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Fiscal Decentralization and Cyclicality in Latin America: Evidence from a New Regional Budget Database

Davi Bhering Buarque de Gusmao, Hector Perez-Saiz, Joe Ue and Valeria Visser

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Fiscal Decentralization and Cyclicality in Latin America: Evidence from a New Regional Budget Database

Prepared by Davi Bhering Buarque de Gusmao, Hector Perez-Saiz, Joe Ue and Valeria Visser*

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ABSTRACT: Using a newly constructed database of highly granular regional-level budgets, this paper documents the growing relevance of regional governments in Latin America over the past three decades and evaluates the implications for fiscal cyclicality. We find that regional governments exhibit lower revenue elasticity to national GDP than central governments, primarily due to the limited cyclicality of transfers. On the expenditure side, while overall elasticity is comparable to central governments, fiscal adjustment occurs through capital expenditures. We also show that transfers appear to operate primarily as redistribution mechanisms across regions rather than as instruments to offset differences in tax capacity.

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WORKING PAPERS

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1 Introduction

The allocation of fiscal responsibilities across levels of government has remained a central—and contested—issue in public finance since Musgrave's (1959) seminal framework. In this foundational work, Musgrave argued that the provision of local public goods may be efficiently decentralized as subnational governments are better informed about local needs and more accountable for regional outcomes. In contrast, redistribution and macroeconomic stabilization are better conducted at the central level to avoid distortions and ensure policy effectiveness. More recently, the literature has emphasized the risks to greater decentralization, such as those related to weaker fiscal control, coordination failures in macroeconomic policy, and potential fiscal imbalances arising from mismatches between revenue authority and expenditure responsibilities.

Latin America provides a particularly relevant setting to study fiscal decentralization. The region combines federal and unitary states with widely varying degrees of decentralization and revenue transfer mechanisms, which have also greatly evolved over time. Consequently, debates over the appropriate allocation of fiscal powers remain prominent in many countries in the region. Despite its importance, the debate has not been sufficiently informed by a long-term, region-wide, and disaggregated assessment of subnational fiscal dynamics in Latin America.

This paper first asks whether regional governments have increased their fiscal importance over time in Latin America. We study long-run patterns of fiscal decentralization for regional governments—states, provinces, or regions—across the continent. Because meaningful decentralization reforms typically unfold gradually and at different points in time across countries, understanding these dynamics requires a long-term perspective. Beyond aggregate trends, we examine how changes in revenue and expenditure composition have contributed to decentralization. Distinguishing between own-source revenues and transfers, as well as between current and capital expenditures, provides insight into the forces driving decentralization and into the nature and quality of the observed changes. Cross-country coverage also allows us to move beyond country-specific narratives and identify common patterns underlying individual experiences.

These issues connect to broader macroeconomic policy questions that have attracted significant attention in the academic literature. In particular, they relate to the study of fiscal risks and debt sustainability and their implications for the design of fiscal frameworks and fiscal rules. For instance, subnational borrowing, contingent liabilities, or vertical imbalances can threaten overall fiscal sustainability in decentralized systems. Indeed, the fiscal vulnerabilities of subnational governments contributed to the major Latin America crises at the turn of the century (e.g. Brazil in 1998, Argentina in 2001). These issues also concern the role of intergovernmental transfers in reducing inequality within territories or decreasing disparities across regions. Transfers between territories have also traditionally helped enhance risk-sharing, especially in currency unions, where monetary policy is centralized and subnational governments have limited stabilization capacity.

We construct a new long-term, highly granular database on subnational public finances in Latin America. The dataset covers nearly four decades, from the early 1980s to 2024, and includes regional-level revenue and expenditure data for major countries in the region, in addition to municipal-level fiscal variables and debt for some countries. Compared with existing sources, it provides longer time coverage and a finer geographic breakdown at the regional level, rather than only country aggregates, allowing analysis of both cross-country patterns and within-country heterogeneity.

We find that the fiscal importance of regional governments has increased markedly across Latin America over the past three decades. In all countries in our sample, regional government revenues as a share of GDP have risen, roughly doubling on average, with revenues in countries such as Argentina or Brazil reaching a level close to 15 percentage points of GDP. A similar, though less pronounced pattern emerges when measuring regional revenues as a share of general government revenues.

Transfers to regional governments play a central role in regional public finances. In all countries considered in our sample, transfers account for more than 30 percent of regional government revenues. However, reliance on transfers varies widely across regions, with richer regions consistently exhibiting lower transfer dependence. Disaggregating revenues shows that this pattern reflects higher transfers to poorer regions rather than systematically lower own-source revenues in those regions. In other words, transfer systems appear to operate primarily as redistribution mechanisms across regions rather than as instruments to offset differences in tax capacity.

The paper next examines whether the growing fiscal role of regional governments affects fiscal cyclicality and what is the role played by transfer revenues. Fiscal cyclicality is defined as an elasticity, i.e., the responsiveness of revenues and expenditures to changes in economic activity measured by GDP. We analyze whether regional governments' finances display different cyclical behavior than central governments' finances, considering responsiveness to national and regional GDP, short-term versus long-term responses, and exploring the factors driving differences in cyclicality across levels of government, regions, and countries.

Estimating the elasticity of regional fiscal variables to both subnational and national GDP is important for assessing the sensitivity to the cycle and the capacity for stabilization. Elasticities to subnational GDP indicate how strongly own-source revenues and expenditures move with local activity, helping inform tax design and fiscal frameworks to avoid procyclical adjustments at the local or regional level that could amplify downturns. It also measures the degree of vertical fiscal insurance provided to regions through intergovernmental transfers, shedding light on how effectively central governments smooth shocks across regions. Elasticities of regional fiscal variables to national GDP capture the degree of cyclicality at the aggregate level and how transfers could contribute to macroeconomic stabilization. Together, these elasticities estimates could help identify vulnerabilities in subnational fiscal systems and inform the calibration of transfers and fiscal rules, supporting an appropriate balance between fiscal autonomy and macroeconomic stabilization.

Using error-correction models and common correlated effects estimators, we find that regional government revenues are less responsive to national GDP fluctuations than central government revenues. A 1 percent increase in nominal national GDP is associated with a 0.87 percent increase in regional government revenues in the same year. This below one elasticity is driven by the limited responsiveness of transfers: own-source revenues respond almost one-for-one to national GDP, while transfer revenues are significantly less flexible. Similarly, the elasticity of regional revenues with respect to regional GDP is also below one, again driven by the weak responsiveness of transfers. The low elasticity of transfers and the limited revenue-raising capacity of regions suggest weak cyclical responsiveness among subnational governments in Latin America and relatively shallow fiscal integration—an important criterion for the existence of an optimum currency area as highlighted in the literature (Kenen, 1969).

On the expenditure side, regional government spending responds even less to economic fluctuations. A 1 percent increase in nominal national GDP is associated with a 0.71 percent increase in regional government expenditures. This asymmetry between revenue and expenditure elasticities may create fiscal

risks during downturns, when revenues decline more sharply than expenditures. The lower expenditure elasticity is primarily explained by the rigidity of current spending, while we fail to reject the null hypothesis that capital expenditures respond proportionally to GDP.

Our research has implications for the efficiency, redistributive and macro-fiscal stability objectives of fiscal policy. Steady expansion of regional governments over the past three decades may have generated efficiency gains by allowing public goods and services to be better tailored to local preferences. This, together with appropriate intergovernmental transfer systems, may have also contributed to reducing inequality, although this may have been constrained by inequal fiscal capacity across subnational governments. Additionally, the limited cyclical responsiveness of the regions' revenue structures—dominated by intergovernmental transfers—could have weakened their role as automatic stabilizers, shifting the burden of adjustment to expenditure, particularly public investment. These findings underscore the need to strengthen intergovernmental fiscal frameworks, better integrate subnational governments into medium-term fiscal planning, implement appropriate regional-level fiscal rules, and ensure that transfer and expenditure rules support both macroeconomic stabilization and sustainable public investment.

The paper is organized as follows. Section 2 reviews the related literature on fiscal decentralization, government size, and fiscal cyclicality, with particular emphasis on the role of intergovernmental transfers and subnational governments. Section 3 describes the data sources and the construction of a new long-term, highly granular database of subnational public finances for Latin America and discusses key measurement and harmonization choices. Section 4 documents long-run trends in fiscal decentralization in a global and regional perspective, highlighting the growing fiscal importance of regional governments and the structure and distribution of intergovernmental transfers. Section 5 presents the empirical strategy and main results on fiscal cyclicality, comparing the responsiveness of revenues and expenditures across levels of government and assessing the role of revenue composition—especially transfers—in shaping regional fiscal behavior. Section 6 concludes by discussing the macro-fiscal implications of the findings and outlining policy considerations and directions for future research.

2 Literature Review

The traditional, or first-generation, theory of fiscal decentralization makes the economic case for decentralization primarily on efficiency grounds. This literature draws on the seminal contributions of Tiebout (1956), Musgrave (1959), Olson (1969), and Oates (1972). Under the assumption of benevolent governments, this literature argues that devolving tax and expenditure responsibilities to lower levels of government allows public policies to better reflect heterogeneous local preferences, thereby improving allocative efficiency. Building on this foundation, a second-generation theory of fiscal decentralization emerged toward the end of the twentieth century, relaxing the assumption of benevolent policymakers and introducing a public-choice perspective. This more recent literature models political and fiscal institutions operating under imperfect information, with self-interested public officials whose objectives may diverge from those of society (Oates, 2005). Drawing on insights from the theory of the firm, information economics, principal–agent models, and contract theory, second-generation approaches emphasize incentive problems, commitment, and accountability. On the empirical front, with the increasing fiscal importance of subnational governments and public data available, a literature has been developed in the last decades to estimate the effects of greater decentralization on public sector efficiency, economic efficiency or growth (e.g. Martinez-Vazquez and McNab, 2003; Faguet 2004; Rodríguez-Pose and Ezcurra, 2010).

A closely related literature to our paper examines the determinants of government size, emphasizing structural and institutional factors, among others. On the structural side, economic development plays a central role in explaining government growth. Consistent with Wagner's Law (originally advanced by Adolph Wagner in 1883), higher income levels are typically associated with greater demand for public goods, social protection, and regulatory functions, leading to an expansion of government spending over time. More recently, other channels have been proposed to explain government size, such as: a) insurance against external risks, which may increase government spending (Rodrik, 1998); b) redistribution channels that emphasize inequality and the median voter (Meltzer and Richard, 1981); and c) Institutional factors, including political rights, regime type, electoral systems, and fiscal federalism (Benabou, 1996; Persson and Tabellini, 1999; Oates, 1999). Shelton (2007) provides a systematic and unified empirical assessment of some of these theories.

Another recent strand of the literature documents historical patterns of fiscal decentralization in Latin America. CAF (2025) and the Inter-American Development Bank (2022) provide important descriptive analyses of subnational public finances, documenting decentralization patterns and the functioning and role of intergovernmental transfers in the region. We contribute to this literature by constructing a new long-term, harmonized database that allows us to document decentralization trends over several decades while also analyzing common patterns across countries. Importantly, we show that decentralization is a Latin America–wide phenomenon that has unfolded over the past decades. We further analyze the role of intergovernmental transfers and show that, across the region, transfers from the center to subnational governments serve an equalizing purpose by partially compensating for income differences across regions within countries.

