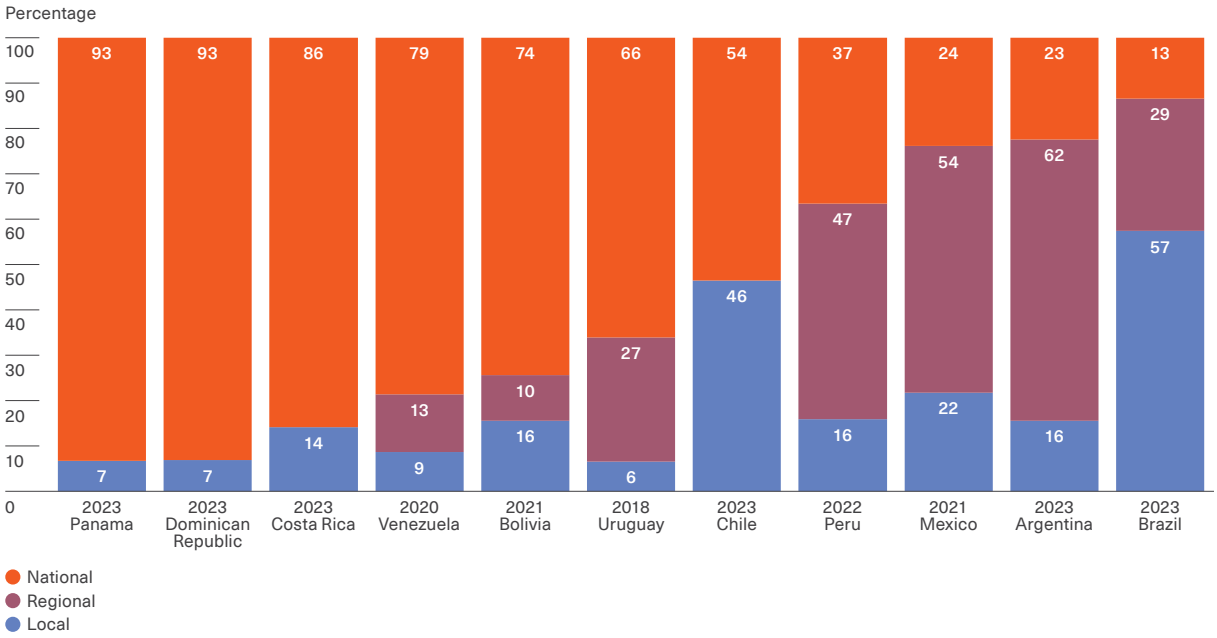
Scale

The importance of subnational public employment as a proportion of total public employment varies significantly across countries depending on their degree of decentralization (see Graph 7.1). Among the 11 countries with available data, subnational employment is most prevalent in Brazil (86%), Argentina (78%), and Mexico (76%), all federal states. In contrast, in Venezuela, the other federal country in the region, subnational employment accounts for only 22% of public employment.

Among unitary countries, subnational employment plays a larger role in Peru (63%) and Chile (46%), primarily because education and health services—sectors that are labor-intensive—are decentralized in both countries. In less decentralized countries like the Dominican Republic and Costa Rica, subnational employment represents only 7% and 14% of public employment, respectively.

2 Cortázar Velarde et al. (2014) demonstrate, based on expert assessments, that most countries in Latin America and the Caribbean have made significant progress in the functioning of their national bureaucracies. However, no comparable study exists for subnational bureaucracies.

Graph 7.1
Public sector employment by government level in Latin American and Caribbean countries



Note: Data from the International Labour Organization (ILO) is based on standard international definitions from the International Conference of Labour Statisticians (ICLS), 13th revision. These data include employment within general government (as defined in the 1993 System of National Accounts) at the central, regional, and local levels, excluding publicly owned enterprises and companies. In Brazil, Uruguay, and Venezuela, these figures include employment in social security, based on ILO criteria related to the administrative and financial integration of this sector with the corresponding government levels. For further details, refer to the descriptions in the Labour Force Statistics (LFS, STLFS, RURBAN Databases) provided by ILO (n.d. a).

Source: ILO (n.d. b) for all countries except Argentina and Chile. For Argentina, Iacoviello et al. (2024), and for Chile, Applied Audit Unit (2024).

The share of subnational public employment within total public employment has grown alongside the decentralization process. For instance, Iacoviello et al. (2024) report that the number of national government employees in Argentina increased by 10% between 1980 and 2022, while the number of regional government employees rose by 250% and local government employees by 160% during the same period. In Brazil, the number of national government employees fell by 3% between 1985 and 2021, whereas regional government employees increased by 38% and local government employees by 327% (IPEA, 2024).

As shown in Chapter 3, public employment can represent a significant portion of subnational government budgets. For instance, spending on bureaucracy averages 36% of total expenditures for regional governments in eight countries of the region and 32% for local governments in 13 countries.[3]

3 This figure includes the combined expenditure on "personnel" and "social security," covering both active public officials and retirees. See details in Table 3.1.

Profile and working conditions of public officials

There is extensive information about the profile and working conditions of public officials in general, but it often lacks distinctions by level of government. For instance, compared to private sector employees, public sector employees in the region tend to have higher levels of education and more work experience, are more likely to hold professional and technical positions (and less likely to work in elementary roles), and on average, benefit from better working conditions, including higher salaries, shorter work hours, and longer tenure (Báez et al., 2022; World Bank, 2022d; Gasparini et al., 2015). However, there is limited data specifically on officials in subnational governments.

This knowledge gap is due to the scarcity of databases that identify the government level at which public officials work and provide detailed information on their profiles. National employment or household surveys are the primary sources of data on a country's workforce. However, in the region, only the surveys conducted in Bolivia, Brazil, Mexico, and Uruguay enable the identification of the level of government to which public officials are assigned. Furthermore, this analysis can be fully carried out in these four countries only for the public administration subsector, excluding service delivery-related subsectors such as waste management, water supply, urban cleaning, education, health, and security.

The public administration subsector constitutes a significant portion of total public employment. According to the author's estimates, employees in this subsector account for approximately 30% of public employment in Bolivia and Uruguay and 40% in Brazil and Mexico. One advantage of focusing on this subsector is that it includes core activities essential for any jurisdiction, such as tax collection, economic and social planning, and public expenditure management.

In the four countries analyzed, the occupational structure of the public administration subsector varies significantly by government level (see Table 7.1). Compared to the national government, subnational governments have a smaller proportion of professional and technical positions and a higher proportion of elementary roles.[4]

Subnational governments have a smaller proportion of professional and technical positions and a larger proportion of elementary roles compared to the national government

Consistent with these differences in occupational structure, subnational public employees tend to have lower levels of education and receive lower salaries compared to their national counterparts. For instance, the gap in the proportion of employees with tertiary education between national and subnational levels ranges from 33 percentage points in Brazil to 13 percentage points in Mexico. Conversely, the average age—a proxy for work experience—is similar for employees at both levels.

At the subnational level, a smaller proportion of employees in managerial and professional roles have tertiary education. In the four countries, at least 90% of national employees in these positions hold tertiary education qualifications, with nearly all meeting this criterion in Bolivia and Brazil. The gap between national and subnational levels is 3 percentage points in Mexico, around 10 percentage points in Bolivia and Brazil, and 17 percentage points in Uruguay.

Subnational employees in all four countries are more likely to hold temporary contracts and, in Brazil in particular, tend to have shorter tenure compared to their national government counterparts.

4 In a study commissioned for the preparation of this report, Martínez et al. (2024) show that the prevalence of assistants varies significantly across local jurisdictions in Colombia, with a positive correlation between the proportion of assistants and the size of the local bureaucracy.

Table 7.1
Characteristics of national and subnational public administration employees

	Bolivia		Brazil		Mexico		Uruguay	
	National	**Subnational**	**National**	**Subnational**	**National**	**Subnational**	**National**	**Subnational**
Female (%)	42	37	41	49	48	45	57	43
Age	39	39	45	43	41	42	46	46
Ethnicity (%)								
White	-	-	60	49	-	-	96	96
Mestizo	48	58	-	-	-	-	-	-
Asian	-	-	2	1	-	-	0	0
Afro-descendant	0.2	0.01	38	50	-	-	2	3
Indigenous	52	42	0.4	0.3	-	-	1	1
Educational Level (%)								
Incomplete secondary education or less	3	18	2	16	8	23	17	46
Complete secondary education	8	16	18	37	29	28	38	36
Complete tertiary education	90	67	80	47	63	50	46	18
Type of Occupation (%)								
Managers	8	12	4	5	12	10	5	4
Professionals	30	16	37	17	24	17	31	10
Technicians	28	25	32	26	18	17	16	15
Clerical	24	19	25	28	38	37	42	42
Elementary	9	28	2	24	8	18	6	29
Working conditions								
Hours worked per week	42	42	39	39	42	41	38	38
Tenure (in months)	-	-	171	129	140	127	198	193
Monthly salary (as a percentage of the private sector)	139	110	240	132	133	112	143	117
Temporary contract (%)	48	63	12	26	19	24	-	-

Note: Details about the sample composition can be found in the chapter appendix, included in the online edition of the RED report. For the "ethnicity" category, Uruguay does not include mestizo-origin populations. In Bolivia, the "mestizo" category includes Asians and Whites due to survey design limitations. The "Afro-descendant" category includes individuals self-identifying as "parda" (Mestizo) or "preta" (Black) in Brazil, as having "Black" or "Afro" ancestry in Uruguay, and as "Afro-Bolivian" in Bolivia. The "tertiary education completed" category includes both completed and incomplete tertiary education in Bolivia. Data comes from national employment surveys in Bolivia (ECE), Brazil (PNAD-C), Mexico (ENOE), and Uruguay (ECH).

Source: Author based on data from IBGE (n.d. b), INE (n.d.; 2022), INEGI (n.d.), and methodology by Báez et al. (2022).

Several factors may explain the documented differences in occupational structure and employment stability by government level. For instance, weaker subnational public finances could account for the higher prevalence of temporary contracts. However, this pattern is also consistent with the greater political use of public employment in subnational governments (see the next section for more on this topic).

Subnational employees are more likely to hold temporary contracts and have shorter tenure compared to their national government counterparts

Gender and ethnic gaps in subnational bureaucracies

The region is marked by persistent gender and ethnic inequalities in the labor market (Berniell et al., 2024). Reducing these gaps is imperative for equity. Additionally, removing barriers to participation and career development for a large segment of the population brings significant efficiency gains. Bureaucracies can particularly benefit from this talent pool. The public sector offers conditions that may lead to greater participation of women and minority groups than in the private sector. However, it is not immediately evident how this participation varies across levels of government.

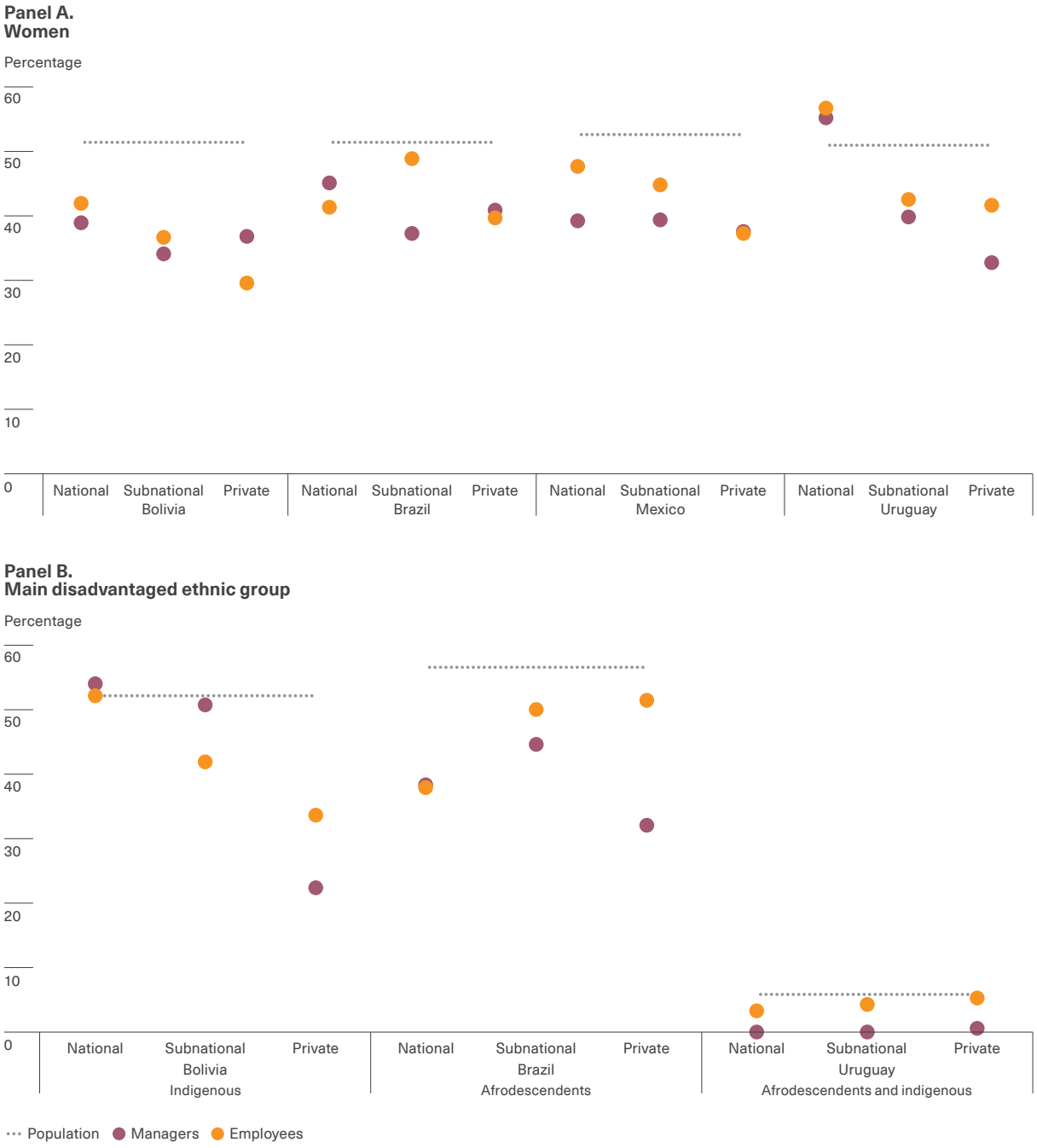
The results show that women's representation in public employment, particularly in managerial positions, is indeed higher than in the private sector across the four analyzed countries (see Panel A of Graph 7.2, where private employment is restricted to formal salaried workers for comparability). However, within the public sector, women's representation at the subnational level is generally lower than at the national level. Furthermore, in most (sub)sectors, female participation remains below their share of the population.

A similar pattern emerges when comparing the wage gap between women and men, adjusting for differences in education level, age, occupation type, hours worked, and region of residence. Overall, the gender wage gap is smaller in the public sector than in the private sector but larger at the subnational level than at the national level (see Panel A of Graph 7.3). In terms of magnitude, women earn on average about 20% less than men in the private sector in Brazil and Uruguay, while the gap is 13% in Bolivia and Mexico. In the subnational public sector, the gap ranges from about 5% in Mexico and Uruguay to 17% in Brazil.

To examine ethnic gaps, information on self-identified ethnicity from surveys in Bolivia, Brazil, and Uruguay is used (Mexico does not include ethnicity in its survey). The analysis focuses on Indigenous individuals in Bolivia (52% of the working-age population), Afro-descendants in Brazil (57%), and both Afro-descendants and Indigenous people in Uruguay (6%).

In general, the historical disadvantages faced by ethnic groups are reflected in lower participation in public and private employment relative to their population share and a lower likelihood of holding managerial positions (see Panel B of Graph 7.2). However, differences between (sub)sectors vary across countries.

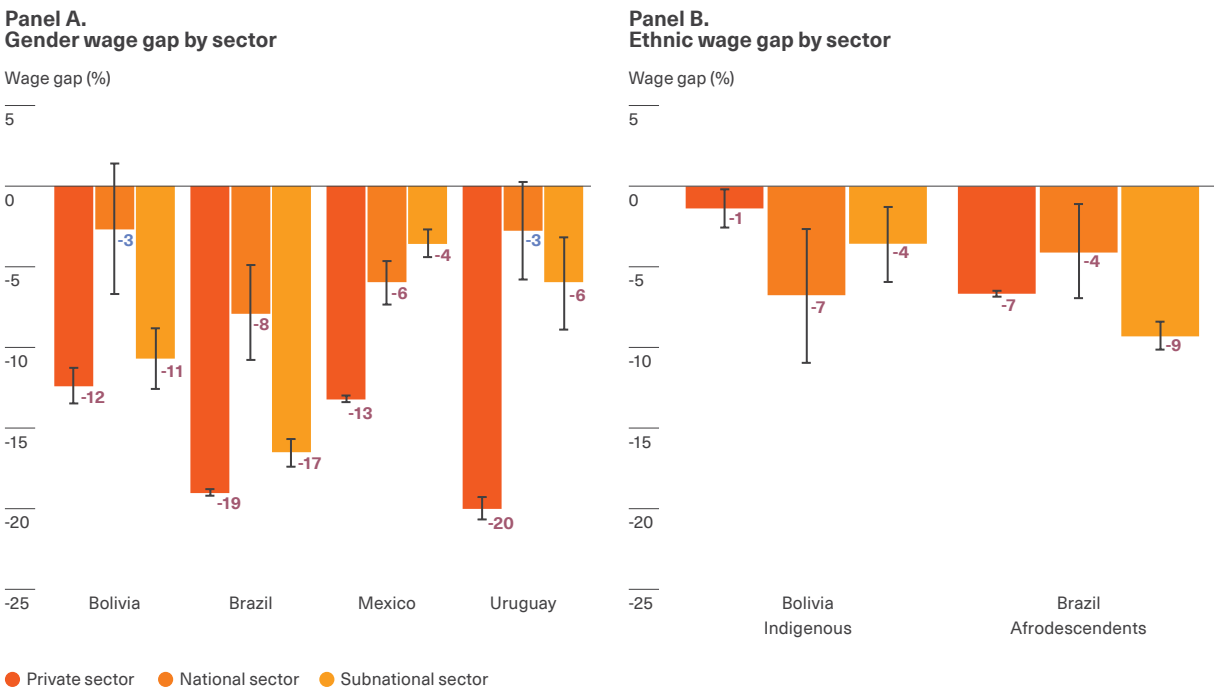
Graph 7.2
Participation in employment and managerial positions in public and private sectors by gender and ethnicity



Note: The category "Afro-descendants" includes individuals self-identifying as "pardas" (Mestizo) or "pretas" (Black) in Brazil and those of "Black" or "Afro" ancestry in Uruguay. Details about sample composition can be found in the chapter appendix, included in the online edition of the RED report.

Source: Author based on data from IBGE (n.d. b), INE (n.d.; 2022), INEGI (n.d.), and methodology by Báez et al. (2022).

Graph 7.3
Gender and ethnic wage gaps



Note: The category "Afro-descendants" includes individuals self-identifying as "pardas" (Mestizas) or "pretas" (Black) in Brazil. A negative value indicates that the group of interest has lower average hourly wages than the rest of the population. Purple labels denote statistically significant differences at the 5% level, while blue labels indicate non-significant differences. Details about sample composition can be found in the chapter appendix, included in the online edition of the RED report.

Source: Author based on data from IBGE (n.d. b), INE (n.d.; 2022), INEGI (n.d.), and methodology by Báez et al. (2022).

The historical disadvantages faced by ethnic groups are reflected in lower participation in public and private employment relative to their population share and a lower likelihood of holding managerial positions

For wages, the analysis is limited to Bolivia and Brazil due to insufficient statistical precision in Uruguay. As with labor participation, ethnic wage gaps are not consistently smaller in the public sector than in the private sector, and in Bolivia, they are even larger (see Panel B of Graph 7.3).

In Bolivia, Indigenous public employees—both national and subnational—earn on average 4% to 7% less than non-Indigenous employees (adjusting for age, education, occupation type, gender, hours worked, and region of residence). By contrast, no significant gap is observed in the private sector in that country. In Brazil, Afro-descendants face wage gaps of 9% in the subnational public sector, 4% in the national public sector, and 7% in the private sector.



In the canton of Santo Domingo, Costa Rica,
all households have access to improved water sources.

Gender and ethnic gaps in elected positions

In Latin America and the Caribbean, the representation of women and ethnic minority groups in elected positions has historically been low compared to their proportion in the population. To address this disparity, most countries have implemented gender quotas for electoral candidates and, to a lesser extent, ethnic quotas.

Evidence shows that when gender quotas increase the proportion of women holding elected positions, the composition of elected officials tends to improve, as more capable women replace less qualified men (Fajardo et al., 2019). Studies from India demonstrate that greater political representation of women leads to increased investment in their stated priorities, such as access to clean water (Chattopadhyay and Duflo, 2004), early childhood health services (Bhalotra and Clots-Figueras, 2014), and reporting crimes against women (Iyer et al., 2012).

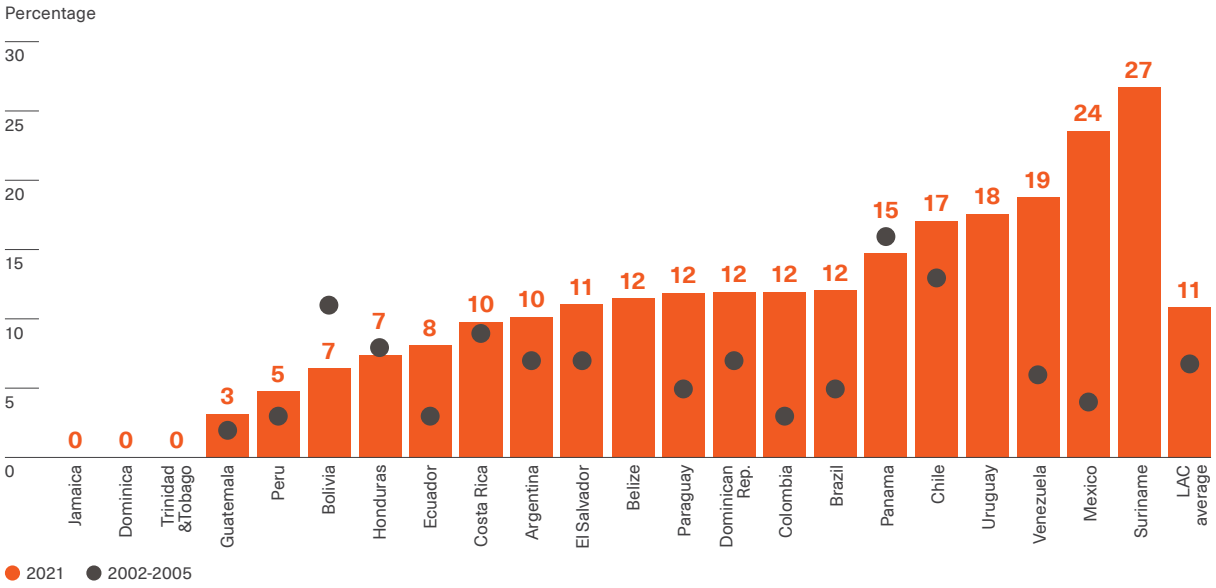
In the region, evidence highlights the impact of electing women to lead local governments. In Brazil, electing a female mayor shifts spending priorities from transportation and urban development to education, health, and social assistance (Funk and Philips, 2019). Furthermore, during the COVID-19 emergency, local jurisdictions led by women experienced fewer deaths compared to similar jurisdictions led by men (Bruce et al., 2022). Female mayors in Brazil are also less likely to engage in corrupt practices and are less inclined to increase public employment during election years (Brollo and Troiano, 2016). In Chile, electing a female mayor reduces the size of local bureaucracies and increases women's representation (Alberti et al., 2022). In Colombia, during the armed conflict, the rise to power of female mayors led to a reduction in acts of violence carried out by guerrilla groups (Eslava, 2020).

