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Decentralization and Reform in Latin America

Improving Intergovernmental Relations

Edited by

Giorgio Brosio

University of Turin, Italy

Juan Pablo Jiménez

Economic Commission for Latin America and the Caribbean (ECLAC) and School of International and Public Affairs (SIPA), Columbia University, USA

IN ASSOCIATION WITH THE ECONOMIC COMMISSION FOR LATIN AMERICA AND THE CARIBBEAN (ECLAC)



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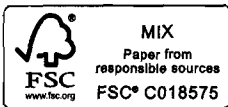
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Contributors

José Roberto Afonso Economist, National Bank of Economic and Social Development, Rio de Janeiro, Brazil.

Ehtisham Ahmad Senior Visiting Fellow, London School of Economics, UK and Senior Fellow of the Bonn University, Germany.

Vivian Almeida Professor of Economics, Instituto Brasileiro de Mercado de Capitais (Ibmec), Rio de Janeiro, Brazil.

Gustavo Arballo Professor, National University of La Pampa, Argentina.

Giorgio Brosio Professor of Public Economics, University of Turin, Italy.

Kleber Castro Economist, Eletrobrás, Rio de Janeiro, Brazil.

Oscar Cetrángolo Professor, IIEP, University of Buenos Aires – UNTREF, Argentina.

Sulamis Dain Professor, Federal University of Rio de Janeiro and State University of Rio de Janeiro, Brazil.

Luiz de Mello Deputy Chief of Staff of the OECD Secretary-General, Organization for Economic Cooperation and Development, Paris, France.

Ana Cecília Faveret National Agency for Supplementary Health (ANS), Rio de Janeiro, Brazil.

Roberto Gargarella Professor, University of Torcuato Di Tella, Buenos Aires, Argentina.

Ariela Goldschmit Consultant, Buenos Aires, Argentina.

Juan Carlos Gómez Sabaini Consultant, Buenos Aires, Argentina.

Veronica Grembi Assistant Professor of Public Finance, Catholic University, Milan, Italy.

Juan Pablo Jiménez Officer in Charge, ECLAC Office in Montevideo, Uruguay and Adjunct Professor, Program of Economic Policy Management (PEPM), SIPA, Columbia University, USA.

Alvaro Manoel Senior Economist, Economic Policy and Debt Department (PRMED), World Bank, Washington, DC, USA.

Jorge Martinez-Vazquez Regents Professor of Economics and Director, International Studies Program, Andrew Young School of Policy Studies at Georgia State University, Atlanta, GA, USA.

Fernando Rezende Professor, Brazilian School of Public and Business Administration, Getulio Vargas Foundation, Rio de Janeiro, Brazil.

Cristian Sepulveda Senior Research Associate, International Center for Public Policy and Visiting Assistant Professor, Department of Economics, Andrew Young School of Policy Studies at Georgia State University, Atlanta, GA, USA.

Teresa Ter-Minassian International Consultant, ex-Director of the International Monetary Fund, Washington, DC, USA.

João Veloso Researcher, Research Program for National Development (PNPD), Department of Regional, Urban and Environmental Policies and Studies (DIRUR), Institute for Applied Economic Research (IPEA), Brasilia, Brazil.

Preface

Beyond the high institutional heterogeneity that characterizes Latin America, during the past decades the countries in the region have increasingly reallocated responsibilities from central levels of government to intermediate and local levels. Similarly to the rest of the world, most countries of the region have experienced a clear trend towards increasing decentralization of spending responsibilities. These decentralization processes have occurred in both federal countries as well as in unitary and/or centralized countries, however, through different institutional and legal instruments. Therefore, sub-national governments participate more and more actively in the management of a substantial part of the public budget.

Despite the potential advantages frequently referred to in order to justify these reallocations, it is important to note that these decentralization processes and their results have not been uniform. The systems of inter-governmental relations and their impact in terms of efficiency and equity in the provision of decentralized goods and services (health, education and infrastructure) continue to be very heterogeneous.

Evidently the expected benefits of decentralization must be evaluated with a view of the conditions in which the reform processes are orchestrated. Thereby it is essential to recognize a series of specific characteristics of Latin America: high inequality in income distribution, high level of urbanization, territorial inequality within countries, and limits to public policy imposed by low levels of taxation both at the central and the sub-national government level. Moreover the development of decentralization processes together with the recovery and strengthening of democratic institutions must be stressed. In addition, in several countries of the region the strategic importance of natural resources has made the allocation and distribution of revenues and royalties from these sectors to become one of the most active part of the decentralization process and reallocation of functions. Hence it becomes very important to check whether and how local institutions have worked in these contexts and to see how their actions can be improved.

The rapid devolution of spending responsibilities was not mirrored on the revenue side. As is well documented in this volume, this asymmetry between revenues and expenditure in decentralization is quite common

around the world, but it is especially relevant in Latin America, reflecting a number of economic, political and institutional factors that affect the process and its outcomes.

In order to address the impact of the decentralization process in the region, the Economic Commission for Latin America and the Caribbean (ECLAC), with the financial support of Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and the Federal Ministry for Economic Cooperation and Development (BMZ), has carried out two projects on decentralization and governance. As part of these projects a series of seminars and workshops were held with fiscal authorities and experts to evaluate the state of intergovernmental relations in Latin America and the impact of the reassignment process in terms of equity and macro fiscal sustainability.

As a result of these multiple activities ECLAC and GIZ present this volume with the purpose to contribute to the knowledge about the decentralization process in the region, emphasizing the intergovernmental relations systems and the public policies implemented to reduce multiple forms of inequality in the region. We consider that the topics analyzed in this book have a strong importance for the debate about public policies in Latin America.

The objective of this book requires the consideration of various subjects, ranging from those linked to the relationship between economic development and decentralization to those related to the macroeconomic impact of the reassignment of functions and the resulting system of intergovernmental relationships. Furthermore, the book addresses social and infrastructure spending, social cohesion, and financing of sub-national expenditure.

Decentralization remains one of the biggest challenges in the region, presenting as many opportunities as risks. As described in this volume, the process involves many multidimensional factors that require a constant effort to learn and rethink the kind of interventions needed to take advantage of the opportunities and overcome the challenges.

We are sure that *Decentralization and Reform in Latin America: Improving Intergovernmental Relations* will be of interest to the many scholars and practitioners working in this field and will serve to stimulate debate on the governance of intergovernmental relations in Latin America.

Alicia Bárcena
Executive Secretary, ECLAC

Acknowledgments

Since producing this volume has been a team effort, the editors would like to thank all those who have made this book possible.

We start by expressing our gratitude to our contributors, all of whom are leading experts in the field. We thank them for their participation.

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We are grateful for the financial support of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), granted within the framework of the 'Decentralization and governance (GER/08/003)' project executed by ECLAC jointly with the GIZ and financed by the German Federal Ministry of Economic Cooperation and Development (BMZ).

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1. Introduction: approaching recent transformations of intergovernmental relations from multiple profiles

Giorgio Brosio and Juan Pablo Jiménez

1 SPECIFICITIES OF THE EVOLUTION OF DECENTRALIZED ARRANGEMENTS IN LATIN AMERICA

In most Latin American countries, since colonial independence, the shaping of intergovernmental relations has been a crucial component of the debate on the institutional structure of government and constitutional design. In the region, political reform and federalization/decentralization intersect in the political and intellectual debate with an intensity that, possibly, is not observable in other continents.

This is not widely recognized outside Latin America (LA), possibly because the offences by authoritarian rulers and regimes to the federal and decentralized arrangements have been more prominent than the peculiar characteristics and the innovations introduced to them by democratic governments.

There are common characteristics of the decentralization processes worldwide that are worth analyzing from a general and not just a Latin American perspective. At the same time, Latin American countries show some specificities that trace their roots, as to be expected, to the original features of the constitutional and political institutions of the continent.

Decentralization reform has been rapid and intense over the past three decades. Like the rest of the world, most countries in LA have experienced a clear trend towards increasing decentralization of spending responsibilities. As a result, subnational spending rose sharply between 1985 and 2010, both as a ratio to GDP and as a share of overall public sector spending. Subnational governments (SNGs) are managing a much

larger share of the public sector budget than they did before, although it is not as large as that prevailing in most industrial countries. SNG management is also more active, since most heads of the executive are selected by popular vote due to political decentralization. Following Treisman (2002), LA has one of the highest levels of electoral, that is, political, decentralization.

