INTERNATIONAL
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International Center for Public Policy
Working Paper 24-15
December 2024

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Abstract

This paper addresses how decentralization, encompassing political, administrative, and fiscal dimensions, is subject to varied interpretations by policymakers and research. At present, a robust knowledge base has been developed on how to go about measuring these separate dimensions of decentralization, much of which is metrics-based. These metrics are typically ratios and indexes, both simple and complex, that are, indeed, useful in addressing a wide range of analytical questions. An important feature of this current state of measurement art has been a focus on developing cross-country indicators of decentralization. This type of information is most important not only for securing agreement on the definitions and degrees of intergovernmental fiscal "autonomy" across types of governments but also in establishing benchmarks for assessing whether the theoretical outcomes promised by/expected from decentralization are accomplished. But measurement is about more than the metrics of ratios and cross-country databases. Understanding what decentralization is and whether it "works" requires a multi-dimensional approach to understanding "fiscal autonomy." And to get a full understanding of that, the analyst must take a public sector reform path-dependent country-by-country context examination that includes along with the metrics, a qualitative assessment of the features and practice of intergovernmental financial management. The purpose of this paper is to illustrate what a multi-dimensional analysis will entail.

Keywords: decentralization, public policy

Written for the S*ymposium on Future Challenges in Fiscal Decentralization*: Essays in Honor of Jorge Martinez-Vazquez. Georgia State University, Andrew Young School of Policy Studies.

Initial Presentation: October 17-19, 2024; Revised: December 29, 2024

To understand how decentralization works in any country, let alone improve it, one must first understand in detail many aspects of the institutional context. There is no short cut. (Bahl and Bird, 2018)

1. Introduction: Purpose and scope

As a complex multi-disciplinary phenomenon encompassing political, administrative, and fiscal dimensions, decentralization is a concept that is difficult to define and measure. Moreover, policy makers and practitioners use the term "decentralization" differently(the" 3Ds"). Some research treats decentralization as the devolution of responsibilities and granting autonomy to subnational governments as the central tenet of decentralization, whereas others use the word to describe a process by which the presence of central government is geographically dispersed—deconcentration of state apparatus. Consequently, it is not an easy task to devise a measurement framework of decentralization that satisfies everybody. Researchers face at least three challenges: (i) measuring decentralization in the first place, (ii) then analyzing the outcome of decentralization, (iii) and comparing decentralization reforms across countries.

Measuring decentralization right has a huge bearing on analyzing the outcome of decentralization and comparing it across countries. Despite being useful, many measurement tools developed to date suffer from the imprecision of capturing the diversity of intergovernmental design properties of countries, whereby their utility in analyzing outcomes and their comparability across countries are questionable. As Bahl and Martinez-Vazquez (2022) conclude, this has led to a considerable body of research using measures that are incomplete.

That there is a degree of incompleteness is well illustrated by the growth in the empirical literature that focuses largely on conducting a cross-country analysis on the degree and impact of the impact of decentralization. This literature has high merit in not only giving the policymaker a good understanding of how their country (or region, or sector) compares but also securing agreement in the policy research community on the metric-measurable definition of "fiscal decentralization" (Annex 1). However, in order to conduct a cross-country analysis, the analyst researcher must turn—is constrained by—the use of imperfect measures of decentralization in the name of degrees of freedom imposed by the variability of scope and quality of data available across numerous countries. The result is that the use of imperfect measures of decentralization raises doubts about their findings. For example, in our 2003 paper we demonstrated how using different datasets alters results of the same analytical question (Ebel and Yilmaz, 2003).

The objective of this paper is to have a conversation on how to guide the development of a measurement framework that captures the variation in intergovernmental design properties across three dimensions of decentralization—political, administrative and fiscal. Accordingly, we focus on capturing the variation of subnational government autonomy in different design options across countries. In articulating the main tenets of decentralization, we benefit from a robust "post-seminal" research of the 1980s/1990s[1] era in which a global trend was to incorporate fiscal decentralization as

[1] Bird and Bahl, 2018, Ch.1

part of a broader public sector reform strategy and as Bird stated it: …the " 'best' " package for any particular country or subnational government is likely to be not only context-specific and [public sector reform] path dependent, but also highly sensitive to the balance struck between different political, and economic factor and interests" (Bird, 2011).

In order to organize this discussion we adopt the framework of the four fundamental questions—"Pillars" -- facing any intergovernmental system (Bird, 1994; Martinez-Vazquez, 1995a; Bahl and Martinez-Vazquez, 2006; Bahl 2008): (i) expenditure assignment and autonomy across different types (levels, tiers) of governments; (ii) revenue assignment and autonomy; (ii) how can the fiscal imbalances –vertical and horizontal— be addressed for the typical case whereby decentralizing expenditures is greater than that of decentralizing revenue (intergovernmental transfers); and (iv) how should the timing of receipts be addressed (borrowing and debt management)?

Why is measurement of decentralization important?

Decentralization is an important aspect of public sector reforms aimed at improving government efficiency, effectiveness, and responsiveness. As the global development community recognizes that the public sector in developing countries must be made to function more effectively and efficiently in the pursuit of their own development and poverty reduction ambitions, there is a growing interest in better understanding of the role of decentralization reforms in achieving better development outcomes (Yilmaz, 2010; Kim, Lotz and Blöchliger, 2013; Martinez-Vazquez, Lago-Peñas, and Sacchi (2016); Lago-Peñas and Herrero-Alcade, 2025).

To understand the impact of decentralization reforms on the development trajectory of countries, one must be prepared to consider the complex interactions between political, administrative, and fiscal dimensions of decentralization. Measuring decentralization is important to guide the analysis of the interrelations between these three dimensions of decentralization in order for policy makers and practitioners alike to have the best information on how much resources are going to the subnational government and on what circumstances and whether these resources are making the subnational public sector more effective and accountable. In short, measuring decentralization to capture in its all dimensions matters for the knowledge base as it is the key to understanding the effectiveness of decentralization, its (intended) outcomes, and whether, *inter alia*, the process holds subnational governments accountable to their citizens.

The purpose of all of this—getting measurement right—is key if we are to know whether decentralization "works"–whatever the term "it works" means (e.g., does it enhance economic growth and development? Improvement in human development indicators? More efficient and effective delivery of public services? An increased local citizen willingness to pay for public services?).

However, in order to start an analysis, there needs to be agreement on the dependent variable: what is the variable(s) that captures everything about decentralization? If there is a gap between what is written in a legislation or policy white paper and realities on the ground, and if so, can we measure (qualitatively and well as quantitively).[2] Furthermore, if the outcome that one is looking for—the independent variable—is not showing up, our measurement should serve to give us insight into why. That is, if there are decentralization failures, we need to measure that as well.

Accordingly, from the start, measurement requires rigor in defining what one means by decentralization—making the link between theory and practice. Established theories in economics and political science have articulated the efficiency and accountability gains from decentralization. They include the internalization of spillover effects (Oates, 1972; Mueller, 1996), the alleviation of information asymmetry and better accountability due to the proximity of principals and agents (Cremer et al., 1996; Raff and Wilson, 1997; Bucovetsky et al., 1998) and competition among subnational governments (Tiebout, 1956; McGuire and Wasylenko, 1986). Although many countries embarked on decentralization reforms, the emphasis on political, administrative, and fiscal dimensions varies across countries. As noted, there are different forms of implementation: deconcentration, delegation, and devolution. Moreover, in any given intergovernmental system, there will be a mix of the "3Ds."

Martinez-Vazquez (2015) argues that political, administrative, and fiscal decentralization can strengthen democratic representative institutions, increase the overall efficiency of the public sector and lead to improved social and economic welfare; however, the implementation of decentralization reforms is always partial, based on the political context of a country. At best, decentralization reforms try to increase the autonomy of subnational governments without thinking through the accountability structures that are crucial for a responsive and accountable public sector. At worst, in many cases, national governments may attempt to strengthen the deconcentrated structures in the name of decentralization, e.g., Cambodia (Smoke and Morrison, 2011) and Egypt (Martinez-Vazquez and Timofeev, 2010). In all cases, the question is how to reflect the context-specific diversity of decentralization reforms in measurement.

To sum: measuring fiscal decentralization right and having the data to do so is imperative since it allows analysts and policy makers to more fully understand and address why different countries/places decentralize for their different reasons, and whether their goals are being met in a manner that (i) enhances how efficiently resources are being allocated and managed within a country to improve the effectiveness and quality of the delivery of public goods and services; (ii) allows decisionmakers to understand whether public policy is addressing regional fiscal disparities and achieving a country's overall development objectives; (iii) recognizes that subnational government can play a key role in contributing to a nation's public capital investment base; (iv) promotes a system of governance that is policy wise and administratively transparent and accountable to its citizens; and (v) for some countries with a highly fragmented society and/or limited tradition of self-government it serves as a strategy for nation building (Bird and Ebel, 2007; Bird, Vaillancourt and Roy-Cesar 2010).

2. Dimensions of decentralization

Over the last three decades, efforts to strengthen the role of subnational governments through decentralization have claimed a significant place in public sector reforms in developing and transition countries (Bird, Ebel, Wallich, 1995; Martinez-Vazquez, 1995a); Bahl and Linn, 1992; World Bank Development Report, 1999/2000; Martinez-Vazquez, 2025). Yet, despite the best efforts of the global

[2] Smoke (2013) addresses several "gap" problems including that numbers on tax and spending may be reported differently across jurisdictions; the failure of subnational administrative and management capacity to collect and maintain data files; and for political reasons some governments do not want to have such data.

development community to strengthen subnational governments, the promised potential benefits of decentralization remain elusive. A contributing factor to this disappointing situation is the fragmentation of both the theory and practice. As a result, there is a lack of common understanding on measuring the complexities of decentralization and producing data to research the topic.