Despite these advancements, gender gaps in elected positions persist. On average, only 11% of local jurisdictions in Latin America and the Caribbean are governed by women (see Panel A, Graph 7.4). The proportion of female mayors ranges from 27% in Suriname and 24% in Mexico to 0% in Jamaica and Trinidad and Tobago. While representation has generally increased over the past two decades, it has done so from a very low baseline. Women's representation in local councils across the region is higher but remains underrepresented relative to their share of the population (see Panel B, Graph 7.4). As expected, the presence of gender quotas for candidates is associated with greater representation of women in deliberative bodies of local governments. However, the effectiveness of quotas depends on several factors, ranging from their design (e.g., whether they only establish a minimum percentage for candidates or also introduce requirements affecting election probabilities) to the characteristics of the electoral system that make it more or less likely for women candidates to win (Tripp and Kang, 2008)

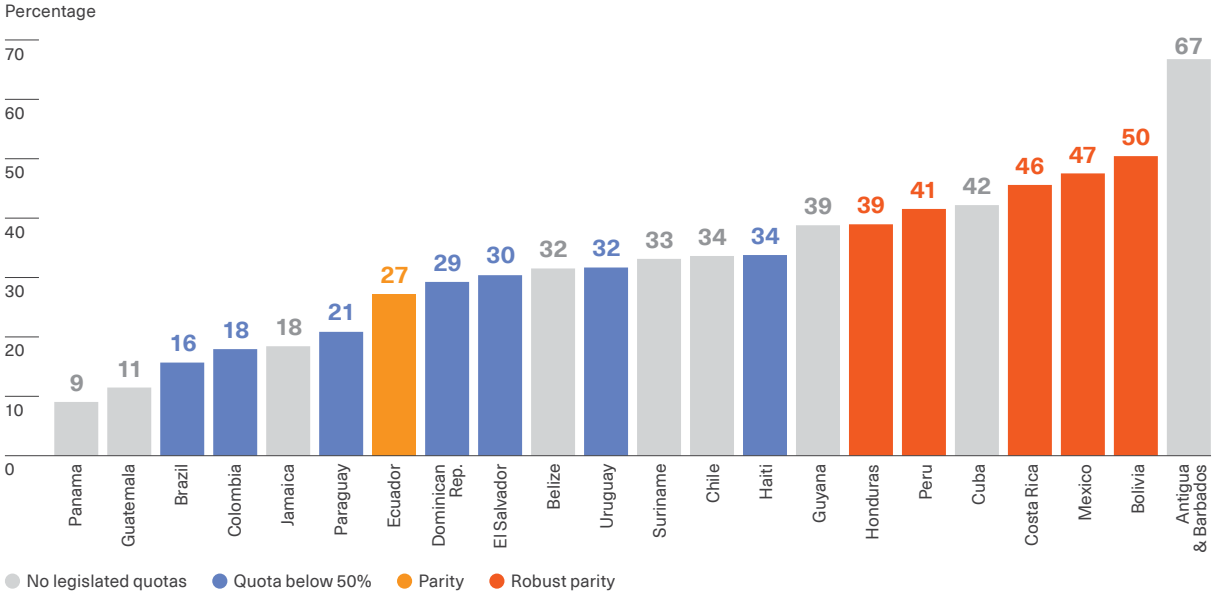
There is less information on political representation by ethnic group, particularly at the subnational level. Available evidence indicates a widespread ethnic representation gap at the national level, with Bolivia and Guatemala being the countries where the Indigenous population has the highest representation in national legislative bodies relative to their share of the population (Global Americans, 2017). These two countries, along with Mexico, are among the few to implement political representation quotas for Indigenous populations, while no country in the region has quotas for Afro-descendant populations. This phenomenon is reflected in local-level political representation figures. In Brazil, only 32% of mayors elected in 2020 identified as Afro-descendants, despite these groups accounting for 56% of the population in those municipalities on average (TSE, 2020; IBGE, 2022). Starting in 2022, candidacies of women and Afro-descendants in the country receive increased public funding in order to reduce their underrepresentation in elected positions. Indigenous and Afro-descendant women may face additional obstacles, as evidence suggests that the intersection of gender and ethnic inequalities amplifies disadvantages (Piscopo and Wylie, 2020).

Graph 7.4
Mayors, councilors, and gender

Panel A.
Percentage of female mayors in local governments in Latin America and the Caribbean



Panel B.
Elected seats held by women in deliberative bodies of local government in 2023



Notes: The type of quota referred to is for candidates, which establishes the minimum proportion of women to be included on electoral lists. "Robust parity" refers to 50% participation goals for women, including classification or placement rules and strict sanctions, such as rejection of lists that fail to meet quota requirements. In Ecuador, parity quotas only apply to candidate lists for multi-member constituencies, and in Colombia, quotas apply only to deliberative bodies with more than five seats.

Source: Author based on ECLAC (2021; 2023), UN Women and ECLAC (2023), and Urban et al. (2008).

Challenges to building high-quality subnational bureaucracies

The political use of public employment and the quality of local institutions

One of the main obstacles to developing professional bureaucracies is the political use of public employment, particularly through clientelism, a practice known in the region as patronage. Patronage involves the discretionary allocation of public jobs in exchange for votes and electoral support. This practice differs from the authority of government leaders to directly appoint a small group of close collaborators to lead the administration.

One of the main obstacles to developing professional bureaucracies is the political use of public employment

For patronage to function, political control over hiring and retention in public employment is required (Robinson and Verdier, 2013). The scope of patronage tends to expand as bureaucracies grow, potentially leading to excessive increases in public employment.

Like with other forms of favoritism, as a result of patronage, opportunities for entry into public service are not the same for everyone. By prioritizing connections over merit, it results in the recruitment of less qualified officials. It also erodes the prestige of public service, making it less attractive to individuals highly motivated by public service. Additionally, it fosters clientelist networks, undermining the independence of the bureaucracy and the checks and balances between elected officials and the administrative apparatus (Fajardo et al., 2019). Furthermore, the excessive growth of bureaucracies due to patronage can strain public finances and reduce private-sector job creation.

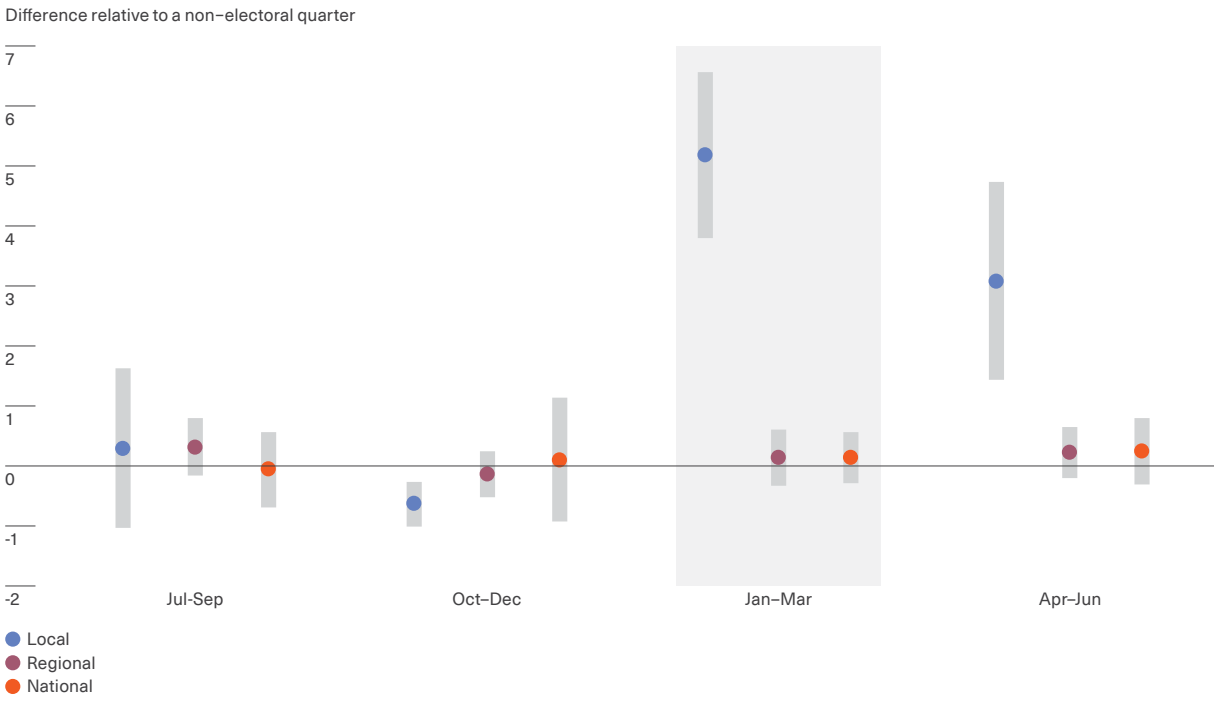
Research in Brazil and Ecuador shows that having a political connection with the winning party increases the likelihood of obtaining a local government job (Brassiolo et al., 2020; Colonnelli et al., 2020). A significant proportion of these jobs are in non-managerial positions, suggesting that they result from clientelist practices rather than the selection of qualified individuals to implement electoral mandates. Moreover, individuals who obtain these positions often have lower qualifications than those hired without political connections (Colonnelli et al., 2020).

One indication of the political use of public employment is the rise in staff turnover around election periods. In addition to the negative effects of patronage mentioned earlier, this excessive turnover can directly harm the quality of public services by disrupting the management and operations of organizations, as shown in studies on Brazil's education and health sectors (Akhtari et al., 2022; Toral, 2023).

One indication of the political use of public employment is increased staff turnover during election periods

Graph 7.5 (taken from Brassiolo et al., 2024) provides evidence of the difference in public employment turnover in Brazil during election years compared to non-election years. As shown, employee turnover in Brazilian municipalities is significantly higher in years when local elections take place. In the six months following the inauguration of new authorities, quarterly turnover increases on average by 3 to 5 percentage points compared to the 4.5% average in a non-election year, effectively doubling. Additionally, it is noteworthy that turnover related to the electoral cycle is clearly observed only in local governments and not in regional or national governments.

Graph 7.5
Change in the percentage of new employees by government level around electoral cycles in Brazil



Note: The figure shows the difference in the percentage of new public sector hires for each quarter around elections compared to the same quarter in non-election years, by government level. The grey bar represents the quarter when elected officials assume office. The coefficients come from separate regressions for municipal, state, and national employees. Vertical lines represent 95% confidence intervals. For more details, see Brassiolo et al. (2024).

Source: Brassiolo et al. (2024).

The same study by Brassiolo et al. (2024) found that election-related turnover is higher in jurisdictions with lower scores on the Municipal Institutional Quality Index (IQIM, by its Portuguese acronym), which combines measures of citizen participation in public management and the management and financial capacities of municipal governments. This evidence supports the hypothesis that the political use of public employment is less likely to occur in jurisdictions with stronger formal and informal institutions that promote accountability between leaders and citizens. Examples of such institutions include government agencies responsible for auditing public accounts, the media, and civil society organizations.

Another manifestation of clientelism is the excessive use of temporary contracts, private-regime contracts,[5] and exceptions for direct appointments. As noted earlier, temporary contracts are significantly more prevalent at the subnational level than at the national level in the four countries analyzed. Notably, the use of temporary contracts is higher in Brazilian municipalities with lower IQIM scores.[6]

5 For example, the self-employment regime in Argentina, service provision in Colombia, and fees-based contracts in Mexico.

6 According to the author's calculations, a one-standard-deviation increase in a local jurisdiction's IQIM score is associated with a 5-percentage-point decrease in the proportion of employees with temporary contracts, controlling for GDP, population, and the geographic area of the jurisdiction.

A lack of merit in hiring decisions can lead to other forms of favoritism. Brassiolo, Estrada, Fajardo and Martínez-Correa (2021) and Riaño (2021) document widespread nepotism in hiring within Mexico's judiciary and Colombia's public sector, respectively, and find a negative correlation between nepotism and labor productivity. These findings reinforce concerns about the detrimental effects of favoritism on the quality of public services.

Challenges in hiring qualified workers at the subnational level

Decentralization and the establishment of subnational bureaucracies involve a geographic redistribution of public employment, shifting jobs from national capitals to the capitals of regional and local jurisdictions. Consequently, the development of subnational bureaucracies depends not only on the availability of specialized human capital in local labor markets but also on their ability to attract and retain it.

Decentralization and the establishment of subnational bureaucracies involve a geographic redistribution of public employment

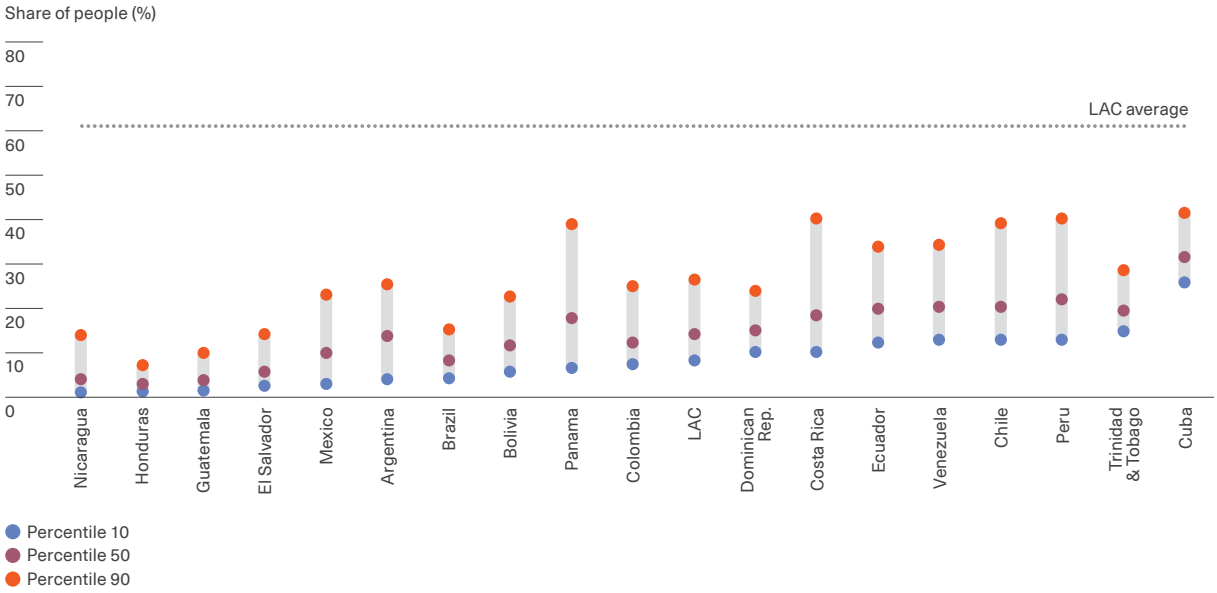
The public sector is characterized by a relatively high demand for qualified personnel. For example, 61% of public employees in Latin America and the Caribbean have tertiary education, compared to 25% in the private sector (World Bank, 2022d). As noted in the previous section, the prevalence of officials with tertiary education tends to be lower at the subnational level than at the national level. However, part of this gap may stem from structural constraints. Given regional inequalities in economic development and educational attainment, many subnational governments, particularly at the local level, may struggle to find the personnel they need.

Graph 7.6 illustrates the inequality in the distribution of adults with tertiary education across 18 countries in the region. On average, 14% of the population in the median jurisdiction (50th percentile) has tertiary education, compared to 27% in jurisdictions with the highest educational levels (90th percentile) and only 8% in jurisdictions with the lowest educational levels (10th percentile). These figures vary significantly across countries; however, a substantial number of local jurisdictions generally have low proportions of tertiary-educated residents. For instance, in 10 of the 18 countries analyzed, at least half of the jurisdictions have no more than 15% of adults with tertiary education. This data underscores the very low availability of specialized human capital in many cases.

The lack of amenities in rural and poorer localities makes it even more challenging to attract qualified personnel. Evidence from national programs for assigning doctors and teachers in Brazil and Peru supports this conclusion (Costa et al., 2024; Bobba et al., 2021). Both groups of service providers show a strong preference for working in urban areas with better amenities. As a result, personnel assigned to rural and poorer localities tend to have lower qualifications, and a significant proportion of positions in these areas remain unfilled. Programs offering salary bonuses in marginalized areas help mitigate this issue, but their impact is limited by the strong geographic and quality-of-life preferences of these professionals.

The public sector is characterized by a relatively high demand for qualified personnel

Graph 7.6
Adult population with tertiary education in local jurisdictions of Latin American and Caribbean countries



Note: The figure illustrates the percentage of adults aged 23 to 60 with either incomplete or complete tertiary education—both non-university and university—by local jurisdiction. The colors of the points indicate the 90th, 50th, and 10th percentiles of the distribution, as shown in the legend. The dashed line represents the share of public employees with completed tertiary education, calculated based on the simple average of World Bank (2022d) data from 16 Latin American and Caribbean countries, 14 of which are included in the graph.

Source: Author based on census data from the countries analyzed (see Table A.7.6 in the chapter appendix, available in the online edition of the RED report).

Areas of action

Regulatory framework

In their efforts to professionalize public service, countries in the region have developed legal frameworks and agencies at both the national and subnational levels with regulatory authority over various aspects of subnational public employment. At the heart of this regulatory framework lies a tension between national government control and the autonomy of subnational governments.

In a document prepared as input for this report, Pérez Chiqués et al. (2024) review the main characteristics of the regulatory framework in 18 Latin American and Caribbean countries. Broadly speaking, the authors identify similarities in how unitary and federal states regulate subnational public employment. However, within each group, there are notable differences between countries and in the delegation of various powers. For example, subnational governments in some unitary countries



Uru Chipaya is one of the four jurisdictions
with autonomous indigenous governance in Bolivia.

have the same level of autonomy—or even greater—than those in federal countries when it comes to expanding their workforce.

In general, the legal framework for subnational public employment comprises national legislation applicable to all public employment and laws specifically aimed at regulating employment in subnational governments. In federal countries, regional governments have the autonomy to define the legal frameworks regulating public employment within their jurisdictions, increasing the heterogeneity and complexity of the overall framework. In both federal and unitary systems, national agencies regulating employment and public finances exert some influence over subnational public employment, though the degree of involvement varies. Additional details on national and subnational agencies with authority over subnational public employment are provided in Table A.7.1 in the online appendix, available in the online edition of the RED report.

The legal framework for subnational public employment in Latin America and the Caribbean establishes merit as the guiding principle for decisions on hiring, promotion, and retention in public service (see Table 7.2). Most countries also include provisions against patronage and nepotism, and in some cases, these principles are embedded in their constitutions. However, the *de jure* framework may not reflect the *de facto* situation in many subnational bureaucracies.

The importance of employment stability is recognized by the legislation in every country in the region. It plays a critical role in reducing the connection between labor turnover and political cycles and in curbing patronage by severing bureaucrats' dependence on politicians for job security. However, strict dismissal protections can discourage effort, potentially affecting employee performance and the quality of public services. This issue is particularly significant when entry into public service does not follow merit-based processes. For example, a recent reform in Chile granted permanent contracts to teachers with temporary contracts and at least three years of service. As a result, retention of poorly evaluated teachers increased, while their performance, as reflected in their students' learning outcomes, declined (Estrada and Lombardi, 2022). Excessive regulation of employment and career service systems may also encourage reliance on temporary and private-regime contracts.

The legal framework in LAC countries clearly mandates that merit serve as the guiding principle for decisions regarding recruitment, promotion, and retention in subnational public service

A central element in the professionalization of bureaucracies is the process of entry into public service and the mechanisms employed for this purpose. Broadly, these mechanisms can be grouped into three categories: 1) competitive examinations with public and open calls, where criteria, weighting factors, and evaluation methods are transparently disclosed; 2) simplified processes that incorporate merit-based elements in hiring decisions but do not mandate public tenders or explicitly define the criteria, weighting factors, or evaluation methods to be used; and 3) the direct appointment of officials by designation. Each of these mechanisms has distinct advantages.

Competitive selection processes are generally the most suitable option for selecting permanent public servants in non-managerial roles, as they provide economies of scale, transparency, and reduced risks of manipulation. Simplified processes, by contrast, may be more appropriate for hiring temporary employees, given that the shorter duration of these contracts makes the more extensive and costly competitive examinations less appealing. Direct appointments and removals are desirable for leadership and support roles, where trust and ideological alignment with elected officials are essential to fulfilling their electoral mandates.

Table 7.2
Provisions related to merit in subnational public employment legislation

Country	Subnational public employment legal framework	Establishes career civil service	Requires merit for entry	Requires merit for promotion	Requires evaluation for retention	Ensures job security*	Includes anti-nepotism provisions	Includes anti-patronage provisions
Argentina	Constitution							
	Provincial legislation	✓	92% of the provinces	88% of the provinces	75% of the provinces	✓	21% of the provinces	83% of the provinces
Bolivia	Constitution	✓						
	Other legislation	✓	✓	✓	✓	✓	✓	✓
Brazil	Constitution	✓	✓			✓		✓
	Other legislation	✓	✓	✓	✓	✓		✓
Chile	Constitution	✓						
	Other legislation	✓	✓	✓	✓	✓	✓	✓
Colombia	Constitution	✓	✓	✓	✓		✓	
	Other legislation	✓	✓	✓	✓	✓		
Costa Rica	Constitution	✓	✓			✓		
	Other legislation	✓	✓	✓	✓	✓	✓	✓
Ecuador	Constitution	✓	✓	✓		✓		✓
	Other legislation	✓	✓	✓	✓	✓	✓	
El Salvador	Constitution	✓						
	Other legislation	✓	✓	✓	✓	✓	✓	
Honduras	Constitution	✓						
	Other legislation	✓	✓	✓		✓	✓	✓
Jamaica	Constitution and other legislation	✓	✓	✓	✓	✓		
Mexico	Constitution					✓		
	State legislation	✓	97% of the states	97% of the states	94% of the states	✓	69% of the states	75% of the states
Panama	Constitution	✓	✓			✓		
	Other legislation	✓	✓		✓	✓	✓	
Paraguay	Constitution	✓				✓		
	Other legislation	✓	✓	✓	✓	✓		✓
Peru	Constitution	✓						
	Other legislation	✓	✓	✓		✓		✓
Dominican Republic	Constitution	✓						
	Other legislation	✓	✓	✓	✓	✓		
Trinidad & Tobago	Constitution and other legislation	✓	✓	✓	✓	✓	✓	✓
Uruguay	Constitution	✓				✓		✓
	Public servant statute	✓	✓		✓	✓	✓	✓
	Departmental statutes	✓	Varies	Varies	Varies	Varies	Varies	Varies
Venezuela	Constitution	✓	✓	✓		✓		
	Other legislation	✓	✓	✓	✓	✓	✓	✓

Note: The asterisk (*) indicates whether the legal framework establishes that public officials can only be dismissed for just cause, as stipulated in the legislation. In Uruguay, the Public Servants' Statute applies to departments that have not enacted their own statutes. Appendix Table A.7.2 of the chapter, included in the online edition of the RED, lists the legal documents consulted.

Source: Author based on Pérez Chiqués et al. (2024).

Evidence from the region highlights the impact of using competitive examinations instead of discretionary methods on the profile of new hires and the quality of public services. In Mexico, teachers hired through discretionary processes controlled by the teachers' union tend to have lower competencies, and their students learn less compared to those selected through competitive examinations (Estrada, 2019; Bedoya et al., 2023). Similar findings have been documented in Colombia and Ecuador (Brutti and Torres, 2022; Araujo et al., 2020). In Mexico, competitive examinations were introduced to address concerns about abuses related to the inheritance and sale of teaching positions under the discretionary process.

Table 7.3 outlines the mechanisms specified in the legal frameworks of 18 countries for hiring new public servants in permanent, non-managerial roles. In most unitary countries (11 out of 14), regulations mandate the use of competitive examinations. In Bolivia, Jamaica, Trinidad and Tobago, and Venezuela, hiring is governed by simplified processes with merit-based elements. In Brazil, the federal constitution mandates competitive examinations for hiring officials at all levels of government. In Argentina and Mexico, each regional jurisdiction has its own legislation, resulting in significant variation in selection mechanisms, including direct appointments in some cases.

Table 7.3
Mechanisms for entry into subnational public service for non-managerial permanent positions

Country	Competitive examination	Simplified process with merit-based elements	Direct appointment
Argentina	✓	✓	✓
Bolivia		✓	
Brazil	✓		
Chile	✓		
Colombia	✓		
Costa Rica	✓		
Ecuador	✓		
El Salvador	✓		
Honduras		✓	
Jamaica		✓	
Mexico	✓	✓	✓
Panama	✓		
Paraguay	✓		
Peru	✓		
Dominican Republic	✓		
Trinidad & Tobago		✓	
Uruguay	✓		
Venezuela		✓	

Note: Countries mentioned in more than one category allow for multiple entry mechanisms under their legislation. It includes public officials with permanent contracts in either civil service career positions or public official positions when the first category does not exist. The "simplified process" category includes cases where legislation mandates a selection process that considers merit-based elements but does not specify the evaluation criteria or their weighting. It also includes cases where the process is not public, open, and transparent.

Source: Author based on the current legislation of each country (see Table A.7.3 in the chapter appendix, included in the online edition of the RED report).

Table 7.4
Regulations on wage bills in subnational governments

Country	Salary scales	Job creation	Wage bill provisions
	Level defined at		
Argentina	Subnational	Subnational	Indirectly limited through caps on current spending growth in regional jurisdictions. Prohibition on increasing jobs per capita in jurisdictions with fiscal deficits.
Bolivia	Subnational	Subnational	Indirectly limited through caps on operational spending and budget preparation under fiscal balance principles in regional and local governments.
Brazil	Subnational	Subnational	Limited to 60% of own revenues in regional and local jurisdictions.
Chile	National	Subnational	Limited to 42% of own revenues in local jurisdictions.
Colombia	Subnational	Subnational	Indirectly limited through caps on operational spending, which cannot exceed 50%-80% of freely disposable current revenues in regional and local jurisdictions, depending on the total amount of such revenues and population size.
Costa Rica	Subnational	Subnational	Indirectly limited through caps on general administrative spending, which cannot exceed 40% of the ordinary revenues of local jurisdictions.
Ecuador	National	Subnational	The Ministry of Labor Relations determines personnel spending in jurisdictions based on general guidelines set by the Ministry of Finance.
El Salvador	Subnational	Subnational	No specific criteria identified.
Honduras	Subnational	Subnational	Indirectly limited through caps on operational spending, which cannot exceed 40%-65% of current revenues in local jurisdictions, depending on the total amount of such revenues.
Jamaica	National	National	The Ministry of Finance and Public Service supervises the wage bill to ensure alignment with budget restrictions and financial policies.
Mexico	Subnational	Subnational	Growth limited to the lesser of 3% real growth in the wage bill or the real GDP growth rate in regional and local jurisdictions; zero real growth if GDP declines.
Panama	National	National	The Directorate General of Civil Service determines the job structure in accordance with the General State Budget.
Paraguay	National	National	The job structure is established in the General National Budget. The Ministry of Finance prepares its proposal after consulting the Public Service Secretariat.
Peru	National	Subnational	Typically limited by austerity, discipline, and quality spending measures imposed in budget laws
Dominican Republic	National	National	The Secretariat of State for Public Administration approves the job structure.
Trinidad & Tobago	National	National	Established by the Ministry of Rural Development and Local Government and the Ministry of Finance. The latter ensures alignment with budget restrictions and financial policies.
Uruguay	Subnational	Subnational	No specific criteria identified.
Venezuela	National	Subnational	Indirectly limited by a mandate to allocate at least 30% of the budget to investment spending in local jurisdictions and prepare budgets under fiscal balance principles in regional and local governments.