Decentralization has been especially prominent in health and education expenditures. These two sectors on average account for approximately 40 percent of total subnational spending in the region. In countries such as Argentina, Bolivia (Plurinational State of), Brazil, and Colombia, SNGs are responsible for over 70 percent of total public spending on education, and for 50 percent or more on health. This fact highlights the social implications of a substantial portion of subnational spending in many Latin American countries.

The rapid devolution of spending responsibilities was not mirrored on the revenue side. With the exception of Brazil and, to a much lesser extent, Argentina, Bolivia (Plurinational State of) and Colombia, subnational own revenues in LA account for small, and broadly constant over time, shares of total tax revenues, and for less than 2 percent of GDP, giving rise to large vertical imbalances.

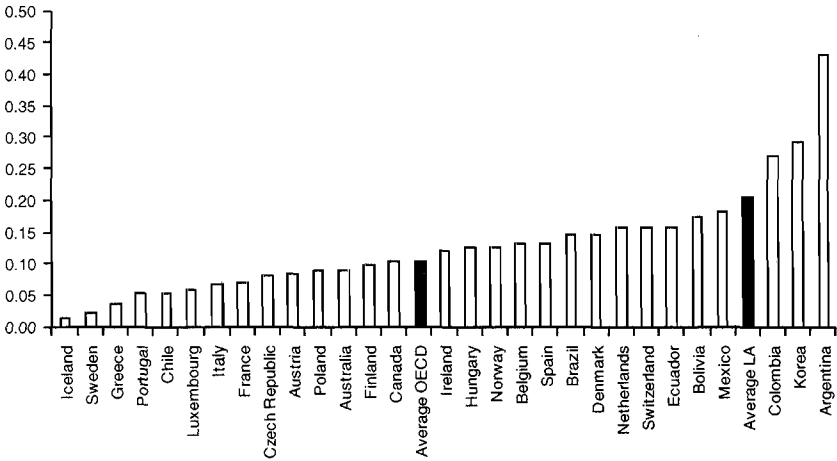
2 ASYMMETRY BETWEEN DEVOLUTION OF EXPENDITURE AND DEVOLUTION OF TAXING RESPONSIBILITIES

It is well documented in the relevant literature that this asymmetric trend in decentralization is quite common around the world, but it is especially relevant in LA, and reflects a number of factors (see Ambrosanio and Bordignon, 2006; Ter Minassian and Fedelino, 2010; Gómez Sabaini and Jiménez, ch. 6 in this volume).

First, political economy incentives for both the central government (CG) and most SNGs tend to work in favor of revenue centralization: CGs prefer to maintain control of most revenue bases, and to provide resources to SNGs through transfers and, for their part, SNGs tend to prefer avoiding the political costs of raising resources from their own constituents, and blaming the CG for any shortfall of such resources.

Second, the scope for decentralization of taxing powers is also constrained by economic factors, most notably the higher mobility of goods and factors of production within than outside a national territory. This tends to limit subnational tax handles mainly to property taxes.

Third, with taxing capacities typically being unequally distributed



Sources: ECLAC and OECD.

Figure 1.1 Transfer ratio (average 2000–2006) (% of GDP)

across the national territory (especially in resource-rich countries), significant vertical imbalances need to be maintained between levels of government, to facilitate horizontal redistribution through equalization-type transfers.

In that sense, the growing vertical imbalance is covered by intergovernmental transfers. One important characteristic of LA is the importance of these transfers, which amount to an average of 21 percent – almost double the OECD average (11 percent) (Figure 1.1).

An additional characteristic of the intergovernmental transfer system in LA is the significance of revenue-sharing mechanisms and poorly designed equalization transfer programs (see ch. 9 in this volume).

Finally, subnational tax administrations generally (albeit not always) are less effective than national ones. This is especially evident in LA in the administration of local property taxes, with outdated *cadastres* (property registers) and infrequent reassessments of property values. As a result, the ratio of property taxes to GDP is equivalent to approximately 20 percent of the corresponding ratio in OECD countries (Gómez Sabaini and Jiménez, ch. 6 and Sepulveda and Martínez-Vazquez, ch. 7 in this volume).

These stylized facts are the results of a long process of reforms during the last three decades that have attracted a lot of analytical attention and have been the focus of considerable academic and expert research in most countries.

3 STAGES OF DECENTRALIZATION REFORMS AND THEIR RATIONALE

In the first period (until the mid-1990s) the leading idea was that decentralization would stimulate more-efficient provision of public goods, and would improve democratic and popular participation and thus accountability. We are referring, in particular, to the constitutional reform in Brazil (1988), to the Coparticipation Law in Argentina (1988), to the decentralization of the health and education law in Argentina (1994) and to the constitutional reform of Colombia (1991).

According to Rezende and Veloso (ch. 8 in this volume) this wave

which gained impetus in the late 1980s, was accompanied by a widespread defense of the virtues of familiarizing governments with their constituencies, so as to improve efficiency in managing public resources, achieve efficacy by adjusting the provision of public services to local priorities, and allowing for the accountability of the governmental authorities. This should also enhance democracy following the demise of authoritarian regimes in some parts of Latin America.

To a large extent the normative theory of fiscal federalism was the intellectual support of these reforms.

At the same time the World Bank – the international organization most active in the support of those reforms – emphasized in a 1988 report:

Decentralization promotes efficiency by allowing a close correspondence between public services and individual preferences, favoring responsibility and equity through a clear relationship between service benefits and costs. This is the justification for the establishment of provincial and local governments sensitive to the wishes of its citizens, and not simply instruments of the central government. (World Bank, 1988, pp. 182–3; see also 1993, pp. 12–13)

Starting from the mid-1990s, and related to some events such as the default in Minas Gerais (Brazil) and the fiscal crisis of Argentina, the process was reoriented. Some governments, experts and international organizations started to worry about the extent of decentralization, and particularly about the increase of subnational debt. The reforms of those days were oriented towards coordinating and controlling subnational borrowing. Most of the fiscal responsibility laws of the region¹ were formulated in those years to control subnational borrowing.

Questions also started to emerge about the effectiveness of decentralization. In the *World Development Report* (1997), the World Bank pointed out that decentralization generates significant benefits in different parts of the world, including LA. In particular, it can improve the quality of

governance and achieve a better representation of citizens. Competition between provinces, cities and localities can spur the development of more-effective policies and programs. However, the World Bank acknowledges three big potential pitfalls of decentralization: greater inequality, macro instability and submission of local governments to interest groups. The existence of such dangers, then, shows that the role of central governments is vital for the preservation of development: 'The problem is finding the appropriate division of responsibilities between the central and other levels of government' (*ibid.*, p. 13).

4 PECULIARITIES OF LATIN AMERICAN SOCIETIES AND THEIR CONSTRAINTS ON DECENTRALIZATION

As mentioned above, the crucial sectors affected by decentralization have been health, education and basic infrastructure. These sectors impact directly on living conditions, particularly of the poor, and have submitted the merits of decentralization to a crucial test. There are some peculiarities of Latin American societies, such as the high inequality in income distribution and territorial disparities which could be considered as a limit or as a justification for the disappointing results noted in some countries. Hence, it becomes very important to check whether and how local institutions have worked in these contexts and to see how their actions can be improved.

As a response to this need, there is a growing branch of the literature that studies the effectiveness of decentralization in terms of service provision. Part of this literature refers specifically to LA (Faguet, 2004; Faguet and Sánchez, 2006). Latin American countries are also included in large sectional studies that analyze the outcomes of decentralization across the world (Robalino et al., 2001; Arze del Granado et al., 2005). According to this literature, there is evidence that substantiates the claims made by the theory that decentralization improves governance by ensuring better preference-matching and allocation efficiency. These findings are partially contradicted by the observation of an increase of poverty and inequality in some Latin American countries in the last part of the 1990s. To a great extent these results have to be assigned to the economic and financial crisis of the end of the decade. They have also impacted on decentralized arrangements. In some countries the need to give a quick response to the deteriorated conditions of the poorest segments of the population has induced the government to introduce new social programs that channel resources directly from the center in a targeted way (*Progresá* in Mexico;

Bolsa Familia in Brazil; and the *Jefas* and *Jefes* Program in Argentina, among others) (Díaz-Cayeros and Magaloni, 2009).

Institutional changes for social policies are in line with the concomitant and important changes in the economic literature on fiscal federalism with the advent of the so-called 'second generation'. This new literature (Lockwood, 2006; Rodden, 2006; Weingast, 2006) follows the typical political economy approach by replacing the benevolent government assumptions with the more realistic one of self-serving officials and politicians, and stresses the critical role of institutions in determining the effects of centralized or decentralized government.