In the academic world, the first-generation theory of fiscal federalism made the case for decentralized fiscal choice based on its superior allocative efficiency (Oates 1972). The second-generation theory of fiscal federalism is bridging the gap between the economic and political dimensions of decentralization, taking as its point of departure from the assumption that participants in political processes (both voters and officials) have their own objective functions that they seek to maximize in a political setting that provides the constraints on their behavior (Qian and Weingast, 1997; Oates, 2005; Weingast 2009, Zhang, 2010; Ahmad and Brosio, 2025)). The second generation of thinking recognizes the need for a wider lens to assess whether decentralization reforms successfully empower people to have a well-functioning subnational government system (Boex and Yilmaz, 2010).

The theoretical foundations for addressing the question of how to achieve a well-functioning decentralized system have been, and continue to be, developed as the world 's "fiscal architecture" is ever-changing (Wallace, 2001). DeMello and Ter-Minassian, 2025; Fox and Zodrow, 2025) have been accompanied by a robust economic, political science, and public administration literature. Nonetheless, the practice of decentralization has been fragmented and incomplete. This is because of the separate pathway the academic literatures on public finance, public administration and political science has followed. This is due in part to advisors to developing country governments too-often failing to synthesize the main messages from these different academic disciplines that implementing decentralization requires a multi-disciplinary perspective reflecting the multidisciplinary characteristics of decentralization. To further make the measurement of decentralization difficult, the empirical literature analyzing the relationship between decentralization and various macro-fiscal and socio-economic indicators also too readily breezes by the multidisciplinary nature of decentralization. The Typical procedure is to use simple ratios, an index or composite ratio of variables to represent the degree of decentralization in a country (for a review of the practice: Harguindeguy, 2021).

One of the consequences of using ratios for cross-country comparative analysis is the uncertainty of having identified the complete set of policy concerns/challenges for any one country. Accordingly, it is fair to say that the empirical literature analyzing whether decentralization improves economic growth, public service delivery or accountability can be inconclusive. There are various other factors contributing to this outcome, including limitations ranging from the comparability and quality of the data for each country included in the measure to the incompleteness of reforms pursued in the countries being compared.

Recognizing the merits of these quantitative measures but also that there are significant nuances in the definition and degree of decentralization (Martinez-Vazquez and Smoke, 2010; Dardanelli and Wright, 2012) Bahl and Bird (2018) broadly define decentralization as the empowerment of subnational populations through the empowerment of their governments. The merit of this definition is that decentralization is about citizens having the power through strong political accountability linkages on fiscally and administratively empowered subnational (local) public sector. Otherwise, the implementation of decentralization will be partial and fragmented. *Inter alia*, any measurement of decentralization must also be sensitive to the reason for which a country has made the political decision to decentralize (Dafflon and Madies, 2011).

This line of thinking recognizes that a wider lens than a ratio or index is needed to assess whether decentralization successfully empowers subnational populations over central authority through empowering their subnational governments politically, administratively and fiscally. Accordingly, and following both Martinez-Vazquez (2015) and Bahl and Bird (2018), the approach taken here is that a successful decentralization reform is one when subnational governments are empowered in all three dimensions of decentralization (Table 1). When people and their subnational governments are only empowered in one or two dimensions, they are not meaningfully empowered to address the needs of their citizens. As such, the success of decentralization reforms can only be assessed meaningfully by considering all three dimensions of decentralization together.

Table 1: Decentralization and empowerment

Political Decentralization	Administrative Decentralization	Fiscal Decentralization	Full Empowerment
YES	NO	NO	NO
YES	YES	NO	NO
YES	NO	YES	NO
NO	YES	NO	NO
NO	YES	YES	NO
NO	NO	YES	NO
NO	YES	YES	NO
YES	YES	YES	YES

Source: Boex and Yilmaz, 2010.

3.1 Fiscal decentralization

As has been noted, it is not uncommon that the fiscal decentralization literature researchers often construct ratios on the different aspects of decentralization to analyze the impact of fiscal decentralization across countries. This metrics approach method has great merit in establishing the framework for taking a first glance at a country's comparative degree of decentralization and establishing a set of measures for making country comparisons over time (Annex 1). It is also important to recognize that getting "measurement" right replete with country-specific nuances (from culture and history ancient and recent, to degrees of asymmetrical decentralization) that have a huge bearing on the fiscal autonomy spirit of decentralization and its implementation. A failure to systematically supplement the cross-country metrics with a systematic examination and evaluation of the qualitative public financial management aspects of a country-context may confound the decentralization analysis (see Annex 1). As Spahn (2013) along with others (e.g., Dafflon, 2013; Smoke, 2013, and Martinez-Vazquez and Timofeev, 2009) have advised, it is helpful to further "have an outline" for a comprehensive analysis. The purpose of this paper is to systematically suggest the elements of just such an approach.

3.1.1 Measuring subnational expenditure autonomy

The topic/examination of subnational expenditure assignment and its accompanying measure of autonomy in fiscal decentralization is the prologue to measuring the other pillars of fiscal decentralization. As an overarching principle, there is a policy sequence (Bahl and Martinez and Martinez-Vazquez. 2006). Once subnational service responsibilities are assigned, then comes the measurement of the revenue autonomy, the design of the intergovernmental fiscal transfers to close the gap between revenue potential and expenditure needs, and how to manage the timing of receipts, that is, a matter of borrowing authority of subnational governments. The Bahl/Martinez-Vazquez dictum: "Finance Follows Function." (Bahl and Martinez-Vazquez, 2006).

The public finance literature provides guidance on the criteria for assigning expenditure responsibilities, such as how economies of scale and externalities manifest themselves in different activities and policies related to service delivery responsibilities (Vaillancourt, 2025) . In principle, the question of which level of government should be in charge of different activities can be answered by applying the correspondence principle to the geographical scope of the externality (Alm and Banzhaf 2012;(Lago-Peñas and Herrero-Alcalde, 2025).[3] However, the useful application of the correspondence principle is contingent on the fulfillment of the other principles of expenditure assignment, such as administrative capacity and financial affordability. Indeed, as adequately discussed elsewhere (e.g., extensively so in GOLD II) a major issue in many developing countries is the lack of clear assignment of service delivery responsibilities. Indeed, the ambiguities in assigning roles and responsibilities in the delivery of subnational services prevent subnational governments from functioning effectively.

The guidance from public finance discipline in assigning service delivery responsibilities across different level of government is helpful as a normative framework. However, implementing the normative framework leaves room for constraining or expanding subnational expenditure autonomy, which needs to be captured by measurement tools.

The existing measurement tools ignore how subnational expenditure autonomy is established. In a fiscally decentralized system, subnational governments need to have the ability to respond to the demands of citizens—which is a function of service delivery responsibilities assigned to them and the extent of discretion available to them to make their own budgetary decisions (Vaillancourt, 2005). Therefore, we argue that expenditure assignment is multidimensional, involving the attributes of norming or regulation, financing, and implementation, and thus a complete taxonomy of expenditure assignments would require a complete listing of how those attributes are assigned. Consequently, expenditure autonomy is measured by evaluating the degree of control that subnational governments have over their expenditure decisions, including the ability to independently formulate and execute budgets, decide on the categories and levels of public services provided, and manage financial resources without undue interference from higher government levels. Overall, the measurement involves examining both the formal legal arrangements and the practical realities of how subnational governments can manage their expenditures. The key factors in subnational expenditure autonomy are summarized below (Table 2):

- <u>Broad control over expenditure policies</u> emphasizes the ability of subnational authorities to make independent decisions regarding service delivery responsibilities assigned to them.

[3] The "*correspondence*" principle states that the geographical dimension of the benefits received from a service should match the geographical dimension of the level of government responsible for its provision.

Subnational expenditure autonomy is essential if the fundamental objective of allocative efficiency is to be met (Oates 1972).

- Control over the workforce is very closely related to the administrative dimension of decentralization. It refers to the degree of autonomy that subnational governments have in managing their public sector employees. This includes authority over hiring and firing employees, setting wages, determining working conditions, and managing performance evaluations. Effective control over the workforce enables subnational authorities to recruit personnel with skills and expertise relevant to subnational priorities, adapt to regional economic conditions, and innovate in public administration practices. The salience of this workforce control factor often causes tensions that arise from questioning the tradition of a workforce that is centrally managed. However, the expenditure assignment principle of the Oates theorem (heterogenous preferences) argues for subnational control.

- Standard setting and regulation involve the establishment of norms, rules, and guidelines by governments to ensure uniformity, quality, and accountability in the delivery of public goods and services. The standard setting process is a complex one. The special case of primary education for example, entails an "unbundling" of the many components by applying the sorting-out criteria, including that of economies of scale (minimizing costs of production and sometimes sharing the cost), to the determination of the service benefit area (capturing spillover effects/externalities). Accordingly, a "higher level" of government (the central authority and/or in some cases, "a middle tier") may take on the responsibility for establishing a baseline to set standards/regulations, a process that in some cases leads to political tension. [4] For primary education service delivery, typical "higher level baseline" examples include student-teacher ratio, developing a system of student achievement test scores, integrating boys and girls schooling, and mandating a core common curriculum. However, when it comes to an activity on which there are no significant net externalities or joint cost-savings, the regional or subnational government will take the lead. Indeed, in many developed and decentralized systems, the subnational government sets the bulk of standards setting and regulatory matters— actions tailored to the unique economic, demographic and institutional features of its citizenry. They do so often more stringent than what a "higher level" of government would set (teacher certification, teacher salaries, teaching techniques). Gershberg, 2016; Ebel 2019).