Note: In Argentina, jurisdictions that achieve a surplus or balanced financial outcome (on an accrual basis) are allowed to increase staffing levels tied to new investments aimed at expanding social services such as education, health, and security. The Federal Fiscal Responsibility Council establishes the optimal ratio of occupied positions (permanent, temporary, and contracted staff) suited to the characteristics of each jurisdiction, enabling exceptions.

Source: Author based on Pérez Chiqués et al. (2024) and national and subnational legislation (see Table A.7.4 in the chapter appendix, available in the online edition of the RED report).

The excessive growth of the public sector wage bill, including at the subnational level, is a frequent concern. Generally, legal frameworks in the region include provisions to control either the wage bill of subnational jurisdictions or its two components: workforce size and salary structures (see Table 7.4).

In most cases, subnational governments have flexibility to expand their workforce—albeit under certain restrictions that vary by country—but must comply with fiscal rules that cap the overall wage bill. For example, in Brazil and Chile, the wage bill cannot exceed 42% and 60% of a jurisdiction's own revenues, respectively. In Mexico, subnational wage bill growth cannot exceed 3% annually and must remain below the annual growth rate of GDP. In Bolivia, Colombia, Costa Rica, and Honduras, the wage bill is limited by restrictions on operational expenditures for subnational jurisdictions.

In contrast, in Jamaica, Panama, Paraguay, Dominican Republic, and Trinidad and Tobago, the creation of new positions requires approval from national authorities. In Argentina, regional governments with fiscal deficits are prohibited from increasing the number of public employees per capita.

In most cases, subnational governments have the flexibility to expand their workforce but must comply with fiscal rules that cap the wage bill

National regulations on subnational salary policies can help standardize working conditions across jurisdictions and prevent abuses that damage the reputation of the bureaucracy and strain public finances. However, excessively strict and uniform regulations may constrain jurisdictions' ability to align salaries with local labor market conditions.

The degree of autonomy granted to subnational jurisdictions to set salary scales varies across countries. In eight of the 14 unitary countries analyzed (including Peru, a relatively decentralized country), salary scales for subnational employment are determined at the national level. In the remaining six unitary countries, jurisdictions have the authority to define their own salary scales, although Bolivia and Uruguay require compliance with specific national guidelines. A similar approach is followed in the federal countries of Argentina, Brazil, and Mexico.

Wage premium

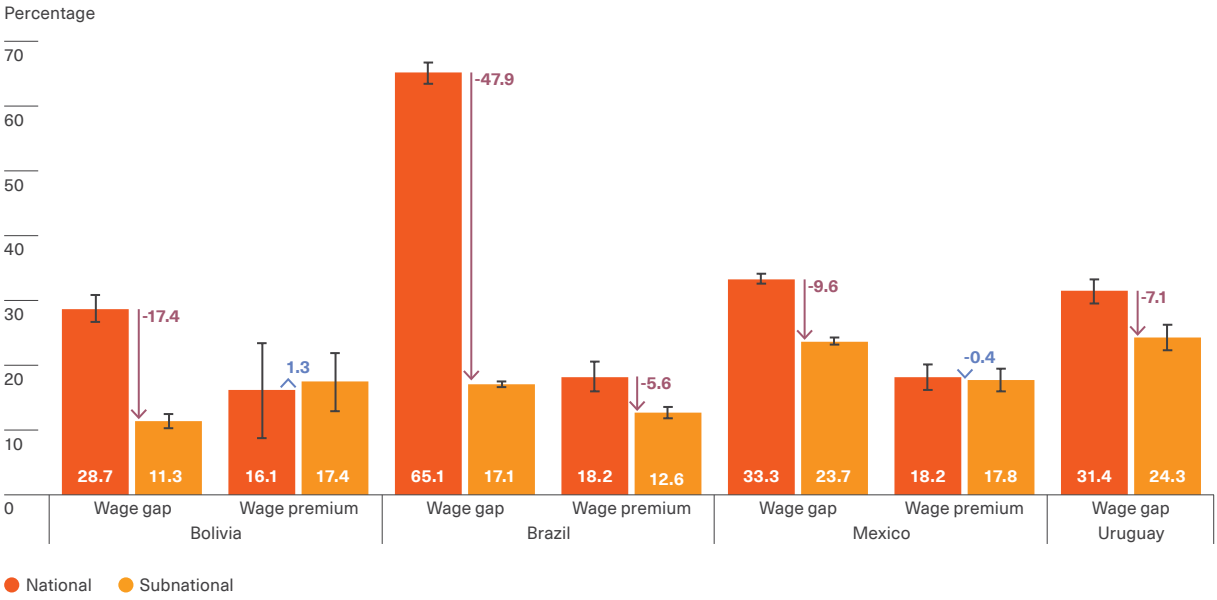
Working conditions, including competitive compensation, are critical for attracting and retaining qualified personnel in any organization, including bureaucracies (Dal Bó et al., 2013). However, excessively high salaries in the public sector compared to the private sector can undermine public financial sustainability, damage the government's image among citizens, and lead to inefficient talent allocation between the two sectors, negatively affecting economic growth.

When controlling for differences in education, age, gender, occupation type, working hours, and region of residence, average salaries in the subnational public sector are higher than those in the private sector but lower than those in the national public sector (see Graph 7.7). The salary gap between national and subnational levels varies significantly across countries, ranging from 7 percentage points in Uruguay to 48 percentage points in Brazil.

These wage gaps include a wage premium attributable to working in the public sector rather than the private sector, as well as unobserved differences in individual labor productivity. Since the survey structures in Bolivia, Brazil, and Mexico allow for such estimates, the wage premium in the public sector is calculated for these countries (see Graph 7.7).[7] The results show that working in the public sector offers, on average, a salary about 17% higher, with a similar premium across government levels. The exception is Brazil, where the subnational level offers a premium of 13%.

The combination of the magnitude of the observed wage premium and the better benefits typically associated with the public sector compared to the private sector—excluding the highest-paying positions—suggests that strengthening recruitment and attraction policies could improve the quality of hires at the subnational level.

Graph 7.7
Wage gap and premium in national and subnational public administration compared to formal private employment



Note: The graph illustrates differences between private sector workers and those in national and subnational public administration, differentiated by bar color. The wage premium estimate accounts for fixed individual effects in the regression. Vertical lines within each bar represent 95% confidence intervals. In all cases, the wage gap and premium between the private sector and the national and subnational public sectors are statistically significant at the 1% level. Labels are shown in purple when the differences between the national and subnational public sectors are statistically significant at the 1% level, and in blue when they are not significant. Details on sample composition can be found in the chapter appendix, included in the online edition of the RED report.

Source: Author based on data from IBGE (n.d. b), INE (n.d.; 2022), INEGI (n.d.), and the methodology of Báez et al. (2022).

7 The wage premium is estimated based on variations in the salaries of individuals who transition between public and private sector jobs. This requires surveys to have a panel dimension, meaning the same individuals are interviewed across multiple periods.

Training

Training is a key mechanism for developing the skills of public officials, improving their performance, and strengthening the institutional capacities of subnational governments in Latin America and the Caribbean. The need for training may be particularly pronounced at the subnational level due to higher staff turnover.

The need for training may be particularly pronounced at the subnational level due to higher staff turnover

There is limited rigorous evidence on the impact of training strategies on public officials' performance and their development of competencies. However, studies focusing on training for teachers and school principals offer some valuable insights. First, not all training programs deliver the expected outcomes. The alignment of the program design with the specific context and the quality of its implementation are critical factors for success. Training is generally more effective when it addresses a well-defined diagnosis of competency development needs and when the work environment supports the application of newly acquired skills and knowledge (Barrera-Osorio and Linden, 2009). The mode of training also plays a significant role. For instance, peer feedback based on workplace observations can be an effective tool for improving the performance of service providers (Álvarez Marinelli et al., 2023).

To reduce costs, the cascade training model replaces professional trainers with trained public officials who replicate the training among their peers. While this model can work well in certain contexts, it may have significantly less impact than direct training in others, as shown by the impact evaluation of a program to improve the management skills of school principals in Mexico (Romero et al., 2022).

Several countries in the region have agencies specifically dedicated to training public sector personnel. For example, Chile, Colombia, and Mexico have national public administration schools that offer a broad array of training programs, including academic courses, for both national and subnational officials. The Chilean case is widely regarded as a model for learning across the region (Corrales Angulo, 2024).

In Chile, the National Directorate of Civil Service (DNSC) has implemented a training management model that prioritizes needs assessment, multi-year planning, and evaluation of training activities. This decentralized model delegates the management and implementation of training plans to organizational units, while the DNSC focuses on system coordination and regulation. Additionally, the DNSC offers an extensive range of training programs through its virtual platform, CAMPUS Servicio Civil. In 2022, the system coordinated by the DNSC trained 218,517 public officials, representing 28% of the total public workforce (Corrales Angulo, 2024).

As part of its efforts to strengthen the institutional capacity of subnational governments in the region, CAF — Development Bank of Latin America and the Caribbean — offers a wide range of training programs for public officials (see Box 7.1).

Box 7.1
CAF training programs for public officials of subnational governments

CAF prioritizes strengthening the institutional capacity of subnational governments in Latin America and the Caribbean. To this end, it offers a diverse range of training programs to public officials in the region, including diplomas, programs targeting senior management and young professionals, and specialized online courses. These courses can take different forms, from long-term massive open online courses (MOOCs) and short-term options (NOOCs) to closed offerings. They include programs relevant to officials at all levels of government, as well as options specifically tailored to subnational governments.

Key CAF training programs include:

- **Diploma in Integration and Development for the Ibero-American Local Sphere**: Designed for subnational government personnel, this program focuses on strengthening the work of strategic local actors in designing and implementing policies. It is conducted in collaboration with the Ortega Marañón Foundation and Fundar.
- **Diploma in Governance and Public Innovation**: This program trains public administration leaders to analyze the political, economic, social, climate, and gender dimensions of public policies. It is implemented in partnership with 18 universities across the region.
- **Leadership for Transformation 2.0 Program**: Aimed at comprehensively enhancing the competencies of public sector leaders, this program places a strong emphasis on developing soft skills. It is delivered with the support of nine academic institutions.
- **Latin American High Leadership Program**: Focused on strengthening high-level government and public management capacities, this program has organized two mayoral summits (Southern Cone and Costa Rica).
- **Closed courses on BIM Methodology (Building Information Modeling)**: Targeted at municipal officials in Quito and Bogotá, these courses center on using construction information modeling techniques.
- **Road Safety Engineering Training**: Tailored for officials from 30 Brazilian municipalities, this course emphasizes the application of road safety engineering concepts to road projects.
- **Courses for mayors and local authorities of the BiodiverCities Network**: These courses aim to enhance political communication, leadership skills, and decision-making regarding the integration of biodiversity, natural capital, and ecosystem services into urban planning and management.

CAF also offers a wide range of free MOOCs covering topics of interest for public officials. These include courses on impact evaluation of public management, environmental economics and sustainable finance, road infrastructure provision, cities and climate change, sustainable mobility, and rural water and sanitation.

In collaboration with national and subnational governments and in response to their demands, CAF develops and delivers specialized closed courses on topics such as digital transformation, innovation in citizen participation, public-private partnerships, corporate governance in state-owned enterprises, and financing local investment projects.

Since 2022, around 10,000 participants have taken part in eight diploma programs and the Latin American High Leadership Program, 70% of whom were public officials from 21 countries. Additionally, over 260,000 individuals have enrolled in one of the MOOCs offered since 2017, with 59% being public officials from 40 countries. Finally, more than 980 subnational public officials have been trained through six courses specifically designed for them between 2021 and 2024.

Action CAF.
Scan the QR code to see CAF's training programs.



The municipality of Ciénaga de Zapata, in Cuba,
is the largest local jurisdiction by area in the Caribbean.

Local electoral systems

The characteristics of electoral systems play a significant role in determining the profiles of individuals elected to public office. The RED 2019 report demonstrates that competitive local elections, combined with access to public funding and rigorous mechanisms to control and ensure transparency in campaign financing and spending, result in the selection of better-qualified mayors and legislators (Fajardo et al., 2019). Developing electoral systems that prevent the exchange of public jobs for votes and electoral support is a critical step toward the professionalization of bureaucracies.

In-office incentives also play an important role. One key factor is the possibility of reelection, which, in principle, allows citizens to reward officials who perform well during their terms and penalize those who do not. However, unlimited reelection can dilute these incentives if it fosters collusion between officials and interest groups or reduces electoral competition. Prolonged tenure in office can weaken the independence between elected officials and the bureaucracies they oversee.

Table 7.5
Regulations on mayoral elections in Latin American and Caribbean Countries

Country	Term length (years)	Consecutive reelection allowed	Number of reelection terms
Mexico	3	✓	1
El Salvador	3	✓	Unlimited
Trinidad & Tobago	3	✓	Unlimited
Colombia	4		None
Peru	4		None
Brazil	4	✓	1
Costa Rica	4	✓	1
Ecuador	4	✓	1
Chile	4	✓	2
Argentina	4	✓	Between 1 and unlimited
Guatemala	4	✓	Unlimited
Honduras	4	✓	Unlimited
Jamaica	4	✓	Unlimited
Dominican Republic	4	✓	Unlimited
Venezuela	4	✓	Unlimited
Bolivia	5	✓	1
Paraguay	5	✓	1
Uruguay	5	✓	1
Guyana	5	✓	Unlimited
Nicaragua	5	✓	Unlimited
Panama	5	✓	Unlimited

Note: In Argentina, the number of reelection terms varies by province, with two terms being the general rule.

Source: Author based on ECLAC (n.d.) and national and subnational legislation (see details in Table A.7.5 in the chapter appendix, available in the online edition of the RED).

The characteristics of electoral systems play a significant role in determining the profiles of individuals elected to public office

Evidence indicates that the possibility of reelection creates incentives for mayors to perform better. For instance, it reduces corruption in Brazil (Ferraz and Finan, 2011). However, when reelection extends beyond two terms, it begins to negatively impact performance (De Benedetto and De Paola, 2019; Coviello and Gagliarducci, 2017).

In the region, nearly all countries allow mayors to be reelected, often without term limits. The exceptions are Colombia and Peru, where reelection is prohibited (see Table 7.5).

The concentration of power among local elites has raised concerns about the impact of political dynasties in politics. Studies in Brazil and Colombia provide evidence on this phenomenon (Caputo-Leyva, 2022; Bragança et al., 2015). In both cases, electing a mayor from a dynastic family has no effect on economic growth or the quality of public services, despite increases in infrastructure spending. These findings suggest that political dynasties undermine the quality of governance.

In summary, competitive local electoral systems encourage the election of better-prepared leaders and are essential for fostering professional bureaucracies. They limit the incentives and capacity of elected officials to bypass merit and use public employment for political purposes.



Seat of government for the municipality of Breves, Pará, Brazil.

Digitalization and management capacities

- Adoption of technologies for internal process management
- Digitalization of procedures and services for citizens and businesses
- Use of technologies to manage city and urban services
- Structural factors enabling the adoption of digitalization strategies



Key messages

1 Digital tools can help subnational governments improve three major areas of responsibility: internal administrative processes, procedures for citizens and businesses, and the deployment of technology to manage cities.

2 Internal processes that can be enhanced through digitalization include cadastre management, administrative and financial operations, and public procurement. Digitizing and modernizing cadastral systems can increase real estate tax collection capacity and enable the use of cadastral data in territorial planning.

3 The availability of digital services and procedures offered by local and regional governments remains limited. Most websites are used primarily to provide information about administrative procedures but do not enable users to complete those processes online.

4 Deploying technology in the field—such as cameras and sensors—offers the ability to collect information for managing public safety, traffic, or natural events. However, the effective use of these tools largely depends on the capacity and governance systems established to process the data generated and to respond appropriately.

5 Developing and adopting digital tools is expensive and may be cost-prohibitive for smaller jurisdictions. National governments play a central role in providing standardized systems, templates, and horizontal services—such as digital signatures and identity verification—not only to facilitate adoption but also to promote interoperability.

6 Access to and use of ICT in the region remains uneven, with significant geographic and demographic gaps. Recognizing connectivity and digital skills deficits is essential to ensure that digitalization strategies do not exclude segments of the population from accessing government services.

Digitalization and management capacities[1]

Introduction

One of the key pillars of modernizing public administration is the application of digital technologies and solutions in governance. The premise is that these tools, by automating processes and generating data, enhance public policy formulation and targeting, improve service delivery, prioritize scarce resources, and increase transparency for citizens.

National governments tend to adopt digital solutions before subnational governments. This is due, in part, to their role in establishing regulatory frameworks and the governance and institutional structures for data and systems. Furthermore, centralizing modernization strategies has the advantage of enabling economies of scale and facilitating the establishment of standards that ensure system compatibility and provide a unified experience for citizens and businesses (Cubo et al., 2022). On the other hand, the capabilities of these technologies apply to all levels of government and, in some cases, are even greater for local governments, which provide many services to citizens and directly manage their territories.

This chapter provides an overview of how local and regional governments in Latin America and the Caribbean (LAC) are incorporating digital solutions and data-driven practices into their management. The discussion is organized by the areas of application for these technologies. First, it examines their adoption in internal processes, focusing on cadastral systems, procurement systems, and financial administration platforms. The second section addresses the digitalization of procedures and services for citizens and businesses. Next, the chapter explores the deployment of technologies such as cameras, sensors, and radars which, when combined with machine learning algorithms and artificial intelligence, enable governments to address territorial challenges like traffic, safety, and

1 This chapter was written by Florencia Buccari and Gustavo Fajardo, with assistance from Pilar Toyos and Mateo Fernández.

extreme natural events. Finally, it examines the structural factors that underpin the progress of digitalization agendas in subnational governments, with particular emphasis on gaps in access to and use of information and communication technologies (ICT) across geographic regions and demographic groups.

Technology adoption in internal administration

Relying on electronic platforms to complete internal administrative processes offers the fundamental advantage of saving time and costs by streamlining procedures and ensuring they are carried out efficiently. Another benefit is the creation of an automatic record of all actions and transactions, which facilitates database updates, cross-referencing with other datasets, and reviewing processes. One example of these benefits can be seen in Nigeria, where the implementation of a pilot payroll management system in certain national public administration units resulted in cost savings by identifying duplicate payments and "ghost" workers (Gelb and Metz, 2018).

Internal digitalization also extends to administrative data, which arise from interactions and transactions between citizens and the government. This can improve the targeting and efficiency of public programs and policies (World Bank, 2021). For instance, Muralidharan et al. (2016) demonstrated that the introduction of electronic beneficiary records, combined with biometric data, for two of India's largest social programs reduced leakages.

At the subnational level, notable examples of digitalization include the digitalization of property cadastres, the implementation of electronic procurement systems, and financial administration platforms. While this list is not exhaustive, these areas represent fundamental functions supporting revenue and expenditure management in subnational governments.

Digitalization of property cadastres

Real estate taxes account for 42% of local government tax revenues in 11 countries in Latin America and the Caribbean (LAC). They offer clear advantages as a fiscal instrument: they are based on an immovable tax base, are transparent and progressive, and directly benefit taxpayers through services provided. However, collection rates in some LAC countries fall below their potential.[2] Barriers to increasing revenues include not only the elevated political costs of reforming real estate taxes but also challenges related to cadastral and tax administration systems of subnational governments, as well as institutional capacity for land and property valuation. A unique case in the region is Chile, where the central government is solely responsible for administering this tax, including managing the tax base and rates (De Cesare et al., 2016).

Digitizing cadastres —converting property records into electronic formats—is an important first step toward improving real estate tax administration. Several subnational governments have made progress in this area (Knebelmann, 2022). In Mexico, for instance, 61% of local governments had digitized their cadastral records by 2020, while in

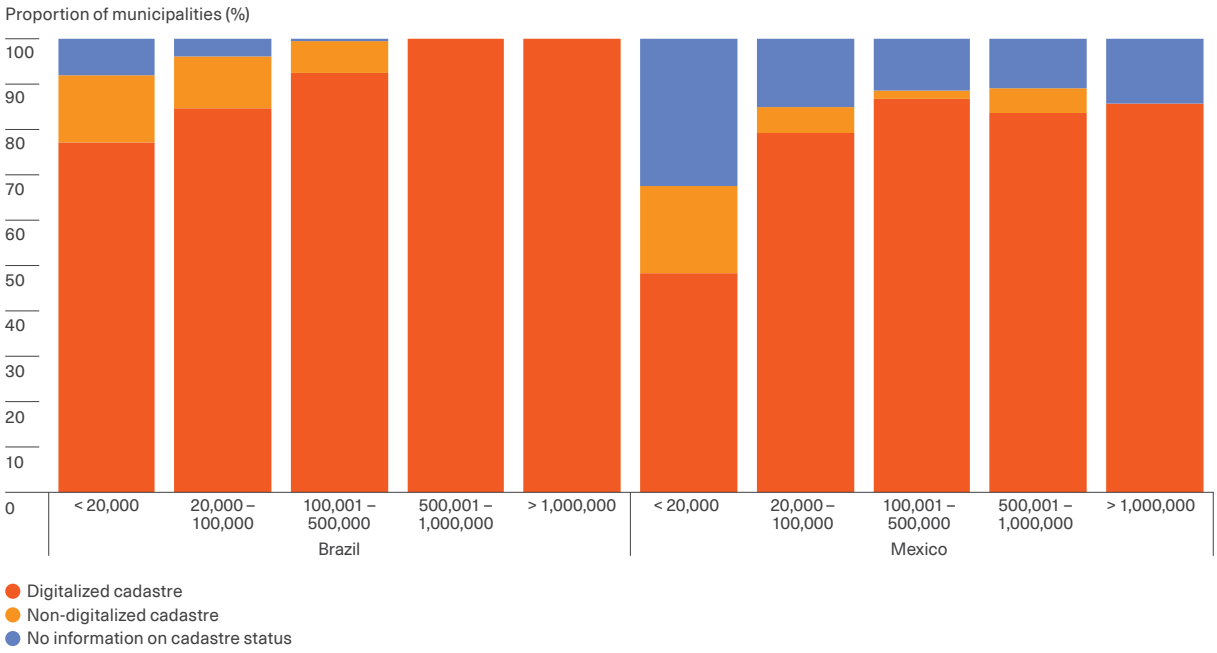
2 For more information, see Chapter 5.

Brazil, this figure was 80% in 2019, with 21% also georeferenced (IBGE, 2019; INEGI, 2021). In both countries, the likelihood of having digitized records increases with municipal population size (Graph 8.1).

The digitalization of cadastre systems facilitates the completeness and timely updating of property information. Data from Mexico supports this hypothesis: 67% of municipalities with digital records updated their cadastres in the previous year, compared to only 17% of those without digital systems (INEGI, 2021). In Brazil, although there is no clear difference in the frequency of cadastral updates, there is a significant gap in the update rates of the Generic Value Table, which establishes basic unit values for land and buildings. Among local governments with digitized cadastres, 65% updated the plan in the past ten years, compared to only 43% of those without digital records.

Regular cadastral updates are associated with better tax collection performance. Evidence from Martínez (2023) for Colombia supports this point. Until 2016, municipal cadastres in Colombia were centralized under the Agustín Codazzi Geographic Institute (IGAC), except for Bogotá, Cali, Medellín, and the Antioquia Department. IGAC handled cadastral updates, including property revaluations and the inclusion of unregistered properties. While updates were mandated every five years, delays were common. Martínez (2023) estimates that cadastral updates resulted in a 12% increase in per capita real estate tax revenue. Similarly, in Mexico, the adoption of cadastral modernization programs by local governments led to a 10% increase in revenue within the first five years (Montoya-Aguirre et al., 2024).

Graph 8.1
Proportion of local governments in Mexico and Brazil with digitalized cadastres, by population size



Note: The graph shows the digitalization of cadastral records in Mexican municipalities in 2020 and property cadastres in Brazilian municipalities in 2019. Definitions can be found in the appendix available in the online edition of the RED report.

Source: Authors based on IBGE (2019), INEGI (2021), and CAF (2025).

Subnational governments in LAC have made progress in digitizing cadastres: over 60% of municipalities in Mexico and more than 80% in Brazil have already taken this step

Georeferencing cadastral information represents a step beyond digitization, as it enables integration with data from other sources. A clear example of this integration is the work carried out by real estate market observatories, which collect data from various sources—such as cadastral records, property transaction records, real estate service companies, and chambers of commerce and industry—to monitor trends in the sector. In some cases, these observatories also apply predictive models to estimate land and property values, facilitating more frequent updates of the valuations used as the basis for real estate and transaction taxes (Eguino et al., 2020).

In recent years, georeferenced cadastral data has been combined with other spatial datasets, including road infrastructure maps, public transport routes, and the locations of economic activity hubs, schools, and health facilities. However, compiling these datasets requires standardization and interoperability, meaning they must comply with specific norms, specifications, and standards. This necessity has driven the creation of Spatial Data Infrastructures (SDIs), information systems comprising technological resources—such as servers, applications, and websites—dedicated to managing geographic data. These systems adhere to a set of standards to ensure accessibility and interoperability across multiple stakeholders (Eguino et al., 2020; MITECO, 2024). In Argentina, for example, 19 of the country's 23 intermediate-level governments have established their own SDIs, with some enabling local governments to join and create their own geoportals.

Subnational governments can leverage georeferenced cadastral systems to plan and define policies, such as those related to urban development, land-use management, and public safety programs. However, such applications remain limited. According to calculations based on data from Mexico's National Institute of Statistics and Geography (INEGI, 2021), only 35% of local governments in Mexico used cadastral information for urban development or land-use planning. This ratio varied depending on the digitization of the registry: 52% of municipalities with a digitized registry used it for urban planning purposes, compared to just 15% of those without one.