Fiscal cyclicality has been studied extensively from a cross-country perspective. This long-standing literature documents systematic differences in fiscal cyclicality between low- and high-income countries and emphasizes the role of institutions, financing constraints, and policy frameworks in shaping fiscal responses over the business cycle (Lane, 2003; Frankel et al., 2013; Heimberger, 2023; or Jalles et al., 2024). More recent contributions focus on the buoyancy and elasticity of revenues with respect to economic activity, using dynamic panel methods to distinguish short-run from long-run responses and to address common shocks (Cornevin et al., 2020; Lagravinese et al., 2020; Gupta et al., 2022). A key finding from this literature is that direct taxes tend to be more elastic than indirect taxes. Focusing on Latin America, early work highlights the procyclicality of fiscal policy in the region (Gavin and Perotti, 1997), the role of vertical fiscal imbalances (Stein, 1999), and asymmetries in tax revenue responses over the business cycle depending on deviations from long-run equilibrium relationships (Fricke and Süssmuth, 2014). Procyclicality declined moderately in the region since the mid-2000s, as fiscal consolidation, stronger macro frameworks, lower debt, and improved fiscal institutions expanded policy space, supporting more neutral or countercyclical policies (Klemm, 2014; Martorano, 2018).

A smaller but growing literature examines fiscal cyclicality at the subnational level, where institutional constraints and intergovernmental arrangements can lead to markedly different fiscal responses. Vertical fiscal imbalances—defined as mismatches between subnational expenditure responsibilities and own-source revenue capacity—have been shown to be associated with weaker fiscal performance in advanced economies (Eyraud and Lusinyan, 2013). More recently, Dougherty and Biase (2020) compare central and subnational governments and show that subnational revenues are less sensitive to economic downturns than central government revenues, while subnational expenditures are more procyclical. They attribute these differences to the interaction between expenditure assignments and revenue composition across levels of government. For Latin America, Arena and Revilla (2009) document procyclical fiscal behavior at the state level in Brazil and highlight the role of transfers and own-source revenues, while Meloni (2018) analyzes the

Argentine case at the provincial level. Outside Latin America, Xing and Fuest (2018) study Chinese provinces and show how central–local fiscal relations and regional revenue sources shape subnational spending cyclicality. Related work on the United States examines fiscal cyclicality among state and local governments, with seminal contributions dating back to Groves and Kahn (1952) and more systematic evidence provided by Sørensen et al. (2001).

We contribute to this literature by providing a long-term, multi-country assessment of fiscal cyclicality at the regional level in Latin America. Using newly constructed and harmonized subnational fiscal data together with frontier panel econometric methods, we analyze fiscal cyclicality at the subnational level and compare cyclical responses across levels of government. We further investigate the mechanisms underlying cross-country and within-country heterogeneity by examining differences in revenue composition—particularly the role of intergovernmental transfers—and in expenditure categories.

3 Data Sources

Our empirical analysis relies on three primary databases. First, we construct a highly granular dataset of subnational fiscal information, at the regional or municipal levels, using administrative data obtained directly from fiscal authorities in Latin America. Second, we develop an extended version of the IMF's Fiscal Decentralization dataset, which offers comprehensive and internationally comparable decentralization indicators at the country level. Third, we complement these two databases with additional country- and regional-level demographic and economic information, including regional GDP or population. The compilation of each database is described in detail next.

3.1 Subnational-Level Budget Information for Subnational Governments

We construct a highly granular database with fiscal information at the subnational level using a variety of sources from fiscal authorities in Latin America. The process consisted of systematic collection and harmonization of data from official national sources. For each country, the collection process involved manual downloading of budget execution and fiscal reports of regions and municipalities available from finance ministries or national statistical offices (Table 1). The dataset covers the largest economies in the region: Argentina (only regions), Brazil, Colombia, Mexico, Peru (only regions) and Uruguay (only regions).

The scope of analysis was also guided both by the economic relevance and availability of subnational fiscal data. Very small economies in the region (e.g., small countries in Central America countries or certain Caribbean islands) were excluded, given the near absence of subnational structures or publicly available data and their limited subnational fiscal importance. Other countries, such as Bolivia, lack consistent time series of subnational fiscal data, while in the case of Chile, regional governments have very limited fiscal autonomy and municipalities represent the primary subnational entities in terms of fiscal relevance. The database starts as early as 1989, and most countries have information up to 2023, offering a long-term view of subnational fiscal dynamics (Table 2).

We mainly focus the empirical analysis on regional governments (states, provinces, or regions). The focus on regions reflects their greater fiscal importance: on average, regional governments account for a larger share of GDP than local governments (municipalities) and typically enjoy greater fiscal autonomy. Local

governments play a significant role in fiscal decentralization in some countries in the region due to historical reasons, and in several cases the regional tier is not clearly defined from a fiscal perspective.[1] Accordingly, extending the analysis in the future to the municipal level—especially in countries where subnational government activity is mainly concentrated at the local level—would help provide a more comprehensive assessment of fiscal decentralization.

Once collected, the data were standardized and reformatted to ensure comparability across countries and levels of government. Fiscal variables were homogenized following the IMF Government Finance Statistics (GFS) principles. Revenue was consolidated into three broad categories—own-source revenue (including tax and non-tax collections), transfers revenue for the subnational government, and finally, the total revenue recorded. Similarly, expenditures were grouped into current, capital, and debt-servicing spending. This data harmonization enables meaningful cross-country analysis of subnational fiscal performance, vertical imbalances, and relative elasticities across Latin American economies.

Fiscal variables definition reflects their underlying economic functions and the degree of control exercised by subnational governments (Table 2). Own-source revenues correspond to revenues directly controlled and collected by subnational governments, such as local taxes, fees, and charges for public services. Transfer revenues include resources received from other levels of government, typically in the form of central government grants or shared revenues. On the expenditure side, current expenditures capture day-to-day operating spending, including wage payments, purchases of goods and services, and routine administrative costs, while capital expenditures refer to investments in physical assets and infrastructure, such as the construction of schools, hospitals, or transport facilities. Debt-servicing expenditures comprise interest payments of public debt.

3.2 Country-Level Budget Information for Subnational Governments

We compare the granular, subnational level, fiscal data we collected to that provided at the aggregate level in the IMF Fiscal Decentralization dataset. This publicly available dataset primarily uses indicators from the Government Finance Statistics (GFS) database for central, regional (aggregated across states), and local (aggregated across municipal) levels, encompassing in total more than 165 economies reporting at least one of these levels, and spanning several decades.[2] Raw data is provided by national authorities, and it is processed following the highly recognized standards of the Government Finance Statistics Manual 2014 (GFSM 2014). The GFS database contains comprehensive fiscal data on stock positions (balance sheets) and fiscal data on flows (transactions and other economic flows).

We expand the IMF Fiscal Decentralization dataset to include additional countries and years, providing a more comprehensive and recent picture of regional trends The original publicly available dataset includes a complete picture of subnational fiscal governments for approximately 82 economies with data up to 2020. We extend the IMF Fiscal Decentralization dataset to incorporate historical revisions and newly covered data for the years of 2021-2023. Additionally, our work expands the number of economies available to 97. The coverage has been broadened to include new countries in Latin America and the Caribbean (LAC) such as

1

[1] For instance, the fiscal prominence of municipalities in Brazil, Colombia, and Chile reflects the political economy of decentralization during democratic transitions and structural reform periods over the last decades. In these countries, reformers sought to expand participation, improve service delivery, and rebuild state legitimacy.

[2] The database is available at https://data.imf.org/en/datasets/IMF.STA:FD .

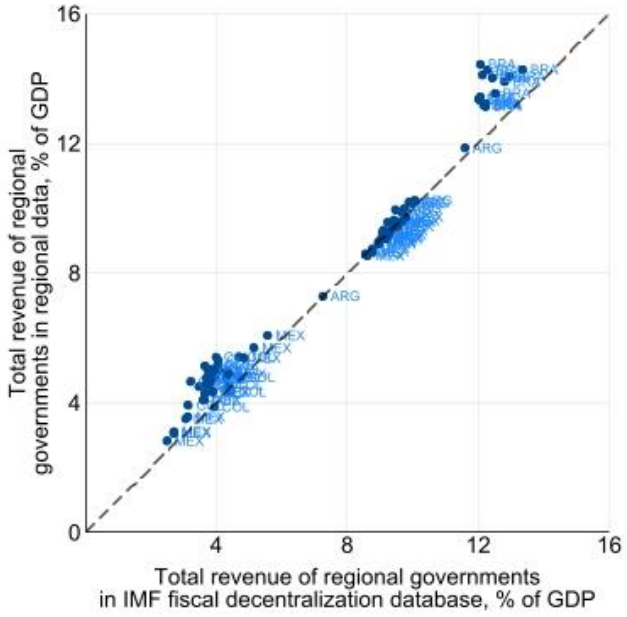
Argentina, Dominican Republic, Ecuador, Panama and Uruguay—where subnational fiscal data have become increasingly accessible and comparable, allowing for a more comprehensive assessment of decentralization trends and regional fiscal dynamics across the region.

The comparison between the granular subnational database described in the previous section and the extended IMF Fiscal Decentralization dataset reveals a high degree of consistency across the two sources. Figure 1 plots the sum of regional revenues for Argentina, Brazil, Colombia, and Mexico (y-axis) against the corresponding aggregate values reported by national authorities to the IMF (x-axis) over 1989–2023, though coverage varies by country and year. The close alignment of observations around the 45-degree line indicates that both datasets are broadly consistent. Minor discrepancies likely reflect differences in reporting standards between the IMF's Government Finance Statistics (GFS) submissions and the more detailed regional data available from national sources, as well as possible measurement errors, and classification differences.

3.3 Additional Country-Level and Subnational-Level Demographic and Economic Information

In addition to fiscal variables, we incorporate key demographic and economic indicators at the national and subnational level, such as population and national or regional GDP. These variables were obtained from countries' own statistical agencies and ministries of finance to ensure consistency with national accounts and demographic projections. The inclusion of these indicators allows for the estimation of per capita regional GDP or national-GDP, or the construction of fiscal ratios expressed as a percent of subnational GDP. These ratios provide a standardized basis for cross-country comparison and for assessing the relative size and fiscal

Figure 1: Comparison of Subnational Databases (1989–2023)



Source: IMF estimations using the IMF Fiscal Decentralization dataset and subnational-level budget information for subnational governments compiled from individual countries.

capacity of subnational governments within each country. Table 4 in the Annex summarizes all years available for each country and database used in this paper.