- The administration of service delivery includes functions like planning, organizing, staffing, directing, and controlling. In order to meet the expectations of subnational constituents in terms of the quality and quantity of subnational services, subnational governments need to have control over how they organize their administrative structures.

Monitoring and evaluation responsibility in the context of subnational expenditure autonomy for infrastructure investments, including planning, implementation, operations, and maintenance dimensions. There are four different configurations: (i) national planning and implementation & subnational maintenance whereby the central government is responsible for planning and implementing infrastructure, while subnational governments handle operations and maintenance , e.g., Albania; (ii)

[4] This sorting-out process can become contentious, especially in the case of central mandates and pre-emption of subnational authority and the sleight-of-hand practice of the use of extrabudgetary funds (Martinez Vazquez, 1995a; Eads, Jr., 2012; Wong, 2013).

national planning, subnational implementation by which central governments set priorities, while subnational governments implement them, e.g. Vietnam; (iii) national goal setting, subnational planning and implementation in a principal -agent framework whereby the subnational governments plan and execute projects based on national goals, e.g., China; and (iv) subnational/central sharing of responsibility when cross-jurisdictional externalities are significant, a circumstance whereby subnational governments have control over planning, implementing, and maintaining infrastructure complemented by with central government oversight and/or intervention in areas such as setting environmental standards, e.g., United States (OECD, *Investing Together,* 2013; Vu and Ebel, 2016).

Table 2: Features of Subnational Expenditure Autonomy

Function influencing the degree of autonomy	**Description**	**Low Degree of Fiscal Autonomy**	**High Degree of Fiscal Autonomy**
Broad control over policy	Setting the main policy guidelines (for example, compulsory primary education as a national policy)	Center makes the policy decision	Subnational governments make the decision (for example, water tariff and threshold exemptions for low Income households)
Control over work force (intimately linked to the administrative dimension of decentralization)	Control over employee functions such wage, overtime payments, hiring, promotion	Center determines the conditions subnational government employment	Subnational government control over its work force who is engaged in the delivery of services
Standard setting and regulation	Governments set the standards for the quality and quantity of subnational public services	Centrally imposed standardization of service quality and/or quantity where there are no or few net externalities (for example, except in the case of a clear cross-jurisdictional matter such as earthquake zones , land use zoning and building codes are typically local) .	Subnational government control over standard setting and regulation
Administration of services (intimately linked to the administrative dimension of decentralization)	Administration of service delivery on a day-to-day basis (such as procurement of goods and services)	Mandating of internal administrative organization and functions	Subnational government control over internal administrative structures and functions in order to adopt them to subnational needs
Monitoring and evaluation	Monitoring and evaluation service delivery quality and quantity	The center might have an appropriate role without controlling.	Subnational governments have M&E systems as well as consumer complaint hotlines.

When we analyze subnational expenditure autonomy on the service delivery responsibilities assigned to subnational governments, we observe that in many countries, restrictions are imposed on subnational governments in conducting the administration of services. Once again, just using ratios masks these restrictions which are against the spirit of decentralization. If subnational governments are constrained in responding to the needs and demands of their populations, the measurement framework should reflect these constraints. In Table 3, we present examples of constraints imposed on subnational government expenditure autonomy in selected countries. We observe that even in countries with a high share of subnational government expenditure in total government expenditures, such as Estonia (25 percent), Vietnam (70 percent), and Indonesia (40 percent), there are significant constraints on subnational government expenditure autonomy.

Table 3: Examples of constraints on subnational government expenditure autonomy

Country	Function influencing the degree of autonomy	Description
Estonia	Administration of services	Ministries exercise administrative supervision over the legality of administrative acts of subnational governments. This responsibility is enshrined in Article 753 of the Government of the Republic Act (Lääne, Mäeltsemees and Oll 2021).
Vietnam	Broad control over policy	The most important subnational expenditure item is recurrent expenditures, in which salaries account for more than 50% due to centrally imposed entitlements and regimes.
Cambodia	Broad control over policy Control over work force Standard setting and regulation Administration of services Monitoring and evaluation	There are three levels of subnational governments—provinces, districts and commune—the first two of which are deconcentrated governments. National ministries organized their field presence according to deconcentration principle—out of 39 ministries 28 of them are present at the provincial level and 13 of them at the district level. The direct election of subnational leadership happens only in commune governments, but commune governments have no expenditure autonomy on any of the critical aspects of public expenditures.
Indonesia	Broad control over policy	Central government interventions in district budgeting decisions through spending mandates, tight earmarking of intergovernmental transfers and central review of district budgets. Through increased use of earmarked transfers, the central government aims to align subnational spending with national priorities to meet minimum service standards.
Uganda	Broad control over policy	The central government's budget includes all subnational government budgets (as separate district-level budget votes); the national parliament approves the entire subnational government budget (including expenditures funded from own source revenues).
Malawi	Broad control over policy Control over work force Administration of services	National MPs are voting members of subnational councils. Furthermore, the Chief Executive Officer or the District Commissioner is appointed by the Minister. As a result, subnational governments lack the political and administrative independence to determine their own budget priorities. Legislation further requires that ach subnational council "shall, not later than ninety days before the commencement of the financial year next ensuing, prepare detailed estimates of its revenue and expenditure for such financial year, and shall submit such estimates to the [central-government dominated] Subnational Government Finance Committee which may either approve the estimates as submitted or disallow such estimates in whole or in part or refer such estimates back to the Council for further consideration."
Zambia	Broad control over policy	Considerable 'subnational' spending is funded through the Constituency Development Fund (CDF). While these funds are accounted for through the subnational government budget, and the CDF is considered a transfer mechanism, the allocation of these funds are (de jure and de facto) controlled by Constituency Development Committees led by members of parliament.

Table 3, concluded.

Country	Function influencing the degree of autonomy	Description
Tanzania	Broad control over policy	“[w]here at any time during the implementation of the annual or supplementary budget it appears to the Minister that a subnational government authority is in contravention of any national policies, guidelines or standards, he shall take appropriate measures to ensure that these are complied with and, for that purpose, may issue directives for the implementation of those measures, and such directives shall be binding on the subnational government authority.”
India	Broad control over policy Control over work force Administration of services	Urban subnational bodies (ULBs) as well as rural subnational bodies (RSBs) in India are subject to extensive vertical budget control. As a rule, subnational expenditures in India are heavily controlled in a top-down manner, both during budget preparation as well as budget execution. Subnational (budget) officers are appointed by the state government. To the extent that functions are performed under notional control by subnational governments (e.g., health services), in reality, all service delivery staff is seconded by the higher-level government
Bulgaria	Broad control over policy	There are 583 normative acts (laws and secondary regulations), specifying the details of subnational service provision. Delegated functions (e.g., education, social services, culture, health care) are exclusively funded by national budget grants & transfers, while municipal ones (communal services, public works) are financed by own source revenues, plus minor general equalization subsidy. This strict separation by law is overwritten by the subnational practice, when municipalities contribute to financing of delegated services.

Source : Authors and text references

In measuring the level of decentralization across countries, it is essential to have identified the features that allow subnational governments to exercise expenditure autonomy for the services assigned to them. Two first steps are necessary to understand expenditure decentralization: (i) agreeing on a commonly accepted taxonomy for broad control over expenditure policies, including employee functions; and (ii) producing detailed information about standard setting and regulation and the division of responsibilities in administration and monitoring and evaluation of services between central and subnational governments.

3.1.2 Measuring subnational revenue autonomy

Revenue autonomy refers to the authority granted to subnational governments to mobilize financial resources independently of another government. This includes the ability to select own tax bases, set tax rates, and adjust tax bases. Greater control in these areas is a key indicator/measure of high revenue autonomy (Martinez-Vazquez and Sepulveda, 2012; Boex, Willamson, Yilmaz, 2024). The *European Charter of Subnational Self-government* of 1985 clearly expresses the importance of revenue autonomy (Council of Europe, 1985). The Charter states in Article 9, Paragraph 3 that “at least a part of the financial resources of subnational authorities shall derive from subnational taxes and charges of which, within the limits of statute, they have the power to determine the rate.” By paying higher or lower taxes, residents of subnational jurisdictions can choose the level of public services they want to finance and fund. The necessary prerequisite for the exercise of subnational fiscal autonomy is the ability to choose tax rates (OECD, 1999; Oulasvirta and Truala, 2009; Bird and Bahl, 2018).

Whereas expenditure autonomy both frames and constrains the next three pillars of a decentralized system of government, revenue autonomy is the essence of fiscal decentralization in that it is the test of citizen willingness to pay for a decentralized society (Gulyani, 2005; Ebel, 2019). It has important implications on other dimensions of decentralization as well as for the creation of a community social contract in support of a functioning intergovernmental system of fiscal affairs. However, there is no consensus on how much revenue autonomy should be given to subnational governments and how to measure revenue autonomy. A simple measure of the share of subnational revenues in total government revenues masks the diversity of revenue autonomy across countries.

There is consensus that as the autonomy and discretion of subnational governments increase, they should become more accountable to citizens (Yilmaz, Beris, and Serrano-Berthet, 2010). A critical assumption is that subnational governments would become more responsible and responsive to the needs of citizens if they incur the political costs of taxing their constituents (Bahl and Martinez-Vazquez, 2022). In contrast, if the subnational revenues come to them politically -free, in terms of transfers or from taxing out-of-jurisdiction taxpayers that do not benefit from the taxing jurisdiction's provision of services, the tax-levying authority will have perverse incentives in using their fiscal resources (Ter-Minassian, 2006;).