5 GROWING MACRO-FINANCIAL CONCERNS ASSOCIATED WITH DECENTRALIZATION

A growing branch of this recent political economy-based literature focuses on fiscal management. This is not by chance. An increasing number of SNG fiscal crises have ended in most cases with the CG bailout of defaulted units. Macroeconomic policy also constitutes an area where the incentive-based approach to local governance finds an ideal ground for application. Since local governments have little electoral responsibility for macroeconomic performance and since fiscal sovereignty has been concentrated in the hands of the CG, intergovernmental fiscal relations have become a political game where local governments tend to overspend and then ask the CG for financial help once they have exhausted their borrowing capacity. On the other hand, the CG tries to abstain from intervention, but with a limited credibility deriving from its increased fiscal sovereignty. Quite paradoxically, but not too much in the microeconomic sphere, political incentives increase the efficiency of decentralized government by stimulating competition, while in the macroeconomic sphere they may complicate fiscal and monetary management.

To improve the macroeconomic performance of local governments, the bulk of the literature points to the importance of fiscal institutions, particularly to reliance on taxation instead of CG transfers. While higher reliance on taxation improves local accountability and hence has a positive, microeconomic, impact on the behavior of SNGs, from a macroeconomic point view things may look different. A high level of fiscal decentralization reached in some countries in the Latin American region is often considered as a factor of fiscal fragility and of amplification of macroeconomic shocks. At the same time, one has to consider that these problems do not necessarily originate in decentralization *per se*, but rather in underestimation of the need to insert coordination mechanisms

within the system of intergovernmental relations and of increasing SNG reliance on own taxes.

All these evolutions suggest the need to give new and more emphasis to a wide-spectrum analysis of the working of subnational governance. Studies should range from the empirical analysis of the effective outcomes of decentralization, to the impact of decentralization reforms on equity and poverty and to the macro-financial consequences of devolution of powers and finance.

6 OVERVIEW OF THE VOLUME

The aim of the initial seminar that gave birth to the present volume was exactly in line with the exigencies mentioned above. The key issue is not to evaluate the pros and cons of decentralization, but to assess the working of decentralized arrangements and institutions with a view to suggesting corrections and reforms where they are not working according to expectations.

Consideration has been given here to a large set of issues, ranging from the impact of decentralization on social cohesion, to the observable link between decentralization and spending for the social sectors and infrastructure and to the financing of subnational spending responsibilities through taxes, transfers and debt. Special consideration must also be given to macro-financial issues and fiscal rules in view of their relevance in the Latin American context. Additionally, in several countries in the region, the intergovernmental allocation of revenue from natural resources has become one of the most debated issues of the processes of decentralization, bringing the need for careful and multifaceted analysis.

The first topic discussed in this volume is the link between constitutional reform and decentralization. Gargarella and Arballo (ch. 2) describe the context in which constitutional issues have been debated in LA. The authors provide an overview of the present scenario as defined in the latest constitutional reforms in the region, taking into account generally established trends and those just emerging in the area of political and fiscal decentralization. They distinguish between the main federal models that have prevailed in LA and point to a recent process of convergence between them. However, convergence is still limited and refers more to formal than to substantial issues, however important. The authors point out that many crucial issues, such as revenue assignment, are omitted from constitutional texts. This is a reasonable strategy in view of the rapid and changing responses that states have to give to the fast evolution of their socio-economic and political context impacting on intergovernmental relations. On

the other hand, this strategy also reflects an uneasiness in making critical choices and may be a source of uncertainty and instability.

Cetrángolo and Goldschmit (ch. 3) take a critical look at decentralization policies in LA that may have had an adverse impact in terms of social cohesion. Based on the existing literature, they evaluate the effects on social cohesion of public policies on decentralization and contemplate the types of reforms needed to achieve greater social cohesion within a decentralized policy environment. Their analysis highlights the importance of taking into account the complex web of interrelated policy objectives, and focuses on a new wave of reforms based on the redefinition of the relevant sector policies. The discussion begins with a brief overview of the way in which decentralization has taken place in LA, the inroads that have been made and the reasons why these processes have been undertaken. The chapter then addresses the tensions and constraints in terms of greater social cohesion that are associated with these reforms, given their effects on fiscal correspondence and solvency. After exploring a few options for easing these tensions, the authors evaluate their impact and provide a number of policy recommendations.

Afonso, Dain, Almeida, Castro and Faveret (ch. 4) focus on the issue of social policies. They examine the evolution and the assignment of social spending in LA, focusing on the perspectives and the main approaches in the current debate on the decentralization of social spending in the region and on the potentiality of fiscal decentralization as an instrument to foster social spending. They note a general increase in social spending in the region and a less general attempt to provide social services on a universal basis. Differences between individual countries are still important and are dominated to a large extent by the level of economic development.

De Mello (ch. 5) analyzes investment in infrastructure – a crucial component of subnational spending – and provides empirical evidence on the effects of decentralization on investment with reference to a panel of countries for which data on this investment are available. The analysis suggests that decentralization discourages Latin American SNGs from investing (acquiring fixed assets) and that lower subnational spending on investment is associated with lower economy-wide gross fixed capital formation. This finding challenges some conclusions of the existing literature stressing the positive impact of decentralization on investment expenditure. According to de Mello, Latin American countries will therefore need to face the double challenge of having to revisit the current arrangements for decentralized provision that discourage SNG investment, while making the most of decentralization as a policy lever to raise private investment.

Gómez Sabaini and Jiménez (ch. 6) examine the assignment of revenue to SNGs and illustrate the main characteristics of financing systems, such

as vertical imbalance and the prevalence of coparticipation schemes. They analyze the working of SNG financing systems, giving particular attention to the distinct components of subnational own resources. The authors also examine the range of borrowing options available to lower levels of government, as a complement to the 'above-the-line' revenues. The study of specific cases is designed to spotlight the different own-revenue options open to these jurisdictions (intermediate and/or local governments) – despite the predominance of CG transfers – as well as the main courses of action that could be taken to strengthen subnational financial autonomy.

In their first contribution to this volume, Sepulveda and Martinez-Vazquez (ch. 7) focus on the property tax, the most important source of own revenues for local governments around the world. An increasing number of countries that have recently embarked on a decentralization process also look to the property tax as the main vehicle to provide their SNGs with revenue autonomy. In the case of LA, in particular, the property tax continues to be a predominant policy concern among policy makers. However, with very few exceptions, Latin American countries have not been able to develop revenue-productive property tax systems. The region has been identified in the economics literature generally as one with relatively low general tax effort, and with a level of tax performance that is even lower than other developing and transition countries. The issues of low effort and revenue performance are especially acute and challenging in the case of the property tax. The authors analyze the causes of the poor tax performance of the property tax in LA and identify policies that could help with the current impasse

Intergovernmental transfers are the focus of two distinct chapters. Rezende and Veloso's contribution (ch. 8) illustrates the main characteristics exhibited by the transfer regimes of eight Latin American countries, highlighting the changes provoked by reactions to the economic crisis of the 1990s and pointing out their main flaws. They point to the need to improve the efficiency and equity content of the present transfers system and advance a number of propositions concerning the reform of these systems with a view to removing their flaws and making them compatible with both microeconomic and macroeconomic concerns. More specifically, transfer systems have to be more equitable and efficient. At the same time, they have to be flexible to accommodate changes in fiscal policies that can be necessitated by the short-term evolution of macroeconomic conditions.

In their second contribution to this volume, Martinez-Vazquez and Sepulveda (ch. 9) focus on the equalization impact on and the capacity to stimulate own revenue in the present transfer system in nine Latin American countries. Their analysis shows that on both counts substantial

improvements are needed. Countries in LA might achieve great benefits by reducing their reliance on revenue-sharing schemes and improving the design of equalization transfer programs, with a view to reducing fiscal disparities, and at the same time providing SNGs with the right incentives to expand own revenues and to develop their own tax collection capacity.

Brosio and Jiménez (ch. 10) analyze the allocation of rents from non-renewable natural resources, hydrocarbons and minerals, among levels of government in LA. This is a crucial issue not only from the point of view of ensuring good governance at the subnational level, but also from the necessity of avoiding political conflict and strains on national unity. Bearing that in mind, the authors first explore the issues connected to the sharing of rents from natural resources among levels of government. This analytical, but policy-oriented section provides a number of policy indications on how to share the rents that are based on the economic theory of factor production remuneration. Second, the authors analyze empirically the issue of intergovernmental sharing in eight Latin American countries endowed with oil, gas and minerals.