An illustrative example of the benefits of alternative applications for georeferenced cadastral data comes from the modernization of the cadastre in Fortaleza, Brazil. This modernization enabled the Municipal Secretariat of Urbanism and the Environment to access and use the cadastral data, enabling the streamlining of economic and construction feasibility consultations. When the system was first implemented, response times for these requests decreased from 120 days to near-instantaneous responses, while the number of consultations processed increased from 80 per semester to 265 per day (Eguino et al., 2020).

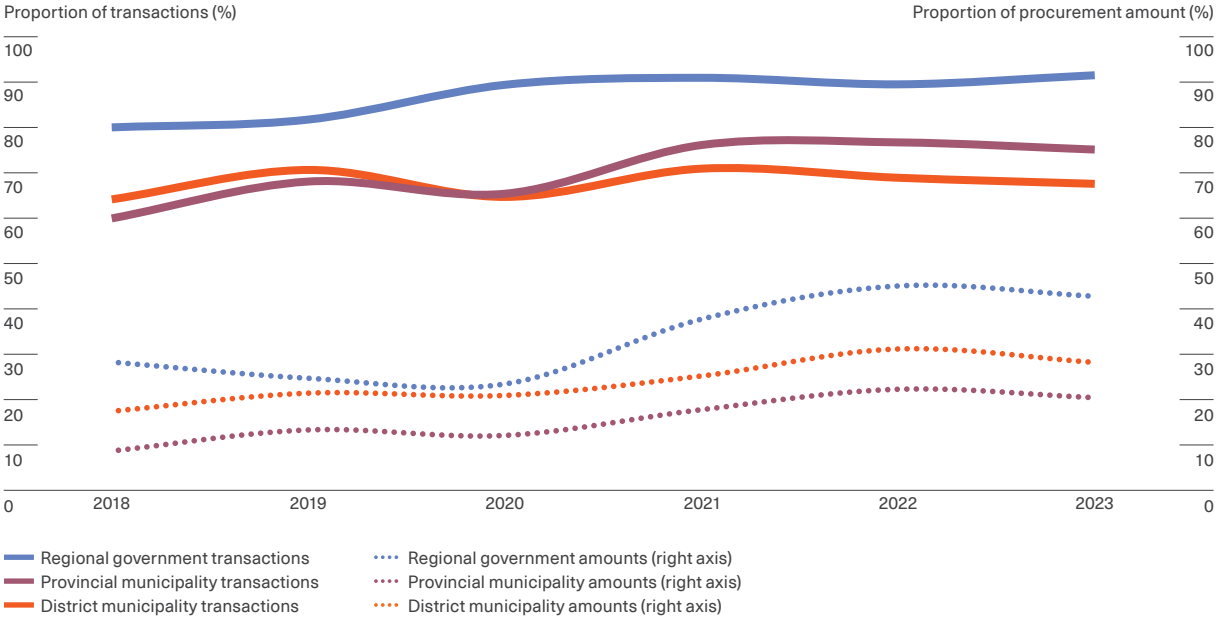
Electronic procurement systems

Studies show that the implementation of electronic procurement systems by subnational governments can yield numerous benefits. Lewis-Faupel et al. (2016) examined the adoption of e-procurement systems for infrastructure projects in regions and provinces in India and Indonesia. They found improvements in project quality (measured by on-time completion rates) and an increase in the number of winning contractors, which suggests greater openness and competition. Positive evidence also exists for the implementation of e-procurement platforms in Latin America and the Caribbean, but primarily at the national government level (De Michele and Pierri, 2020; Singer et al., 2009).

Electronic procurement systems offer the added advantage of automatically generating transaction records, which leads to the creation of large databases of past operations. These databases are invaluable for analyzing the efficiency of public procurement processes or identifying irregularities.

The adoption of these systems by regional and local governments is quantitatively significant given the large share of total public procurement they account for—ranging from 10% in Paraguay to 85% in Brazil (OECD, 2024b). A common first step in promoting the use of these platforms among subnational governments is their adoption at the central government level. In the region, 25 out of 30 countries with subnational governments had an active national e-procurement portal as of 2022 (World Bank, 2022b). Of the 10 South American countries with such systems, eight extend the scope of their national public procurement legislation to include subnational governments. All of these countries use electronic portals to systematize the procurement of homogeneous goods and acquisitions for infrastructure projects.

Graph 8.2
Use of electronic catalogs for public procurement by subnational governments in Peru, measured in terms of transactions and spending



Note: The left axis shows the proportion of transactions conducted through electronic catalogs relative to the total operations possible under framework agreements (i.e., those eligible for electronic catalog use). The right axis provides a similar analysis but in terms of procurement amounts. The data is disaggregated by levels of government: regional and local (provincial and district). Procurement data for transactions conducted through electronic catalogs comes from Perú Compras, while data for transactions conducted outside this mechanism is sourced from the State Procurement Supervisory Agency (OSCE). The figures reported represent averages for all subnational governments using both mechanisms in each year. Hospitals, universities, and schools are excluded.

Source: Author based on Open Contracting Partnership (2023a, 2023b).

Having an electronic platform, however, does not guarantee widespread use for public procurement operations, as purchasing units—both national and subnational—may find exceptions to avoid its adoption. Perú Compras illustrates this dynamic. Graph 8.2 shows the percentage of regional and local government purchases in Peru that could be conducted through electronic catalogs and were actually executed using this method. While the proportion of transactions conducted electronically is high, it is much lower in terms of total spending amounts. A similar analysis for central government agencies reveals comparable findings: in 2023, 88% of transactions eligible for electronic catalog use were completed through this mechanism, but electronically executed purchases accounted for only 17% of total spending (Open Contracting Partnership, 2023a, 2023b).

Three hypotheses may explain the limited use of electronic catalogs for high-value purchases, even though this mechanism is mandatory for products covered under framework agreements. First, a comparison of public procurement for similar goods reveals that items purchased outside the electronic catalog have higher prices—on average, 30% more expensive (Cusato Novelli, 2022). The second hypothesis suggests that officials include additional specifications for goods to bypass the use of electronic catalogs (Inostroza and Centa, 2020). Finally, Chile's experience seems to suggest that audits of purchases made through electronic platforms could disincentivize their use (Gerardino et al., 2024).

Administrative and financial management systems

Financial Management Information Systems (FMIS) are programs that support the budgetary, financial, and accounting management of the public sector. These systems enable the creation of a unified and timely record of revenues and expenditures and allow for the automatic generation of financial statements. Recent advancements have also enabled the operation of a Treasury Single Account, which provides a consolidated financial position and facilitates centralized balance management. In their current design, FMISs are composed of various modules beyond budget tracking, including public debt, procurement, and human resources management (Pimenta and Seco, 2021).

Implementing an FMIS benefits both subnational governments, providing them with organized and up-to-date financial and administrative information, and national entities, centralizing and standardizing data on budgets and finances across levels of government. As of 2022, all central governments in the region had implemented financial management systems, except for Trinidad and Tobago, where implementation was underway (World Bank, 2022b). These systems typically include features for budget planning and monitoring. Additionally, in 19 countries in the region, central government FMISs allow subnational governments to use their functionalities (World Bank, 2022b).

●●

While almost all central governments in LAC have an FMIS, only 19 allow subnational governments to access its functionalities

The development and adoption of these tools require careful management. Pimenta and Seco (2021) reviewed successful FMIS implementation cases in several Latin American and Caribbean countries and highlighted key lessons learned. First, implementing or modernizing such systems incrementally or in modular form can be favorable, since it facilitates their maintenance. Additionally, to encourage adoption, these systems must be designed with a user experience approach and accompanied by training and technical assistance for government officials. The authors note, however, that despite incorporating these principles in the region, many transactions



San Felipe, Mexico, is one of the region's newest municipalities, established in 2022.

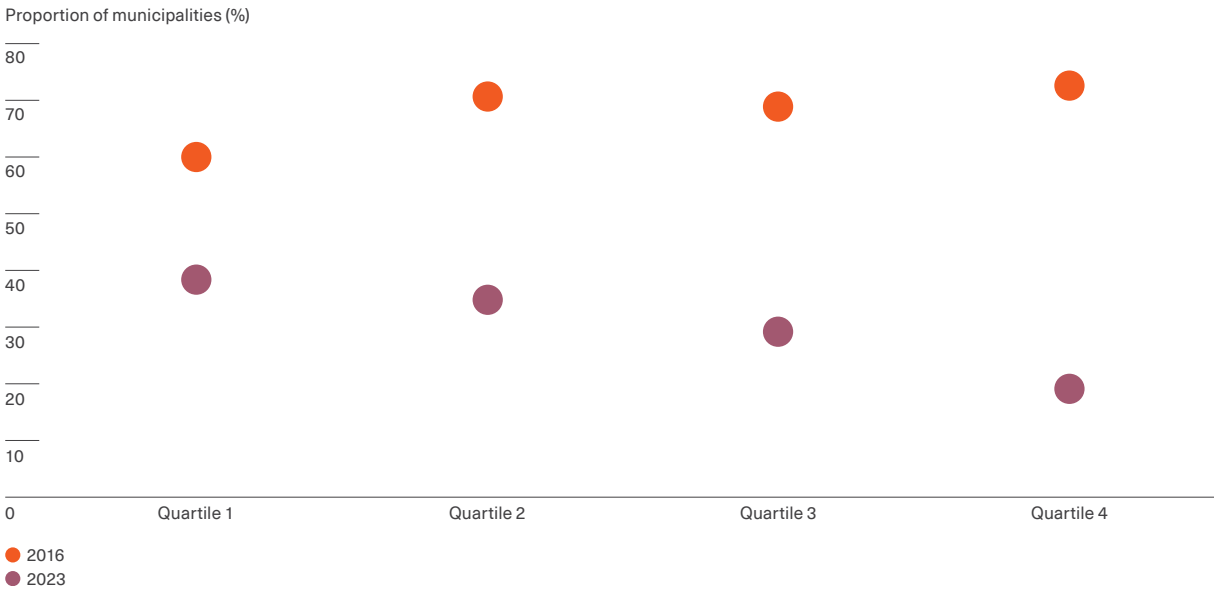
continued to occur outside these systems after their implementation, and alternative methods proliferated. This led to issues of interoperability and task duplication.

In many cases, subnational governments use alternative systems to national FMIS for their records, leading to task duplication and interoperability issues

The case of FMIS implementation in Peru illustrates several of these recommendations and highlights the challenges associated with such strategies. The central government began rolling out the FMIS for local governments in 2003, starting with the budget management module and providing support for its adoption (MEF of Peru, 2007). The territorial deployment of this system was carried out by offering the program free of charge and equipping municipalities with computers, modems, and printers. To assist with the software implementation, municipal officials received hands-on support from experts. Currently, the FMIS includes modules for budget management, treasury, debt, accounting, procurement, and human resources, and its use is mandatory for regional and local governments (Legislative Decree No. 1436, 2018).

Despite efforts to encourage local governments in Peru to use the FMIS, a significant proportion still operated their own budget systems alongside the national system in 2016, as shown in Graph 8.3. Starting in 2018, the Ministry of Economy and Finance introduced web-based applications for some FMIS modules (MEF of Peru, 2018), which may be related to a significant reduction of local governments that operated their own budget systems. However, the use of proprietary systems persisted in 2023, particularly in municipalities with lower per capita tax revenues (Graph 8.3).

Graph 8.3
Percentage of local governments in Peru operating their own budget systems, by per capita tax revenue quartile



Source: Authors based on INEI (2016, 2023b) and CAF (2025).

Modernizing administrative procedures and services for citizens and businesses

The most compelling argument for digitalizing public services and other administrative procedures is its potential to increase accessibility for citizens while reducing transaction costs (Gupta et al., 2017). Although it is difficult to estimate the welfare losses associated with bureaucratic procedures in the region, survey data indicates that completing such processes is often time-intensive. According to Latinobarómetro, a public opinion survey conducted across 19 countries in Latin America and the Caribbean, respondents reported spending an average of 5.4 hours on their most recent administrative procedure, with 25% requiring three or more interactions to complete (Roseth et al., 2018).

Delays and procedural burdens in administrative processes also impose significant costs on the productive sector, often being associated with lower rates of business creation (Branstetter et al., 2014; Djankov et al., 2018). Pellegrino and Zheng (2024) estimate that these inefficiencies can lead to losses of up to 4% of GDP in some European countries.

In the region, a study conducted in São Paulo estimated that digitalizing business-related processes—such as permits for transporting hazardous goods or property tax-related procedures—reduced the unit cost of applications by 67% (Pizzolato Gonçalves and Venijio Maggion, 2022). Similarly, surveys indicate that bureaucratic burdens can hinder the growth of existing businesses. In 2020, 28% of Mexican firms reported that the regulatory framework—comprising laws, processes, applications, and inspections—was an obstacle to their success (INEGI, 2020b). The primary barriers to compliance were, in order of importance, the time required, the need to provide the same information multiple times, the preparation and submission of government-mandated documents, and the associated costs.

Digitalizing public services can also reduce the costs of service provision for public administrations. In the same study conducted in São Paulo, digitalization was estimated to lower the unit cost of responding to a request by 40%, net of the costs associated with implementing digital solutions (Pizzolato Gonçalves and Venijio Maggion, 2022). These savings largely stem from reducing personnel dedicated to direct customer service and application processing.

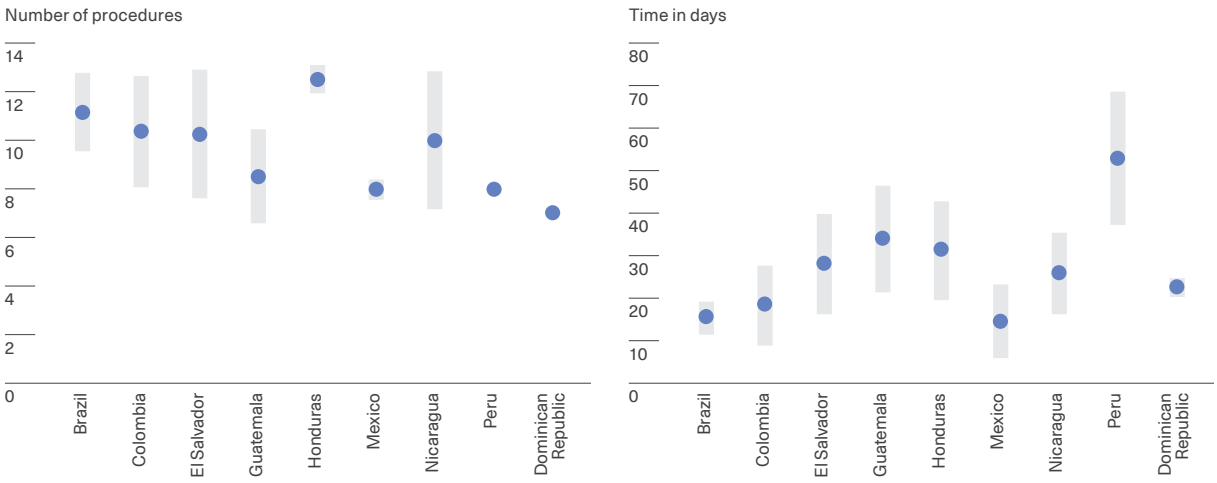
According to the World Bank's *Doing Business* report, companies in Latin America and the Caribbean wait an average of 28 days to start a business and 150 days to obtain a construction permit. Additionally, completing these processes requires between 10 and 16 separate procedures in each case (World Bank, 2022c). While this report does not provide representative data for local governments within each country, it does include surveys from various areas, and the geographic dispersion suggests a specific effect of subnational administrations (see Graph 8.4).

A basic prerequisite for offering digital services is having a government website. While this practice is widespread among subnational governments, it is not universal. For instance, according to a recent United Nations report, in six LAC countries, the largest local governments by population do not have websites (United Nations, 2022). Census data on subnational governments in the region also highlights significant disparities in website adoption: in Brazil, 96% of local governments had active websites in 2019, compared to only 55% in Peru by 2023 (IBGE, 2019; INEI, 2023b).

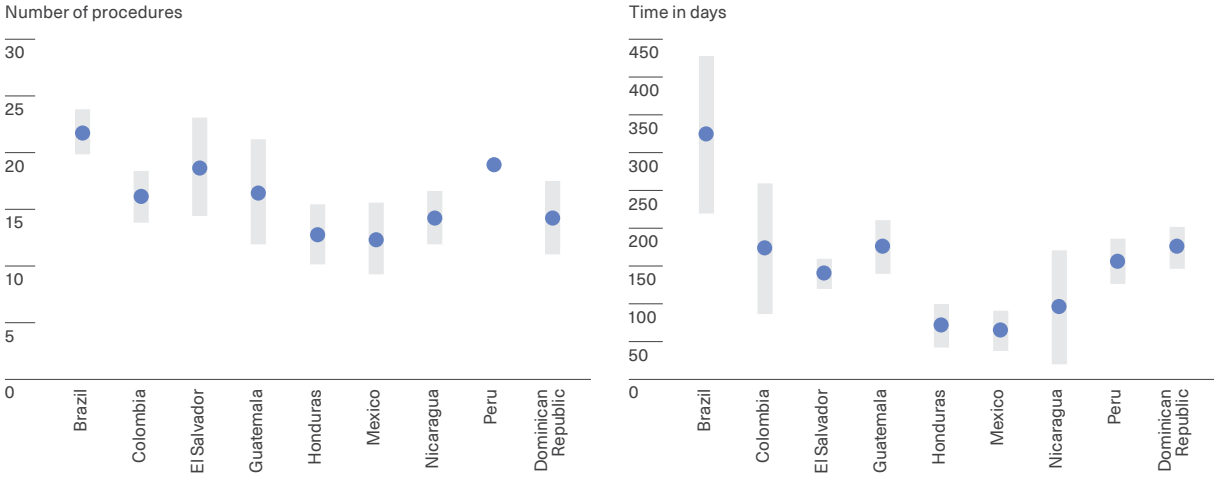
Having a website, however, is only a preliminary step, and many governments use their sites solely to provide general information about their offices. Data from Mexico's National Census of Municipal Governments and Territorial Demarcations reveals that only 10% of municipalities had any kind of procedure available on their websites in 2021 (INEGI, 2021). Of these, 53% were purely informational, 26% offered interactive features, and only 21% were transactional. These findings align with Roseth et al. (2018), who noted a nearly 15-percentage-point gap across the region between the proportion of processes that can be initiated online and those that can be fully completed online—except in Chile, where this gap is almost null. On the other hand, governments at more advanced stages of digitalizing their systems have implemented artificial intelligence to develop virtual assistants that provide additional information on online procedures and guide citizens through their completion.

Graph 8.4
Number of procedures and waiting days for starting a business and obtaining construction permits

Panel A.
Number of procedures and time required to start a business in Latin America and the Caribbean



Panel B.
Number of procedures and time required to obtain construction permits in Latin America and the Caribbean



Note: The graph shows the number of procedures and days required to start a business or obtain construction permits. The dot represents the average and the bar indicates the standard deviation across selected cities included in the *Doing Business* report for each Latin American and Caribbean country. The most recent data available was used: Brazil (2021), Peru (2020), Colombia (2017), Mexico (2016), and El Salvador, Guatemala, Honduras, Nicaragua, and the Dominican Republic (2015 for the last five countries).

Source: Authors based on World Bank (2022c).

According to the same municipal census in Mexico, the most in-demand administrative procedures—after payments for drinking water services and real estate taxes—were civil registry certificates and proof-of-residence documents. However, only 4% of municipalities offered these procedures

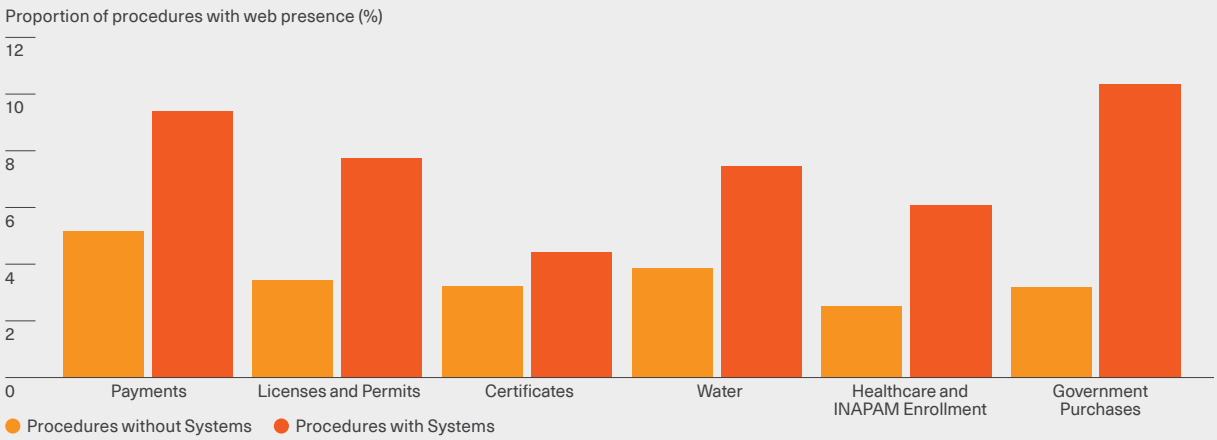
online. Similarly, while all regional governments in Brazil have websites, 30% do not provide their most in-demand public service online (CETIC, 2024). The development of online administrative processes is often linked to the implementation of internal systems within public administrations for processing or tracking applications, as explained in Box 8.1.

Digitalizing services and procedures can yield significant benefits when combined with administrative simplification measures. A classic example is the adoption of one-stop shops that integrate various services and processes into a single point of access, whether physical or digital (OECD, 2020b). Box 8.2 discusses some examples of these initiatives.

Box 8.1
The relationship between digitalizing citizen services and internal management systems

The digitalization of citizen services often depends on whether public administrations have internal IT systems to process requests. Data from the National Census of Municipal Governments and Territorial Demarcations in Mexico City (INEGI, 2021) illustrates the relationship between the internal and external components of administrative processes. The census asks two key questions regarding a wide range of procedures and services offered by municipalities: first, whether these services are accessible via the government's website; and second, whether internal IT systems are in place to manage them. The likelihood of offering online services increases significantly for municipalities that have internal systems for processing requests. As shown in Graph 1, on average, 7.5% of services supported by internal IT systems are available online, compared to less than 4% for municipalities without such systems.

Graph 1
Proportion of services available online based on the presence or absence of internal IT systems



Note: The "Payments" category includes payments for real estate taxes, fees for drinking water supply and drainage, traffic fines, and violations of administrative or public safety regulations. The "Licenses and Permits" category includes permits for events and shows, business licenses, construction permits, and public advertisement permits. The "Certificates" category covers proof-of-residence documents and certified copies of civil registry records. The "Water" category includes water and drainage service contracts, piped water services, water leak repairs, and wastewater discharge permits. The "Medical and Elderly Services" category refers to enrollment in the National Institute for Older Adults (INAPAM), medical consultations, and psychological counseling.

Source: Authors based on INEGI (2021).

Box 8.2
Digital one-stop shops

One-stop shops (OSS) have served various purposes since their inception. Common applications include social security services, foreign trade facilitation, and business and investment registration. A study on the implementation of a digital one-stop shop for business registration in the Dominican Republic in 2013 found that it led to increased formalization, particularly among smaller businesses (Bobić et al., 2023).

There are very few documented cases of one-stop-shop implementation at the subnational level in the region. An exception is Mexico's National Commission for Regulatory Improvement (CONAMER), which certifies local governments that establish digital one-stop shops for business creation and streamlined construction processes. For business creation, there are two programs: the Rapid Business Start-Up System (Sistema de Apertura Rápida de Empresas, SARE) and the Rapid Business Start-Up Recognition and Operation Program (Programa de Reconocimiento y Operación del Sistema de Apertura Rápida de Empresas, PROSARE). These programs certify that low-risk businesses in certified municipalities can be opened within three days using a standardized application, either in person or online. For construction, the Streamlined Construction Permit System (Ventanilla de Construcción Simplificada, VECS) certification applies to municipalities that issue municipal construction permits and related processes through a single one-stop shop. These processes must be resolved within 10 days, with no more than three interactions, using a single form. All of the aforementioned certifications provided by CONAMER must be renewed every two years.

As of late 2024, 114 of 2,469 municipalities had been certified under the rapid business start-up program, and all reported having a website for the corresponding procedures. Additionally, fewer than 10 municipalities held active certifications for one-stop shops related to construction processes (CONAMER, 2024).

Horizontal services for the digitalization of procedures: The role of central governments

The digital transformation of subnational governments should leverage shared tools developed by central government entities. These are also known as horizontal services or platform services. They include, for example, digital identification and digital signatures. Leveraging the economies of scale provided by these tools leads to efficiency gains, enables the digitalization of procedures that depend on them, and accelerates their development (Cubo et al., 2022). They also improve user experience by eliminating the need to input data and configure multiple platforms while ensuring system compatibility by default.

Online digital identity refers to systems that allow individuals to securely and remotely verify their identity for online transactions (Metz et al., 2024). A study conducted by Metz et al. (2024) examines the availability of national digital identification systems that meet the following requirements: i) guarantee a strict link between digital credentials and the physical person (e.g., through biometric data verification); ii) are operational and actively used by the population; and iii) grant access to multiple platforms or services, such as civil registries, social program beneficiary databases, tax payments, or local health services. Nearly all South American countries have implemented identification systems with these characteristics, as shown in Table 8.1, while adoption is lower in Central America and the Caribbean. By contrast, such systems are available in almost all OECD countries.