To address the potential accountability issues, the hardening of the budget constraint is proposed to promote fiscal responsibility (*Rodden, et. al*. 2003 ; Kornai, 1992; Bird, Ebel, Wallich, 1995). The idea is to provide revenue autonomy to subnational governments in return for hard budget constraint. As a result, there is no consensus on how to do that, and, thus, no clear answer to the question of "what is the right kind of revenue autonomy" for subnational governments.

The second dimension of revenue autonomy is related to deciding on the tax base and the rate (Table 4). Deciding on the structure of a tax involves decisions on special exclusions from tax, deductions from the tax base, and credits against the tax liabilities, which lead to complexities and lack of harmonization across jurisdictions (Vehorn and Ahmad, 1997; Blöchliger and Rabesona, 2009; Bird, 2015; Fox and Zodrow, 2025).) On the other hand, autonomy in deciding on the tax rate is more desirable because it is easier for both tax administrations and taxpayers to deal with a tax rate on a commonly defined tax base. Martinez-Vazquez (2015) argues it also has "…the additional important advantage of being perceived to generate political accountability." (Martinez-Vazquez, 2015).

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Table 4. Classification of Subnational Taxes by Degree of Subnational Autonomy [5]

High Revenue Autonomy	Subnational governments set tax rate and base.	Highest degree of own source revenues.
	Subnational governments set tax rate only.	Necessary and sufficient condition for categorization as "own revenue" (piggybacking, tax base harmonization/conformity permitted).
	Subnational governments set tax rate, but only within centrally permissible ranges.	A typical practice is to cap the top rate.
	Tax sharing whereby central/subnational revenue split can be only changed with consent of subnational governments.	Can result when a subnational authority collects the tax and remits to the center
	Revenue sharing with share determined unilaterally by central authority.	100% control by center; this category is a source of much misspecification of what is a central vs. subnational revenue (GFS includes this category as a subnational tax).
No Subnational Autonomy	Central government sets rate and base of "subnational revenues."	May accompany political decentralization.

Source: Adapted from Leif Jensen 2001; further detail is provided by Blöchliger and Rabesona (2009)

The third dimension of revenue autonomy is which level of government should be responsible for revenue administration. The question of revenue administration is not necessarily intrinsically linked to revenue autonomy question (Martinez-Vazquez and Timofeev, 2005. Fox and Zodrow, 2005). The fact that a particular tax has been assigned at the subnational level does not necessarily mean that it should be administered at the subnational level. Martinez-Timofeev, 2010; Bird, 2018; Bird and Bahl, 2018) There are reasons for central administration of revenue collection, including s minimizing compliance costs (Alm, 2025). The Scandinavian countries, for example, devolve considerable revenue autonomy to subnational governments, yet they have centralized tax administration systems (Lotz, 2006). In contrast, other countries, such as Germany, devolved little revenue autonomy but subnational governments have their revenue administrations (Farber, 2006).

In Table 5, we present examples of constraints imposed on subnational governments in managing revenue sources assigned them in a selected group of countries. As seen in the table, there is a wide variation across countries regarding subnational government autonomy in deciding the rate, determining the base and administering the collection of subnational revenues. The degree of the diversity of subnational government revenue autonomy across countries again makes it clear that a simple ratio of total subnational government revenue in total government revenues is a rudimental measure.

[5] Following OECD's earlier work (1999), Blöchliger and Rabesona (2009) have developed much more detailed set of tax autonomy criteria, including breakdowns on degree of SNG discretion over setting tax rates("full" vs. restricted) and variants of central/SNG tax sharing practices.

Table 5: Examples of constraints on subnational revenue autonomy

Country	Revenue source	Description
Estonia	Personal income tax (*tulumaks füüsilistelt isikutelt*)	Subnational governments have no autonomy in setting the rate or defining the base; more importantly, the tax is administrated by the central government. It is a derivation-based tax sharing system—the receipts are transferred to subnational government of the taxpayer's residence.
Türkiye	All taxes	According to the Turkish Constitution, taxation power is only granted to the parliament, and the council of ministers has the power to decide tax rate within the limits of a law enacted by the parliament. In 2011, the Constitutional Court ruled that municipalities don't have the same right to decide a tax rate within the limits set by a law. However, the same Constitutional Court ruled in 2013 that municipalities have the right to set a tax rate within the limits set by a law. In 2014, the government issued a decree on setting the minimum and maximum limits for municipal revenues and authorized municipal councils to decide on the rate. However, the decree doesn't necessarily empower municipal councils to make decision single-handedly. Municipal councils decide on rates for municipal revenues and send the decision to the central government for approval.
Vietnam	All taxes	All tax policies and most fee and charge policies are decided by the National Assembly as part of the State Budget Law that specifies the so-called budget stability period. The revenue collection system is under the Ministry of Finance, leaving provinces, districts and communes with minimal roles.
Cambodia	All revenues	Commune governments do not have autonomy over any of the revenue sources.
Hungary	Subnational taxes	Maximum rates of all subnational taxes (building tax, tax on plots, communal tax, subnational business tax, tax on tourism) are set by law; one object might be taxed only by one type of subnational tax.
Hungary	Subnational Business Tax (LBT)	General rules of tax base assessment are set by law (net turnover), use of LBT revenues is restricted in the Capital City (public transportation, social services). The equalization scheme is built on standardized LBT revenue.
Bulgaria	Real state tax	Area based tax with centrally set base value and multipliers influencing property value (location, age, type of the property, building characteristics and access to communal services) differentiated by municipality type.
Slovakia	Real estate tax	The nationally set value of land tax base of different types; minimal rate (0.25%) with set maximum subnational rates by land types. Area-based tax on buildings (land area: EUR 0,033/m2) with maximum rates for nine building types.

Source: Authors and text references

An appropriate measure of revenue decentralization requires the identification of revenue autonomy in each country. Therefore, the steps for a cross-country dataset on revenue decentralization are: (i) agreeing on a commonly accepted taxonomy for own source revenue definition; (ii) detailed data/information about each revenue source assigned to subnational governments (like revenue base, rate, and administration); (iii) frequent update on base, rate and administration properties of subnational government revenues.

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3.1.3 Measuring autonomy in intergovernmental transfers

Intergovernmental transfers are an essential component of fiscal decentralization reforms as they make up a significant portion of subnational government revenues in most countries (Yilmaz and Zahir, 2020). According to Bahl and Bird (2018) intergovernmental transfers, including revenue sharing, account for 19 and 13 percent of tax revenues in developed and developing countries, respectively. There are two design issues in the design of an intergovernmental transfer that have huge implications on subnational autonomy: (i) determination of the distributable pool; and (ii) allocation of resources from the pool.

There are at least three approaches to determine the size of the distributable pool: (i) formula-based—usually as a fixed share of national government revenues; (2) *ad hoc* as a part of annual budget decision; (3) as a proportion of approved specific subnational expenditures to be reimbursed.

A well-designed transfer system promotes subnational government autonomy, as well as good planning and efficient service delivery efforts (Martinez-Vazquez and Searle, 2007). Otherwise, subnational recipient governments will neither have good budgeting practice, nor will they face an appropriate hard budget constraint. Formula-based determination of the distributable pool is the most conducive to subnational government autonomy. On the contrary, if a transfer system calls for an annual determination of the distributable pool, it is difficult to achieve subnational autonomy in that country. If the total amount in a distributable pool is decided as part of the annual budget decision without explicit and stable funding rules or formula, the determination of the pool will become a continuing and revenue uncertain *ad hoc* exercise. Thus, the central government will have a significant amount of control over subnational governments (Yilmaz and Zahir, 2020).

In terms of the allocation of transfer resources from the distributable pool, unconditional transfers are the most subnational government autonomy-enhancing option as central governments place no restriction on the use of funds. When it comes to conditional transfers, central government specifies the spending conditions. The use of conditional transfer funds might be limited to a specific sector or service that is important to the central government, such as education, health, housing, environment. These types of transfers are sometimes called specific purpose grants or categorical grants. There are different applications of conditional transfers:

1. Open-ended matching: For a unit of money given by the donor, the recipient should spend some amount and there is no cap on the amount of funds transferred to the recipient. Open-ended means as long as the recipient provides co-financing, the central government will also contribute its share.
2. Close-ended, matching: Similar arrangements but transferring authority puts a ceiling on the total amount to be transferred.
3. Non-matching: The recipient is not required to provide co-financing. The donor gives a fixed sum of money with the stipulation that it be spent on a public good.

Similar to that for revenues, we structure the framework for classifying intergovernmental transfers according to the degree to which subnational governments can control the use of funds transferred from the central government (Table 6). In general, unconditional grants promote subnational autonomy as subnational governments have more discretion in using unconditional grants than conditional grants.

However, in case of conditional grants there are several considerations: (i) the strictness of the conditionality; (ii) whether the conditionality is ex-ante or ex post; and (ii) whether conditionality requires a matching.

Table 6. Classification of intergovernmental transfers by degree of fiscal autonomy

High Autonomy with Respect to Transfers	Unconditional (which may be formula-based or in the form of revenue sharing)	The highest degree of subnational autonomy. Note that whereas revenue sharing was given low marks in terms of "own" revenue autonomy if that shared portion is returned to the subnational government where it was collected, it takes on the character of a very flexible transfer. If subnational governments have some authority and control over tax instruments, revenue sharing can be decentralization-friendly. However, if all the decisions on tax instruments and revenue-sharing arrangements are made unilaterally by the central government, revenue-sharing arrangements are detrimental to achieving subnational autonomy.
	Conditional non-matching	The donor government gives the recipient subnational government a sum with the stipulation that funds shall be used for a specific purpose. Given the fungible nature of this grant, it can offer a degree of fiscal autonomy.
	Conditional, open-ended matching	Matching requirements diminishes autonomy. Though there is still a degree of flexibility due to fungibility, with the matching requirement it is difficult to say that this form of grant gives a subnational government much flexibility (autonomy).
Low or No Subnational Autonomy	Conditional, closed-ended	This type of grant is clearly designed to influence the composition of subnational government spending. Such specific grants certainly have their merits (e.g., to adjust for net externalities), it is just that they do not add to the degree of subnational governments fiscal autonomy.