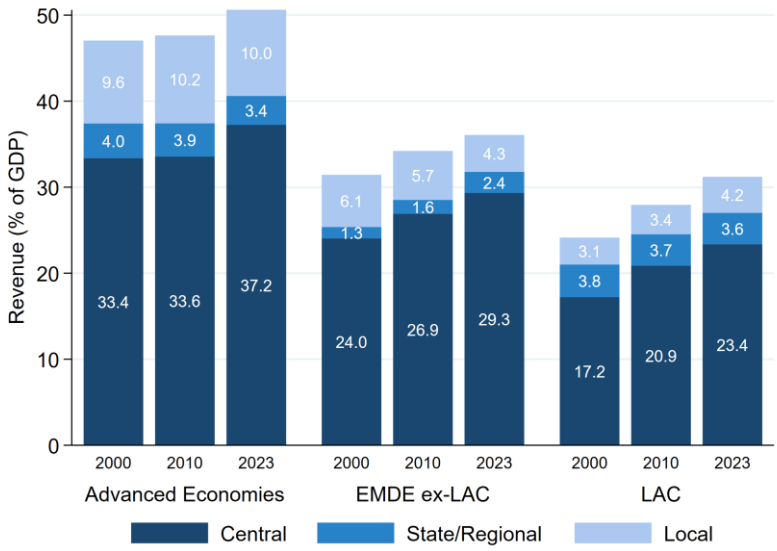
4 Fiscal Decentralization Trends

4.1 Fiscal Decentralization in Global Perspective

We first use the IMF Fiscal Decentralization dataset to provide a global overview of subnational fiscal trends. Figure 2 illustrates the evolution of central, regional, and local government revenues (as percent of GDP) for advanced economies, emerging and developing economies excluding LAC (EMDEs ex-LAC), and LAC countries, for the years 2000, 2010, and 2023, averaged across countries in each group. Total fiscal revenues across all government levels as a share of GDP have increased across all regions over time, although levels in LAC remain below those observed in advanced economies and EMDEs. The importance of local governments continues to be comparatively limited in LAC compared to the other groups, particularly in advanced economies, where local governments play a much important fiscal role. Interestingly, regions in LAC have reached in 2023 a high level of importance when compared to advanced and emerging countries.

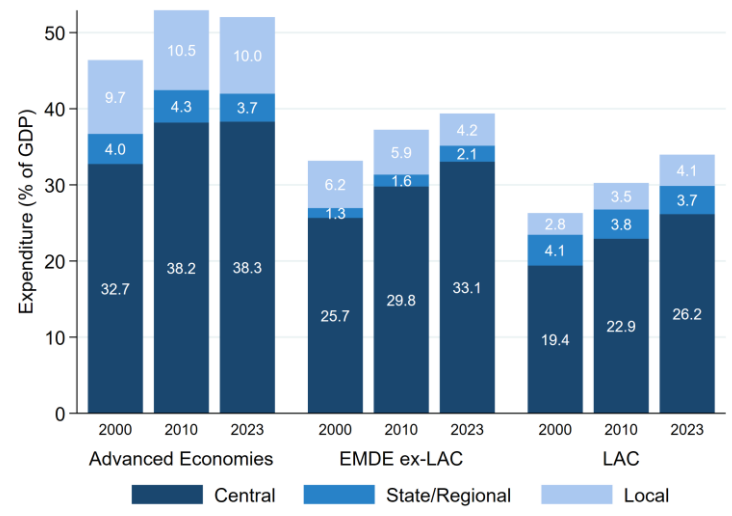
Error! Reference source not found.**, which presents expenditures by government level across world regions, broadly mirrors the revenue patterns but reveals some additional nuances.** Expenditures show greater variation than revenues across decades in advanced economies, although LAC exhibits a more consistent upward trend at all levels of government. Interestingly, local government revenues and expenditures tend to move closely together across all regions—unlike those of central and regional governments—suggesting tighter constraints on local governments' ability to finance fiscal deficits.

Figure 2: Revenues in Subnational Governments Across Regions



Source: IMF estimations using IMF Fiscal Decentralization dataset and the World Economic Outlook.

Figure 3: Expenditures in Subnational Governments Across Regions



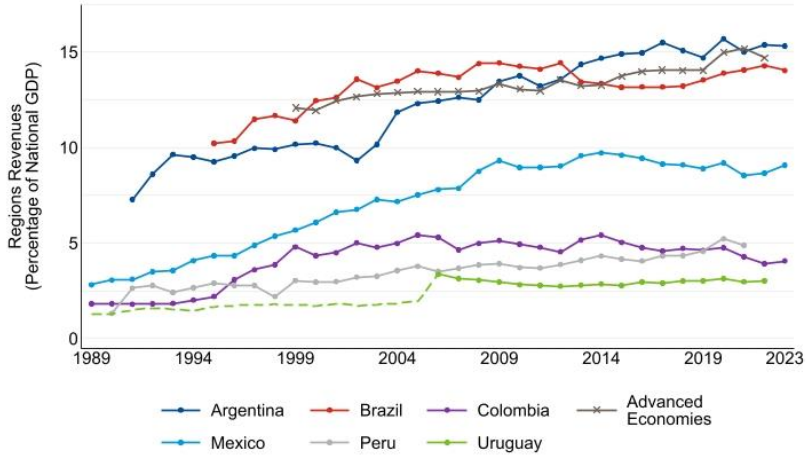
Source: IMF estimations using IMF Fiscal Decentralization dataset and the World Economic Outlook.

4.2 Fiscal Decentralization in Latin America

A more detailed description of the fiscal decentralization trends in Latin America reveals marked differences across countries, reflecting institutional characteristics. Table 2 and Table 3 in the Annex display considerable heterogeneity in the decentralization frameworks for the sample of countries included in our database. For instance, Chile, which has a relatively small number of municipalities compared to its neighbor Peru, grants very limited fiscal autonomy to regional governments. Argentina, Brazil, and Mexico are constitutionally established as federal states, while unitarian countries such as Paraguay allow very limited fiscal autonomy to regional governments. In Mexico, decentralization is primarily concentrated at the state (regional) level, whereas Brazil and Peru feature a more balanced distribution of fiscal responsibilities between regional and local governments.

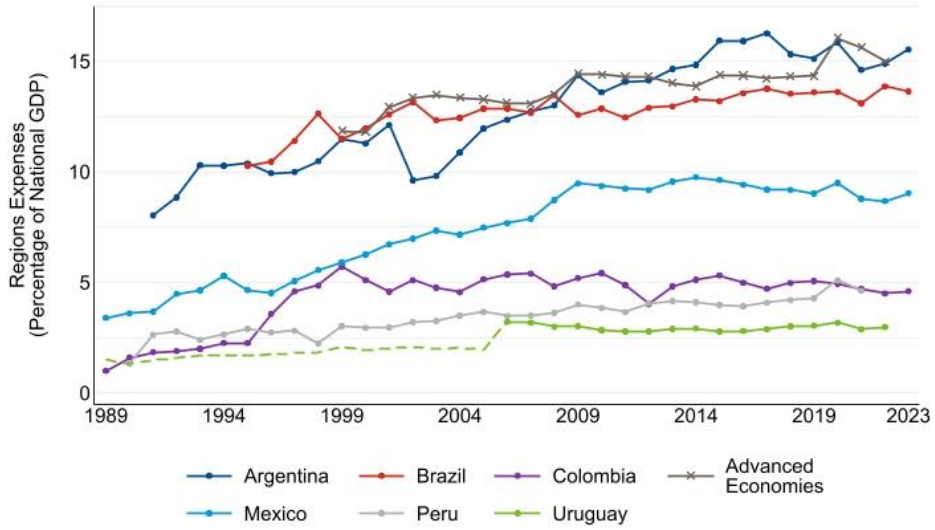
There is a clear long-term upward trend in the relative size of regional fiscal budgets in Latin America. Using the highly granular subnational-level database, Figure 4 shows that regional revenues, as a share of national GDP, have generally increased over the period 1989–2023 across the six economies in the sample. Argentina and Brazil's regional budgets are the largest in the period, with revenues close to 15 percentage points of GDP in 2023, followed by Mexico—about 10 percentage points—which has experienced a pronounced growth over this period. Temporary declines in revenues are evident during crisis periods for some countries like Argentina. Uruguay's regional governments size remains the smallest in this period, followed by Colombia and Peru. The evolution of expenditures as a share of GDP (Figure 5) follows a pattern broadly similar to that observed for revenues.

Figure 4: Regional Government Revenues



Source: IMF estimations using the IMF fiscal decentralization database and subnational-level budget information for subnational governments compiled from individual countries.

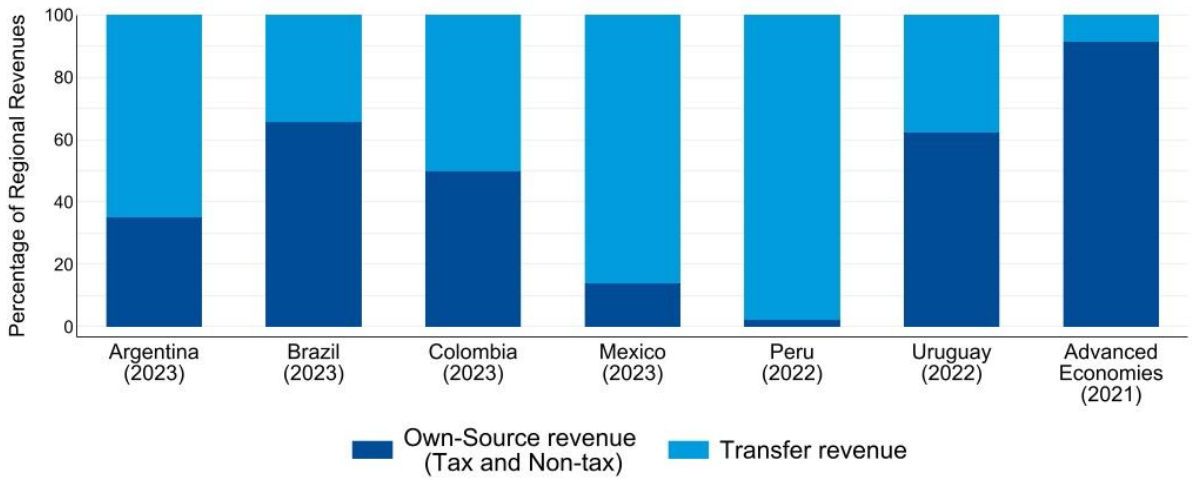
Figure 5: Regional Government Expenses



Source: IMF estimations using the IMF Fiscal Decentralization dataset and subnational-level budget information for subnational governments compiled from individual countries.