Table 8.1
Adoption of digital identity and digital signatures at the national level in Latin American and Caribbean countries

Country	National digital identity	Digital signature at the national level		
		Legislation	Infrastructure	In use
Antigua and Barbuda	No	Yes	Yes	No
Argentina	Yes	Yes	Yes	Yes
Bahamas	Yes	Yes	No	-
Belize	No	Yes	No	-
Bolivia	Yes	Yes	Yes	Yes
Brazil	Yes	Yes	Yes	Yes
Chile	Yes	Yes	Yes	Yes
Colombia	Yes	Yes	Yes	Yes
Costa Rica	No	Yes	Yes	Yes
Cuba	No	Yes	Yes	No
Dominica	No	No	No	-
Ecuador	No	Yes	Yes	Yes
El Salvador	No	Yes	Yes	No
Guatemala	No	Yes	Yes	Yes
Guyana	No	No	No	-
Haiti	No	No	No	-
Honduras	No	Yes	No	-
Jamaica	No	Yes	No	-
Mexico	No	Yes	Yes	Yes
Nicaragua	No	Yes	No	-
Panama	Yes	Yes	Yes	No
Paraguay	Yes	Yes	Yes	No
Peru	Yes	Yes	Yes	Yes
Dominican Republic	No	Yes	Yes	Yes
Saint Kitts and Nevis	No	Yes	No	-
Saint Lucia	No	Yes	No	-
Suriname	No	No	No	-
Trinidad and Tobago	Yes	Yes	No	-
Uruguay	Yes	Yes	Yes	Yes
Venezuela	No	Yes	Yes	No

Note: The table includes only LAC countries with subnational governments.

Source: Authors based on Metz et al. (2024) and World Bank (2022b).



The Autonomous Region of the South Caribbean Coast in Nicaragua has a self-governing Indigenous administration.

Digital signatures are required to carry out online procedures and services and to ensure the legal validity of resulting documents and transactions (Cubo et al., 2022). These services may be limited to public officials or extended to citizens and businesses. In the latter case, the workload for service-providing entities increases significantly, highlighting the importance of offering shared services across entities to reduce complexity. A best practice is to ensure that all public entities have access to the modules and programs that constitute these services and to make them easy to use.

Entradilla: National governments' digital identity and signature infrastructures should be leveraged by subnational governments, but many countries have yet to develop them

Given their nature, digital signatures require legal frameworks to enable their use. Table 8.1 shows that while most countries in the region have made progress in their legislation on this matter, only about one-third currently use these systems for public sector officials.

Chile provides an example of horizontal service implementation in the region. Through its State Digital Transformation Law, it offers regional and municipal governments cross-cutting platforms for digital identity (Clave Única) and digital signatures for government officials (FirmaGob). The legislation categorizes regional and local governments, establishing deadlines for the full implementation of these tools. As of June 2024, digital document signing had been implemented in 83% of regional and local governments, while digital authentication services were available in only 29% (SGD, 2024).

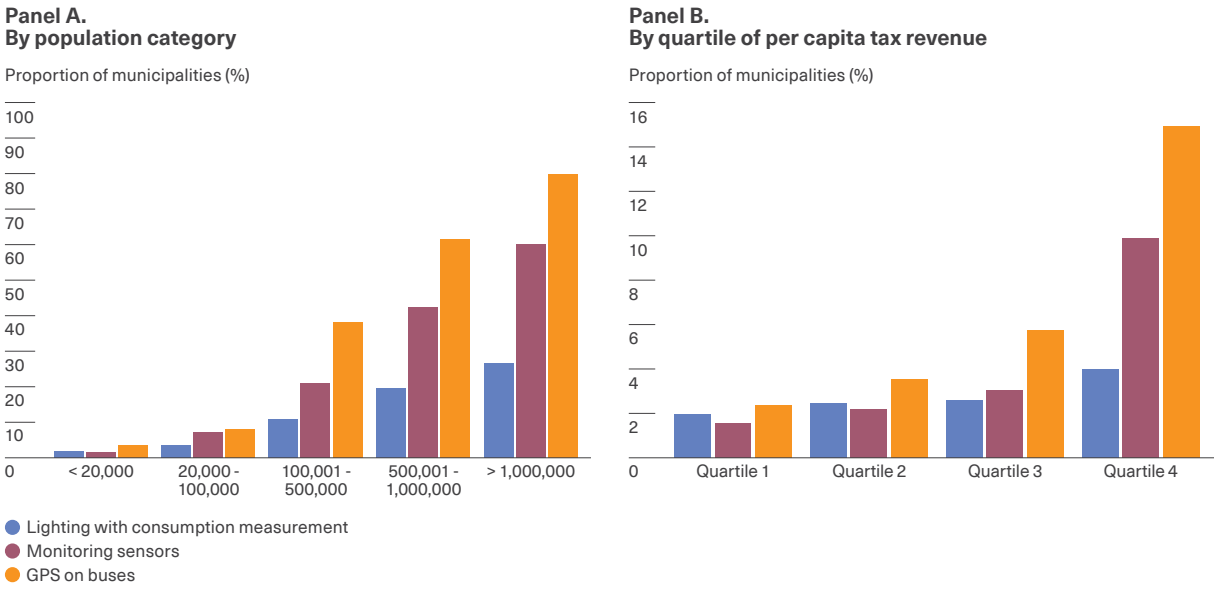
Use of technologies for city management

In recent decades, new technologies such as sensors, cameras, and global positioning systems (GPS) have emerged and improved, enabling high-frequency monitoring of activities within a territory. This type of information has very tangible potential applications for local governments, which manage urban affairs more directly. For example, by combining these data with machine learning and artificial intelligence models, alert and response systems have been implemented to address traffic issues, potential natural disasters, and public safety.

Local governments have begun adopting these technologies, though progress has been gradual. In 2019, 7% of local governments in Brazil had GPS systems that transmit location and speed data installed in their buses; 4% used sensors, which monitor areas at risk of natural disasters; and fewer than 3% employed lighting systems that measure real-time energy consumption (IBGE, 2019). The use of these tools increases with municipal population size and income (Graph 8.5). Larger municipalities are better positioned to afford the high installation costs of such devices. Additionally, data processing requires significant computational capacity, often necessitating cloud services. By 2022, 11 countries in the region were already using these services, and eight national governments had launched initiatives to begin using cloud computing. Among these 19 countries, eight had developed strategies to centralize central government services with local governments (World Bank, 2022b).

One example of these tools' adoption is the Welcoming, Global, and Smart City Program (Ribeirão Ágil – Ciudad acogedora, Global e Inteligente) Program in Ribeirão Preto, Brazil. Funded by CAF — Development Bank of Latin America and the Caribbean —, the project aims to modernize municipal management and improve the quality of public services. It includes the installation of new video surveillance cameras and the modernization of the Municipal Integrated Video Surveillance Center.

Graph 8.5
Proportion of local governments in Brazil using real-time monitoring tools in 2019



Source: Authors based on IBGE (2019), CAF (2025), and STN (2023d).

To aggregate and process the high-frequency information collected by sensors and cameras—often combined with external data sources—monitoring centers have been implemented (Cabello, 2022). These units use the data to monitor, prevent, and respond quickly to local issues such as traffic or security problems. An interesting case is Medellín's Intelligent Mobility System, which collects data from monitoring cameras and traffic lights equipped with vehicle detection sensors capable of capturing traffic information. The data is integrated into the Mobility Control Center, which transmits alerts to citizens via social media and city-installed panels.

The monitoring center model is beginning to expand among local governments in Brazil: 11% of municipalities had operational control centers in 2019 (IBGE, 2019), covering over half of municipalities with populations between 100,000 and 1 million inhabitants. A notable example is the Rio de Janeiro Operations Center (COR), inaugurated in 2010. It combines its own traffic and transportation data with private applications such as Waze and Moovit, public safety data, and information on potential extreme weather events (e.g., heat waves and floods). Its goal is to identify and manage crises (Municipal Government of Rio de Janeiro, 2024). Box 8.3 provides details on other cases of cooperation with the private sector for data collection.

One factor that explains the still limited adoption of monitoring centers and related technologies is the high cost of installation and operation. For example, the Regional Government of Santiago de Chile estimated the cost of installing 400 cameras in 2023 at approximately USD 7,000 per unit (Metropolitan Regional Council of Santiago, 2023). Operational costs also vary widely among governments and can be significant. In the case of Rio de Janeiro, for instance, the 2023 budget allocated USD 5 million for COR's operational expenses that year (Municipal Government of Rio de Janeiro, 2023).

Box 8.3
Cooperation with the private sector for data collection

The significant growth of the digital service economy has led to the emergence of private companies and organizations that collect vast amounts of information through their activities (social media posts, satellite images, mobility applications). This creates opportunities for new data sources that could potentially be used by the public sector. Examples of potential applications include disaster response targeting, greater geographic and temporal disaggregation in socioeconomic status estimates for households, and road accident monitoring (World Bank, 2021).

One example of a public-private agreement is the partnership between the Rio de Janeiro Operations Center (COR) and mobility applications such as Moovit and Waze, which provide city traffic data. The COR uses these applications to send notifications to citizens about construction projects that may impact mobility and receives real-time traffic updates from the applications' users (Municipal Government of Rio de Janeiro, 2024).

A general caution regarding the public sector's use of such data is that it must be handled with great care. Specifically, potential biases in data coverage and representativeness should be considered (e.g., data from a cellular services company with low penetration in certain regions or socioeconomic strata). Additionally, governments should be mindful of prior data cleaning and processing by the private sector actors providing the data (World Bank, 2021). The public sector must also ensure the confidentiality of the data obtained from private entities and clearly define the purposes for its use. To this end, governments can rely on the confidentiality frameworks already established in their statistical systems (European Commission, 2020).

To date, the implementation of such collaborations has not expanded significantly.

Capabilities and enabling factors for modernization

Despite the arguments presented in this chapter in favor of investing in data use and information technologies, progress among subnational governments remains incipient. Several factors contribute to this. First, these investments are costly. Evidence that costs are a significant factor can be seen in the higher penetration of technological solutions in more populated and wealthier jurisdictions, where budgetary constraints are less restrictive, as shown throughout this chapter. National government initiative is essential to addressing this issue. By leveraging economies of scale, they can offer standardized models and platforms for subnational governments to adopt. This approach can address at least some of the costs associated with developing and adopting software. However, other costs, such as purchasing equipment, hiring personnel, and making organizational adjustments, cannot be addressed through this method.

In addition to costs, there may be a perception among authorities that these investments yield low returns. While direct evidence in this regard is difficult to obtain, recent studies have explored how much government organizations value quantitative evidence when making decisions. This may reflect a broader organizational culture oriented toward data use and digital tools. Findings from these studies, which have focused on municipal governments,

suggest that organizations respond to evidence but only moderately and that institutional continuity and inertia often carry more weight in decision-making (DellaVigna et al., 2024; Hjort et al., 2019).

Costs, organizational culture, and political economy factors influence subnational governments' decisions on the use of technologies and data

Political economy factors can also hinder digitalization efforts. For example, authorities may perceive reforms as potentially detrimental, either by reducing their revenue streams or affecting their popularity. In line with this, Ferraz et al. (2024) found that Brazilian municipalities invest little in fiscal capacity (including property registries) when they receive substantial transfers from the national government, to avoid the political cost of increasing taxes. In some cases, however, political competition can incentivize reforms. For instance, Berliner and Erlich (2015) found that state-level freedom of information laws, often closely tied to digitalization, were passed more quickly in Mexican states with higher levels of political competition because authorities in such states had more incentive to raise transparency standards when the likelihood of political alternation was high.

The paragraphs above highlight factors closely tied to the incentive and cost calculations faced by subnational authorities when deciding whether to pursue digitalization initiatives. On the other hand, some more structural factors, which are beyond the immediate decisions of authorities, play a significant role in determining the viability of such initiatives. Next, four of these structural factors are described: the quality of infrastructure and citizens' skills, the capacities of subnational bureaucracies, the digitalization strategies of national governments, and collaboration with the private sector.

Digital gaps: Infrastructure and citizen skills

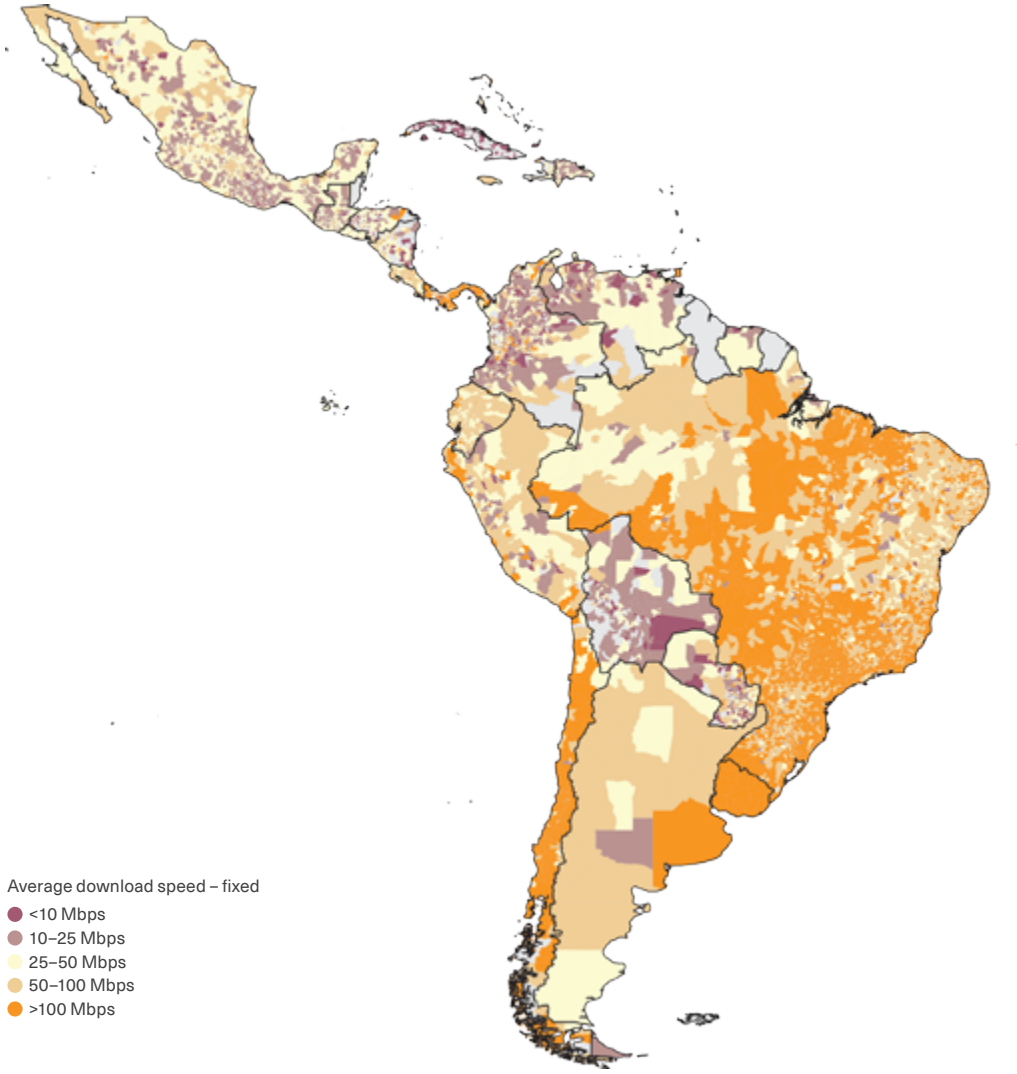
The value of digital services offered by subnational governments depends on demand, which in turn relies on the population's access to and ability to use ICTs. In LAC, there are significant digital gaps, with substantial inequalities in access and usage, making it essential to explore the sources of these differences.

The first source of the digital gaps is internet quality, which is directly linked to digital infrastructure. Figure 8.1 illustrates fixed internet download speeds at the subnational level throughout the region. With exceptions like Chile and Uruguay, where speeds are uniform and high, most countries show significant geographic disparities. Twenty-two percent of jurisdictions have download speeds below 25 megabits per second (Mbps), making simple tasks like file downloads, email, or online conferencing across multiple devices difficult. Fixed internet speeds often reflect the connection quality available to subnational government offices. However, from the user's perspective, mobile connectivity is more relevant and tends to be worse. In the average jurisdiction, mobile download speeds are 50% lower than fixed speeds, and 37% of jurisdictions have mobile speeds below 25 Mbps (Figure A.8.1).[3]

Ownership or access to devices is another determinant of ICT use. While computer ownership is low in the region, mobile phone penetration is exceptionally high, with over 90% of individuals in countries with household survey data (e.g., Bolivia, Brazil, Colombia, and Mexico) reporting ownership. This disparity highlights the importance of mobile internet for users. On the other hand, age stands out as a notable source of heterogeneity. Mobile phone ownership drops to between 60% and 75% among individuals aged 65 and older.

3 The affordability of internet services can also be a barrier, as shown in the Ideal 2021 report (Cont et al., 2021).

Figure 8.1
Average download speeds of fixed connectivity in 2023 for local and regional governments in Latin America and the Caribbean



Note: The map presents average download speeds in 2023, measured in megabits per second (Mbps). Data comes from OOKLA (2023), which collects speed test results from users with GPS-enabled devices connected via Wi-Fi and Ethernet.

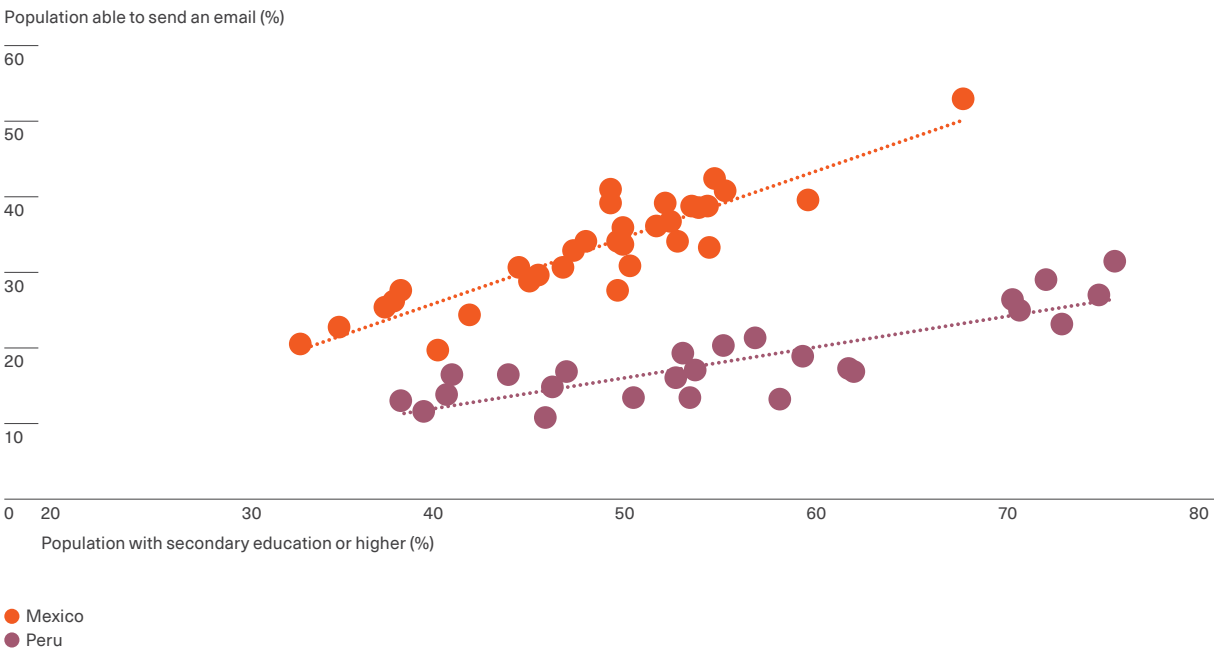
Source: Authors based on OOKLA (2023) and CAF (2025).

Finally, the ability to use online services and procedures depends on citizens' basic digital skills, an area where the region lags behind developed countries. Measurements of basic skills (e.g., copying or moving files or sending emails with attachments) show that only 28% of the population in LAC possess these skills, compared to 64% in OECD countries (Dalio et al., 2023). These skills also vary geographically and correlate with educational attainment. Graph 8.6 presents data from Mexico and Peru, illustrating the positive relationship between the percentage of individuals with secondary or higher education in a jurisdiction and the percentage able to send an email with attachments.

To address gaps in internet quality, device access, and skills, subnational governments in the region implement digital inclusion policies and programs. The 2019 Municipal Basic Information Survey (MUNIC) in Brazil collected data on four such initiatives implemented by municipalities. Fifty-five percent of municipalities reported some type of action, with the most common being the installation of computers in public schools, and the least common being computer courses for the general population (Graph 8.7).

Other examples include the Santa Fe + Connected program (Santa Fe + Conectada), implemented by the provincial government of Santa Fe (Argentina) with CAF funding. Its objectives include extending the provincial internet network through fiber optic deployment, providing wireless (Wi-Fi) connections to low-income neighborhoods in the cities of Rosario and Santa Fe, and developing tools and training to improve the digital skills of teachers and students.

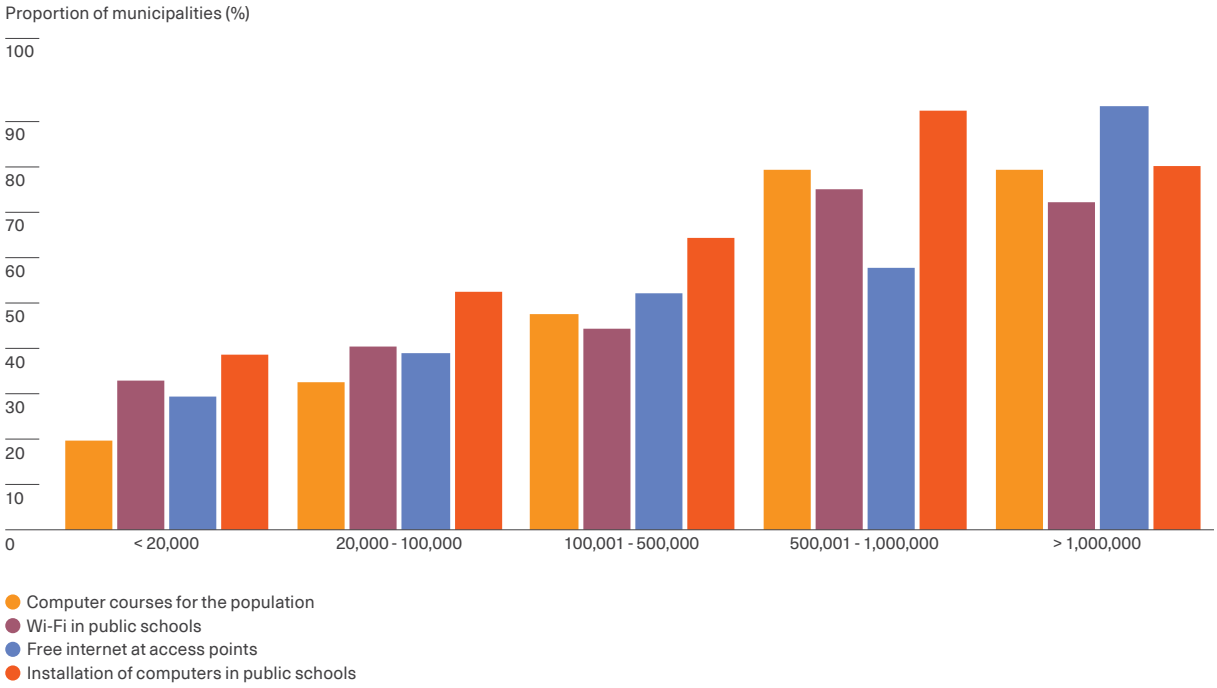
Graph 8.6
Relationship between educational level and basic digital skills in jurisdictions of Mexico and Peru



Note: The graph shows the percentage of individuals aged 18 and over in Mexico and Peru who can send an email using a computer, compared to the percentage of individuals with at least a secondary education.

Source: Authors based on INEGI (2023b) and INEI (2023a).

Graph 8.7
Digital inclusion actions in local governments of Brazil in 2019 by population category



Source: Authors based on IBGE (2019) and CAF (2025).

In addition to these digital inclusion initiatives, the observed patterns of access and usage highlight several policy implications for subnational governments' digitalization strategies. One implication is that websites and digital service platforms must be accessible from smartphones, a feature that is often overlooked. As of 2019, data from Brazil indicated that only 25% of municipalities had designed a mobile-friendly website or one adaptable to mobile devices (IBGE, 2019).

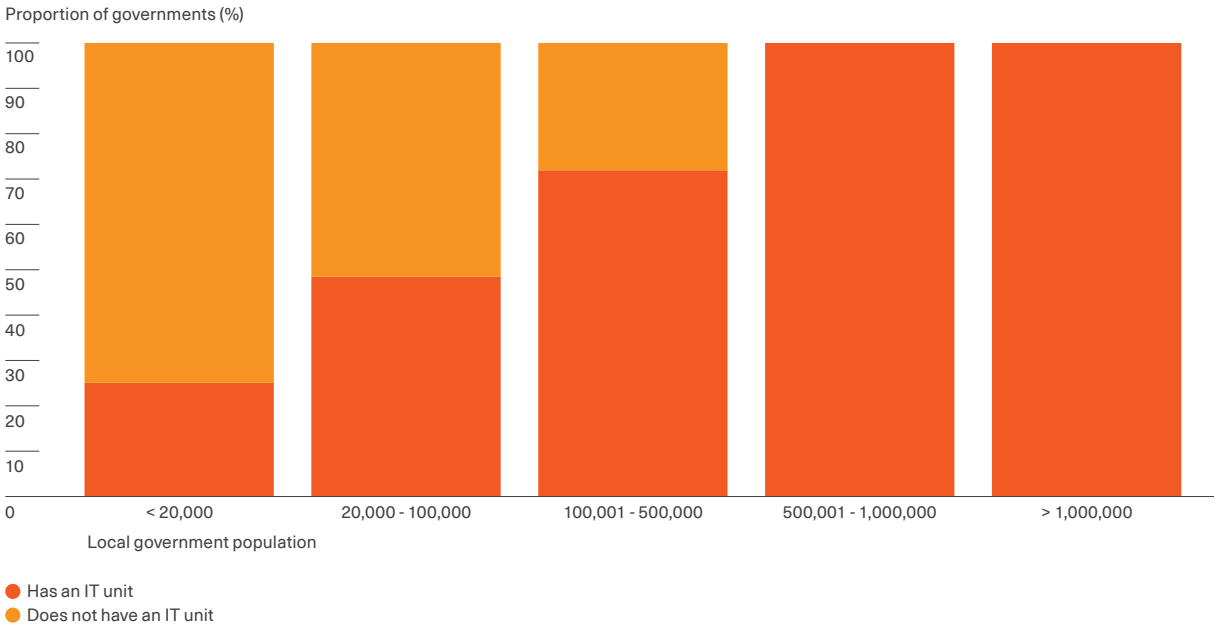
Another more critical implication is that electronic services and procedures must always retain traditional (non-digital) channels of access. This principle, known as omnichannel, is essential to avoid excluding population groups with limited or no access to ICTs. Moreover, as mentioned earlier, user experience and service quality across different access channels must remain consistent (OECD and CAF, 2023).