Source: Ebel and Yilmaz, 2007.

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Table 7 presents examples of how the design of intergovernmental transfer systems constrains subnational government autonomy. In many decentralizing countries, such as Indonesia, there is heavy reliance on earmarking.

Table 7: Constraints imposed on the use of transfer resources

Country	Transfer system	Description
Estonia	Subnational governments in Estonia are dependent on intergovernmental transfers as the main category of revenue—which make up to 90 percent of total revenue.	There are two main types of transfers to subnational governments: conditional earmarked transfers, which is more than 80 percent of total transfers, and equalization transfers—less than 20 percent of total transfer amount.
Indonesia	District level spending autonomy is restricted through increased emphasis on earmarking of transfers.	The share of earmarked transfers in total district revenues increased from 4 percent in 2005 to 31 percent in 2023.
Botswana	The discretionary, negotiated nature of Revenue Support Grants (RSG)—as well as the discretionary, earmarked nature of capital development grants—prevent subnational governments from having meaningful budget autonomy.	Recurrent grants are allocated as the difference between centrally approved expenditure items and projected own source revenue collections, leaving no space for subnational discretion.
India	Urban subnational governments and rural subnational bodies in India are extremely dependent on (mostly earmarked) transfers from state governments.	Most grant-funded subnational expenditures in India are heavily controlled in a top-down manner, both during budget preparation and budget execution. For instance, General Financial Rules stipulate that grantee organizations must submit a certificate of actual utilization of the grants received for the purpose for which it was sanctioned (i.e., Utilization Certificate or UC). The difficulty in complying with such administrative requirements results in considerable under-release and under-spending.
Hungary	Task based financing: app. 150 basic indicators - further refined by diverse coefficients – are used for allocating grants. Indicators are measures of service performance, statistical proxies of needs. Coefficients follow municipality type, size, standardized own source revenues.	Transfers of different types (general, block, specific earmarked grants) represent 47% of subnational government revenues (2024).
Bulgaria	Earmarked grants for delegated subnational government functions, financing 94% of education, 95% of social services, 78% of health care spending.	74% of total transfers are specific state grants for delegated services.
Slovakia	Earmarked transfers for delegated municipal services (e.g., registry, education, construction permit, social housing, environment, forestry) are allocated through the relevant line of ministry budgets.	Grants and transfers represent 32% of municipal revenues, 31% of Higher Territorial Unit (region) revenues. (PIT shared by formula is an additional subnational revenue.)

Sources: Authors and text references

To sum: in order to understand subnational government autonomy over resources coming from the intergovernmental transfers, it important to identify (i) whether the distributable pool is determined with formula; (ii) the percentage of conditional/unconditional transfers in total transfers; (ii) the percentage of matching conditional transfers in total transfers.

3.1.4 Measuring subnational borrowing autonomy

In principle, there is no reason that a subnational government should not borrow. However, a critical issue is to first ensure sustainability of the fiscal space for central and subnational governments alike. (Goodspeed, 2025). Accordingly, if the central authority is shown to be fiscally and intergovernmentally capable, then is not inappropriate to subject subnational governments to a clear set of rules that establish fiscal accountability and lead to a hard budget constraint. The payoff to getting this right is that subnational borrowing for capital spending meets the tests of equity and efficiency in resource allocation. The efficiency test is met since capital (investment) expenditures provide a flow of current benefits over time, thereby, allowing –being able to structure--the capital cost recovery process over that same period. Moreover, using “other peoples’ money” provides fiscal space for economic development spending. Equity is satisfied by spreading out the payment of the capital costs over successive generations that benefit from the subsequent year-to-year flow of services of the initial investment year. Repayment may be based on revenues from the investment (for example, if user charges are imposed on a market) or general taxes (Bird and Slack, 2017).

However, in nearly all developing countries, “in principle” merits are overridden to varying degrees due “in-practice” concerns by the central authority that “ their” local governments do not have the financial management capacity go-it-alone in the capital markets (Boadway and Shah, 2025). As a result, to ensure that borrowing undertaken by local governments is in line with a national public sector reform policies and that local governments have the capacity to service its debt over the life it is loan obligations, central governments often impose a range of rules and regulations to ensure local and intergovernmental fiscal sustainability. These rules and regs, which have been extensively discussed elsewhere may include a one or several conditions: central-approval (by a MoF or other central authority) before a local government may engage in borrowing (e.g., Jordan., Malaysia); consistency with the “Golden Rule” that borrowing is only for investment projects and that local authorities demonstrate they can clover operational costs; limits on the amount of debt a local government may accumulate (common in Eurasia, e.g., Kazakhstan); transparency and regular reporting requirements (in Peru local governments must submit detailed reports to the Ministry of economy and Finance); restrictions from borrowing from foreign sources (exchange rate risk/the Mexico Peso Crisis of 1994); and establishing a system for monitoring the performance and condition of infrastructure that has been financed (a process that may either ”Top-down” or multi-tier (Sutherland, Price and Joumard, 2015; Frank and Martinez-Vazquez, 2016; Martinez-Vazquez and Vulvoic 2016; Vu and Ebel, 2016 Yilmaz and Ebel, 2020; NALAS 2024).

Drawing on presentation format of Joumard and Kongsrud (2003, 2005), subnational borrowing autonomy can be divided into six stylized categories (Table 8). Table 9 expands (and very generally so) with a glance at the degree of subnational fiscal autonomy with respect to the use of borrowing authority as a complementary source of revenue to pursue economic development objectives.

At the highest level of subnational borrowing autonomy, countries rely on market forces for fiscal discipline. In these countries, there is little, if any, reason for a “higher” level of government to legally constrain subnational government borrowing since the capital markets become the agent for enforcing financial discipline through bond rating mechanisms and the understanding that a profligate subnational government will be allowed to fail (e.g., g, Canada, Czech Republic, Paraguay, New Zealand, Switzerland and the United States. In some cases, the problem is not a "profligate" system of subnational governments, but rather a failure –an intergovernmental design and implementation failure—to recognize and address the asymmetries among different local governments in terms of their varying capacities to manage debt (Barati-Stec, 2014).

In a cooperative approach to subnational borrowing autonomy, fiscal objectives are established through a negotiation process involving central and subnational authorities, usually represented by the regional level and/or subnational government associations. Cooperative approaches rely on different enforcement mechanisms. In the case of peer pressure type of cooperative approach countries, a joint central-subnational committee monitors fiscal situation of all levels of government and recommends restoring fiscal discipline in case of non-compliance. For example, in Germany, the Financial Planning Council establishes an intergovernmental (central, lander, and municipal) debt strategy and monitors its implementation. In a different version of the cooperative approach, in addition to peer pressure, financial sanctions are imposed in case of non-compliance. In Austria, for example, subnational governments agree to balance their budget over a period of time. Subnational governments that fail to reach the target are subject to fines. Application of the fine, however, depends on the decision of an intergovernmental fiscal commission composed of central and subnational governments. In another version of the cooperative approach, fiscal discipline is enforced through administrative procedures. In the Netherlands, for example, subnational governments are expected to take administrative actions, such as increasing revenues, to be eligible for support from the center. The association of municipalities plays a critical role in establishing consensus for fiscal discipline targets and consequent administrative action in case of noncompliance with targets.

However, the typical practice in developed and developing countries alike, is to establish a rule-based system that is designed to insure accountability and fiscal discipline. Thus, in some countries the central government imposes strict administrative controls (e.g., subnational authority borrowing is subject to approval by the central government in Ireland, Japan, Korea and the United Kingdom). Other countries rely on mechanisms for formal cooperation and coordination.

In countries with fiscal rules but without sanction, there is a legal requirement for subnational governments to have balanced budget; however, non-compliance is not sanctioned. In Finland, for example, law requires subnational governments to have a balanced budget and there are no restrictions on borrowing, the municipal association coordinates.

Whereas in countries with fiscal rules with sanction, there is a legal requirement for balanced budget, and non-compliance is sanctioned. In Brazil, *the Fiscal Responsibility Law* requires all subnational governments to have a balanced budget, and Subnational governments failing to comply with fiscal targets face financial sanctions. The *Fiscal Responsibility Law* and its companion legislation allow states and municipalities to borrow under the conditions that they maintain debt stocks below specified ceilings and establish annual targets for revenues, expenditures, and the balance and changes in the stock of debt (Wetzel, 2004). Subnational governments failing to comply with these rules will face sanctions, including the nullification of contracts and fines. And, for governors and mayors who are chronic rule breakers, there is the threat of impeachment and imprisonment.

In a stricter form of fiscal rule countries, subnational government borrowing is restricted if subnational governments fail to meet with the targets prescribed in fiscal rules. In Norway, for example, if subnational governments have an operating deficit for two years in a row, the borrowing would be subject to the approval of the central government.

The last category is the extreme case of no subnational borrowing autonomy. Combined with little subnational fiscal autonomy, many countries, such as Japan, the United Kingdom and Ireland, subject their subnational governments to seek central government approval of their borrowing authority together with their budgets.