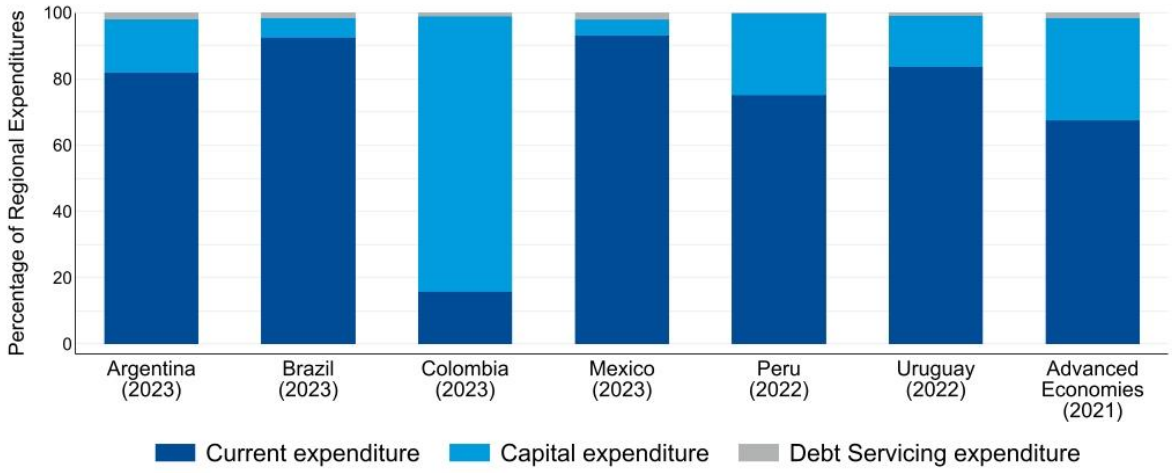
There is also wide variation in the composition of revenues and expenditures across Latin American countries. Transfers from the central government play a dominant role in regional government revenues, accounting for more than 65 percent in Argentina and Mexico, about 50 percent in Colombia, and roughly 30 percent in Brazil, and Uruguay (Figure 6). In contrast, transfers account for only about 10 percent of total regional government revenues in advanced economies. This difference reflects institutional arrangements and revenue collection challenges often faced by emerging and developing countries in the region compared to most advanced economies (Table 5 in the Annex). On the expenditure side, capital spending accounts for more than 80 percent and 50 percent of total regional government expenditures in Colombia and Peru, respectively, whereas in the rest of the region it remains below 20 percent—similar to the levels observed in advanced economies (Figure 7). Given relatively low debt levels and limited access to financing, subnational debt service expenditure remains minimal in the region, also in line with levels observed in advanced economies.

Figure 6: Regional Government Revenues Breakdown



Source: IMF estimations using the IMF Fiscal Decentralization dataset and subnational-level budget information for subnational governments compiled from individual countries.

Figure 7: Regional Government Expenditures Breakdown



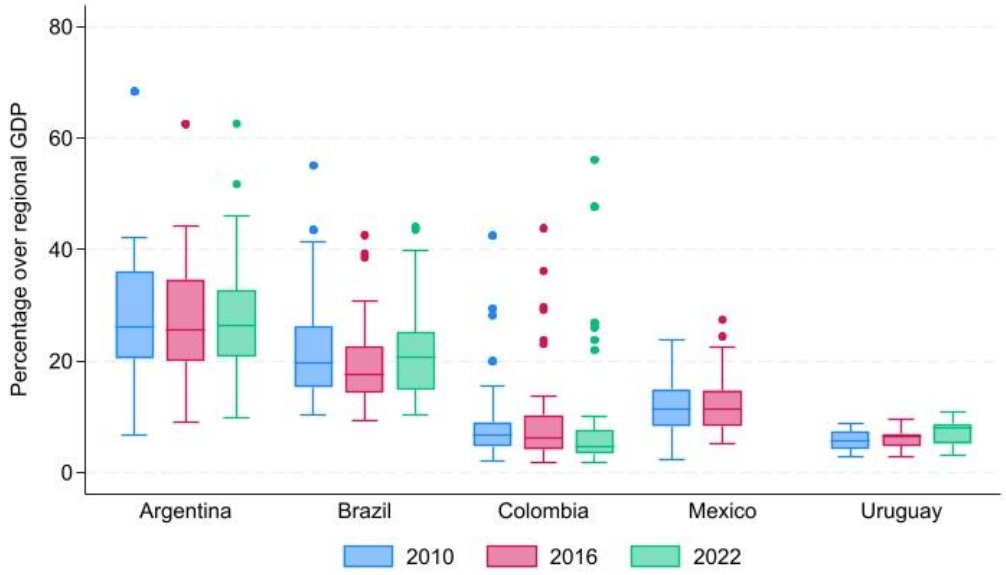
Source: IMF estimations using the IMF Fiscal Decentralization dataset and subnational-level budget information for subnational governments compiled from individual countries.

Evidence points to several structural drivers behind the rise in fiscal decentralization across Latin America. In many of the region's larger economies, decentralization has expanded over recent decades as governments reassigned major service-delivery responsibilities—particularly in education, health, infrastructure, and social programs—to subnational levels and financed these mandates through revenue-sharing arrangements and formula-based transfers. This process has been shaped by multiple reinforcing factors, including: (i) democratization and constitutional reforms that broadened political participation and territorial representation; (ii) pressures to strengthen service delivery and expand the state's presence across

heterogeneous territories; (iii) political bargains that enhanced the role of governors and local authorities, especially in federal systems; and (iv) in resource-rich economies, natural-resource revenues that further boosted subnational budgets (Falleti, 2010; Brosio and Jiménez, 2012).

There is also a large dispersion of regional revenues measured as a percentage of regional GDP, suggesting wide regional disparities in revenue autonomy and capacity within Latin American countries. Figure 8 reveals significant intra-country variation, particularly in Argentina and Brazil, where revenue-to-GDP ratios range widely across provinces and states, indicating uneven fiscal capacity. Colombia and Mexico show more compact distributions, reflecting more centralized and uniform revenue assignments across regions. Uruguay stands out for its low and tightly clustered ratios, suggesting very limited regional revenue autonomy. Overall, the data highlight pronounced heterogeneity not only across countries but also within them, underscoring persistent disparities in regional revenue-raising capacity and the concentration of fiscal resources at the central level.

Figure 8: Dispersion of Regional Government Revenues Across Regions, as Percent of Regional GDP



Source: IMF estimations using subnational-level budget information for subnational governments compiled from individual countries.

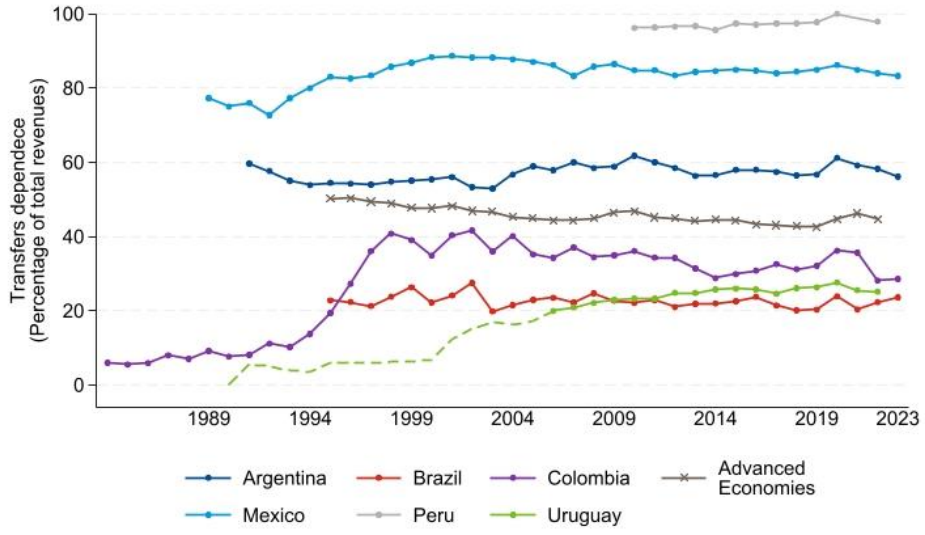
4.3 Transfer Dependence in Latin America

Fiscal transfers from central governments to subnational authorities play a central role in supporting service delivery and addressing vertical imbalances across Latin America. However, their design and fiscal significance vary considerably across countries, reflecting structural differences in intergovernmental arrangements and levels of decentralization. As summarized in Table 5 in the Annex, the region features a diverse mix of transfer mechanisms. In federal countries such as Argentina, Brazil, and Mexico, constitutionally established revenue-sharing mechanisms allocate a significant share of national tax revenues to subnational governments. Brazil exhibits relatively balanced fiscal autonomy on aggregate while Mexico remains highly dependent on federal transfers, which account for up to 80–90 percent of state revenues. In unitary countries

such as Colombia, Peru, and Bolivia, transfer systems are typically sector-specific and distributed through earmarked formulas targeting education, health, infrastructure, or poverty reduction, often reinforced by natural resource–based transfers that introduce spatial disparities in fiscal capacity (World Bank, 2021). Countries like Bolivia and Peru rely heavily on hydrocarbon or mining royalties (IDH, *canon minero*), which can create volatility and interregional inequities. Also, Chile and Uruguay combine formula-driven funds with equalization and performance-based transfer schemes, resulting in moderate levels of dependence (IDB, 2022).

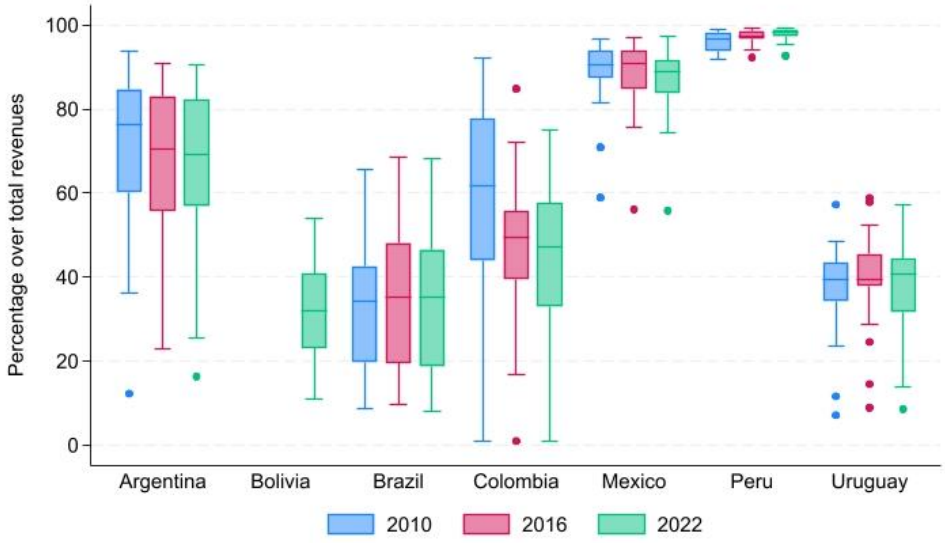
While over the years transfers have remained relatively constant, there is substantial variation in transfer dependence across regional governments in each country. With the exception of Uruguay, which shows a gradually rising dependence on transfers, the rest of the large economies considered show a relatively stable dependence on transfers over the years (Figure 9). Figure 10 illustrates the distribution of transfers as a share of total revenues for regional governments in our sample of selected Latin American countries in years 2010, 2016, and 2022. Argentina and Colombia display very wide dispersion, with an interquartile (25^{th}-75^{th} percentile) range above 60 percent for most years. Brazil, and Uruguay display more moderate dispersion across regions. Mexico and, in particular, Peru stand out for exhibiting both very high transfer dependence—exceeding 80 percent of total revenues—and very limited dispersion, especially in the case of Peru. Overall, the evidence suggests persistent cross-country heterogeneity: while some countries maintain high and stable levels of transfer reliance over time, others experience broader fluctuations and more pronounced changes across periods.

Figure 9: Regional Government Transfers Across Years, as Percent of Total Revenues



Source: IMF estimations using the IMF Fiscal Decentralization dataset and subnational-level budget information for subnational governments compiled from individual countries.