Bureaucratic capacities for digitalization

Digitalization requires skilled personnel. Even for the most basic levels of digitalization, there is a need for staff specializing in IT, security, and information systems to handle technical support tasks. However, not all subnational governments have units dedicated to these functions. Payroll data from Ecuador's cantons show that only 42% of cantons had such units between 2018 and 2023.

Unsurprisingly, this percentage increases with the size of the local government. In Brazil, just over half (58%) of municipalities had a technology and IT unit in 2019 (IBGE, 2019).

Graph 8.8
Proportion of local governments in Ecuador with ICT units, 2018–2023



Source: Authors based on Ecuadorian cantons' transparency webpages.

The lack of such units in smaller municipalities reflects their limited use of computers and software applications, which may not justify a dedicated support position. This highlights an important principle: digitalization strategies should not be uniform across subnational governments but should adapt to the specific needs and resources of each jurisdiction. Some of the more complex solutions discussed in this chapter can only be implemented in jurisdictions of a certain size.

For jurisdictions with sufficient scale, the value of digitalization increases when complementarities within the organization are exploited. For instance, the value of an electronic procurement system grows if, beyond facilitating transactions, its records are used to build management indicators or audit processes. Two important actions can foster such complementarities: first, enhancing the skills of staff across the organization; and second, creating units that promote the use of data in management. These units generate internal demand for the systematic use of digital tools, which are themselves sources of data.



The Bolívar state in Venezuela is home to Canaima National Park, one of the largest protected areas in Latin America and the Caribbean.

To enhance staff skills, subnational administrations can adjust hiring requirements and provide training for current employees. Economies of scale can be leveraged by including subnational governments in training programs already offered by central governments. According to a survey by OECD and CAF (2023), nine out of 13 national governments in the region include subnational governments in their capacity-building strategies. Topics covered in these courses include digital transformation, innovation, and change management. In some cases (e.g., Argentina, Brazil, Chile, and Uruguay), these programs have been specifically designed for local and regional governments.

Box 8.4
Traditional data collection

Understanding socioeconomic variables such as education, employment, income, and housing conditions, among many others, is essential for governments. These variables provide insights into the population's quality of life and well-being and allow for the monitoring of public policy impacts. This information is primarily collected through national statistical offices. In addition to censuses, these offices develop various data collection tools, with the most common being household or living conditions surveys and labor market surveys.

A limitation of national surveys for subnational governments is that they often do not cover the entire national territory and may not provide representative results at regional and local levels. In LAC, nine out of 23 countries with household or labor market surveys do not provide data representative of any subnational government level. Regarding regional governments, eight countries have surveys representative for all their jurisdictions, and one more has representation for some. For local governments, only Antigua and Barbuda has surveys that are representative for all municipalities, while eight countries have surveys representative for some.

Given the limitations of national statistics in providing representative results for subnational governments, these entities may choose to collect data themselves. Typically, this has been done through their own statistical institutions or units, using traditional methods such as surveys. However, due to the high costs of establishing such units and conducting primary data collection, these activities are mainly carried out by jurisdictions with more resources, such as high-income cities and regional governments in federal countries. For example, in Argentina, each provincial government has its own statistical unit that coordinates with the National Institute of Statistics and Censuses (INDEC) on annual statistical activities. In Mexico, according to the National Census of State Governments, all 32 federal entities engaged in statistical and geographic data generation and processing activities in 2022.

At the local government level, the most basic arrangement involves having a unit responsible for working with data (public or private) to produce multipurpose indicators. However, not all subnational governments have statistical teams, let alone a dedicated area. It is difficult to obtain specific data, but the National Census of Municipal Governments and Territorial Demarcations of Mexico City (INEGI, 2021) offers some insights. In 2020, 20% of municipalities reported performing some type of statistical and geographic information processing, with this proportion increasing alongside the population size and wealth of the local government (approximated by per capita tax revenue).

Regarding units that promote data use, a notable example is government delivery units. These units are responsible for setting quantitative goals or indicators related to priority management objectives and monitoring their progress (Barber et al., 2011). Through these functions, they have encouraged the use of statistics in policymaking and monitoring. When deficiencies in the necessary information are identified, these units play a key role in generating data. In this sense, these units demand various types of data. On the one hand, they promote the use of digital records of government processes, which provide information on aspects such as the financial and operational execution of government programs. On the other hand, they rely on demographic and socioeconomic variables derived from more traditional data sources, such as surveys conducted by national or subnational statistical offices (Box 8.4).

Several countries in the region include subnational governments in their national skills upgrading strategies, which is crucial for capacity building

Subnational governments in LAC have begun implementing delivery units over the past two decades at local and regional levels (Alessandro, 2020). According to examples documented by Alessandro and by Lafuente and González (2018), the objectives of these units have covered areas such as public safety, health, education, and infrastructure. The number of objectives monitored varies significantly, with up to 290 strategic projects tracked simultaneously in some cases.

Impact evaluation units are another type of unit that uses data intensively. These focus on measuring the impact of programs and policies, such as the effect of hotspot policing schemes on crime rates. Conducting such evaluations is costly and logistically complex, so it is generally reserved for sufficiently large organizations. However, these evaluations provide value to administrative records and other data sources. Developing such units only makes sense if the evidence is used to inform decision-making. In Mexico, the National Council for the Evaluation of Social Development Policy (CONEVAL) oversees the adoption of monitoring and evaluation functions by regional governments. Its 2023 report highlights that 31 out of 32 regional governments have made evaluations mandatory for their social development policies, although only 12 have established an institution with technical and managerial autonomy.

Interaction with national governments

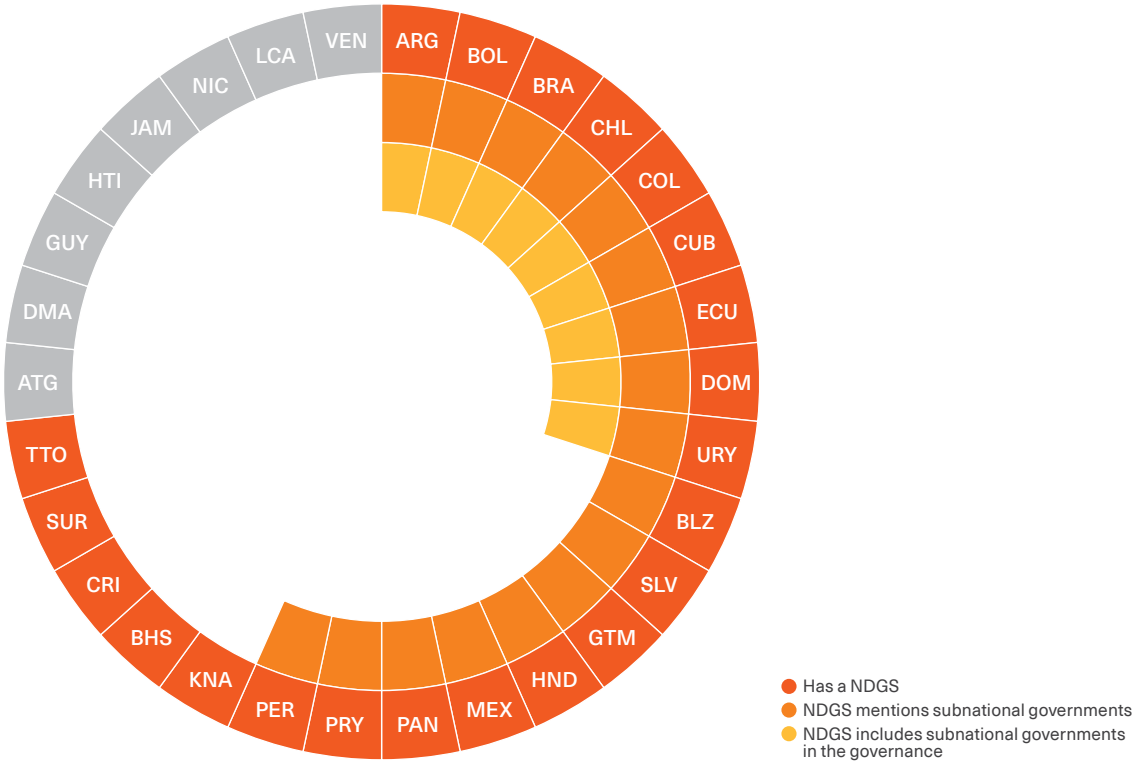
Central governments in the region have made progress in recent years in creating national digital government strategies (NDGS) or programs, which serve as instruments to define the main pillars and objectives of digital transformation in government, along with the actors involved.[4] The NDGS can be laid out in documents specifically addressing the digital transformation of government or included within broader digitalization strategies (OECD and CAF, 2023). All South American states and the majority in Central America—22 countries in total—have NDGS. Some of these countries have also adopted sector-specific digitalization strategies or a strategy for incorporating artificial intelligence and other technologies into government operations (World Bank, 2022b).

4 CAF has supported the development of these digital transformation strategies in the region. Examples include a support program for Panama's digital strategy (Programa de Apoyo a la Estrategia de Transformación e Inclusión Digital de Panamá), a program to support digital transformation of the Colombian State (Programa de Apoyo para la Transformación Digital del Estado para la Reactivación en Colombia), and a sector-wide program in Trinidad and Tobago to implement its digital strategy (Programa Sectorial de Enfoque Amplio de Apoyo a la Implementación de la Estrategia de Transformación e Inclusión Digital de Trinidad y Tobago).

While subnational governments are mentioned in the NDGS of 18 of the 22 countries, only nine include provisions for coordinating with subnational governments during implementation or integrating them into the governance framework.

A noteworthy example of coordination and inclusion is Uruguay, which developed a digital strategy plan for subnational governments (Plan Estratégico de Gobierno Digital para Gobiernos Subnacionales). This plan sets specific objectives that the Electronic Government and Information Society and Knowledge Agency (AGESIC) aims to achieve in cooperation with the Congress of Mayors, a coordination body for regional government authorities (AGESIC, 2021).

Graph 8.9
Inclusion of regional and local governments in national digital government strategies (NDGS)



Source: Authors based on national documents related to national digital government strategies (refer to the appendix, available in the online edition of RED, for each country's source).

Some national strategies include specific programs for implementation at the regional and local government levels. A previously mentioned example is Chile's deployment of cross-cutting platforms for digital identity and electronic signatures. Another example is a program implemented by Colombia's Ministry of Information and Communications Technology since 2018 called Mi Colombia Digital. This program provides regional and local governments (as well as schools, state-owned enterprises, and other territorial entities) with free templates for creating websites and email accounts

(Facchina and López Barrera, 2024). These model templates integrate easily with the proprietary systems of territorial entities (Cruz, 2020), meet accessibility and security standards, and allow entities to customize them (Mi Colombia Digital, 2024). By the end of 2023, 879 local governments in Colombia (out of 1,105) had implemented an electronic headquarters using the Mi Colombia Digital model (Mi Colombia Digital, 2023; CAF, 2025).

Another relevant case is Brazil's National Digital Government Network, led by the Ministry of Public Service Management and Innovation. In addition to providing website templates, this program offers tools for digital identification and signatures for citizens (Ministry of Management and Innovation in Public Services, 2024b). The first to join the network were regional governments and local governments representing capital cities. An encouraging development is the significant increase in local governments that joined the network and began using its services in 2023 and 2024 (Ministério da Gestão e da Inovação em Serviços Públicos, 2024a).

Innovations in partnership with the private sector

Collaboration with private companies that use digital technologies and innovative methodologies to address public challenges is a key enabler of modernization in the public sector. This type of cooperation, and the ecosystem in which it occurs, is known as GovTech (Zapata, 2020). In recent years, programs have emerged to accelerate companies offering innovative digital solutions, such as InovAtiva in Brazil, the Ingenio incubator in Uruguay, and MiLAB/Innpulsa in Colombia, implemented with support from CAF. Strategies have also been adopted to build networks among various actors in the ecosystem, such as Peru's National Network of Digital Innovators (OECD and CAF, 2023).

Another way to foster this ecosystem is through financial support. This can take the form of state procurement of services, the creation of state investment funds to develop pilots or prototypes, or grants for research and development (Kuziemski et al., 2022). However, according to OECD and CAF (2023), no innovation funds have been identified in countries across the region.

Subnational governments can leverage collaborations established at the national level. For example, partnerships created by Innpulsa in Colombia provide solutions for local governments to offer digital residency certificates (Innpulsa Colombia, 2024). Local governments in Argentina, Colombia, Costa Rica, Peru, and Uruguay have also been implementing innovation labs and joint initiatives with the private sector (Laguyas et al., 2021). These labs have developed solutions for a range of challenges, including waste management and inclusive education for persons with disabilities.

Several subnational governments in LAC have implemented solutions in collaboration with the private sector for managing areas such as education and waste management

The challenges to fostering these ecosystems—faced by both central and local governments—are tied to adapting public procurement frameworks, building the capacities of public officials, and establishing spaces for testing and experimentation (OECD and CAF, 2023).

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Appendixes

Chapter 1 Appendix

Table A.1.1
Correlations between the number of regional governments and the area, population, and GDP per capita of countries

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Log of GDP per capita	4.6			9.5**	-1			0.8	3.3
	(7.1)			(3.5)	(1.4)			(1.3)	(2.4)
Log of area		4.7**		-3.2		3.6***		-0.6	-0.4
		(1.7)		(2)		(0.7)		(1.1)	(1)
Log of population			4.4***	7.3***			6.7***	7.3***	7.4***
			(1)	(1.5)			(1.1)	(1.7)	(1.5)
Asia									10.2
									(6.9)
LAC									7.5*
									(4.2)
Europe									9.6*
									(5.1)
Africa									7.4
									(7.2)
Observations	12	12	12	12	87	87	87	87	87
R^2	0.1	0.4	0.5	0.8	0.0	0.1	0.3	0.3	0.4
Sample	LAC	LAC	LAC	LAC	All	All	All	All	All

Note: The table presents the results of ordinary least squares (OLS) regression estimating the number of regional governments. The observations are countries, and the independent variables are GDP per capita (adjusted for PPP), area, and population (expressed in natural logarithms). The sample includes 87 countries, of which 12 are in LAC. Dummy variables were included to identify groups of LAC, Asia, Europe, and Africa. Each column presents a variant depending on the inclusion or exclusion of variables or the sample considered. Robust standard errors are shown in parentheses. The number of asterisks indicates significance levels: * at 10%, ** at 5%, and *** at 1%.

Source: Authors based on data from the World Bank (2024a, 2024c, 2024d), CAF (2025), and OECD and UCLG (2016).

Table A.1.2
Correlations between the number of local governments and the area, population, and GDP per capita of countries

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Log of GDP per capita	-0.7			-0.2	0.2			0.5***	0.2
	(0.5)			(0.3)	(0.1)			(0.1)	(0.2)
Log of area		0.7***		0.4*		0.6***		0.0	0.1*
		(0.1)		(0.2)		(0.1)		(0.1)	(0.1)
Log of population			0.8***	0.4			0.8***	0.8***	0.7***
			(0.1)	(0.3)			(0.1)	(0.1)	(0.1)
Asia									0.7
									(0.5)
LAC									-0.6
									(0.4)
Europe									0
									(0.4)
Africa									-1.2**
									(0.6)
Obs	27	27	27	27	127	127	127	127	127
R^2	0,0	0,8	0,8	0,8	0,0	0,3	0,5	0,6	0,7
Sample	LAC	LAC	LAC	LAC	All	All	All	All	All

Note: The table presents the results of ordinary least squares (OLS) regression estimating the number of local governments. The observations are countries, and the independent variables are GDP per capita (adjusted for PPP), area, and population (expressed in natural logarithms). The sample includes 127 countries, of which 27 are in LAC. Dummy variables were included to identify groups of LAC, Asia, Europe, and Africa. Each column presents a variant depending on the inclusion or exclusion of variables or the sample considered. Robust standard errors are shown in parentheses. The number of asterisks indicates significance levels: * at 10%, ** at 5%, and *** at 1%.

Source: Authors based on data from the World Bank (2024a, 2024c, 2024d), CAF (2025), and OECD and UCLG (2016).

References consulted on the evolution of territorial organization in Latin America and the Caribbean

To examine the evolution of the number of subnational governments in the countries of Latin America and the Caribbean, various documents, reports, and databases were reviewed, describing the administrative units in each country at different points in time: CAF, 2025; Law Without a Number (S/N) of 1891; DANE, 2012; Legislative Decree No. 762, 2023; Single Law of the Political Regime of 1924; Faguet, 2003; IBGE, 2011; INE, 1982, 1995, 2001, 2003, 2011; INEC, 1990, 2000, 2010; INEGI, 1980, 1990, 2010, 2020a; INEI, 2018; Instituto Geográfico Militar, 2010; Lara et al., 2022; Martínez López and Simón Caná, 2013; OCEI, 1985, 1992; ONE, 2021; UCLG, n.d. a; UNDP, 2006; Law No. 18653 of 2010.

Chapter 2 Appendix

Table A.2.1
Correlations of the Regional Authority Index (RAI) measured at the country level

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Logarithm of GDP per capita	2.7*			1.3	1.8**			2.1***		2.1***	1.7*	0.6***
	(1.5)			(0.9)	(0.7)			(0.6)		(0.7)	(1.0)	(0.1)
Logarithm of area		2.3***		2.3***		1.3***		0.9*		0.9*	0.8	
		(0.3)		(0.6)		(0.4)		(0.5)		(0.5)	(0.5)	
Logarithm of population			2.9***	-0.1			1.2***	0.7		0.7	0.9*	
			(0.6)	(1.0)			(0.4)	(0.5)		(0.5)	(0.5)	
Obs	20	20	20	20	77	77	77	77	77	77	77	2.100
R-sq	0.1	0.7	0.5	0.8	0.1	0.2	0.1	0.3	0.1	0.3	0.3	0.9
Fixed effects	No	No	No	No	No	No	No	No	Region	Region	Region	Country
Countries	LAC	LAC	LAC	LAC	All	All	All	All	All	All	All	All
Mean	6.55	6.55	6.55	6.55	7.31	7.31	7.31	7.31	7.31	7.31	7.31	7.11
Standard deviation	4.85	4.85	4.85	4.85	5.33	5.33	5.33	5.33	5.33	5.33	5.33	5.48

Note: The table shows the results of an ordinary least squares (OLS) estimation of a linear regression model for the self-rule component of the RAI index, where the observations are countries, and the independent variables are GDP per capita, area, and population (expressed in natural logarithms). The sample includes 77 countries, 20 of which are from LAC. Each column of the table presents a variant with respect to the inclusion or exclusion of the mentioned variables or the sample considered. In all columns, data refer to the year 2018 (the most recent available), except for the last column, which uses data for the period 1990–2018. Robust standard errors are shown in parentheses, and the number of asterisks next to the coefficients indicates significance: * at 10%, ** at 5%, and *** at 1%.

Source: Authors based on Hooghe et al (2016) and Hooghe and Marks (2016).

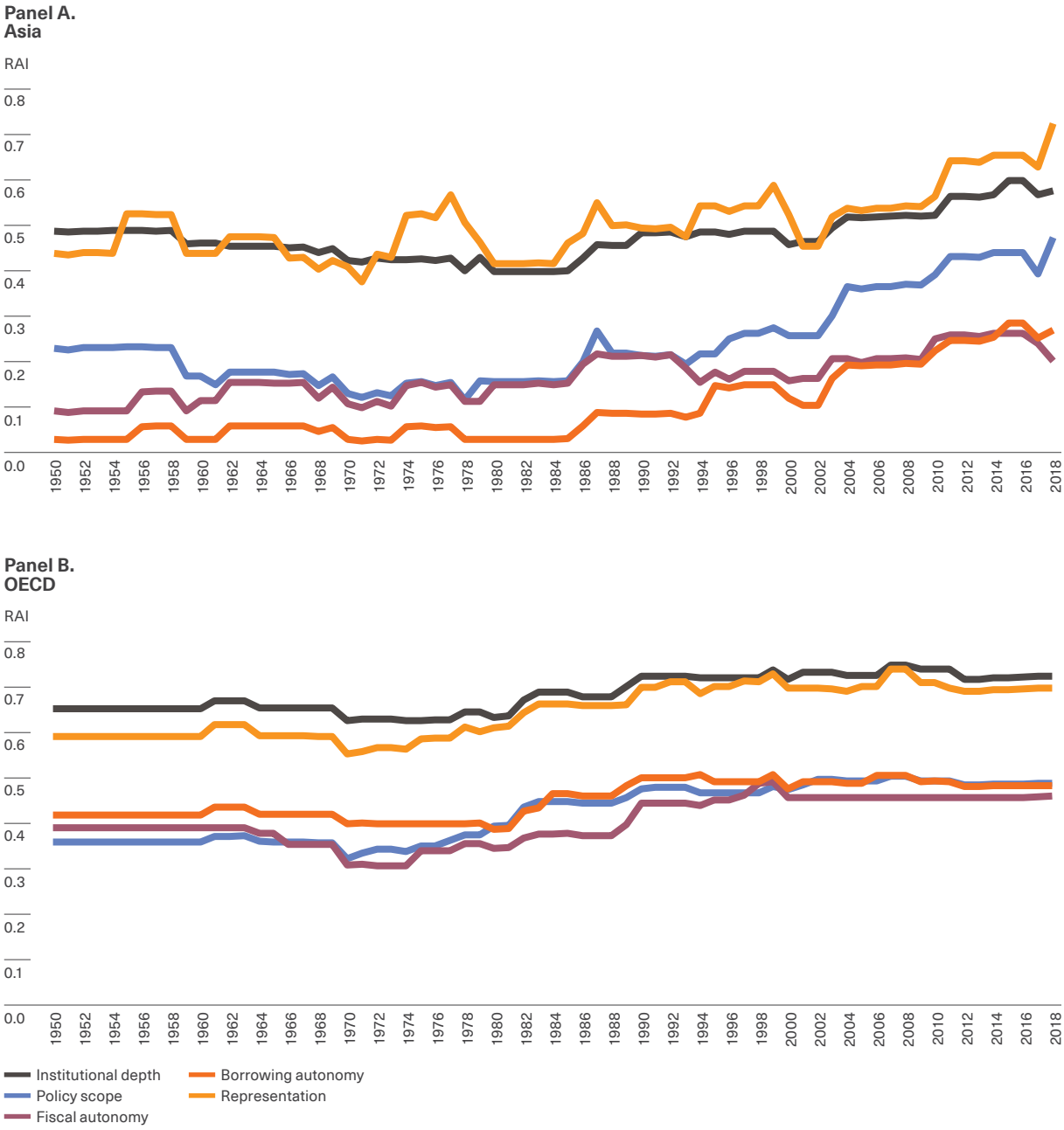
Table A.2.2
Correlations of the Local Autonomy Index (LAI) measured at the country level

	(1)	(2)	(3)	(4)
Logarithm of GDP per capita	3.1***			3.2***
Logarithm of area		0.2		0.5
Logarithm of population			0.2	-0.4
Obs.	54	54	54	54
R-sq	0.2	0.0	0.0	0.2
Mean	15.4	15.4	15.4	15.4
Standard deviation	3.9	3.9	3.9	3.9

Note: The table shows the results of an ordinary least squares (OLS) estimation of a linear regression model for the self-rule component of the LAI index, where the observations are countries and the independent variables are GDP per capita, area, and population (expressed in natural logarithms). The sample includes 54 countries, four of which are from LAC. Each column of the table presents a variant concerning the inclusion or exclusion of the mentioned variables or the sample considered. The number of asterisks next to the coefficients indicates significance: * at 10%, ** at 5%, and *** at 1%.

Source: Authors based on Ladner et al. (2023).

Graph A.2.1
Evolution of the dimensions of the self-rule component of the RAI in Asia and OECD



Note: The graph shows the evolution of the five dimensions of the self-rule component of the RAI index for the average of countries in the Asian region (11 countries) in Panel A and the OECD (20 countries) in Panel B, for the period 1950–2018. Only countries with data available for the entire series were included. To obtain the indicator value, only the first level of regional government (tier 1 in the original dataset) was used. The value scale was adjusted to range from 0 to 1.

Source: Authors based on Hooghe et al (2016) and Hooghe and Marks (2016)

References consulted on the role of subnational governments in education, health, and security

The analysis of the responsibilities of subnational governments in primary education provision is heavily based on a report prepared for the Latin America and Caribbean Office of the International Institute for Educational Planning (IIEP) of UNESCO (Gorostiaga, n.d.) and on Rivas and Scasso (2020). The aspect of secondary education was analyzed using data from the PISA 2022 survey (OECD, 2022).