The decentralization of spending responsibilities has created growing challenges for macro-fiscal management. On the one hand, it has become more important and more difficult to ensure that SNGs do not accumulate unsustainable debts; on the other, the traditional fiscal federalism's view that short-term macroeconomic stabilization should be the exclusive purview of the CG is becoming increasingly unrealistic.

Jiménez and Ter-Minassian (ch. 11) contribute to this debate on how fiscal decentralization affects macroeconomic management in the main Latin American countries and on the selection of reforms in the existing intergovernmental fiscal systems of those countries that could help to strengthen their fiscal sustainability, minimize the risk of pro-cyclicality at all levels of government, and create 'fiscal space' for active countercyclical responses to economic shocks.

Grembi and Manoel (ch. 12) provide a critical review of the fiscal rules at the subnational level for Argentina, Brazil, Colombia, and Mexico. Innovating on this topic, they provide disaggregated evidence for a sample of countries. This evidence allows some elements to be addressed that deserve further investigation. For instance, in some cases there seems to be no difference between those SNGs that did adopt fiscal rules and those that did not adopt them, whereas in other cases the imposition of the rules from the CG appears to generate compliance, but not change in the fiscal outcomes. Whether the ineffectiveness of the rules is due to their characteristics rather than a weak definition of the decentralization system remains an open issue. Although it is not possible to evaluate the causal impact of the introduction of fiscal rules at the subnational level in the countries of

reference, the analysis of descriptive statistics shows that a unique indicator of compliance might be a misleading indicator of fiscal rules at that level.

Finally, Ahmad (ch. 13) analyzes the intergovernmental reforms in LA, establishing some stimulating links with ‘Asian transplants’ and focusing on the role played by international and donor agencies. The chapter distinguishes, in particular, between the normative and the political economy approaches to decentralization, and suggests how excessive reliance on the former had led to inconsistencies in the formulation of policy recommendations by international organizations and the donor community. The chapter also refers to the main recent developments in theoretical literature, singling out the steps that are needed to ensure that the objectives of constitutional reforms are met efficiently.

The editors are confident that the topics analyzed in this book and the issues they raise will have an important impact on the political, social and intellectual life in LA, and contribute to the debate on the reform of intergovernmental relations systems.

NOTE

1. Usually accompanied by a subnational restructuring debt (Argentina, Brazil and Colombia).

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2. Federalism and fiscal federalism: the emergence and distortion of the centro-federalist constitutional model in its political and fiscal manifestations

Roberto Gargarella and Gustavo Arballo

1 INTRODUCTION

The question of federalism in general, and of fiscal federalism in particular, has been a central theme of Latin American constitutional history from its beginnings. Placing the issue in the context of Latin American constitutional history can help us recognize that the debate over federalism and the duties of the national state has been a feature of constitutionalism since its inception, and involves different ways of designing constitutional arrangements. This has always been a central point of a dispute that is still far from being resolved, whether in theoretical or in practical terms. The dispute, in turn, reflects differing views as to how best to assemble the various pieces of the constitutional puzzle.

In other words: the still-unresolved debate over the scope of federalism and its arrangements is not merely the result of the relative ‘backwardness’ of our societies, a shortage of resources, recurrent economic crises, or the failure to consolidate and strengthen our institutions. The debate over federalism is in fact part of a broader dispute, also unresolved, over the constitutional model that should guide the organization of our societies.

Section 2 describes the context in which constitutional issues have been debated and settled in Latin America (LA). We consider here some specific points of constitutional topology that involve the regulatory and fiscal powers of states and how they have been correlated with conflicting political and legal concepts, generating instability and pressures for change.

Section 3 provides an overview of the most recent scenario, as defined in the latest constitutional reforms in the region, taking into account generally established trends and those just emerging in the area of political and

fiscal decentralization. Finally, in Section 4 we attempt to place in context the conclusions of the comparative study, and we identify some problems, uncertainties and challenges relating to constitutional tensions and changes in LA regarding issues that have an impact on fiscal federalism.

2 THE CONSTITUTIONAL ASSEMBLY ERA: THE RISE OF THE CENTRO-FEDERALIST CONSTITUTIONAL MODEL

In this section we look at the different constitutional models that have existed in LA since its origins, and consider their stances in relation to the federalist–centralist debate.

As a first step, to take account of the contents of these different undertakings, we must recognize that a constitution – basically any known constitution – comprises two main parts, which in turn involve various ramifications and subdivisions. The two parts of any constitution involve the organization of government (normally, into three branches: executive, legislative and judicial), and the organization of rights (which includes a ‘bill of rights’ accompanied by guidelines or norms and indications as to the extent and scope of those rights).

Since the time of independence, Latin American history has known at least three, very different models or proposals for organizing these different parts of the constitution. Each of those models included, crucially, specific references for dealing with the question of federalism. The three main constitutional concepts that we can recognize from the earliest days of independence are (to use a terminology common to historical studies of that period) those associated with conservatism, republicanism, and liberalism.

The first model, the conservative one, was of decisive importance in the region’s constitutional history, and (with some exceptions) was clearly the most hostile to ideals of federalism. That stance has consistently been translated into constitutions that, regarding organization of power, have centralized authority politically and territorially and have made rights dependent on a concept that was politically elitist and morally perfectionist.¹

The radical or republican constitutional stance can be defined by its commitment to majority rule and its populist take on rights. The ideal of radicalism was ‘self-government’ which, in terms of constitutional design, was normally expressed through adoption of an organization based on the premise of ‘popular sovereignty’, together with a system of rights placed at the service of, and dependent on, the political majority. In contrast to the

centralist and authoritarian tenets of conservatism, the radicals tended to defend federal ideals and a more dispersed power structure.

Finally, constitutional liberalism can be described as a stance concerned with maximizing the scope of individual liberty. It has sought to differentiate itself both from conservatism and from republicanism. Its proposal to confront the twin evils of tyranny and anarchy must be read in this sense: it seeks to guard both against the abuses of concentrated authority and against the predictable excesses of unfettered majority rule. Normally, liberalism has viewed federalism as a natural consequence of its commitment to the ideals of individual autonomy and freedom of choice.

The Conservative Constitutional Model

The conservative model was present in LA from the very first post-revolutionary years. It sought to concentrate political power in a few hands, so as to facilitate the swift reconstruction of society. These ideas were based on an elitist conception of politics, according to which it was neither helpful nor desirable to involve the bulk of the population in debating and deciding the great public issues that society had to resolve: that responsibility, it was assumed, should lie in the hands of the most illustrious minority of the community. Consistent with that approach, conservative constitutions were distinguished essentially by the presence of very strong executive branches, endowed with exceptional powers that could be called into play in situations of 'internal or external crisis'.² The battle waged by conservatives on behalf of centralism was undoubtedly one of the most important contests of the nineteenth century. At least in its declaration, the anti-federalist cause always occupied a central place among the conservatives' political initiatives, and was one of the principles invoked to justify their most violent acts.

In Chile, the conservatives claimed that the federalist constitution of 1828 had thrown the country into chaos and anarchy, and that the rudder had to be tilted sharply away from decentralization. As Andrés Bello (1997) saw it, the 1828 Constitution had granted so much power to local authorities that it had converted the executive into a toothless body.³ The 1833 Constitution, then, seemed especially designed to repair that source of weakness.

The struggle against federalism also occupied pride of place among the proposals of Mexican conservatism during the entire period under review here. Lucas Alamán spoke of federalism as 'the most powerful and destructive instrument imaginable' (Stevens, 1991: 31–2). In Argentina, all the significant constitutional documents issued during the first half of the century were clearly centralist (in particular the constitutions of 1819 and

1826). It was not until 1853, with approval of the new constitution following the overthrow of Juan Manuel de Rosas, that the country adopted its federal form of government.

In Venezuela, the 1830 Constitution, through which José Antonio Páez controlled power for decades, established a 'centro-federalist' form of government that represented a reaction to the federalist spirit of the 1811 Constitution. The cause of centralism, present throughout the century and responsible for bloody battles during that time, found constitutional expression again during the government of General José Tadeo Monagas in the 1857 document. That constitution, the most centralist in history, and also the shortest-lived, was replaced in 1858 by another that was more open to federalism. Yet the seeds of the 'federal war' had been sown, and would end up exploding in that same year, whereupon debate over federalism was put back on the negotiating table, in the midst of a frightening and violent situation.