Figure 10: Dispersion of Regional Government Transfers Across Regions, as Percent of Total Revenues



Source: IMF estimations using subnational-level budget information for subnational governments compiled from individual countries. Data for Bolivia is only available for 2023.

Richer regions—those with higher GDP per capita in relationship to the national GDP per capita—tend to exhibit lower revenue ratios when revenues are measured as a share of regional GDP. Figure 11 illustrates a clear inverse relationship between total regional revenues (as percentage of regional GDP) and regional GDP per capita relative to the national GDP per capita. While total regional revenues can reach up to 50 percent of GDP in poorer regions, regions with per capita GDP exceeding twice the national average display markedly lower revenue shares, closer to 10 percent of their regional GDP (see also Table 6 in the Annex for detailed regression results using additional years).[3]

Richer regions also tend to exhibit lower dependence on transfers as a share of their total revenues. The negative slope in Figure 12 exhibits an inverse relationship between dependence of transfers over total revenues for regions, and the ratio of GDP per capita of the region as percent of the national GDP per capita. This inverse relationship suggests that economic capacity is strongly correlated with fiscal autonomy. Poorer regions rely much more heavily on central transfers to finance their budgets, reflecting structural differences in revenue bases and fiscal capacity.

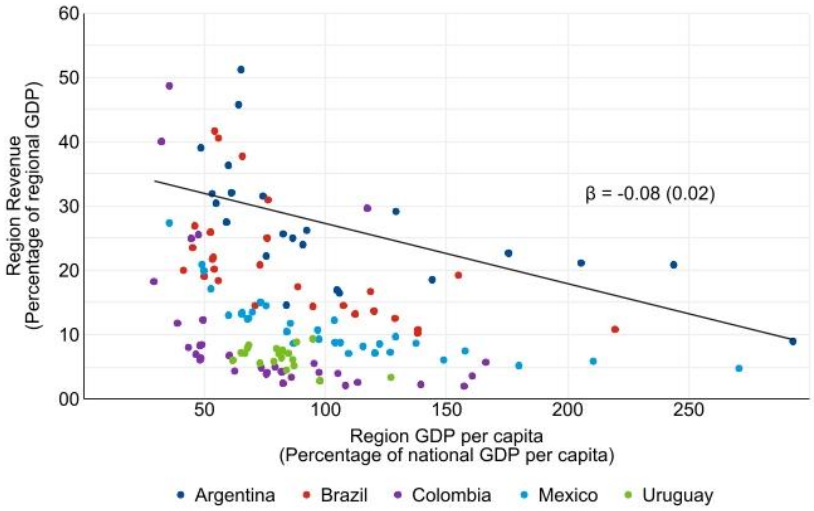
High transfer dependency of poorer regions is driven by more transfers, not by less own-source revenues. Figure 13 shows that own-source revenues, when normalized by regional GDP per capita, are relatively flat across the income distribution, indicating that poorer and richer regions collect similar levels of local taxes relative to their income level. In contrast, Figure 14 reveals a clear negative association between transfer receipts (as percent of the regional GDP) and regional GDP per capita, showing that higher transfer dependence in poorer regions stems primarily from larger inflows of central transfers rather than from weaker own-revenue collection.

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[3] For visual clarity, Figure 11 and other related charts are constructed using data for 2021 only; however, the same patterns emerge when the full sample period is used.

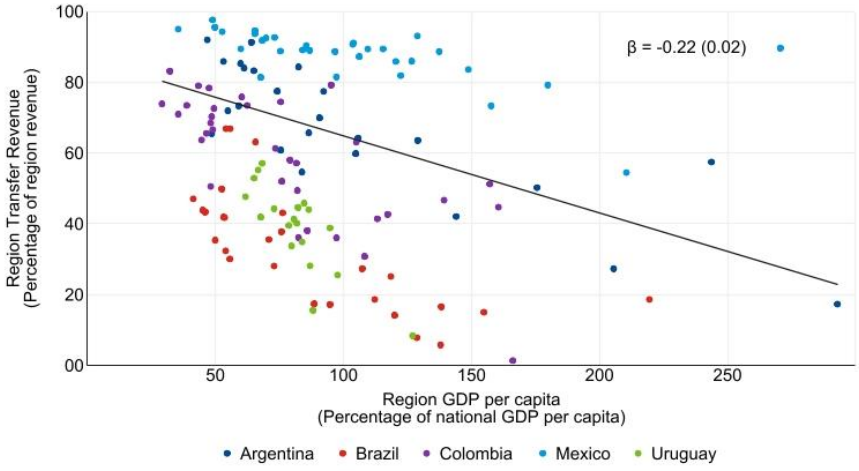
Taken together, these results suggest that regional differences in transfer dependency in Latin America are mainly driven by redistributive transfer design rather than by differences in regional fiscal effort. Intergovernmental transfers appear to play an equalizing role, channeling more resources to lower-income regions to offset disparities in economic activity and revenue potential. However, the overall high levels of transfer dependency and the persistence of wide dispersion implies that regional fiscal disparities remain significant, underscoring the need to balance redistribution objectives with incentives for local revenue mobilization and efficient expenditure management.

Figure 11: Regional Government Total Revenues (As Percent of Regional GDP) and GDP Per Capita



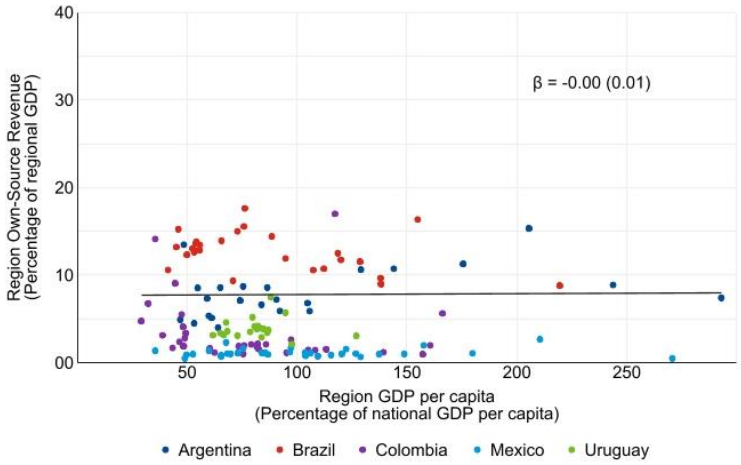
Note: We include the result of a country fixed-effects regression using year 2021.
Source: IMF estimations using subnational-level budget information for subnational governments compiled from

Figure 12: Regional Government Transfers (As Percent of Regional Revenues) and GDP Per Capita



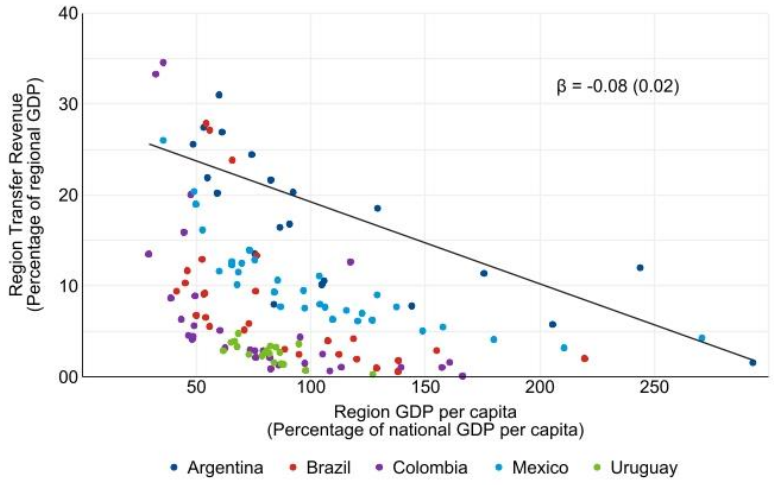
Note: We include the result of a country fixed-effects regression using year 2021.
Source: IMF estimations using subnational-level budget information for subnational governments compiled from individual countries.

Figure 13: Regional Government Own-Source Revenues (As Percent of Regional GDP) and GDP Per Capita



Note: We include the result of a country fixed-effects regression using year 2021.
Source: IMF estimations using subnational-level budget information for subnational governments compiled from individual countries.

Figure 14: Regional Government Transfers (As Percent of Regional GDP) and GDP Per Capita



Note: We include the result of a country fixed-effects regression using year 2021.
Source: IMF estimations using subnational-level budget information for subnational governments compiled from individual countries.

5 Empirical Results

5.1 Empirical Strategy

We next examine how the growing fiscal role of regional governments affects fiscal cyclicality, focusing on the role of transfers and other determinants. Fiscal cyclicality is measured as the

responsiveness of revenues and expenditures to changes in economic activity, proxied by national or regional GDP. The analysis compares cyclical behavior across regional and central governments and investigates the drivers of heterogeneity across levels of government and countries.

The estimation of fiscal elasticities is based on a panel Error Correction Model (ECM). Following Engle and Granger (1987), the ECM framework captures both the short-run and long-run relationships between fiscal variables (such as revenues or expenditures) and economic activity (e.g. GDP). This approach is particularly suited for macro-fiscal data, where both variables tend to be non-stationary but cointegrated, meaning they share a stable long-term equilibrium relationship. The presence of the error-correction term ensures that deviations from this equilibrium are corrected over time, allowing to distinguish temporary cyclical movements from more persistent, long-term structural adjustments, and estimate both short-run and long-run elasticities in a coherent framework.

To address the presence of common shocks that affect all countries or regions simultaneously, we use the Common Correlated Effects (CCE) estimator developed by Pesaran (2006). This estimator introduces cross-sectional averages of the dependent variable and GDP and is represented by the cross-sectional average term, which helps control for shocks such as global commodity price swings or synchronized business cycles. These terms capture unobserved global or regional factors that could otherwise bias the estimates. As a result, the methodology provides robust and comparable estimates of two key parameters: the short-run elasticity to GDP, which measures how fiscal variables respond to contemporaneous changes in GDP, and the long-run elasticity to GDP, which reflects the extent to which fiscal aggregates adjust to sustained shifts in output. Together, the ECM and CCE components allow for a rigorous estimation of fiscal elasticities that account for both country-specific dynamics and broader macroeconomic interdependencies.

Our specification can be expressed as shown in equation (1):

$$(1)\quad \Delta lnY_{i,t} = \theta_i \Delta lnGDP_{i,t} + \gamma_i (lnY_{i,t-1} - \beta_i lnGDP_{i,t-1}) + \mu_i + \delta_{1i} mean_i(lnY_{i,t}) + \delta_{2i} mean_i(lnGDP_{i,t}) + \varepsilon_{i,t}$$

where $Y_{i,t}$ is a fiscal variable (e.g. revenues or expenditures) of a geographic unit i (e,g, a region in a given country or the entire country) in a given year t, θi is the short-run elasticity to GDP, and βi is the long-run elasticity to GDP.

We estimate equation (1) using a broad set of alternative fiscal indicators and GDP measures. Our empirical specification allows us to identify both the long- and short-run elasticities of multiple fiscal variables with respect to economic activity, at both the national and regional levels. To capture potential differences in the responsiveness of fiscal aggregates to regional versus country-wide conditions, we consider elasticities of regional governments with respect to national GDP as well as to regional GDP. In addition, we examine the sensitivity of total revenues and their subcomponents, and of total expenditures and their subcomponents, to changes in economic activity.