Table 8. Classification of Borrowing and Debt Authority by Degree of Subnational Autonomy

High Autonomy	Market Discipline (Australia, the states of the United States, Canadian provincial and territorial governments, Czech Republic).	Subnational governments borrow on their own account, from internal and external country sources alike. This requires that the market assess the creditworthiness of the borrower. There's a clear understanding that subnational borrowing shall not be guaranteed by the central/state government; however, there may, and should be, a default/bankruptcy "work-out" procedure codified in the law.
	Cooperative Approach	Germany: The Landers agree to the "golden rule" of borrowing for only capital investment expenditure. The same is true for municipalities but their borrowing is subject to regional approval. Peer pressure to comply is introduced by the Financial Planning Council, which monitors fiscal flows and may make recommendations for restoring fiscal discipline as required.
		Austria: Municipalities as a group agree to balance their budgets, with the possibility of providing deficits/surplus rights to other governments. Governments failing to meet their targets are subject to fines and sanctions by an intergovernmental commission. The fine may be refundable if fiscal discipline is restored. There is an "escape clause" in case of serious economic downturn.
		Netherlands: Subnational governments are free to borrow as long as they run balanced budgets. Regular meetings are held between central authorities and the Dutch Association of Municipalities on financial issues. Provinces are responsible for errant municipalities, and the center will intervene to bail out in exchange for loss of subnational financial independence.
	Fiscal Rules without sanctions (Finland municipalities)	Law requires subnational governments to achieve a balanced budget as well as make plans on how to cover any deficit. Borrowing is coordinated by the municipalities' organization. There is no central guarantee.
	Fiscal Rules with Sanctions (Brazil)	The Fiscal Responsibility Law requires states and municipalities to establish agreed upon annual targets for taxing, spending, and stock of debt. States are free to borrow as long as they comply with the targets. Subnational governments failing to comply are subject to a number of financial sanctions (e.g., nullification of contracts made). At the extreme governors and mayors risk impeachment and imprisonment.
No Subnational Autonomy	Fiscal Rules with Central Intervention (Norway)	Whereas there are no explicit restrictions on subnational government borrowing, if a subnational government runs a deficit over two years, the central government intervenes with the power to approve borrowing.
	No subnational borrowing autonomy (Greece, Iceland, Luxembourg, UK)	Subnational governments must submit their budgets for central approval; borrowing is subject to central approval (either all borrowing or borrowing within certain limits such as some percent of current revenues and/or debt service).

Source: Adapted from Joumard and Kongsrud, 2003, 2005

Table 9: Examples of borrowing practices

Country	General Framework	Description
Australia	A co-operative Approach**.** The Australian Loan Council co-ordinates public sector borrowing. The Loan Council considers each jurisdiction's borrowing for the forthcoming year with regard to each jurisdiction's fiscal position and the macroeconomic implications of aggregate borrowing.	Market Discipline**.** States may borrow on their own account; the Loan Council provides information to the financial market on public sector borrowing plans. Peer Pressure**.** State borrowings do not have to be approved. However, the Loan Council places a high emphasis on the transparency of public sector finances, through financial market scrutiny of proposed borrowing to restrict borrowing to prudent levels.
China, People Republic	Limited Fiscal Autonomy. The Budget Law (2015, Article 35) of the People's Republic of China states that the Provincial governments are authorized allowed to issue bonds for the province and on behalf of municipal governments within the limits determined by the State Council. Debt incurred shall be Additionally, SNG does not have any repayment obligations to Local Investment Corporations (quasi SoEs).	Central Enforcement Rules. SNGs may not borrow from a financial institution such as a commercial bank. Nor is an SNG authorized to go directly to the international capital markets. The MoF has the responsibility to establish accountability enforcement rules for SNGs and supervise local government debt but does not set budgetary assumptions. Bonds are issued subject to quotas approved by the State Council. The quotas are the amount of money in Renminbi (RMB). Administrative Controls. I addition to and MOF evaluation as warning mechanisms. All governments above the county level are to establish institutions to monitor and evaluate different kinds of debt risks (local government bonds, stocks of contingent liabilities, and newly emerging illegally secured debt. Debt risks are defined by four levels, I-IV, with level IV the highest risk.
Hungary	Process of reducing local autonomy. Hungarian laws, rule and regulations have been undergoing change over the past decade. By 2012 almost 70% of local debt (bonds and loans) were dominated in Swill francs and Euros, which was a key factor leading to several municipalities declaring insolvency. Between 2011 and 2014 the central government took over major municipal tasks e.g., education) and bailed out local debt. The central government remains the guarantor of local borrowing	Central Enforcement Rule Post 2012 sectoral laws the central oversight role has gone from passive to active, including forcing municipalities to amalgamate. Municipalities can only borrow short term without direct permission. Long term are allowed only on a case-by-case basis and cannot be taken on if the debt service in any one year will the < 50% of own revenues. Municipalities may engage only in forint denominated loans .
Indonesia	Limited Fiscal Autonomy SNG**s** can borrow from: (i) the central government; (ii) other subnational governments; (iii) banks/financial institutions; (iv) non-bank financial institutions; and (v) the public (through the capital market, in the form of regional bonds). They may not, however, borrow directly from overseas sources.	Administrative Rules and Regulations. Indonesian law stipulates three types of SNG debt (short, medium, and long term), each associated with an allowable source (type of lending) and stipulated use funds. Thus, an SNG can turn to banks, non-bank institutions and other SNGS for short term finance to cover cash flow shortages. Medium term loans for financing non-revenue generating public facilities may be sourced from banks, non-bank financial institutions and the central government . Long term loans for infrastructure (again, banks, non-banks, and the center) To qualify for loans SNGs meet satisfy several requirements such as consistency with regional government plans and debt service coverage ratios. Sanctions. Sanctions may apply in the form of postponement/and/or cuts from the Central Allocation Fund CAF Grant) and or CAF intercept for payment of debt service .

Table 9: Examples of borrowing practices, concluded

Country	General Framework	Description
Malaysia	Asymmetry. The National Finance Council manages the degree of the States' borrowing powers (Article 111(2) of the constitution. However, the Constitution includes a clause that the central government "shall not restrict the power of the Borneo states of Sabah or Sarawak (which are accorded higher degree of autonomy compared to the other 11 peninsular states) per approval by the Central Bank."	**Sanctions.** If a local government defaults in paying back a loan, after three months of written demand by the lender, the affected lender may apply to the High Court to seek redress. Subsequently, the Court may order a levy on property in the local government area (which is to be enforced in like manner as any rate imposed by the local authority), and the proceeds paid to the Court for the lender. [This is provided by section 45(1) of the Local Government Act (LGA) 1976.]
Thailand	Central Permission**.** All tiers of local administration are permitted to borrow from "public and corporate agencies" subject to the approval of the Ministry of the Interior (MOI). A traditional source of borrowing for local governments is an MOI fund. A fund committee is chaired by MOI's permanent secretary and is authorized to determine rules and criteria on the fund's management and administration in respect of loan approval. Local Government Units (LGUs) can borrow for specific purposes including: (i) investment (ii) debt restructuring (iii) revolving funds.	**Administrative Constraints**. Unlike for other local government organizations, the law permits Bangkok Metropolitan Assembly and Pattaya City to issue bonds subject to clearance from the Ministry of Interior. In practice, however, the clearance from the Ministry of Interior is seldom granted as a way of limiting the degree of moral hazard which may arise if local government determine that they can borrow and easily receive support from the central government in the event of a default. **Sanctions.** There is a lack of clarity and strong punitive measures for a local government that has a financial emergency.
Vietnam	**Fiscal Practice**. In general, borrowing is restricted for financing capital spending at the provincial level as a golden rule. However, the State Budget Law (SBL) provides for debt stock limits against decentralized revenue.	**Administrative Controls**. The central Government imposes a debt service limit of 10 percent against annual decentralized revenue (Decree 52, 2017). The 2015 SBL and its guiding legislation as well as the Law on Public Debt Management are silent on recourse to ensure that, if a provincial government defaults on borrowings from other sources (such as commercial banks or capital markets), the lenders or financiers could recover them from the provincial budget. However, the MoF has an informal recourse mechanism, which involves subtracting the amount of arrears from the provincial government's future budget allocations. Advance from the state treasury are not legally regarded as borrowing or loans provided by the central government (that is, the MOF) to the provincial government. **Escape Clause**. The SBL provides a formal enforcement procedure of the rules as well as possibility to violate the rules in special cases such as serious natural disasters or catastrophes.

Source : Authors and text references.

3.1.5 Context and place matters

The measurement and interpretation of fiscal decentralization is replete with nuances, complexities that further attest the view that if analysis and policymakers are to design policy that "works" to enhance goals such as economic growth and development and poverty reduction, the research effort must be both multidimensional and context-specific, a finding that cautions against over-reliance on aggregated indicators (Bahl and Martinez-Vazquez, 2022).