The Alternative: The Republican Constitutional Model

In sharp contrast to the conservative model, the republican constitutional model made little practical headway in the Americas. However, it did become a significant point of reference in political debates of the time. For some, the republican model was an ideal to be pursued, while for many others it was the most serious institutional threat, to be firmly resisted.

In the United States the radical republican model found support among some opponents of the federal constitution of 1787. The stance of those critics was finally defeated – both in the Constitutional Convention and in intellectual debate of the day – but it remained an important influence to the point where it can still explain some of the peculiar institutional arrangements that were finally incorporated into the US Constitution. In LA, republicanism had less of an institutional impact: it was never clearly distilled into any concrete constitutional arrangements in that region. Yet, some claim to see traces of that ideal model in the radicalized phraseology of the region's first constitutions: note the classic radical slogans of the 'sovereignty of the people', the 'popular will', the 'social contract', 'equality', 'universal principles', and the 'rights of man' which marked constitutional texts and debates in Chile, Nueva Granada, Venezuela and the Banda Oriental between 1811 and 1812. Toward the middle of the century, from 1848 onward, there was a certain resurgence of collectivism in the region, but in most cases it remained an ephemeral movement with relatively little influence.

To describe republican constitutionalism we may say that its basic objective is to achieve a self-governing community. It holds that the community

itself must define its objectives and the means for achieving them. Thus, it is not surprising that one of the principal cries raised by republicans throughout the continent was to federalize the new nations, by deconcentrating political power and decentralizing territorial organization.

In fact, republicans in their great majority were inclined to promote a federal type of government. This promised better representation and better protection for the interests of the citizenry. Thus the federalist cause quickly became one of the main sources of conflict throughout the Americas – in the US, because (according to its critics) federalist extremism meant keeping the country disorganized and allowing rights to be trampled, and in LA (again, according to the critics of federalism) because it not only threatened the rights of the minorities but also conspired against the consolidation of independence (which apparently required a concentrated and firm authority). Radicals such as Ezequiel Zamora in Venezuela, Lorenzo de Zavala in Mexico, or José Gervasio Artigas in the Banda Oriental were staunch defenders of the federalist cause, which they saw as a magic solution to the problems afflicting their respective communities. Zamora believed that the Federation had the power to remedy all the ills of the country. His faith in the virtues of federalism was boundless. That system, he added, would not merely resolve such problems but ‘make them impossible’.

The Liberal Constitutional Model

The liberal constitutional model can be seen as a direct reaction to the constitutional ideals described above. Liberalism held that the state must above all respect the rights of individuals and consequently the most basic convictions and interests of each person. In this respect, the state must not undertake to defend any particular religion, philosophy or political ideology. As the first constitutional liberals maintained, a ‘wall of separation between Church and state’ must be erected to prevent the state’s capture, for example, by the defenders of any particular religion. Those who took this stance considered that the state must remain neutral in the face of the different conceptions of the public good adopted by the citizens: a state that subsidized a given religion or that prevented the partisans of a given ideology from expressing themselves was considered a non-neutral state, a state that wrongly took sides with certain ideals of the good. In its proclaimed neutrality, individualistic liberalism thus stood in direct contrast to the two alternative conceptions examined above: all individuals must be free to choose their own way forward in life, even if this conflicted with the values traditionally held by their community (as perfectionism would maintain) or the values defended by a circumstantial majority or required as a way of upholding that majority will (as populism might argue).

Just as in questions of ‘personal ethics’, individualism insists that each person is the master of his/her own destiny and that, when it comes to organizing the community’s political life, each society must in principle govern itself as its own members decide. Now of course on this point again, liberalism differs sharply from alternative conceptions such as those examined above. Against the threats inherent in the concentration of power championed by conservatives, and the predictable risks of delegating power to the majority, liberals proposed an extensive system of institutional controls and restrictions on absolute power. Typically, the liberals proclaimed the need not only to divide and deconcentrate power but also to establish a system of ‘checks and balances’. Neither majorities nor minorities (represented – if only in theory – in the executive branch or in the Senate) should be given the power to oppress its opponents: both groups must have power, so that they would find themselves mutually constrained.

This is the reason why the majority of liberal constitutions included ‘countermajoritarian’ mechanisms such as a bicameral legislature, presidential veto power and judicial review of constitutionality, that is, mechanisms designed to constrain the power of the majority (a power that was seen as a threat to social peace and order). We may cite as examples many of the principal liberal constitutions proclaimed in the region during those years: Chile (1828), Colombia (1853), or Peru (1823, 1834, 1856 and 1860).

In this respect, and from its beginnings, liberalism has deemed state interventionism unacceptable, for it sees in such intervention a serious threat, an undesirable and unjustified intrusion that can only distort the free will of the citizens.

Fusion Constitutionalism and the Creation of Centro-federalist Republics

After decades of bloody confrontations that afflicted all of LA during the founding years of constitutional states, a majority of countries began to consolidate their constitutional structures and to give a more stable and definitive profile to their organization. Of the three models discussed, only two were of much importance: conservatism and liberalism. Thus, the extraordinary succession of constitutions that the region witnessed during its founding essentially involved oscillation between constitutions that concentrated political and territorial authority and enshrined a certain concept of the common good (conservative constitutions) and constitutions adopted in reaction to those conservative constitutions and that sought to impose limits on them, preserving greater space for personal and social freedom. From this combination, as we shall see, emerged

constitutions that were neither openly federalist nor strictly centralist but rather ‘centro-federalist’ in nature.

In the face of those alternatives, the radical republican movement, which made some headway in the original constitutional debates in the US, never won many converts in LA, and it was promptly displaced by the other two alternatives. In fact, from the middle of the century, and after the ‘battle to the death’ that they waged for so long, liberals and conservatives tended to reconcile their positions around the negotiating table, from which they thought about renewed constitutional solutions for their respective countries. In Argentina, the federal convention of 1853 brought together confirmed unitary and federal proponents determined to adopt common rules. Something similar happened in Mexico, with the Constituent Assembly of 1857. In Chile, the harsh conservative constitutionalism championed and protected by Diego Portales following adoption of the 1833 Constitution began to lose force and become more liberal towards the end of the nineteenth century. In Colombia, the process was reversed, but it had a similar outcome. In the last case, it was extreme liberalism dominant in the second half of the century, which ceded power to a gradual resurgence of conservatism that was finally victorious with the 1886 Constitution. In Ecuador there was a gradual merge between conservative and liberal forces, in a process that can be appreciated in the wording of the successive constitutions of 1878, 1884, 1897 and 1906. Similar movements occurred in Peru and Venezuela, especially after the era of the ‘federal war’.

The ‘fusion’ constitutionalism that tended to emerge in the region, then, combined things that at the time seemed irreconcilable, that is, features of liberal constitutionalism with other distinctive conservative initiatives. We can identify three specific features of that process of convergence:

1. *A distribution of powers skewed in favor of the executive branch* The first consequence of this process of armistice and constitutional pact between liberals and conservatives can be seen in the structure of governmental power design. Under pressure from conservative forces, the liberals agreed to set aside the purer ideal of ‘checks and balances’, which called for maintaining strict equilibrium between the three branches of government – executive, legislative and judicial – by giving each equivalent powers of oversight and veto over the others. Instead, a system of ‘weighted checks and balances’ was adopted, where the executive power became *primus inter pares*, thus putting at risk the entire structure of government and posing the threat (which repeatedly materialized over the course of the region’s history) of growing presidential primacy. Typically, the new constitutions that