For the section on healthcare services, various documents describing the organization and functioning of health systems in the countries of the region were consulted (Acosta et al., 2011; Alcalde-Rabanal et al., 2011; Aran and Laca, 2013; Bermúdez-Madriz et al., 2011; Galilea et al., 2011; Guanais et al., 2018; ISAGS, 2012; Ledo and Soria, 2011; Lucio et al., 2011; Maceira, 2014; Mancuello Alum and Cabral de Bejarano, 2011; Muiser et al., 2011; Robles and Vargas, 2013; Sáenz et al., 2011).

The description of the role of subnational governments in public security management focuses on police forces and does not include the management of justice, prisons, or traffic control and oversight. Official websites of police forces (or responsible authorities) in the following countries were consulted for this section:

- Antigua and Barbuda (https://police.gov.ag/)
- Barbados (https://www.gov.bb/Departments/police-department)
- Belize (https://www.belizepolice.bz/)
- Dominica (https://nationalsecurity.gov.dm/commonwealth-of-dominica-police-force-2)
- Grenada (https://www.rgpf.gd/)
- Jamaica (https://jcf.gov.jm/)
- Saint Kitts and Nevis (https://jcf.gov.jm/)
- Saint Vincent and the Grenadines (https://security.gov.vc/)
- Saint Lucia (https://www.govt.lc/ministries/home-affairs-and-national-security/royal-saint-lucia-police-force)
- Suriname (https://politie.sr/)
- Trinidad and Tobago (https://www.ttps.gov.tt/About/About-TTPS)

Additional documents on the topic were also consulted (Acceso a la Justicia, 2021; Arias et al., 2012; Cano, 2006; Casas et al., 2018; Fondevila and Meneses Reyes, 2017; Galilea et al., 2011; Instituto de Defensa Legal, 2022; Insulza et al., 2008; Interpol, 2024; Rodríguez Games et al., 2016; Salas Oroño, 2021; Executive Secretariat of the National Public Security System (SNSP), 2019; UNGL, n.d.).

Chapter 3 Appendix

Table A.3.1
Sources consulted for the graphs and tables

Country	Graph 3.2	Graph 3.4	Graph 3.5	Graph 3.6	Graph 3.7	Graph 3.8	Table 3.1	Table 3.2		
								Expenditures	GDP	Population
Argentina	MECON (2023a)	DNAP (2023a, 2023b)	DNAP (2023a, 2023b) CAF (2025)	DNAP (2023b)	DNAP (2024a, 2024b, 2024c) OPC (2024)	DNAP (2023a, 2023b)	MECON (2023b) DNAP (2023a, 2023b)	DNAP (2023a, 2023b)	ECLAC (2022)	CAF (2025)
Bolivia		MEFP (2023a, 2023b)		MEFP (2023a)	MEFP (2022, 2023a) SEA (2019)	UDAPE (2023a)	UDAPE (2023a)	MEFP (2023a, 2023b)	INE (2023)	CAF (2025)
Brazil	STN (2023b)	STN (2023a)	STN (2023a)	STN (2023a, 2023d)	STN (2023a, 2023d)	STN (2023a)	STN (2023b)	STN (2023a)	IBGE (2023a, 2023b)	STN (2023a)
Chile		CGR of Chile (2023)		CGR of Chile (2023)	CGR of Chile (2023)	CGR of Chile (2023)	CGR of Chile (2023)	CGR of Chile (2023)		CAF (2025)
Colombia		DNP (2023a)	DNP (2023a) DANE (2023b, 2023c)	DNP (2023a, 2023b)	DNP (2023a, 2023b, 2023c)	DNP (2023a)	DNP (2023a)	DNP (2023a)	DANE (2023a, 2023d)	DANE (2023b, 2023c)
Costa Rica							CGR of Costa Rica (2024b)			
El Salvador		PTF (2023)		PTF (2023)	PTF (2023)	PTF (2023)	PTF (2023)	PTF (2023)		BCR (2022)
Guatemala	MINFIN (2023a)	MINFIN (2023a)	MINFIN (2023a) CAF (2025)	MINFIN (2023a, 2023b)	MINFIN (2023a)	MINFIN (2023a)	MINFIN (2023a)	MINFIN (2023a)		CAF (2025)
Honduras		SEFIN (2023)	SEFIN (2023) CAF (2025)	SEFIN (2023)		SEFIN (2023)	SEFIN (2023)	SEFIN (2023)		CAF (2025)
Mexico	CEFP (2024)	INEGI (2023c)	INEGI (2023c) CAF (2025)	INEGI (2023c)	INEGI (2023c)	INEGI (2023c)	INEGI (2023c)	INEGI (2023c)	INEGI (2023d)	CAF (2025)
Panama		INEC (2023b)						INEC (2023b)		CAF (2025)
Paraguay	MEF of Paraguay (2023a)	MEF of Paraguay (2023a)	MEF of Paraguay (2023a) CAF (2025)	MEF of Paraguay (2023a, 2023b)	MEF of Paraguay (2024a, 2024b, 2024c)	MEF of Paraguay (2023a)	MEF of Paraguay (2023a)	MEF of Paraguay (2023a)		CAF (2025)
Peru	MEF of Peru (2023a)	MEF of Peru (2023a)		MEF of Peru (2023a, 2023b)	MEF of Peru (2024a, 2024b)	MEF of Peru (2023a)	MEF of Peru (2023a)	MEF of Peru (2023a)	INEI (2024)	INEI (2022)
Dominican Rep.	DIGEPRES (2023)	DIGEPRES (2023)	DIGEPRES (2023) CAF (2025)		DIGEPRES (2024)	DIGEPRES (2023)	DIGEPRES (2023)	DIGEPRES (2023)		CAF (2025)
Uruguay		OTU (2023a)	OTU (2023a) INE (2013)	OTU (2023a, 2023b)	OTU (2023a, 2024)	OTU (2023a)	OTU (2023a)	OTU (2023a)	OTU (2015) IMF (2024c)	INE (2013)

Chapter 4 Appendix

Table A.4.1
National sources consulted for the preparation of the graphs

Country	Graph 4.1	Graph 4.4	Graph 4.5	Graph 4.7	Graph 4.8	Graph 4.9	Graph 4.10
Argentina	MECON (2005, 2023b)	DNAP (2023b) and CAF (2025)			DNAP (2023b)	DNAP (2024a)	DNAP (2024a)
Bolivia	MEFP (2023a) and Armendáriz et al. (2019)	MEFP (2023a) and CAF (2025)		MEFP (2023a)	MEFP (2023a)		
Brazil	IBGE (n.d. a) and STN (2023a)	STN (2023a)	STN (2023a)	STN (2023a)	STN (2023a, 2023d)	STN (2023c)	STN (2023c)
Chile	DIPRES (2023) and CGR of Chile (2023)	CGR of Chile (2023)		CGR of Chile (2023)	CGR of Chile (2023)	DIPRES (2024b)	DIPRES (2024b)
Colombia	DNP (2023a) and Armendáriz et al. (2019)	DNP (2023a) and DANE (2023b, 2023c)	DNP (2023a) and DANE (2023c)	DNP (2023a)	DNP (2023a, 2023b)	DAF (2024)	DAF (2024)
Costa Rica	CGR of Costa Rica (2024b) and Armendáriz et al. (2019)						
El Salvador	PTF (2023) and Armendáriz et al. (2019)	PTF (2023) and CAF (2025)		PTF (2023)	PTF (2023)	DGCG (2024)	DGCG (2024)
Guatemala	MINFIN (2023a, 2024) and Armendáriz et al. (2019)	MINFIN (2023a) and CAF (2025)	MINFIN (2023a) and CAF (2025)	MINFIN (2023a)	MINFIN (2023a, 2023b)		
Honduras	SEFIN (2023) and Armendáriz et al. (2019)						
Mexico	INEGI (2023c) and Armendáriz et al. (2019)	INEGI (2023c) and CAF (2025)	INEGI (2023c) and CAF (2025)	INEGI (2023c)	INEGI (2023c)	SHCP (2024)	SHCP (2024)
Panama	Armendáriz et al. (2019)						
Paraguay	MEF of Paraguay (2024a)	MEF of Paraguay (2023a) and CAF (2025)		MEF of Paraguay (2023a)			
Peru	MEF of Peru (2024e)	MEF of Peru (2023a) and CAF (2025)		MEF of Peru (2023a)	MEF of Peru (2023a, 2023b)	MEF of Peru (2024c)	MEF of Peru (2024c)
Dominican Republic	DIGEPRES (2023) and Armendáriz et al. (2019)	DIGEPRES (2023) and CAF (2025)		DIGEPRES (2023)			
Uruguay	OTU (2023a), MEF of Uruguay (2024) and Armendariz et al. (2019)	OTU (2023a) and INE (2013)			OTU (2023a, 2023b)		

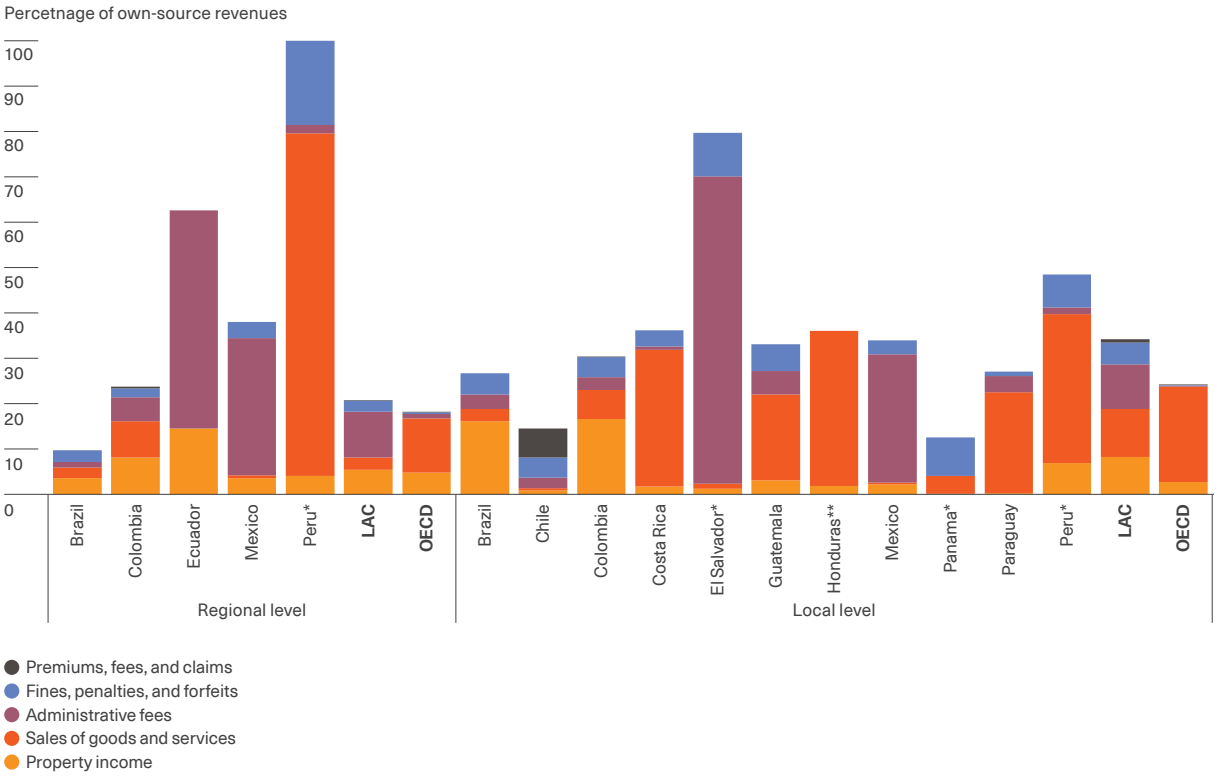
Chapter 5 Appendix

Table A.5.1
National sources utilized

Country	Graph 5.3	Graph 5.5	Graph 5.6	Graph 5.8	Graph 5.9	Table A 5.3
Argentina	DNAP (2023b)	DNAP (2024b)	DNAP (2024b)	DNAP (2023b)	DNAP (2023b)	DNAP (2024b)
		DNAP (2024c)	DNAP (2024c)			DNAP (2024c)
		OPC (2024)	OPC (2024)			OPC (2024)
Bolivia	MEFP (2023a)	MEFP (2022)	MEFP (2022)	MEFP (2023a)	SENARECOM (2022)	MEFP (2022)
		SEA (2019)	SEA (2019)		UDAPE (2023b)	SEA (2019)
Brazil	STN (2023d)	STN (2023d)	STN (2023d)	STN (2023d)	STN (2023d)	STN (2023d)
Chile	CGR of Chile (2023)	CGR of Chile (2023)	CGR of Chile (2023)	CGR of Chile (2023)	CGR of Chile (2023)	CGR of Chile (2023)
Colombia	DNP (2023c)	DNP (2023b)	DNP (2023b)	DNP (2023c)	DNP (2023c)	DNP (2023b)
		DNP (2023c)	DNP (2023c)			DNP (2023c)
Costa Rica		CGR of Costa Rica (2024a)	CGR of Costa Rica (2024a)			CGR (2024a)
Ecuador		MEF of Ecuador (2022)	MEF of Ecuador (2022)		BCE (2023)	MEF of Ecuador (2022)
El Salvador	PTF (2023)	Finance Ministry (2020)	Finance Ministry (2020)	PTF (2023)		Finance Ministry (2020)
Guatemala	MINFIN (2023b)	MINFIN (2023b)	MINFIN (2023b)	MINFIN (2023b)		MINFIN (2023b)
Honduras	SEFIN (2023)			SEFIN (2023)		
México	INEGI (2023c)	INEGI (2023c)	INEGI (2023c)	INEGI (2023c)	INEGI (2023c)	INEGI (2023c)
Paraguay	MEF of Paraguay (2023b)	MEF of Paraguay (2024b)	MEF of Paraguay (2024b)	MEF of Paraguay (2023b)		MEF of Paraguay (2024b)
		MEF of Paraguay (2024c)	MEF of Paraguay (2024c)			MEF of Paraguay (2024c)
Peru	MEF of Peru (2023b)	MEF of Peru (2024a)	MEF of Peru (2024a)	MEF of Peru (2023b)	MEF of Peru (2023b)	MEF of Peru (2024a)
		MEF of Peru (2024b)	MEF of Peru (2024b)			MEF of Peru (2024b)
Dominican Rep.		DIGEPRES (2024)	DIGEPRES (2024)			DIGEPRES (2024)
Uruguay	OTU (2023b)	OTU (2024)	OTU (2024)	OTU (2023b)		OTU (2024)

Source: Authors.

Graph A.5.1.
Structure of non-tax revenues in 2022



Note: Social security contributions and other social contributions are excluded. In the regional average for LAC, Paraguay is included; however, it is not represented individually in the graph since the country does not have non-tax revenues. * Indicates that the latest available data is from 2021. ** Indicates that the latest available data is from 2020.

Source: Authors based on the IMF (2024e).

Table A.5.2
Overview of real estate taxes in Latin America

Country	Level of government responsible for determining or executing the tax			Variation in tax rates		Updating the valuation of the taxable base	
	Tax rates	Valuation of the taxable base	Collection	Type of tariff	Progressivity based on real estate value	Timeframe established by regulation	Methodology for adjusting outdated valuations
Federal States							
Argentina	Regional, with exceptions for local governments with certain administrative capacities	Regional, with exceptions for local governments with certain administrative capacities	Regional, with exceptions for local governments with certain administrative capacities	Selective (construction type, property age, and location)	Yes	1–10 years	Update by coefficient
Brazil	Local (urban) and central (rural)	Regional (urban) and central (rural)	Regional (urban) and central (rural)	Selective (land use, construction type, land characteristics, access to public services, and location)	Yes (depends on the municipality)	8–10 years	Inflation adjustment (IPCA) in some municipalities, depending on legislation.
Mexico	Regional, except for the local jurisdiction where the regional capital is located	Local	Local	Selective (land use and location)	Yes (fixed for the capital)	1 year	Self-assessment
Unitary states							
Chile	Central	Central	Local	Selective (land use)	No	4 years	Inflation adjustment
Bolivia	Central	Local	Local	Non-selective	Yes	5 years	Self-assessment
Costa Rica	Central	Local	Local	Única	No	1–5 years	New legislation
Paraguay	Central	Local	Local	Selective (land use)	No	1–5 years	Ajuste por inflación, coeficientes para alcanzar el precio de mercado
Colombia	Local (municipal), within a range determined at the central level	Central and local governments with administrative capacities	Local	Selective (land use, socioeconomic strata, location)	Yes (also progressive for property size)	1–5 years	Inflation adjustment
Ecuador	Local (municipal), within a range determined at the central level	Local	Local	Selective (land use)	Yes (depends on the municipality)	2 years	Self-assessment
Uruguay	Regional (urban) and central (rural)	Regional	Regional	Selectiva (uso del terreno y localización)	Yes (depends on the municipality)	Not determined	Inflation adjustment

Country	Level of government responsible for determining or executing the tax			Variation in tax rates		Updating the valuation of the taxable base	
	Tax rates	Valuation of the taxable base	Collection	Type of tariff	Progressivity based on real estate value	Timeframe established by regulation	Methodology for adjusting outdated valuations
Peru	Regional	Regional	Local	Non-selective	Yes	1 year	Self-assessment

Source: Authors

Table A.5.3
Major transfer programs from central governments to subnational government

Country	Government	Concept	Percentage	Rules	Allocation criteria	Origin of resources	Conditions on spending
Argentina*	Regional	Tax revenue sharing	72%	Yes	Fixed participation coefficients	Taxes (VAT and income tax)	None
		Educational financing	10%	Yes	Number of students; unschooled population; rurality; financial capacity and effort; goal achievement; grade repetition, overage, and dropout rates	General revenues and taxes	Investment, education, and science and technology (S&T)
	Both	Current and capital transfers	10%	No	Established by the national executive branch	General revenues	Specific programs
Bolivia	Local	Tax revenue sharing	50%	Yes	Population	Taxes	Primarily (85%) on investment
	Both	Royalties	26%	Yes	Production	Use of natural resources	Primarily (85%) on investment
		Direct hydrocarbon tax	20%	Yes	Production and population	Use of natural resources	Education, health, public safety, gender, and socioeconomic development
Brazil	Regional	Participation Fund (FPE)	28%	Yes	Less developed regions, inverse proportion of per capita income, population, and surface area	Taxes (income tax and industrial production)	None
	Local	Participation Fund (FPM)	32%	Yes	Population and inverse proportion of per capita income	Taxes (income tax and industrial production)	None
	Both	Education (including FUNDEB)	10%	Yes	Number of basic education students and priority areas	General revenues	Education
		Unified Health System	18%	Partially	Population characteristics and health network, management indicators, participation in jurisdictional budget, investment plan, and national executive branch provisions	General revenues	Health

Continued on the next page →

Country	Government	Concept	Percentage	Rules	Allocation criteria	Origin of resources	Conditions on spending
Chile	Local	Neighborhood and Urban Improvement Programs	5%	Partially	Number of communes per region; number of unemployed; poverty, potable water and sewage sanitation index, portfolio of "project-type" works, equal parts for all program typologies, and approval of the regional government	General revenues	Urban and sanitary infrastructure
		Schooling subsidies	28%	Partially	Per-student amount for each level, teaching modality, and type of school day, established annually by the Ministry of Education, considering factors such as rurality, vulnerability, and special educational needs	General revenues	Education
		Primary care, Law N° 19378, Art. 49	34%	Partially	Decreed by the Ministry of Health based on the potentially benefitting population, its epidemiological characteristics and socioeconomic level; rurality indices and access difficulties; and programmed and performed health services	General revenues	Health
Colombia	Both	General Participation System	73%	Yes	Benefitting, attended, and unmet population; poverty; population; rurality; population density; efforts to expand coverage; and fiscal and administrative efficiency	General revenues	Education, health, and water and sanitation
		Royalties from the exploitation of non-renewable resources	13%	Yes	Production, population, and UBN (Unmet Basic Needs)	Use of natural resources	Investment, savings, infrastructure, science and technology (S&T), education, and environmental protection
Costa Rica	Local	Law on Tax Simplification and Efficiency	89%	Yes	Social development index and road network extension	Use of natural resources	Investment, defined by the cantonal or district road board
Ecuador	Both	Territorial equity	87%	Yes	Population size and density, UBN, fiscal and administrative effort, and development goal achievement	General revenues	Primarily (70%) on non-permanent expenses
		Transfer of competencies	6%	Yes	Costs and minimum standards, revenues from jurisdictional competencies, and current and historical central government spending	General revenues	Transferred competencies
		Compensation for the exploitation of NNR	7%	Yes	Population and equal parts among producing jurisdictions	Use of natural resources	Social development, nature and environmental protection, and investment
El Salvador	Local	Economic and Social Development Fund	93%	Yes	Population, equity, surface area, and poverty	General revenues	Infrastructure services and works, and promotion of socioeconomic activities
Guatemala	Local	Constitutional allocation	42%	Yes	Population, rurality, equal parts, per capita revenue, and inverse per capita revenue	General revenues	Primarily (90%) education, preventive health, infrastructure, and services
		Tax revenue sharing	55%	Yes	Same criteria as constitutional allocation	Taxes (VAT and vehicles)	VAT: Primarily (75%) on investment; Vehicles: urban infrastructure and sanitation

Country	Government	Concept	Percentage	Rules	Allocation criteria	Origin of resources	Conditions on spending
Mexico	Both	Federal participations	54%	Yes	Production, revenue, growth, and fiscal effort	Taxes and use of natural resources	None
		Federal contributions from branch 33	35%	Yes	Sectoral needs and performance	General revenues	Local: Social development and security Regional: Social development, education, health, and security
		Other agreements and programs	11%	No	Allocated by federal government departments	General revenues	Specific programs
Paraguay	Regional	Tax revenue sharing	7%	Yes	Proportion of VAT in the jurisdiction	Taxes (VAT)	Salud, educación y obras públicas
		Transfers from Treasury resources	24%	No	Established by the national executive branch	General revenues and taxes (real estate)	None
	Both	FONACIDE	16%	Yes	Flood impact, equal parts, and population	Use of natural resources (Itaipú Dam)	Education, investment, and social development
		Royalties and compensations	46%	Yes	Flood impact, equal parts, and population	Use of natural resources (Itaipú and Yacyretá Dams)	Primarily (80%) on investment
Peru	Regional	FONCOR Compensation Fund	7%	Yes	Poverty, UBN, border location, population, tax contributions, and management indicators	General revenues	Investment
	Local	FONCOMUN Compensation Fund	11%	Yes	Population, mortality rate, UBN, and rurality, ensuring a minimum amount per entity	Taxes (sales and vehicles)	None
	Both	Ordinary resources	61%	No	Inertial spending and agreements with the Ministry of Economy and Finance	General revenues	None
		Canon and royalties	18%	Yes	Producing regions, population, and UBN	Use of natural resources	Infrastructure and investment
Dominican Republic	Local	Participations, Law N° 166-03	83%	Yes	Population, ensuring a minimum amount per entity	General revenues	Salaries; operating expenses; investment in health, education, and gender
Trinidad and Tobago	Local	Consolidated Funds: Trinidad/ Tobago	100%	Partially	Applicable legislation, annual budgets, and additional expenditures approved by Parliament	General revenues	Expenses stipulated in the budget approved by Parliament
Uruguay	Regional	Participation in the national budget	73%	Yes	Fixed participation coefficients based on surface area, population, inverse proportion of GDP per capita, and households with housing deficiencies	General revenues	None
		Interior Development Fund	9%	Yes	Fixed participation coefficients based on surface area, population, inverse proportion of GDP per capita, and households with housing deficiencies	Taxes collected outside the Department of Montevideo	Infrastructure
	Local	Management Incentive Fund	7%	Partially	Equal parts, criteria established by the Sectoral Decentralization Commission, population, surface area, UBN, and education levels	General revenues	Primarily (60%) on investment

Note: The fourth column of the table (%) indicates the percentage each transfer program represents in the total transfers to subnational governments. In Bolivia, royalties are included in transfer programs, although national accounting considers them own-source revenues. The asterisk (*) indicates that the percentages in the fourth column (%) exclude transfers to local governments.

Source: Authors based on national laws, Radics et al. (2022), Miranda et al. (2017), ECLAC (2024), and data from national sources (see details in Table A.5.1 of this appendix).

Continued on the next page →

Chapter 6 Appendix

This appendix provides additional information and clarifications on the graphs, figures, and tables included in this chapter.

Clarifications on Figure 6.1

The "other" category includes the following modes of transportation:

Bogotá: cable car, school transport, informal transport (informal bus/minibus/*pirata*/*chana*, shared taxi, informal car, app-based individual transport, jeep, motorcycle taxi), train, private bus, "chiva" (traditional Colombian bus), truck/dump truck/tractor-trailer, animal-drawn vehicle, human-powered vehicle, and other modes.

Buenos Aires: walking trips of more than three blocks for transfers, school transport, company bus, chartered bus, informal transport, and other modes.

Mexico City: employee transport, school transport, *trajinera* (flat-bottomed boat) and other watercraft, among others.

Montevideo: school bus, company bus, and other modes.

Panama City: trucks and other transport for work purposes, and other modes.

Rio de Janeiro: watercraft and other modes.

Salvador de Bahia: school transport, minivan/van/*perúa*, rented bus, and other modes.

São Paulo: chartered transport, school transport, and other modes.