To verify the robustness of the model specification, we also present the main results using four alternative estimators. First, we use the standard Mean Group (MG) estimator, which serves as a baseline that does not account for cross-sectional dependence. Second, we employ the Clustered Common Correlated Effects (CCEC) estimator, which accounts for within-country cross-sectional dependence by including country-

level cross-sectional means.[4] Third, we employ the Dynamic Common Correlated Effects (DCCE) estimator, which addresses lagged cross-sectional dependence by incorporating the cross-sectional mean at time t-1. Fourth, we add country-specific linear trends to control for the long-run growth of subnational governments, referring to this specification as the CCET model.

5.2 Empirical Results

The estimations reveal that short-term revenue elasticities of regional governments to national economic activity are lower than those of central governments. Figure 15 shows empirical estimates of short- and long-run elasticities of revenues and expenditures to national GDP. On average, a 1 percent increase in nominal national GDP is associated with only a 0.87 percent rise in regional revenues for the short-term, compared with a near one-to-one relationship at the central government level. In contrast, long-run revenue elasticities move broadly in line with national GDP—they are not statistically different from one—suggesting a stable and proportional fiscal relationship over time.

For expenditures, term elasticities to national GDP are broadly similar for regional and central governments, although spending tends to adjust less than revenues in the short term. In the short-term expenditures are usually harder to adjust as there is usually greater rigidity both in nominal prices (e.g. wages) or volumes (e.g. labor force). Short-term elasticities to national GDP tend to be lower than revenue elasticities for both central and regional governments, although expenditure elasticity for central governments to national GDP has a wide confidence interval. Over the long run, both revenues and expenditures move broadly in line with national GDP, suggesting a stable and proportional fiscal relationship over time.

A more detailed decomposition of short-run revenue elasticities shows that own-source revenues are markedly more responsive to economic fluctuations than transfer revenues. Figure 16 (panel a) reports detailed estimates of elasticities of regional governments to national and regional GDP. We consider first total revenue elasticities to national and regional GDP, disaggregated between own-source and transfer revenues. Regional own-source revenues (e.g. tax and fee collected by the regions) display elasticities close to or above unity with respect to both national and regional GDP. In contrast, transfer revenues of regions exhibit weaker elasticity for national GDP, typically below 0.7, whereas the elasticity of transfers to regional GDP is even lower, close to 0.4.[5] The lower responsiveness of regional transfer revenues reflects rigid transfer rules from central to regional governments in many Latin American countries. While the countercyclical aspect of transfers provides a backstop for regional governments, it also means a higher rigidity for central government expenditures.

On the expenditure side, capital expenditures of regional governments appear substantially more elastic in the short run to economic activity than current expenditures (Figure 16, panel b). A decomposition of expenditure elasticities of regional governments to national and regional GDP reveals large

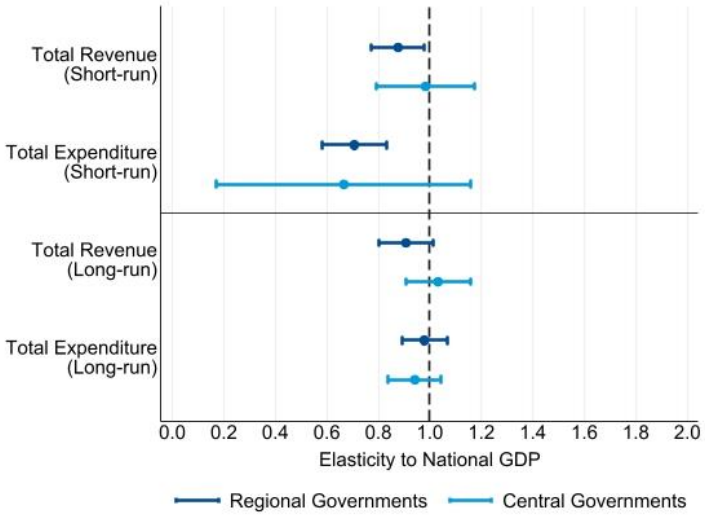
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[4] Regression with the CCEC estimator is on regional GDP. Since the model includes country-level cross-sectional means to account for unobserved common shocks, it completely absorbs country-level variation, which does not allow the estimation of elasticities using national GDP.

[5] These estimates are relatively large when compared to other estimates in the literature for the U.S. and currency unions. For instance, Asdrubali et al. (1996) find that transfers to states only compensate for about 10 percent of regional shocks in the U.S., whereas Furceri and Zdzienicka (2015) find that transfers to countries compensate for less than 4 percent of shocks across euro-area countries.

differences between current and capital expenditures. While elasticities of current expenditures to national and regional GDP are statistically similar, in the range of 0.4–0.5, capital expenditures exhibit substantially higher responsiveness, with elasticities well above one for both fiscal perimeters. The combination of both elasticities leads to a total expenditure elasticity in the range of 0.5-0.6 for both perimeters. Consistent with the discretionary nature and cyclical sensitivity of capital spending, this pattern suggests that investment spending plays a key adjustment role during upturns and downturns, while current spending remains relatively rigid.[6]

Figure 15: Short-Run and Long-Run Fiscal Elasticities of Regional and Central Governments to National GDP



Source: IMF estimations using subnational-level budget information for subnational governments compiled from individual

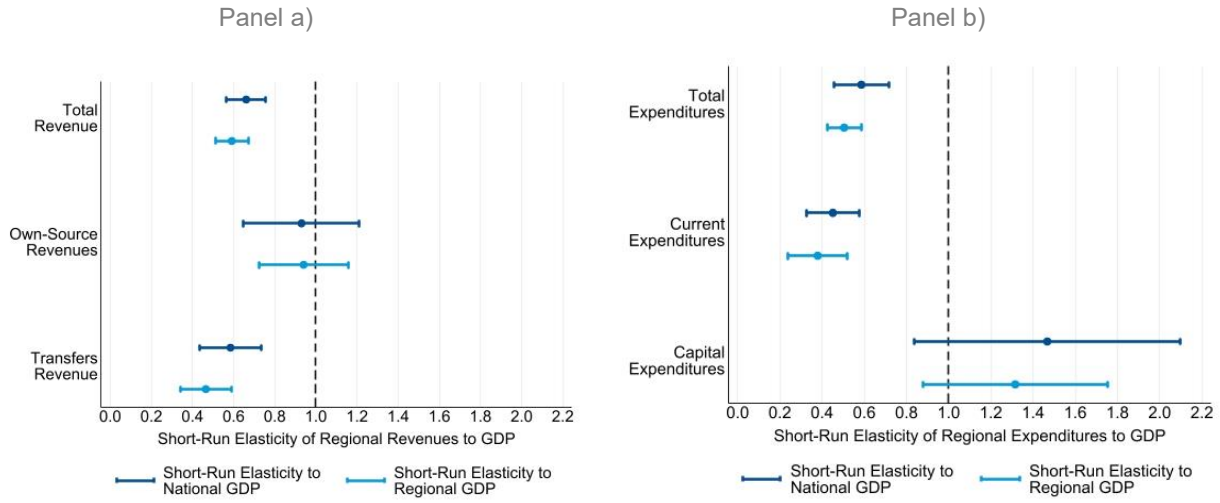
Within-country comparisons confirm that greater dependence on intergovernmental transfers dampens regional revenue elasticity. Figure 17 shows separate estimations for each individual country in the sample. The chart shows that regional governments tend to exhibit lower revenue elasticity in countries where regional revenues rely more heavily on transfers. Dividing within each country regions with above and below median transfer dependency, Figure 18 (panel a) shows that a higher transfer dependency reflects lower short-term elasticities. This result is explained by the lower responsiveness of transfers compared to own-source revenues.

The patterns discussed in this section are also mostly constant over the period analyzed. Figure 18 (panel b) breaks down the total revenue and total expenditure elasticity of regional governments to regional and national GDP in two periods (1995-2010 and 2011-2021). We find similar elasticities for revenues and expenditures across both periods. We also check that the results are robust to adding controls for electoral years.

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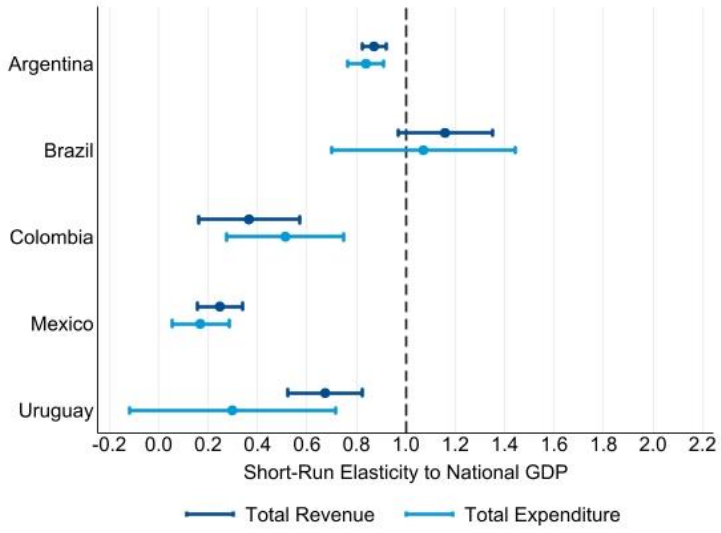
[6] Spending rigidities—usually driven by pensions, wages, interest, and institutional constraints—are in general a key obstacle to fiscal adjustment and reallocation. This suggests the importance of structural reforms and efficiency-enhancing reprioritization to reduce rigidities (IMF, 2025).

Figure 16: Short-Run Revenue and Expenditure Elasticities of Regional Governments to Regional and National GDP



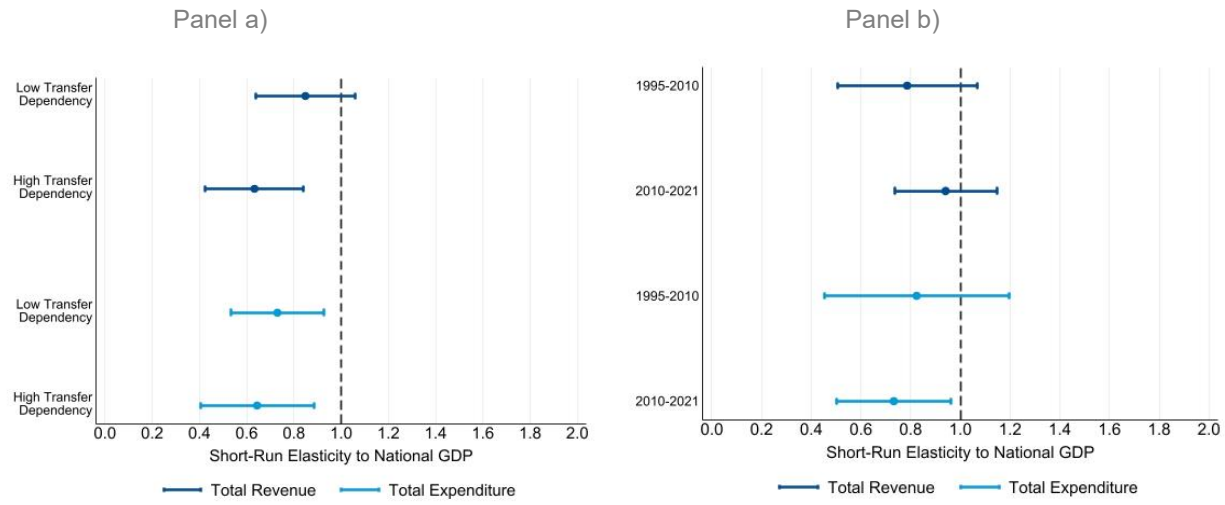
Source: IMF estimations using subnational-level budget information for subnational governments compiled from individual countries.