- emerged from this fusion process gave the executive branch capacities and powers that had been specifically denied it in the traditional checks and balances systems. Among those additional powers we may cite, for example, the right of the president to declare a state of siege and to restrict freedoms in those extreme situations; the power to appoint and remove members of the government at will; powers of legislative initiative; and (decisively for purposes of this chapter) powers of federal intervention.
2. *Tolerant and religious states* One of the clearest examples of the 'constitutional fusion' between liberals and conservatives that tended to dominate from the mid-nineteenth century in LA is what was recognized in the moral sphere. Liberal constitutionalism had hoisted moral neutrality as one of its main banners. At the constitutional level, that neutrality implied, above all, adherence to the principle of religious tolerance. Following the liberal-conservative pact, that principle tended to give way to different principles, which expressed this process of negotiation between the two currents. The examples of the Argentine constitution of 1853 and the Mexican one of 1857 are certainly different, but both illustrate clearly the implications of this new posture. In the Argentine case, the constitution enshrined religious tolerance in its most important article on rights – Article 14 – while in Article 2 it affirmed a special state commitment to the Catholic religion (declaring, with intentional ambiguity, that 'the state shall sustain' a Catholic, apostolic, Roman religion). Meanwhile in Mexico, reflecting the difficulty in finding a formula satisfactory to both sides, the 1857 Constitution chose to remain silent on religion. Although different, both negotiated formulas show the extent to which liberals and conservatives were able to pool their efforts and secure approval of a common constitutional text.
 3. *Centro-federalist republics* The last expression of the 'convergence constitutionalism' we are speaking of is obviously the most important for purposes of this chapter, and it relates to the question of federalism. As we shall see, conservatives and liberals tended to support directly opposing positions on this point: conservatives proclaimed the need to concentrate national power territorially in order to enforce their ideas of 'morality and order', while the liberals, on the contrary, insisted that the different regions must be free to organize themselves with as much autonomy as possible. The new constitutions prepared under the influence of these two groups came to reflect negotiated formulas that implied the establishment of centro-federalist arrangements. The new constitutions explicitly affirmed federalist commitments that were soon contradicted or set aside, in practice and in the

wording of constitutions, with the growing clout of the respective capital cities. In turn, the dynamics imposed by the new organization of power, which as we shall see often gave the president authority to intervene in wayward provinces, ended by vitiating everything that had been proclaimed about federalism.

The Dispute over State Regulations and Its Impact on Federalism

In the context of the new Latin American societies, federalism appeared as a protective shield against abuse of the authority concentrated in the state. To this 'negative' justification another 'positive' one was added, marked by the virtues inherent in collective self-government. Under the idea that federalism represents the best possible form in which each community can become master of its own destiny, decentralization should therefore be a way of upholding the commitment to the ideal of 'popular sovereignty', extending and affirming the democratic nature of society.

These two defenses of federalism were in due course challenged by another proposal, of conservative origin, that advocated the imposition of a distinctly centralist logic on new societies. Conservatives insisted that order was a prerequisite for social existence, especially in societies that were still inchoate and torn – as it was said – by centrifugal and anarchic tendencies. Hence conservatism viewed federalism with great mistrust, and called for a state that could 'take the reins' of national organization.

During the heyday of liberalism the federal solution appeared synonymous with abstinence on the part of the state: respect for autonomy must mean, then, a limited federal state, one that refrained from action, one that chose not to regulate collective life, one that did not impose its authority against the will of individual parties to the social contract. As if in a continuum, local authority was obliged to respect individual decisions and choices, just as the national authority had to refrain from imposing its authority on the states or provinces, and even abstain from interfering in or regulating interstate commerce.

In the US and in much of the Western world, however, the anti-statism era came to an end with the Great Depression of the 1930s and the adoption of national reconstruction programs based on intense economic activism by the state. The New Deal in the US represents perhaps the zenith, visible and very influential, of that trend. It was upheld by the courts (but not without a prolonged political battle in which President Franklin D. Roosevelt intervened actively) through a series of landmark rulings that included the famous *Butler* case and a number of others such as *West Coast Hotel Co. v. Parrish* (300 US 379, 1937); *United States v. Carolene Products* (304 US 144, 1938); *Williamson v. Lee Optical of Oklahoma* (348

US 483, 1955); and *Ferguson v. Skrupa* (372 US 726, 1963). This tendency then spread swiftly and decisively through all of LA, as can be seen in the growth of the new regulator state, accompanied by social movements, court decisions and doctrinal papers welcoming the (perhaps tardy) arrival of state salvation.

Just as the anti-statism era had its roots and its theoretical underpinnings in liberal theory, the New Deal era found its backing in a different constitutional tradition, which has less to do with the conservative Hamiltonian tradition (a tradition that was to some extent authoritarian, and consistently hostile to any notions of social rights) than with the old republican tradition which defended federalism, but in ways and for reasons that were very different from those of liberalism (Sandel, 1996). In this case, federalism was not promoted because of what it might do for personal choices and contractual relations among individuals. Rather, federalism was recognized as an appropriate way to honor commitments of another kind, related to democracy and local self-government, and which in particular included welfare measures that could offer basic social guarantees for all the nation's inhabitants.

Within this scheme, local states or provinces gain the authority to regulate the political and economic life of their respective societies, just as the national state recovers the power to regulate the basic aspects of national life. This latter point, in particular, constitutes a new and decisive factor, and is perhaps one of the most characteristic features of the twentieth century: that new century is one in which there is an extraordinary increase in regulation and in spending by the federal government, accompanied by a concomitant decrease in the powers of local governments. In this renewed world of state interventionism, national governments recover their full capacity to take action, and to back that action through an increase in federal resources derived from higher taxes levied across the country (Hetherington, 1958; McCloskey, 1962).

3 THE ERA OF REFORMS: ADAPTATIONS AND ADJUSTMENTS IN THE CENTRO-FEDERALIST CONSTITUTIONAL MODEL

It was the 'fusion' phenomenon described above that gave rise to most of the constitutions of modern LA. We have also seen that regional constitutionalism, while more firmly rooted, continued to undergo successive modifications in the early twentieth century, and indeed it is still open to changes in the present day.

The liberal-conservative constitutionalism forged in the nineteenth

century underwent profound reforms at the beginning of the twentieth. Those reforms represented a deliberate attempt to incorporate into constitutions some of the features of the republican constitutionalism that had been drastically circumscribed in its initial days. The first wave of reforms came during the social crisis of the 1930s, and can be considered a political response to a new surge of social radicalism, as a way of avoiding what was happening in Europe with the spread of socialist ideology and demands. These constitutional reforms followed in succession after adoption of the Mexican constitution issued in 1917 during the Revolution, and the 1919 Constitution of the Weimar Republic. This period also saw the creation of the International Labour Organization and the steady growth of the so-called welfare state and Keynesian economics.

In the Western Hemisphere, the first constitutions to incorporate social demands of this kind were – together with that of Mexico in 1917 – those of Brazil in 1937, Bolivia in 1938, Cuba in 1940, Ecuador in 1945, Argentina in 1949, and Costa Rica in the same year. Those documents variously enshrined workers' rights and provisions governing working conditions; social safety-nets; government commitments in the areas of housing, health and education; protection of the family; the right to paid down-time and vacations; the rights of children and the elderly; labor union rights; the right to strike, collective bargaining agreements; protection against arbitrary dismissal; unemployment insurance; and other matters.

The second major wave of reforms came towards the end of the twentieth century, and once again involved many of the region's constitutions. Ecuador saw reforms in 1978; Chile and Peru in 1989; Colombia in 1991; Paraguay in 1992; Peru and Bolivia in 1993; Argentina, Guatemala and Nicaragua in 1994. These reforms had many objectives, among which two stand out in particular: the first was to take up again some of the causes that radicalism had championed in its day (for example, fostering political participation); the second was restore to constitutions (especially by re-establishing the system of checks and balances) some of the liberalism that had been stripped away by the dictatorships of the 1970s.

The constitutionalism that emerged in the nineteenth century, then, underwent significant adjustments in the twentieth. Among the many things that have not been done, and which the old republican constitutionalism in particular is still demanding, is to make changes that will strengthen the federal character of Latin American countries. Reforms of this kind were postponed for decades, and they were not on the list of priorities that the reformers pursued from the beginning of the twentieth century. Yet it is clear that in recent decades the region has experienced renewed pressures to move on to new federalist and regionalist horizons.

The Context and Meaning of the Latest Constitutional Reforms in the Region

These recent changes constitute a new framework for decentralization. A survey of the landscape shows that the last round of constitutional reforms has tended to 'localize' public management and establish greater scope for political autonomy at the subnational levels, giving them the powers or prerogatives needed to support their new institutional profiles. The 'centro-federalist' model implies various arrangements for the vertical distribution of powers that, it has been suggested, will appear *redefined* in the new profile of some of the region's constitutions. These reforms are of a mixed nature: while in constitutional terms they include variations or nuances in the centralist paradigm, they also represent, in part, an acceptance or recognition of pre-existing practices of decentralization at the sub-constitutional level. Thus we now find various mechanisms or principles intended to compensate for existing inequalities between the local subunits and to secure equal degrees of economic development and the equal award of rights. We must also consider that many of these tensions have not been translated into constitutional reforms, and thus remain unresolved.