Cities included in Graph 6.2 and Table 6.1

Table A.6.1
Cities analyzed in the graph and table, organized by country

Country	Cities
Antigua and Barbuda	Saint John's
Argentina	Buenos Aires
Bahamas	Nassau
Barbados	Bridgetown
Belize	Belmopan
Bolivia	La Paz and Sucre
Brazil	Belo Horizonte, Brasília, Fortaleza, Rio de Janeiro, Salvador, São Paulo

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Country	Cities
Chile	Santiago
Colombia	Bogotá, Cali, Medellín
Costa Rica	San José
Cuba	Havana
Dominica	Roseau
Ecuador	Guayaquil, Quito
El Salvador	San Salvador
Grenada	Saint George's
Guatemala	Guatemala City
Guyana	Georgetown
Haiti	Port-au-Prince
Honduras	Tegucigalpa
Jamaica	Kingston
Mexico	Mexico City, Juárez, León, Puebla, Tijuana
Nicaragua	Managua
Panama	Panama City
Paraguay	Asunción
Peru	Lima
Dominican Republic	Santo Domingo
Saint Kitts and Nevis	Basseterre
Saint Vincent and the Grenadines	Kingstown
Saint Lucia	Castries
Suriname	Paramaribo
Trinidad and Tobago	Port of Spain
Uruguay	Montevideo
Venezuela	Caracas

Clarifications on Graph 6.5

The types of service providers included in the graph are described below:

Direct public administration: Institutions directly managed by local or state governments, with municipalities being the most common example.

State-owned enterprise or autonomous entity: Entities with legal status created specifically for providing public services. Data from Brazil enables the distinction between autonomous entities—public law entities that are part of the public administration but enjoy a certain degree of organizational autonomy—and state-owned enterprises—private law entities with exclusively public capital. In other countries, data do not always allow for this distinction, so these categories are grouped together.

Mixed company: A private law corporation with both public and private capital, where state participation is 50% or more.

Private company: A private law corporation whose capital is majority-owned by private entities.

Clarifications on Graph 6.8

The Concentration Index (CI) reflects the concentration of water and sewerage service provision within a state. It is calculated using the following formula:

$$CI_e = \sum_{i=1}^{n} \left(\frac{C_{i,e}}{T_e}\right)^2$$

where

CI_e is the concentration index of state "e,"

C_i is the number of water or sewer connections of provider i in state e,

T_e is the total number of connections in the state,

n is the number of providers in the state.

Chapter 7 Appendix

Table A.7.1
Government agencies with authority over subnational public employment

Country	National agencies	Authority over subnational employment	Subnational agencies	Authority over subnational employment
Argentina	Secretariat of Public Management and Employment	Regulation and supervision of applicable national guidelines	Provincial secretariats of public employment	Regulation, supervision, and management
Bolivia	Ministry of Finance	Governing body responsible for regulation and supervision	Local agencies	Varies by jurisdiction
	Civil Service Superintendency	Regulation, supervision, and management of civil service careers		
Brazil	Ministry of Economy	Regulation	State administration secretariats	Regulation, supervision, and management
Chile	National Civil Service Directorate	Supervision and management of civil administration services	Regional Grading Boards	Regulation and supervision
			Municipal Grading Boards	Regulation and supervision
Colombia	National Civil Service Commission	Regulation and supervision of administrative careers	Personnel units of organizations and territorial entities	Regulation, supervision, and management
			Departmental assemblies	Regulation
Costa Rica	National Union of Local Governments	Regulation and management	Mayor's Office	Management
	National Council of Municipal Training	Management	Municipal Administrative Technical Council	Supervision and management
			Municipal human resources body	Management
Ecuador	Ministry of Labor Relations	Management and supervision	Talent Management Units	Management and supervision
El Salvador	Civil Service Commission and Tribunal	Management and supervision	Municipal councils	Supervision
			Municipal mayors	Management
			Highest administrative authorities of municipal entities	Supervision and management
			Municipal Civil Service Commissions	Management
Honduras	Technical Secretariat of Municipal Civil Service	Management	Municipal Corporation	Regulation and management
			Municipal Mayor	Management

Continued on the next page →

Country	National agencies	Authority over subnational employment	Subnational agencies	Authority over subnational employment
Jamaica	Public Service Commission	Management	Parish Councils	Supervision
Mexico	Public Function Secretariat	Supervision and regulation	State Administration Secretariats	Regulation and management
Panama	General Directorate of Civil Service	Regulation, supervision, and management		
	Civil Service Technical Board	Supervision and management		
	Appeals and Conciliation Board	Management		
	Institutional Human Resources Offices	Supervision and management		
Paraguay	Public Function Secretariat	Regulation, supervision, and management	Human Resources Offices or Equivalents	Management
Peru	Superior Council of Public Employment (COSEP)	Regulation, supervision, and management		
	National Civil Service Authority	Management		
Dominican Republic	State Secretariat of Public Administration	Regulation, supervision, a nd management		
Trinidad & Tobago	Ministry of Rural Development and Local Government	Supervision	Municipal Corporations	Management
	Public Service Commission	Supervision and management		
Uruguay	National Civil Service Office	Regulation and management of the civil service system for departments without their own statutes	Departmental Governments	Regulation and management for departments with their own statutes
Venezuela	Ministry of Popular Power for the Social Process of Labor	Regulation and supervision	State Human Resources Departments	Regulation and management

Source: Author based on Pérez Chiqués et al. (2024).

Table A.7.2
Legislation underpinning Table 7.2

Country	Legislation
Argentina	Each province has its own legislation.
Bolivia	*Ley del Estatuto del Funcionario Público y Ley de Administración y Control Gubernamentales.* [Law on the Civil Service Statute and the Law on Administration and Governmental Oversight.]
Brazil	*Ley* N.o *8112, Ley de Responsabilidad Fiscal, Ley* N.o *9504, constituciones estatales y leyes orgánicas municipales.* [Law No. 8112, Fiscal Responsibility Law, Law No. 9504, state constitutions, and municipal organic laws.]
Chile	*Estatuto Administrativo y Estatuto Administrativo para Funcionarios Municipales.* [Administrative Statute and Administrative Statute for Municipal Officials.]
Colombia	Law 909 and Decree 1083.
Costa Rica	*Código Municipal y Reglamento de Carrera Administrativa Municipal.* [Municipal Code and Regulations for the Municipal Administrative Career.]
Ecuador	*Ley Orgánica del Servicio Público.* [Organic Law on Public Service.]
El Salvador	*Ley de Ética Gubernamental, Ley del Servicio Civil y Ley de la Carrera Administrativa Municipal.* [Government Ethics Law, Civil Service Law, and Municipal Administrative Career Law.]
Honduras	*Ley de Carrera Administrativa Municipal y Reglamento del Código de Conducta Ética del Servidor Público.* [Municipal Administrative Career Law and the Code of Ethical Conduct for Public Servants Regulations.]
Jamaica	*Ley de Gobierno Local y reglamentos del servicio público.* [Local Government Law and public service regulations.]
Mexico	Each federal entity has its own legislation.
Panama	Law 9.
Paraguay	*Ley Orgánica Municipal y Ley de Función Pública.* [Municipal Organic Law and Public Service Law.]
Peru	*Ley Marco del Empleo Público, Ley de Bases de la Carrera Administrativa y de Remuneraciones del Sector Público y Ley del Servicio Civil.* [Framework Law on Public Employment, Law on the Basis of the Civil Service Career and Public Sector Remuneration, and Civil Service Law.]
Dominican Republic	*Ley de Función Pública.* [Public Service Law.]
Trinidad & Tobago	*Ley de Corporaciones Municipales y reglamentos de la Comisión del Servicio Público.* [Municipal Corporations Law and regulations of the Public Service Commission.]
Uruguay	*Ley de la Carrera Administrativa y Ley del Estatuto de la Función Pública.* [Administrative Career Law and Law on the Civil Service Statute.]

Source: Pérez Chiqués et al. (2024).

Table A.7.3
Legislation consulted for Table 7.3

Country	Legislation
Argentina	Each province has its own legislation.
Bolivia	Arts. 23–28 of Ley 2027, Ley del Estatuto del Funcionario Público [Law 2027, Civil Service Statute Law] and Art. 64 of Ley de Municipalidades [Municipalities Law].
Brazil	Art. 37 of the Federal Constitution, Ley N.o 8112 [Law No. 8112], Ley de Responsabilidad Fiscal [Fiscal Responsibility Law], Ley N.o 9504 [Law No. 9504], state constitutions, and municipal organic laws.
Chile	Arts. 14, 17–20 of Decreto con Fuerza de Ley (DFL) 29 [Decree with the Force of Law 29] and Estatuto Administrativo para Funcionarios Municipales [Administrative Statute for Municipal Officials].
Colombia	Arts. 29–31 of Ley 909 [Law 909] and Arts. 1–7 of Decreto 4500 [Decree 4500].
Costa Rica	Arts. 133–142 of the Código Municipal [Municipal Code], Reglamento de Carrera Administrativa Municipal [Municipal Administrative Career Regulations], and the Manual para el Reclutamiento y Selección [Recruitment and Selection Manual].
Ecuador	Art. 5 h and 65 of Ley Orgánica del Servicio Público [Organic Law on Public Service].
El Salvador	Ley de Ética Gubernamental [Government Ethics Law], Art. 25 of Ley del Servicio Civil [Civil Service Law], and Arts. 24, 28, and 29 of Ley de la Carrera Administrativa Municipal [Municipal Administrative Career Law].
Honduras	Arts. 27–30 of Ley de Carrera Administrativa Municipal [Municipal Administrative Career Law].
Jamaica	Arts. 16–19 of Reglamentos del Servicio Público [Public Service Regulations] and Ley de Gobierno Local (Servicio Unificado y Empleo) [Local Government Law (Unified Service and Employment)].
Mexico	Each federal entity has its own legislation.
Panama	Art. 32 of Ley 9 [Law 9], Manual de Procedimientos para el Reclutamiento y Selección de Recurso Humano en el Sector Público Panameño [Procedures Manual for the Recruitment and Selection of Human Resources in the Panamanian Public Sector].
Paraguay	Arts. 1 and 15 of Ley de Función Pública [Public Service Law], Resolución SFP 150 [SFP Resolution 150], and Decreto 3857 [Decree 3857].
Peru	Art. 67 of Ley del Servicio Civil [Civil Service Law] and Ley de Bases de la Carrera Administrativa y de Remuneraciones del Sector Público [Law on the Basis of the Administrative Career and Public Sector Remuneration].
Dominican Republic	Arts. 37–44 of Ley de la Función Pública [Public Service Law] and Reglamento de Reclutamiento y Selección de Personal en la Administración [Regulations on Recruitment and Selection of Personnel in the Administration].
Trinidad & Tobago	Ley de Corporaciones Municipales [Municipal Corporations Law] and Reglamentos de la Comisión del Servicio Público [Regulations of the Public Service Commission].
Uruguay	Arts. 93–94 of Ley 19121 [Law 19121] and Estatuto del Funcionario Público de la Administración Central [Civil Service Statute of the Central Administration] for departments without their own statutes.
Venezuela	Arts. 13 and 40 of Ley del Estatuto de la Función Pública [Civil Service Statute Law].

Table A.7.4
Legislation consulted for Table 7.4

Country	Legislation
Argentina	Arts. 121–129 of the National Constitution, Arts. 7–11 of the Régimen Federal de Responsabilidad Fiscal y Buenas Prácticas del Gobierno [Federal Fiscal Responsibility and Good Governance Practices Regime], and provincial regulations.
Bolivia	Arts. 113, 115, and Transitory Provision 9 of the Ley Marco de Autonomías [Framework Law on Autonomies].
Brazil	Arts. 34–37 of the Federal Constitution, Arts. 19 of Supplementary Law No. 101 (Ley de Responsabilidad Fiscal [Fiscal Responsibility Law]), and state and municipal regulations.
Chile	Arts. 21–31 of Decreto Ley 3551 [Decree Law 3551], Estatuto Administrativo [Administrative Statute], Art. 2 of Estatuto Administrativo para Funcionarios Municipales [Administrative Statute for Municipal Officials], and Art. 49 of the Ley Orgánica Constitucional de Municipalidades [Organic Constitutional Law of Municipalities].
Colombia	Arts. 300 and 313 of the Political Constitution, Art. 17 of Law 909, and Arts. 3, 4, 6, and 74 of Law 617.
Costa Rica	Art. 4 of Ley de Salarios de la Administración Pública [Public Administration Salaries Law], Arts. 18, 87–90 of Reglamento de Carrera Administrativa Municipal [Municipal Administrative Career Regulations], and Art. 102 of the Municipal Code.
Ecuador	Arts. 57, 62, 101, 102, and 132 of the Organic Law on Public Service.
El Salvador	Art. 204 of the Constitution and Arts. 16 and 81 of the Ley de la Carrera Administrativa Municipal [Municipal Administrative Career Law].
Honduras	Art. 5 of Ley de la Carrera Administrativa Municipal [Municipal Administrative Career Law] and Art. 98 of the Ley de Municipalidades [Municipalities Law].
Jamaica	Reglamentos del Servicio Público [Public Service Regulations], Ley de Gobierno Local [Local Government Law], and Ley de Administración Financiera y Auditoría [Financial Administration and Auditing Law].
Mexico	National legislation, including Art. 127 of the Political Constitution, Arts. 10 and 21 of Ley de Disciplina Financiera de las Entidades Federativas y los Municipios [Law on Financial Discipline for Federal and Municipal Entities], and state regulations.
Panama	Arts. 38–42 and 73–78 of Law 9 and Ley General de Sueldos [General Salary Law].
Paraguay	Arts. 1, 34, 36, and 96 of the Public Service Law, General Budget of the Nation, Ley de responsabilidad fiscal [Fiscal Responsibility Law], and Art. 220 of Ley Orgánica Municipal [Municipal Organic Law].
Peru	Arts. 43–50 of Ley de Bases de la Carrera Administrativa y de Remuneraciones del Sector Público [Law on the Basis of the Administrative Career and Public Sector Remuneration], Arts. 4–7 of the Civil Service Law, and the Public Sector Budget Law]
Dominican Republic	Law 105–13 on State Salary Regulation and Art. 8 of the Public Service Law.
Trinidad & Tobago	Reglamentos de la Comisión del Servicio Público [Regulations of the Public Service Commission] and Ley de Corporaciones Municipales [Municipal Corporations Law].
Uruguay	Arts. 273–275 of the National Constitution, Ley de Descentralización y Participación Ciudadana [Decentralization and Citizen Participation Law], Ley Orgánica Municipal [Municipal Organic Law], and departmental regulations.
Venezuela	Arts. 144–149 and 311 of the National Constitution, Arts. 9–15 and 54–56 of the Civil Service Statute Law, Arts. 62–64 of the Ley Orgánica de la Administración Financiera del Sector Público [Organic Law on Public Sector Financial Administration], Art. 144 of the Ley Orgánica de Régimen Municipal [Organic Law on Municipal Governance], and state regulations.

Table A.7.5
Sources consulted for Table 7.5

Country	Reelection rules and terms (sources)
Argentina	Reelection rules for mayors vary widely among provinces.
Bolivia	ECLAC (n.d.)
Brazil	Chamber of Deputies. Acessibilidade na Câmara: Reeleição [*Accessibility in the Chamber: Reelection]*
Chile	Ley Fácil. Límite a la reelección de autoridades [Easy Law: Limit to Reelection of Authorities].
Colombia	Concepto 033641 de 2023 Departamento Administrativo de la Función Pública [Concept 033641 of 2023, Administrative Department of Public Service]
Costa Rica	Reform of Article 14 of Ley 7794, Código Municipal [Law 7794, Municipal Code], April 30, 1998 (*Law limiting indefinite reelection of local authorities*).
Ecuador	Consejo Nacional Electoral (CNE) [National Electoral Council], Referendum and Popular Consultation 2018.
El Salvador	Constitución de la República de El Salvador [Constitution of the Republic of El Salvador].
Guatemala	Ley electoral y de los Partidos Políticos [Electoral and Political Party Law]. Decree Number 1–85, National Constituent Assembly.
Guyana	Constitution of Councils for the Municipal Council for the City of Georgetown
Honduras	Ley Electoral de Honduras Poder Legislativo [Electoral Law of Honduras, Legislative Branch], Decree No. 35-2021.
Jamaica	The Local Governance Act, 2016 No. 8
Mexico	Sistema de Información Legislativa. Reelección Consecutiva [Legislative Information System: Consecutive Reelection].
Nicaragua	Ley de Reforma Parcial a la Constitución Política de la República de Nicaragua de 2014 [Law for Partial Reform of the Political Constitution of the Republic of Nicaragua, 2014].
Panama	Tribunal Electoral de Panama. Código Electoral de la República de Panama. [Panama Electoral Tribunal, Electoral Code of the Republic of Panama].
Paraguay	Law N° 1830
Peru	Law N° 30305
Dominican Republic	Constitution of the Republic
Trinidad & Tobago	Municipal Corporations Act and Tobago House of Assembly Act
Uruguay	Constitution of the Republic
Venezuela	First Amendment to the Constitution of Venezuela

Note: To view the material on which the information is based, click the link inserted in each row.

Table A.7.6
Sources of the population censuses used for Graph 7.6

Country	Source	Year
Argentina	REDATAM	2010
Bolivia	REDATAM	2012
Brazil	IBGE	2010
Chile	INE	2017
Colombia	REDATAM	2018
Costa Rica	REDATAM	2011
Cuba	IPUMS	2012
Ecuador	INEC	2022
El Salvador	REDATAM	2007
Guatemala	INE	2018
Honduras	REDATAM	2013
Mexico	INEGI	2020
Nicaragua	REDATAM	2005
Panama	REDATAM	2023
Peru	REDATAM	2017
Dominican Republic	REDATAM	2010
Trinidad & Tobago	REDATAM	2011
Venezuela	REDATAM	2011

Note: To view the material on which the information is based, click the link inserted in each row.

Clarifications regarding Table 7.1 and Graphs 7.2, 7.3, and 7.7

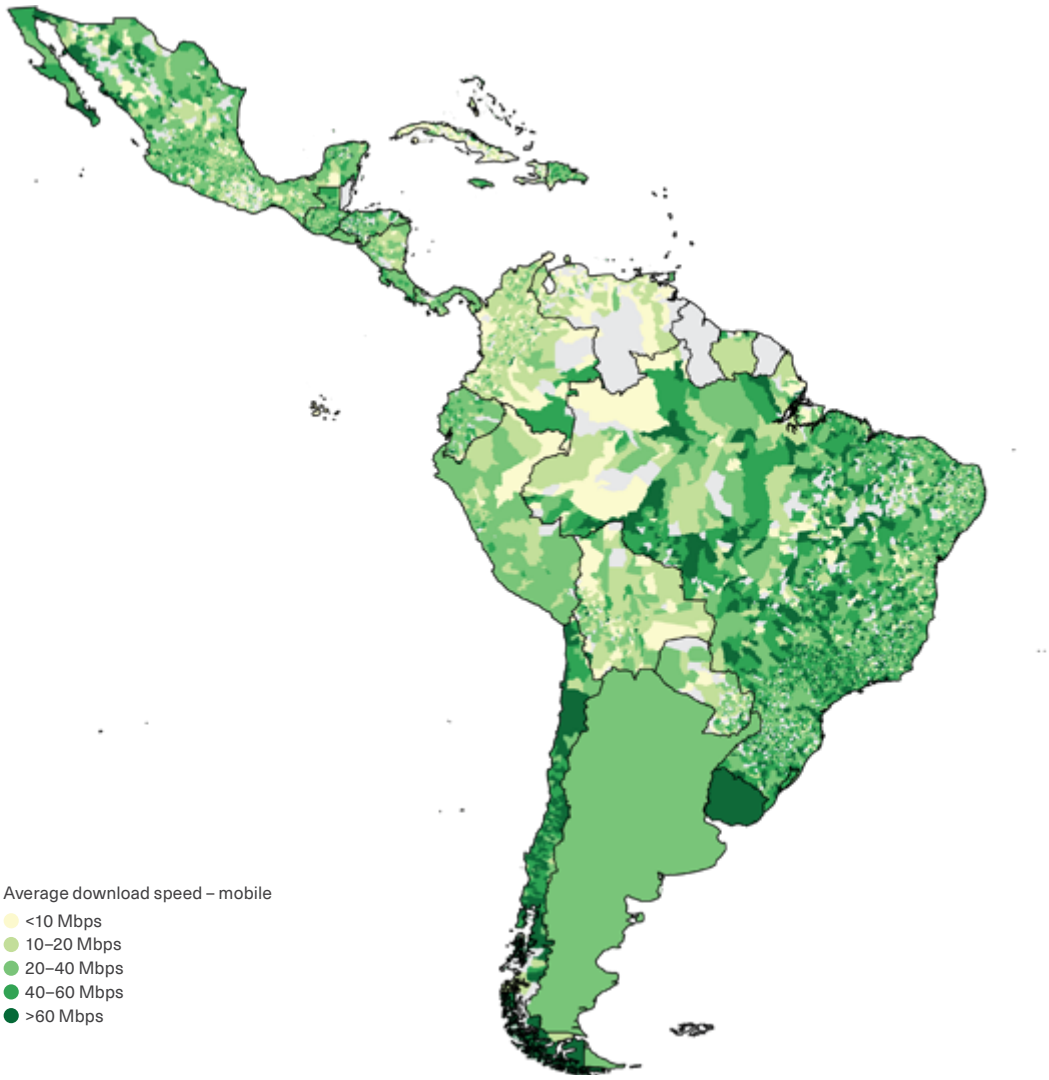
All samples are restricted to paid employees aged 18 to 65 who work between 30 and 60 hours per week. Hourly wages are estimated considering only individuals reporting positive wages. The top and bottom 3% of the wage distribution are trimmed.

In Brazil, Mexico, and Uruguay, only public employees from non-autonomous organizations are included. Data for Uruguay spans from the first quarter of 2018 to the second quarter of 2021, while data for Bolivia, Brazil, and Mexico covers the first quarter of 2018 to the last quarter of 2023.

From the second quarter of 2020, methodological changes were introduced in all surveys due to the health emergency. In Mexico, no data is available for the second quarter of 2020, and the size of in-person interview samples was temporarily reduced. In Brazil and Uruguay, interviews were conducted exclusively by telephone from the second quarter of 2020 to the same period in 2021. In Bolivia, no data is available for the first quarter of 2020, and rural populations are excluded from the second to the fourth quarter of 2020.

Chapter 8 Appendix

Figure A.8.1
Average mobile connectivity download speeds in local and intermediate governments in Latin America and the Caribbean, 2023



Note: The map shows average download speed data in 2023, measured in megabits per second (Mbps). The data comes from OOKLA (2023), an institution that collects speed test results conducted by users with GPS-enabled devices connected via Wi-Fi and ethernet.

Source: Authors based on OOKLA (2023) and CAF (2025).

Clarifications for Graph 8.1

The graph considers cadastral data from Brazil and Mexico. Brazilian cadastres consist of "a set of information identifying, locating, and describing the characteristics of properties in the municipal urban area" (IBGE, 2019). In Mexico, the figure considers cadastral records, defined as "a set of registers containing the general and specific data of real estate properties located within the State's territory" (INEGI, 2021).

Clarifications for Graph 8.6

The graph uses data from Mexico's National Survey on Availability and Use of Information Technology in Households (ENDUTIH) and Peru's National Household Survey (ENAHO). The y-axis represents individuals aged 18 and older who responded affirmatively to the following questions:

- In Mexico: "With a computer, laptop, or tablet, do you know how to... send and receive emails?"
- In Peru: "Which of the following computer activities have you carried out: sending emails with attachments (e.g., documents, photos, videos)?" This question was asked only of individuals who had previously indicated using a computer within the past three months.

Clarifications for Graph 8.9

Below is a list of information sources related to national digital government strategies:

- Argentina: Provision 20/2022.
- Bahamas: DTU (2021).
- Belize: E-Governance and Digitalization Department (2024).
- Bolivia: Supreme decree Nº 3251, July 12, 2017.
- Brazil: Supreme Decree Nº 12069, June 21, 2024.
- Chile: Law No. 21180, Digital Transformation of the State, November 11, 2019.
- Colombia: Decree 767, 2022.
- Costa Rica: MICITT (2023).
- Cuba: Ministry of Communications (2024).
- Ecuador: Organic Law for Digital and Audiovisual Transformation, February 7, 2023.
- El Salvador: Secretariat of Innovation (2020).
- Guatemala: Presidential Commission for Open and Electronic Government (n.d.).
- Honduras: Bermúdez-Madriz et al. (2011).
- Mexico: Agreement issuing the National Digital Strategy 2021-2024 (2021).
- Panama: AIG (2019).
- Paraguay: Ministry of Information and Communication Technologies (2024).
- Peru: Supreme decree No. 029-2021-PCM (2021).
- Dominican Republic: Gabinete de Transformación Digital (2022).
- Saint Kitts and Nevis: Ministry of Finance, Sustainable Development, Information and Technology (2006).
- Suriname: Government of Surinam (2023).
- Trinidad and Tobago: Ministry of Digital Transformation (2023).
- Uruguay: AGESIC (2021).

Over the past four decades, many countries in Latin America and the Caribbean have undergone significant decentralization. During this process, local and regional governments expanded in number, strengthened their political autonomy, and took on new responsibilities. Today, more than 18,000 subnational governments are engaged in delivering essential services across a wide range of areas, including education, health, citizen security, and infrastructure for roads, water, and sanitation.

These government units are undergoing a continuous process of learning and development. While they offer fertile ground for innovation and institutional strengthening, there is still limited accumulated knowledge about how they operate, the resources at their disposal, and the practices they employ. This report seeks to address that gap by pursuing two main objectives: to provide a detailed account of the actions and challenges of these administrations, and to outline an agenda for strengthening their governance capacities.

The report identifies several reasons why strengthening the capacities of local and regional governments is essential—three of which stand out. First, to help close territorial gaps in well-being indicators within countries. Second, to improve the planning and delivery of urban services, a critical issue in such a highly urbanized region. And third, to enable local-level responses to the governance challenges posed by the digital, green, and energy transitions.

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