Figure 17: Short-Run Revenue and Expenditure Elasticities of Regional Governments to National GDP, by Country



Source: IMF estimations using subnational-level budget information for subnational governments compiled from individual countries.

Figure 18: Short-Run Revenue and Expenditure Elasticities of Regional Governments to National GDP, by Time Period and by Transfer Dependency of Regions within Each Country

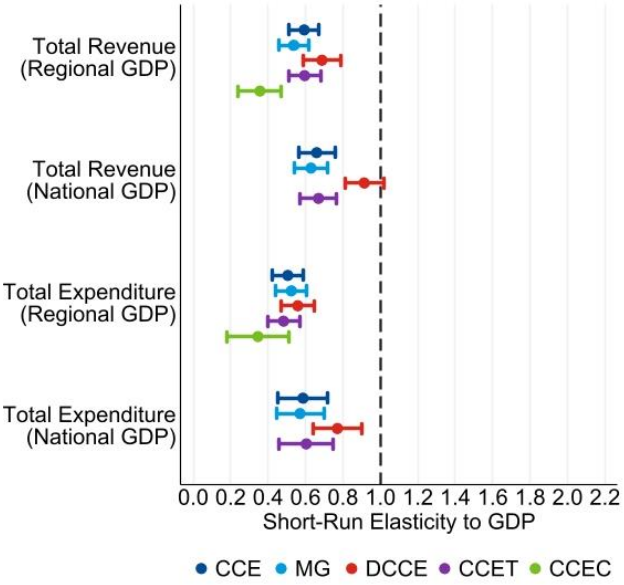


Source: IMF estimations using subnational-level budget information for subnational governments compiled from individual countries.

Our results underscore the importance of revenue autonomy for fiscal flexibility. The results suggest that greater flexibility, combined with stronger accountability, would help strengthen subnational fiscal frameworks. Expanding regional tax bases, through improved taxation or shared income tax arrangements, could foster own-revenue countercyclical capacity. At the same time, redesigning transfer systems to incorporate performance-linked elements could reduce rigidity and promote more own-source financing. Finally, coordination between central and regional governments in budget planning and implementation of fiscal rules at the regional level would help mitigate asymmetric shocks while preserving aggregate fiscal discipline (Eyraud et al., 2020).

To check the robustness of the main findings on subnational elasticity, Figure 19 presents robustness tests across the different estimation models. It reveals a broadly consistent picture. The MG estimator and the CCET model, which adds country-specific linear trends, yield results very similar to those of the benchmark CCE specification. We observe slightly smaller elasticities when using the CCEC estimator. By including country-level cross-sectional means, the estimation isolates within-country variation in state-level GDP, indicating that pure state-level shocks—deviations from national GDP—are even more countercyclical. The dynamic models yield marginally higher elasticities, suggesting that macroeconomic shocks at time *t-1* partially drive the countercyclical response of current revenues and expenditures. This finding aligns with the mechanics of fiscal policy: because budgets are drafted and approved in *t-1*, they are influenced by the economic conditions of the preceding year.

Figure 19: Robustness Tests Across the Different Estimation Models



Source: IMF estimations using subnational-level budget information for subnational governments compiled from individual countries.

As an extension to the main findings, additional results show that regional debt is low in relationship to the regions' GDP, but high relative to own revenues (see Figure 21 in the Annex). We provide a brief analysis of regional debt, with data only available for a smaller subsample of countries. While regional debt remains a relatively small share of GDP in most regions, there are notable outliers, particularly in some regions of Brazil and Argentina. However, when debt is measured relative to own-source revenues rather than regional GDP, a different picture emerges. In several cases, debt levels suggest a greater potential dependence on intergovernmental transfers to service obligations. Importantly, these patterns do not appear to differ systematically across income levels, as richer and poorer regions exhibit broadly similar levels of debt.

6 Conclusion

This paper uses a newly constructed database of regional budgets to document the growing fiscal relevance of regional governments in Latin America and assess the implications for fiscal cyclicality. The evidence points to a sustained expansion in regional revenues, alongside systematic differences in fiscal behavior across levels of government. In particular, regional governments display significantly lower revenue elasticity to national GDP than central governments, largely reflecting the limited cyclical responsiveness of intergovernmental transfers. On the expenditure side, while overall elasticity is broadly comparable across government levels in the short-run, current spending at the regional level is relatively rigid, with fiscal adjustment occurring predominantly through capital expenditures in the short run. These patterns are robust when elasticities are estimated using regional GDP measures, underscoring the structural nature of subnational fiscal behavior.

Our paper highlights the importance of transfers in shaping regional fiscal dynamics. Exploiting the granularity of the database, we find evidence that across all countries transfers function primarily as a redistribution mechanism from richer to poorer regions, rather than as an instrument to offset limited regional tax capacity or smooth cyclical fluctuations. As a result, regional governments contribute less to macroeconomic stabilization than their growing fiscal weight would suggest, potentially weakening aggregate automatic stabilizers. Moreover, reliance on capital spending as the main adjustment margin raises concerns about procyclicality and the long-term growth implications of volatile public investment.

These findings have relevant implications that are aligned with previous IMF results on macro-fiscal risk management for subnational governments. Consistent with previous IMF literature (Fedelino, 2010), making decentralization work requires clearly defined expenditure and revenue assignments, predictable and rules-based transfer systems, and strong coordination mechanisms to preserve fiscal discipline. In addition, systematic identification and mitigation of fiscal risks from subnational governments—through comprehensive fiscal reporting, integration into medium-term fiscal frameworks, and credible borrowing and fiscal rules—are relevant to prevent unsustainable subnational finances and create risks for central governments (Eyraud et al., 2020; Saxena, 2022). Therefore, enhancements to subnational fiscal finances could include strengthening intergovernmental fiscal frameworks, enhancing the design of transfer systems, protecting high-quality public investment, and fully integrating regional governments into fiscal surveillance and macro-fiscal planning.

This paper and the newly constructed database open several avenues for future research. Extending the database to include municipalities for more countries would allow additional coverage in the region and provide a more complete view of subnational fiscal performance. A natural next step would also be to expand the analysis beyond Latin America to a global scope. In addition, the database could be extended further back in time, offering a long-run perspective on fiscal decentralization in Latin America throughout the twentieth century. From an application standpoint, the database can be used to analyze the impact of a wide range of regional-level shocks—such as intergovernmental transfer reforms, climatic shocks, and political transitions—on fiscal outcomes.

Annex

Table 1: Summary of Coverage of Subnational Fiscal Data

Country	Regional (Years)	Municipal (Years)	Government Levels	Fiscal Variables	Debt Variables	Source of Data
Argentina	1991-2024	–	Regional Only	✓	✓	Ministerio de Economía
Brazil	1995-2024	2014-2022	Regional & Municipal	✓	✓	IADB, SICONFI, and Secretaria do Tesouro Nacional (STN)
Colombia	1984-2024*	1984-2023	Regional & Municipal	✓	✓	Departmento Nacional de Planeación (DNP)
Mexico	1989-2024*	1989-2023	Regional & Municipal	✓	✓	Estadística de Finanzas Públicas Estatales y Municipales (EFIPEM) and Secretaría de Hacienda y Crédito Público (SHCP).
Uruguay	1989-2022	–	Regional Only	✓	–	Observatorio Territorio Uruguay (OTU)
Chile	–	2000-2015, 2019-2022	Municipal Only	✓	–	IADB, SUBDERE, and Sistema Nacional de Información Municipal (SINIM)

Note: ✓ indicates availability of variables. A dash indicates that there is no data. Regional (Years) shows the maximum year available across variables; 2024* includes debt data only for that year. Source: IMF estimations using subnational government information compiled from individual countries.

Table 2: Fiscal and Administrative Decentralization Arrangements by Country

Country	Population (est. 2024)	Number of regions	Number of municipalities	State classification	Expenses, regional government (pct of GDP)	Expenses, local government (pct of GDP)	Other comments
Argentina	46.1	24	2,316	Federal			
Brazil	212.6	27	5,570	Federal	13.4	10.3	
Colombia	52.9	33	1,103	Unitary	3.4	7.7	
Mexico	130.9	32	2,458	Federal	8.9	1.7	
Peru	34.2	25	1,891	Unitary	4.6	3.6	
Uruguay	3.4	19	125	Unitary	2.6		
Other countries (not included in database for regional budgets):							
Chile	19.8	16	346	Unitary	0.0	4.1	In Chile, municipalities account for the large majority of subnational spending. Regions have very limited fiscal autonomy, and regional governors have only been elected since 2021.
Ecuador	18.4	24	221	Unitary	4.6		
Paraguay	6.9	18	262	Unitary	0.4	1.0	In Paraguay, municipalities account for the majority of subnational spending and have a strong dependence on transfers. Regions have very limited fiscal autonomy.

Note: The state classification is defined in each country's constitution. Expenses for the regional and local governments are for the most recent year available. Number of regions and municipalities are as of March 2026 (their number has evolved over the years). Municipalities in Argentina include comunas and other related units. Sources: National authorities, and IMF Financial Decentralization dataset.

Table 3: Descriptive Statistics for the Subnational Database at the Regional Level

Country	Mean	p10	p25	Median	p75	p90
Argentina						
Total Revenue	26.9	14.5	19.1	25.4	32.8	40.3
Transfer Revenue	19.6	6.6	10.3	17.5	26.2	35.5
Current Expense	21.5	12.1	15.1	20.2	26.4	34.1
Capital Expense	5.1	1.3	2.1	4.1	7.0	10.4
Regional GDP	3.5	0.5	0.9	1.2	2.2	7.2
Regional GDP per Capita	88.8	41.8	49.1	70.2	95.7	192.8
Brazil						
Total Revenue	21.5	11.4	14.9	19.2	23.9	38.2
Transfer Revenue	8.9	2.0	2.8	6.2	11.0	24.0
Current Expense	17.3	9.6	12.6	16.0	19.9	27.1
Capital Expense	1.6	0.4	0.7	1.1	1.9	3.1
Regional GDP	3.7	0.2	0.7	1.7	3.8	8.8
Regional GDP per Capita	85.1	44.3	53.4	69.7	109.1	139.2
Colombia						
Total Revenue	10.3	2.9	4.2	6.1	10.3	26.0
Transfer Revenue	6.4	1.0	1.7	3.3	6.4	17.5
Current Expense	1.6	0.4	0.6	0.8	1.4	4.0
Capital Expense	8.8	2.2	3.5	5.3	8.9	21.4
Regional GDP	3.0	0.1	0.4	1.6	2.7	6.4
Regional GDP per Capita	82.6	40.4	48.1	73.9	103.0	142.6
Mexico						
Total Revenue	11.6	6.3	8.1	10.7	14.0	18.4
Transfer Revenue	10.4	5.3	7.1	9.7	12.7	17.1
Current Expense	10.6	5.6	7.4	9.8	13.0	16.5
Capital Expense	0.9	0.2	0.4	0.7	1.3	1.9
Regional GDP	2.9	0.7	1.2	2.0	3.2	6.5
Regional GDP per Capita	104.4	49.7	62.7	82.6	114.2	160.4
Uruguay						
Total Revenue	6.1	3.4	4.8	6.0	7.4	8.4
Transfer Revenue	2.3	0.8	1.6	2.4	3.0	3.7
Current Expense	5.1	2.6	4.1	5.0	6.2	7.1
Capital Expense	0.8	0.2	0.4	0.7	1.2	1.6
Regional GDP	3.8	0.8	1.0	1.4	2.1	9.1
Regional GDP per Capita	58.4	46.1	51.4	57.4	62.8	68.7

Note: All variables are expressed as a percent of regional GDP, except “Regional GDP per capita,” which is expressed as a percent of national GDP per capita. Source: IMF estimations using subnational-level budget information for subnational governments compiled from individual countries.