It must be recognized, of course, that constitutional ambitions may be quite different from the actual outcome with respect to the powers constituted in practice – a country may decentralize itself while its constitution remains unchanged, or it may keep its centralized structure intact despite the reforms enshrined in its constitution. We can in fact identify trends in judicial interpretation that we may call 'counter-original' in various federal systems. In Canada and India, where the original intent of constitutional arrangements was to limit subnational powers, jurisprudence has over time interpreted them more generously, at the expense of the central power (Hueglin and Fenna, 2006: 284). But as most federal systems originally had the inverse thrust (a 'limited' central power), it is understandable that the judicial bias has in effect been a centralizing one (Shapiro, 1981: 55; Bdzera, 1993: 1).

In this section we offer a schematic survey of these alternatives, covering the period of relatively 'contemporary' constitutional reforms in the region, that is, the last 30 years.

Again from the legal viewpoint, and although this is not the objective of our comparative survey, we should note that many principles not specifically set forth in national constitutions can have an impact on the dynamics of the public finances. These include the various approaches to protecting national assets, provisions for social advancement or protection, rules governing state intervention in the economy, standards and guidelines for the provision and delivery of government services such as

education and health care, and the type and scope of the pension system, which can have a decisive impact on the national accounts.

To these cautionary notes we must add that the macroeconomic regulatory variables in each country (exchange rate, monetary authority, trade policy, external debt and so on) are the legal preserve of central governments and that decisions taken in these areas (and of course the consequences of those decisions) will have a non-neutral impact on the public finances of local states or provinces (for example, an increase in a country's sovereign risk premium can preclude access to public borrowing by a sub-national entity, even though it is legally entitled to resort to such financing).

The Latest Cycle of Reforms: Political Decentralization versus Fiscal Decentralization

We shall now look at a cross-section of constitutions in the region in order to appreciate the specific forms of decentralization that emerge from their wording. The comparison will involve three issues: (a) the extent to which constitutions resemble each other; (b) how they have evolved in the last 30 years (a period that embraces the latest round of reforms for consolidating democracy in LA); and (c) how political decentralization correlates with fiscal decentralization, the most decisive interface in arrangements for the vertical distribution of powers.

This last paragraph requires some additional explanation. The political and functional responsibilities normally assigned to a state or a territorial subdivision can in practice be negated or severely limited unless guaranteed provision is made to cover the costs inherent in those responsibilities, either through raising direct revenue or through transfers. In this respect, the taxing power and the spending power cannot be considered in isolation: they must be examined in relation to the flow of tasks and responsibilities assigned to each territorial unit.

It is from this viewpoint that we have sought to survey constitutional law in 12 countries and to structure two indices to compare across the region, with a schematic and numerical weighting restricted to certain characteristics of the constitutions of a specific set of countries (Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guatemala, Mexico, Paraguay, Peru, Uruguay and Venezuela⁴). These indices relate to two separate dimensions of constitutional decentralization:

- political decentralization, where we group together all constitutional arrangements that *per se* imply greater powers of self-government for local bodies; and
- fiscal decentralization, where we consider all constitutional

provisions concerning fiscal self-management by local bodies, in terms of providing them with resources and decision-making power over revenues and expenditures.

In the course of this exercise we shall look for trends to see how constitutions have evolved in recent decades, bearing in mind the succession of reforms and amendments. Taking the year 1980 as the baseline – a plausible one for defining ‘recent’ changes – we shall identify from the survey tables those items that in each case were the subject of pro-decentralization changes, and this will allow us to plumb the meaning of the legislative changes of the last three decades.

In computing these items, and recognizing that there may be headings where the survey fell short, we shall accept an intermediate possibility: the rule will assign one point for each characteristic that appears fully developed and plausibly operational, and half a point for each item the constitutional specification of which is relative, conditioned or restricted. The resulting score will have a maximum of 12 points, and it will be standardized to a scale that is more intuitive for the reader, running from 0 to 100.

Of course, the resulting scores in each dimension of decentralization are merely indicative, and they do not take account of terminological or programmatic changes that are not apparent with the items used for the comparison. In any case, we believe that they will provide a general idea of the most relevant points for demonstrating the spectrum of configurations of fiscal federalism.

Political Decentralization

In measuring the degree of constitutionally ordained political decentralization we shall look at the structure of local government in terms of the ‘classic’ branches (executive and legislative) that are constitutionally recognized at that level. We shall then examine the possibility of a second-tier constituent power (allowing state or provincial governments to adopt local constitutions), and that of the municipal government level, with degrees of autonomy.

For weighting ‘local responsibilities’ we have defined two levels: ‘Level I’ covers shared or concurrent responsibilities, under which local governments can legislate at their discretion and assume responsibility for certain basic public services (but excluding those that are ‘national’ in nature or scale), while ‘Level II’ relates to regulatory, land-use planning and development matters that concern subnational territorial jurisdictions and their administrative structures.⁵

The resulting scores for political decentralization, by country and item, appear in Table 2.1, ranked against a ‘perfect score’ of 100.

Table 2.1 Political decentralization in 12 Latin American countries

Country	Local powers				Local responsibilities		Political decentralization score	
	Executive	Legislative	Constituent	Municipal	Level I	Level II	1980	2010
Brazil	●	●	●	●	●	●	100	100
Argentina	●	○	●	●	●	●	92	92
Colombia	○	○		●	○	●	58	58
Ecuador	●	○		●	○	●	67	67
Mexico	●	●	●	●	○	●	92	92
Uruguay	●	○		□	○	●	50	58
Bolivia (Plurinational State of)	●	○		●	○	●	67	67
Venezuela (Bolivarian Republic of)	○	○	●	●	○	●	75	75
Chile		□		○	□	○	17	33
Paraguay				●		●	33	33
Peru	○	○		●	○	●	58	58
Guatemala				●		●	33	33

Note: Items that appeared in constitutions in force in 1980 and that have not subsequently been significantly amended are indicated as circles (with '●' for items of full specification and '○' for items of limited specification). Items that have undergone amendments since 1980 are indicated as squares (with '■' for items of full specification and '□' for items of limited specification).

Source: Comparative constitutional survey conducted for this research by the authors.

Fiscal Decentralization

In our examination of fiscal decentralization we take into account six attributes. Three correspond to basic issues of fiscal management: budget (the capacity of local governments to decide their own expenditures and investments), taxes (local government powers to establish taxes of any kind), and contributions (local government powers to exact payments to cover the cost of public works and services). The right of local states or provinces to levy royalties and fees for the exploitation of natural resources within their territory we treat as a separate item. These items together cover the spectrum of resources within local jurisdiction.

When it comes to resources from other jurisdictions, the analysis is divided into two aspects. Under 'coparticipation' we examine the constitutional provisions whereby local governments are entitled to regular funds from the federal state for inclusion in their budget. Under distributional guidelines we consider whether, regardless of any coparticipation right, the constitution establishes the amounts or concepts either as primary guidelines (the way in which resources are distributed between the federal government and the subnational level as a whole) or secondary guidelines (for distributing resources among various subnational governments).

The resulting scores for fiscal decentralization, by country and item, appear in Table 2.2, ranked against a 'perfect score' of 100.

These data allow us to compare the constitutional configuration of 1980 with that of 2010, based on the respective scores for political and economic decentralization according to each country's constitution. The 'before and after' comparison can be represented as shown in Figure 2.1.

The shaded area in each figure indicates the 'gain' in decentralization resulting from post-1980 constitutional reforms in LA. The dotted area shows the 'initial' decentralization status in our base year, 1980. As will be seen, in some cases there have been no reforms, or those that were introduced did not entail a greater degree of decentralization according to our weighting scheme.