In the measurement of fiscal decentralization, there are two kinds of challenges: endogeneity and interplay among the four pillars of the intergovernmental fiscal system (multicollinearity). Endogeneity occurs when the independent variable is correlated with the error term—that is, the impact of an independent variable on a dependent variable cannot be properly interpreted because it includes omitted information leading to bias in estimation. In terms of multicollinearity, several independent variables are correlated. This can arise for various reasons, including (i) simultaneity (e.g., a simultaneous relationship between fiscal decentralization and economic outcomes: e.g., health indicators and income reinforce each other), and (ii) "reverse causation" (e.g., where the independent variable becomes the explanatory variable; thus, in the education example, rather than education autonomy leading to higher rate of economic growth, economic growth explains the level of education). The challenge is identifying dependent and independent variables and then demonstrating the appropriate association between them without endogeneity and multicollinearity. (Martinez-Vazquez, 2009; Hanif, Wallace, and Gago-de-Santos, 2020).[6]

In terms of the interplay among the pillars, the measurement of each of the four pillars comes with complexities that are due to the presence of factors relating to both (i) internal decisions regarding the design of a country's intergovernmental system and (ii) external demographic, economic, and/or institutional factors that are beyond the control of the analyst (and policymaker). To briefly illustrate:

- Expenditure autonomy. As discussed above in the section of the expenditure variable, the function of spending and all its unbundled parts will vary not only across countries but also within and across different types of subnational governments. Moreover, beyond this important nuance of how functions are unbundled intergovernmentally, it may also be the case that even once the nuance of unbundling is recognized, other features may determine the robustness of the dependent variable. For example, consider the "external" factors of geography (e.g., no school bus service in a rural district) or social norms (access to schooling varies by gender, race, ethnicity or language). If in this example either of these features fail, the merit of a measurement of spending autonomy may not inform as to whether fiscal decentralization is working. *The nuance*: subnational expenditure autonomy looks good as an independent variable for improving growth-enhancing improvements in human capital but only if external factors

[6] Hanif, Wallace, and Gago-de-Santos (2020): Throughout the literature it is acknowledged that the fiscal decentralization-economic growth dynamic may be endogenous, Fiscal decentralization by itself may not be a reality until a country reaches a certain level of growth. Wallace (2001) provides an analytical framework for recognizing that external economic, demographic, and institutional trends shape policy possibilities and outcomes.

such as those ranging from geography (Canavire-Bacarreza and Martinez-Vazquez (2012) to social norms (Yilmaz, Beris, Serrano-Berthet, 2010) in support access to the intended expenditure activity. Place and context matters.

- Revenue autonomy. There is general agreement in the literature that a subnational government's autonomy to determine the tax rate at the margin is a necessary condition for revenue autonomy and, thus, a necessary feature for a system of sustainable fiscal decentralization. But, again, "external" nuances matter. For example, Jain Govil (2014), in her study of village governments in the province of Madhya Pradesh, India, finds that decentralized expenditure patters can be significantly affected by the degree of the "social capital" involvement of subnational citizens in a village. Thus, citizens in villages that agreed to be own-source taxed chose a different bundle of services than those who received an equal amount of funds in the form of untied transfers. One implication: citizens are more likely to scrutinize the use of monies they have directly contributed than the funds received in the form of a transfer from a "higher level" of government. *The nuance*: the context of understanding social capital matters as to why and to what extent places decentralize.

- Intergovernmental transfers. Another point of general agreement in the literature is that untied block grants that contribute to financial autonomy are preferred to restrictive conditional transfers. The argument goes that compared to grants that come with "use of funds" conditionalities, block grants will enhance the degree of fiscal decentralization since it fits the definition that decentralization means power over the control of financial resources. However, what if a reliance on untied transfers is so significant that it substitutes for subnational tax effort and, in the worst case, lead to a transfer dependency that undermines a trend toward increased intergovernmental decentralization? Or it may be that the conditional grant comes with restrictions that may stimulate, not dampen, the subnational government's own source revenue effort. *The nuance:* getting the right mix of untied and conditional transfers is key to a sustainable decentralized governance system.

- Borrowing and debt. Having the autonomy to borrow funds. Such funds are not "revenues." Nevertheless, as both the IMF/GFS and the research in GOLD II attest (e.g., the Africa chapter by Yatta and Vaillancourt) , the cross-country study often has to contend with the reality that many reporting countries include funds from borrowing as revenues. *The nuance*: the quality of the hard-to-quantitatively measured structure and quality of public financial management administration can sustain or undermine a fiscal decentralization system.

3. Administrative decentralization

Subnational governments need to be endowed with administrative autonomy to be able to fulfill the responsibilities assigned to them. However, contrary to the fiscal dimension of decentralization, there are no established principles for administrative autonomy. The lack of a unified theory of administrative decentralization makes it difficult to find consensus among academics and practitioners about what constitutes subnational administrative autonomy (Smoke and Cook ,2022; Smoke 2025). Thus, the absence of strong theoretical foundations and lack of robust empirical evidence are important obstacles in defining the administrative autonomy of subnational governments.

A common confusion is mixing administrative decentralization with deconcentration, which is one of three forms of decentralization, the other two being delegation and devolution. Administrative decentralization means transferring administrative functions/responsibilities and authority for a broad array of diverse functions from central government to subnational governments. Three broad powers are particularly important for subnational governments to effectively administer responsibilities bestowed upon them: (i) the authority to make, change and enforce plans and regulations; (ii) the authority to manage their human resources; and (iii) ability to procure goods, services and infrastructure (Boex and Yilmaz, Beris and Serrano-Berthet 2010) .

In terms of autonomy to make, change and enforce plans and regulatory decisions, subnational governments need a minimum set of powers and capacities such as initiating, amending and enforcing regulatory legislation within their jurisdiction in important areas listed in Table 10. These are important functions affecting the economic and social well-being of the population in any jurisdiction. Subnational governments need to be endowed with authority not only to make decisions on these functions but also the power to sanction non-compliance.

Table 10: Subnational regulatory autonomy checklist

Function	Complete Authority	Partial Authority	No Authority
Public safety			
Zoning			
Land acquisition			
Land conservancy			
Land assignment and use			
Issuing building permits			
Adopting construction codes			
Environmental protection			
Cultural and entertainment activities			
Local tourism development			
Crime prevention			
Adopting fire codes			
Regulation billboards and the display advertisement in public spaces			
Overseeing cemeteries, funeral parlors, and crematoria			
Overseeing places for the accommodation, care and burial of animals			
Managing local sports facilities			
Regulating local marketplaces			
Managing traffic and parking			
Emergency response			
Maintenance of public property			
Regulation of local businesses			
• barbers			
• local restaurants, cafes, eateries			
• retail stores			
• animal husbandry and livestock			

Source: Aslam, Gurkan and Yilmaz (2010).

Managing human resources means subnational control over administrative mechanisms for appointing senior management team for subnational government, heads of service delivery units as well as the front-line staff. Subnational autonomy over human resource management deals with issues related to pay policy autonomy (setting overall wage rates as well as local hardship and remote allowances), budget transparency (paying staff from one's own budget), budget and establishment control (controlling staff numbers and authority to remove surplus staff), recruitment autonomy (recognition as the formal employer), career management control (vertical and horizontal mobility, including transfers to other units within the local government system), and performance management (directing and supervising activities and tasks, conducting evaluations, and exercising the ability to discipline and fire).

Table 11: Subnational administrative autonomy over human resources/checklist

Employer function	Complete Authority	Partial Authority	No Authority
Budget Payroll • Authority to dismiss surplus staff • Determine the wage envelope			
Establishment control • Controlling overall staff numbers • Controlling staffing individual units/departments/facilities			
Recruitment • Recognized as a formal employer • Authority to hires • Independent merit-based hiring mechanism			
Career Management • Promotion • Horizontal mobility • Transfer within the same government			
Performance management • Authority to direct and supervise activities and tasks • Conduct performance evaluation • Offer financial rewards • Authority to discipline (including firing) underperforming staff • Pay policy • Authority to set overall wage rates • Authority to decide incentive payments			

Source: Aslam, Gurkan and Yilmaz (2010).

In terms of ability to procure goods and services, under strictly stipulated national standards and regulations, subnational governments need to have autonomy to develop procurement strategies, identify associated processes, and issue contracts for goods and services. Procurement contracts can take many forms, including service and/or management contracts, leases, concessions, joint ventures and full or partial ownership arrangements (Boex and Yilmaz, 2010). As part of granting administrative autonomy to subnational governments, decentralization arrangements should make sure that national procurement laws and regulations provide a level of flexibility to subnational governments to procure infrastructure services through these procurement methods.

In order to understand subnational governments' administrative autonomy, a decentralization measurement framework needs to provide qualitative information about the following important aspects of administrative decentralization:

- Whether subnational governments have complete, partial or no authority to legislate in important areas listed in Table 10.
- Whether subnational governments have complete, partial or no authority on employer functions listed in Table 11.

- Whether subnational governments have the ability to use different procurement methods for providing services to their population.

4. Political decentralization

Similar to the administrative dimension of decentralization, there is no set of agreed-upon principles for political decentralization and empowerment. However, understanding political setting is critical for the success of decentralization reforms as it establishes the accountability linkage between subnational governments and citizens. (Martinez-Vazquez, 1995b; Yilmaz and Venugopal, 2011) Political decentralization starts with transferring political authority to the local government by establishing elected local governments. However, political decentralization is not only about elections. It is also about establishing rules and norms for interaction between elected local officials within both executive and deliberative bodies of a subnational government and local bureaucracy. Political decentralization should allow the oversight of the elected officials over local bureaucrats (Mahieu, and Yilmaz, 2010). Some argue that political decentralization should further allow citizens to directly intervene in local decision-making processes through various instruments, such as referendum, recall, direct legislation, and term limits (Quinn,2016.). As Boex and Yilmaz (2010) noted "…political decentralization is the primary mechanism through which citizen preferences are represented in local public decision-making and is therefore essential to an effective system of decentralization."[7]

In order to understand the political setting in the context of decentralization, a decentralization measurement framework needs to provide qualitative information about the following issues:

- ***Separation of Powers between Local Executive and Deliberative Branches***
  Is the mayor elected by the council?
  Do councilors select the chairperson among council members?
  Is the mayor also the chair of the council?
  Can local councilors hold other positions in the local government?
  Is there an effective administrative court system?
  Are local courts easily accessible to average citizens?
  Is there an informal court system/alternative dispute resolution mechanism?

- ***Electoral safeguards***
  Can citizens remove councilors from office/trigger a recall?
  Are there recall elections?
  Are there Term Limits?
- ***Effective oversight***
  Does the executive have veto power over council decisions?
  Can the executive occupy dual role/employment?
  Can councils take decisions independently of the executive?
  Does the council have veto power of executive decisions?