Table 4: Common Sample Period for Regional and National Fiscal Series and GDP Series

Country	Regional Fiscal (Years)	Regional GDP (Years)	National Fiscal (Years)	National GDP (Years)	Common Sample
Argentina	1991-2024	1993-2023	2002-2023	1984-2024	2004-2023
Brazil	1995-2024	2002-2022	2010-2023	1990-2023	2002-2022
Colombia	1984-2024*	2000-2023	1998-2023	1980-2023	2000-2023
Mexico	1989-2024*	2003-2021	1991-2023	1980-2023	2003-2021
Uruguay	1989-2022	2006-2023	2001-2023	1980-2023	2006-2023

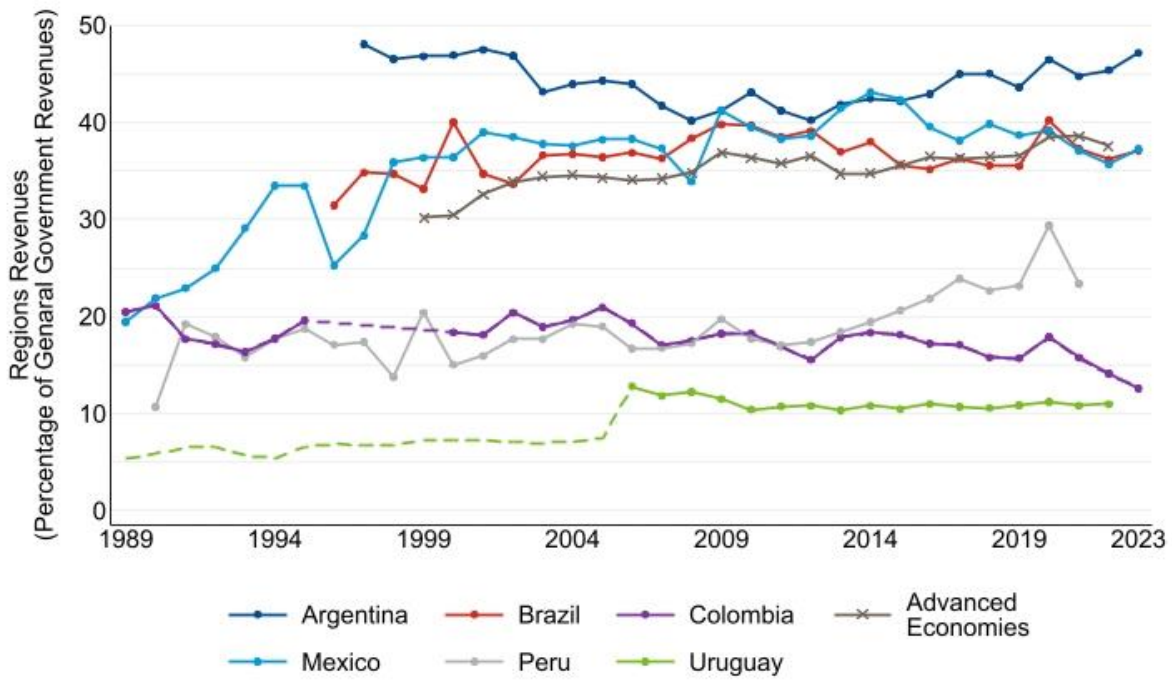
Note: Each column shows the years available for selected variables for each country in our database. For instance, "Regional Fiscal (Years)" shows the years available across fiscal variables for regions in our database; 2024* includes debt data only for that year. Source: IMF estimations using subnational-level budget information for subnational governments compiled from individual countries, IMF Fiscal Decentralization, and WEO.

Table 5: Transfer Mechanisms by Country

Country	Transfer Mechanisms	Allocation Criteria
Argentina	Federal Tax Revenue Sharing (Coparticipación); discretionary transfers (ATN)	Fixed shares by province, population, historical coefficients
Bolivia	National tax co-participation (20% of central taxes); Hydrocarbon IDH transfers	Based on population and natural resource origin
Brazil	State Participation Fund (FPE); Municipal Participation Fund (FPM); sectoral funds (FUNDEB for education, SUS for health)	Based on population, per capita income, regional equity (North/Northeast prioritized)
Chile	National Fund for Regional Development (FNDR); Common Municipal Fund (FCM)	Local revenue capacity, population, development level
Colombia	General System of Participations (SGP); General Royalties System (SGR)	Education (58.5%), health (24.5%), water/sanitation; population, poverty index, needs
Mexico	Ramo 28 (unconditional participaciones); Ramo 33 (conditional aportaciones for education, health, infrastructure)	State GDP, tax effort, population, social needs
Paraguay	FONACIDE (royalties from Itaipú); Fondo para Gobiernos Departamentales y Municipales	Population, poverty, infrastructure needs
Peru	FONCOMUN (municipal compensation); Canon/Sobrecanon (resources from natural resource production); FONCOR (Fondo de Compensacion Regional); other discretionary transfers	Population, poverty, revenue effort, resource production
Uruguay	Interior Development Fund (FDI); Municipal Management Incentive Fund (FIGM); Constitutional revenue sharing	Population, development disparities, performance/management incentives

Note: This table includes examples of transfer mechanisms for regions and municipalities in LAC. Source: Ministers of Finances of countries and IMF analysis.

Figure 20: Regional Government Revenues as Percent of General Government Revenues



Source: IMF estimations using the IMF fiscal decentralization database and subnational-level budget information for subnational governments compiled from individual countries.

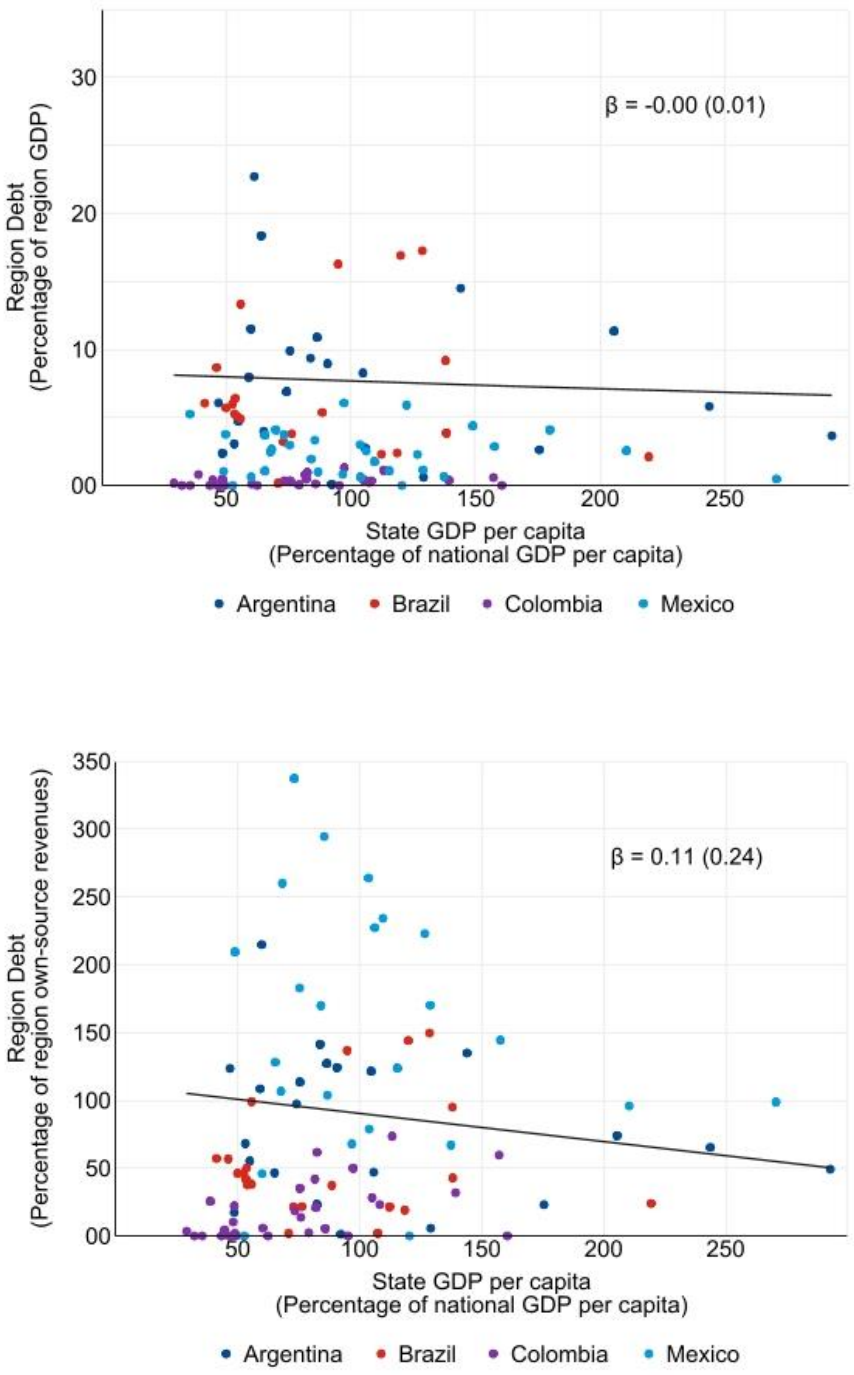
Table 6: Regression Results of Transfer Dependency and Revenues in Regions across Countries

	Transfer Dependency	Revenue Own-Source (%GDP)	Revenue Transfer (%GDP)
Normalized GDP per capita	-0.134**	0.001	-0.058***
	(0.058)	(0.003)	(0.019)
Country × Year FE	Yes	Yes	Yes
Observations	2794.000	2794.000	2794.000
R-squared	0.711	0.664	0.457

Standard errors in parentheses
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Note: Regression results using regional-level budget information for regional governments compiled from individual countries.

Figure 21: Regional Governments Debt



Source: IMF estimations using subnational-level budget information for subnational governments compiled from individual countries.

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PUBLICATIONS

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