[7] To complement this point, Commins and Ebel discuss, different countries with differing cultures have varying forms of political voice and participation (UNCA, 2010).

Can the council call the executive for hearings/ask for testimony?
Does the council receive periodic reports from the executive?
Do local councils have the authority to establish standing committees?
Do local councils have the authority to establish ad-hoc committees?
Can council members remove executive officials by no-confidence vote?

5. Concluding Comments

The most binding constraints in evaluation of decentralization is the absence of data (Jerven, 2013; Bahl and Martinez-Vazquez 2022). Addressing this problem involves agreement on how to measure autonomy of subnational governments in all three dimensions of decentralization. Then it would require gathering and updating comparable statistics and qualitative data and information on the agreed variables.

Fiscal decentralization is underpinned by a variety of theoretical guides and technical standards for data presentation. These standards are integral to implementing sound intergovernmental fiscal reforms, by providing frameworks that guide the reform decisions for better subnational financing. A big missing piece in this puzzle is the lack of Intergovernmental Finance Statistics. The IMF's GFS provides guidelines and standards for fiscal reporting from the perspective of the central government. Complementary to the GFS there needs to be intergovernmental finance statistics that underpin intergovernmental fiscal reporting.

Annex 1. Review of Cross-Country Comparison/Database Studies

Purpose and Scope. There is a two-fold purpose to this Annex. The first is to address the theme of this paper further that a reliance on cross-country/comparative studies will not only not give the give the a clear measure of fiscal decentralization for a country or set of countries but also that to rely only on comparative discussion (e.g., database)   may confound the analysis. What is needed for analyst and policymakers to get the right intergovernmental "fit" requires a detailed analysis of the fiscal, administrative, and political dimensions(including the often not readily recognized nuances) of each country in the context of a country's (or a sector's) broader public sector reform path. The second purpose is to recognize as important as the country-context approach is, the development of comparative data and analysis can greatly and substantively inform the specific "place" analysis.

Accordingly, this Annex briefly reviews the three of most used and useful multi-country comparative databases: the (i) IMF *Government Finance Statistics Yearbook*; (ii) the database that has been developed by the Organization for Economic Cooperation and Development(OECD), and (iii) the United Cities and Local Development's Global Observatory on Local Democracy study (GOLD II).

IMF/GFS. The most cited cross-country database is the annual published in the International Monetary Fund's Government Finance Statistics Yearbook (GFS) , the most comprehensive global dataset. First published in   1997,   IMF's Government Finance Statistics (GFS) report typically covers more than 100 countries. However, the exact number of countries that report data varies depending on the level of government data being examined (e.g., central, state/provincial, local). At present around 70-80 countries provide detailed subnational government data, including local government finance information (IMF GFS update 2024).

The data is collected from country survey questionnaires filed annually by member country statistical institutions. Despite best attempts, the data that the countries report to   IMF are reported is not readily standardized. For example, there is the matter that problem that central tax sharing arrangements vary country to country such that it is not clear how to interpret the data as central or subnational. Consider, for example, how central/SNG tax sharing is treated for data   differs from reporting-country-to reporting country, including in the case of varying degrees of central/SNG "co-participation" in revenue assignment. Spain has a system of co-participation in tax revenues between the central government and the Autonomous Communities (regions). Each region has the power to participate in the revenues of certain taxes, such as personal income tax, VAT, and excise duties, which are shared between the central and regional governments according to predetermined formulas. (Loughlin, Hendricks, and Lindstrom, 2011).

Then there is the case of Germany where the subnational revenue-sharing system between the federal government, Länder and municipalities is well-established. The key taxes, such as personal income tax, corporate tax, and VAT, are shared among these levels of government based on fixed formulas defined in the Basic Law (Grundgesetz). Yet, the GFS classifies a significant percentage of national taxes as generated by subnational governments. (Bahl and Bird, 2018; Box 2.1). However, Argentina the provinces must agree with any changes in the tax sharing agreement. The question arises: when there is a tradition of central and subnational cooperation, which is the correct way to think about fiscal autonomy?

This all said, the GFS coverage is the only global fiscal data base, a feature that, *inter alia*, explains why it is still widely used directly for empirical cross-country testing of fiscal decentralization outcomes (Nakatani, Zhang, and Valdes, 2022) as well as to inform other regional and country databases. [8]

There are two other approaches to developing a cross-country knowledge base that attention. Both have made important contributions to the global decentralization dialogue

Organization for Economic Cooperation and Development/OECD. In 2003, the OECD in cooperation with the Korea Institute of Public Finance launched the OECD's Network on Fiscal Relations Across Levels of Government that has as it may important contributions to the measuring fiscal decentralization, the development of an OECD-wide database that standardizes several definitions of intergovernmental fiscal autonomy. A result been the creation of the OECD Fiscal Decentralization Base, a key contribution of which has been to develop a commonly agreed-upon measurements of fiscal autonomy (Blöchliger and Rabesona, 2009). [9]The OECD database is different from the wider scope GFS in that it is designed to develop data and analysis relating to intergovernmental fiscal relations across just its 38 member countries (plus, at times, a select set of non-OECD non-member partner countries). A further important contribution to the decentralization knowledge base is a series of OECD Federalism ranging from topics addressing federalism and inclusive growth to the changing nature of intergovernmental structures across the world to federalism and inclusive growth.

Of special interest here is a 2013 Report on *Measuring Fiscal Decentralization* (Kim, Lotz, Blöchliger, 2013), that first reviews may OECD metrics from the taxonomy of taxing power of which begins with a detailed review of OECDs decentralization metrics (from taxing power to grant revenue by type of grant) along a series of country case studies that address the deal with the indicators of fiscal decentralization the papers by taking the OECD Fiscal Decentralization Database starting point. The authors then set the

[8] There are other regional data bases that include cross-country data relating to fiscal decentralization. However, whereas when reporting /measuring decentralization, each are guided by the generally accepted assignment guidelines and definitions of fiscal autonomy as autonomy cited in the text., none are complete in the same manner as that of the IMF/ GFS or the OECD. Indeed, many of other cross-country data bases development banks draw on the IMF GFS data. (i)The DB, AfDB, IDB routinely collect and report (timing varies by institution) data from their member national statistical offices, central banks, and ministries of finance that are then supplemented and cross verified with GFS numbers. (ii) The EU's Eurostat independently gathers and reports data on its member states but is fiscal decentralization numbers are limited to aggregate spending for general, central, state and local expenditures.(iii)The World Bank has two global data sources that include information on finances: the World Development Indicators and the Subnational Government Finance Database draws on both ad hoc World Bank and external research, which focuses on the Bank's core topics poverty and health. The World Bank does not have a standardized global data base on intergovernmental finance. What little cross-country fiscal decentralization is reported draws on the GFS. (iv) USAID's Democratic Decentralization Handbook, which primarily focuses on political and administrative aspects of decentralization also turns to the standardized GFS for country-comparative reporting revenues and expenditures.(iv) The United Nations Habitat, Economic Commission for Africa and United Nations Development Program provide special studies on topics of intergovernmental and local finance; but they are not engaged in cross-country comparisons of decentralization metrics.(v) the Caribbean Development Bank (CDB), Islamic Development Bank (IsDB), and the Arab Bank for Economic Developmental in Africa (BADEA) do not systematically report on the intergovernmental finance in their member countries.

[9] www.oecd.org. https://www.oecd.org/en/data/datasets/oecd-fiscal-decentralisation-database.html. The most recent report: OECD (2024), Subnational Government Structure and Finance Database, OECD Publishing, Paris

OECD indicators against a more detailed and informed country-specific analysis that led to the conclusion that there is no single decentralization indicator but that ”measuring intergovernmental fiscal frameworks requires and multi-dimensional approach”(OECD, 2013,p 3). The country studies the US (Martinez-Vazquez and Timofeev), Germany (Spahn), Norway (Borge), Demark (Blom-Hansen) and Italy (Longobardi). As Spahn concludes, and paraphrasing: decentralization measures can be used for a great number of analytical questions, but it is questionable whether a single measure can appropriately summarize decentralization” and that “an outline” for a comprehensive approach could help guiding the discussion. The purpose of this paper is to suggest the key elements of just such an outline.

<u>GOLD II (2010).</u> In 2008 the United Cities and Local Governments (UCLG) published the first of what has become a triennial series of a Global Observatory on Local Democracy and Decentralization (GOLD) Report. The first GOLD report (2008) provided a broad overview of local government systems around the world. GOLD II report took on the much more detailed and ambitious task of providing an analysis of the evolving trends and practices in fiscal decentralization across the globe (Martinez-Vazquez and Smoke, 2010). The report provides a chapter on each of the seven regions encompassing 116 countries.[10] The result is a Report—unfortunately, a “one-off” report—that has contributed significantly to the discussion the measurement of fiscal decentralization in that provides a set of quantitative measures (when data was available) complemented by text details that uses country examples to illustrate institutional complexity, and the many place-specific nuances involved in decentralization processes. By highlighting these various dimensions, the GOLD II study advanced the conversation on measuring fiscal decentralization by encouraging more comprehensive and context-sensitive assessments rather than relying solely on simplistic or narrow metrics. Key among its recommendations the editors called for is the need for more detailed case studies that explore the diversity of experiences across countries and regions.

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[10] Africa (Francois Yatta and Francois Vaillancourt; Asia Pacific (Blaine D. Lewis, Lee Kuan Yew, Bob Searle); Eurasia (Natalla Golovanova and Galina Kurlandskaya); Europe (Luiz de Mello); Latin America(Jorge Martinez-Vazquez); Middle East and Western Africa (Mehmet Tosun) .

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