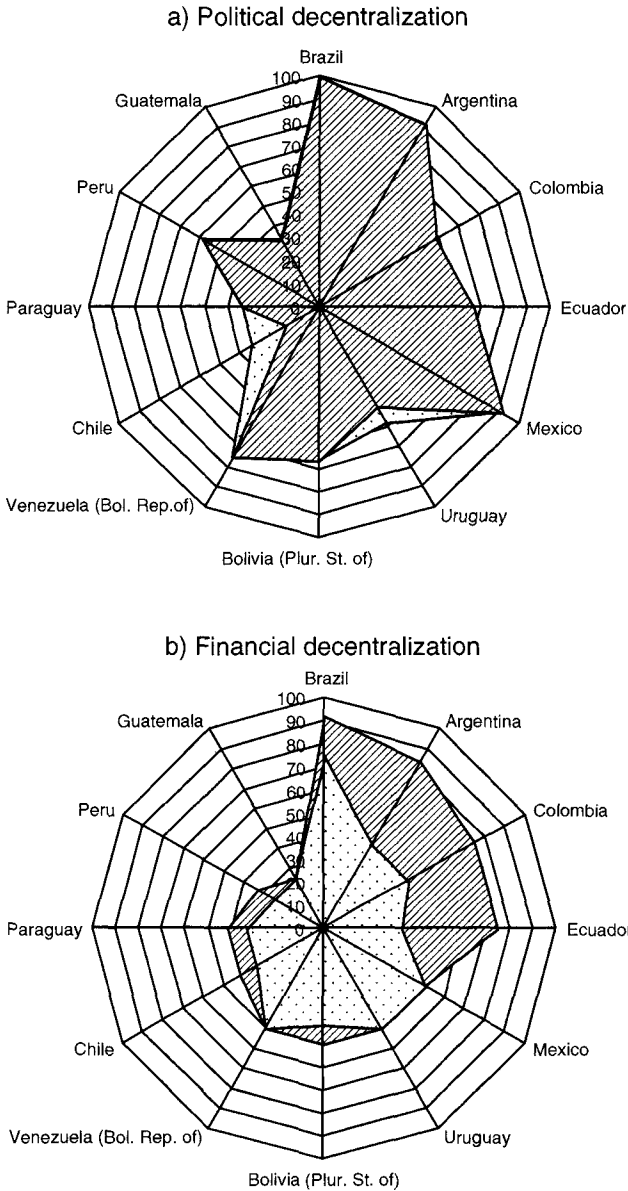
With respect to the degree of 'political' decentralization, the changes do not appear to be very significant. Nevertheless, the parameters for four countries (Brazil, Argentina, Colombia and Ecuador) reveal a sharp swing towards fiscal decentralization. In a sense, these countries appear to be reversing the previous imbalance: constitutions that combined high degrees of political decentralization with very limited fiscal decentralization. That was of course possible under a sort of minimal state model where local services did not go beyond policing, but it no longer works in the case of subnational entities coping with responsibilities for managing, promoting and delivering social services. We may say that in a system

Table 2.2 Fiscal decentralization in 12 Latin American countries

Country	Local resources				Transferred resources		Score	
	Own budget	Taxes	Contributions	NR royalties/ fees	Coparticipation	Distributional guidelines	1980	2010
Brazil	●	○	●	■	●	●	75	92
Argentina	●	○	●	■	■	□	42	83
Colombia	●	○	●		■	■	42	75
Ecuador	●	○	○	□	■	■	33	75
Mexico	●	○	●		○		50	50
Uruguay	●	○	●		○		50	50
Bolivia (Plurinational State of)	●	○	●		□		42	50
Venezuela (Bolivarian Republic of)	●	○	●		○		50	50
Chile	●	○	○		□		33	42
Paraguay	●	○	○		□		33	42
Peru		○	●		□		25	33
Guatemala	●		○				25	25

Note: Items that appeared in constitutions in force in 1980 and that have not subsequently been significantly amended are indicated as circles (with '●' for items of full specification and '○' for items of limited specification). Items that have undergone amendments since 1980 are indicated as squares (with '■' for items of full specification and '□' for items of limited specification).

Source: Comparative constitutional survey conducted for this research by the authors.



Source: Comparative constitutional survey conducted for this research by the authors.

Figure 2.1 Constitutional decentralization in 12 Latin American countries, 1980–2010

where the state was largely defined as an administrator of ‘negative liberties’ the division of responsibilities was an easier matter than it is in a state where the constitution requires it to be more attentive and proactive on behalf of positive freedoms.

If we speak of a reversal or a rectification, we must admit that it has been modest. The taxation powers of local governments are still conditioned and subordinate: they are confined to a narrow range of taxes and tariffs of little significance in comparison to the resources that the national state can raise through its taxing powers.

This requires federal compensation, invariably involving a one-way flow of transfers from the central government to subnational governments which depend on these funds to cover current expenditures in their basic budgets. This is a central feature of the new normative systems which, at the subconstitutional level, must concern them with distribution in a much greater degree of detail than did the constitution writers of the nineteenth century (who confined themselves to a simple division of taxation sources).

Distribution is usually regulated through two distinct channels: regular, fixed-rate transfers that become a direct part of the local unit’s assets, without conditions, and systems involving decentralization agencies and programs under which resources are assigned to specific objectives and in amounts that depend on the economic situation. These channels are not mutually exclusive, and they allow for hybrid distribution systems combining major ‘fixed’ components with lesser ‘variable’ or ‘ad hoc’ components in each fiscal year. It is easy enough to see that this solution can generate other problems such as vertical fiscal imbalances when local entities are encouraged to share in spending without having to contribute any of their own resources.

Contradictory Tendencies

It has rightly been said that federal systems must be compared with caution (Watts, 1999: 1), and the same care must be taken in intertemporal comparisons of the kind presented above. What is clear is that subnational institutional arrangements in federal systems have varied and continue to vary in many ways: in the characteristics and importance of their economic and social structures, in the number of local subunits, and in their relative asymmetry in terms of size, resources, or constitutional status. There are certainly no definitive equations or static systems when it comes to the vertical distribution of powers (nor of course in Montesquieu’s classical, tripartite ‘horizontal’ division of powers).

At the beginning of this chapter we spoke of two critical periods in the intertwined development of federalism and of the state – both of them

occurred in the twentieth century. The first was the liberal, federalist and anti-statist movement that prevailed in the early decades of the century and, to a lesser extent, until the Great Depression of the 1930s. The second took the opposite direction, turning its back on liberalism, championing state intervention, and constraining the federalist model in vogue until then.

These two movements found their reflection in legal arrangements and in the evolution of jurisprudence in the region. In particular, as we saw in Section 2, constitutions tended to track these conflicting tendencies. Thus, the 'fusion' constitutions that carried over from the nineteenth into the early twentieth century – the product of nation states that had little administrative capacity and were normally dependent on agricultural exports; states that were closely tied to the international market and were committed to an economic doctrine very close to liberalism but stripped of any meaningful social commitment. The constitutions promulgated after the mid-twentieth century, on the other hand, reflected a new state: activist, powerful, determined to regulate the economic life of new societies, socially aware, and decidedly interventionist.

The last decades of the twentieth century as well as the first years of the twenty-first once again present us with a shifting panorama. The 1990s, in particular, were symptomatic of a trend that had been gestating for many years. The welfare state inherited from the New Deal, the massive, activist, socially committed state that was to promote economic progress and social equity, was in crisis. The state seemed to have become bloated and alarmingly inefficient, it was the target of constant accusations of corruption and, worse, it was having ever more trouble in coping with steadily growing and proliferating social costs. In response to these many unmistakable signs that the welfare state was exhausted and in need of renewal, the entire hemisphere seems to have been swept by a new wave of anti-statist sentiment. Once again, at the beginning of the century, the state was held guilty of causing the very ills it was supposed to remedy.

As in the early years of the nineteenth century, federalism was the inspiration for various constitutional schemes, based on rationales that were in many cases contradictory. For example, the devolution of responsibilities, which can in principle be seen as a move to local empowerment, could also be understood as a way of alleviating cyclical pressures on the national public accounts. 'Transferring' responsibility can be a subterfuge for abandoning or hollowing out a social policy, a regulation or a public service, when it is obvious that the 'transferee' will not have the means to implement it. This explains why in so many cases, regardless of the country's constitutional framework, the central government has devolved responsibilities by fiat, at its own initiative, rather than in response to

subnational entities' demands for greater powers. In these circumstances, 'localizing' constitutional reforms deserve careful reading.

The new tasks of the state generate two-way flows, involving principles of subsidiarity and a 'pro-local' bias, while at the same time establishing general frameworks of a centralizing thrust, the implementation of which will be defined by agencies or authorities of the national government. There is indeed a tendency to superimpose levels of responsibility, leaving certain fields open to concurrent and simultaneous action by different levels of government. In this juxtaposition we can identify a broad range of variants: the exercise of a responsibility can be simultaneous and coordinated; simultaneous but conflictual; local with central obstruction; central with local obstruction; or it can be simultaneously neglected by all levels of government.

As reforms have strayed from their course, and in light of the obvious dispersal in current Latin American constitutionalism, we find that there is a relatively broad spectrum of potential configurations for the vertical distribution of powers within a state. This is not a new phenomenon, but is rather part of the matrix of American constitutionalism, for we saw earlier how the nineteenth and twentieth centuries gave rise to undertakings that involved centro-federalist arrangements. There is a perceptible change here: while some solutions were conceived in terms of a rigid compartmentalization of exclusive powers (meaning that the 'national' and the 'subnational' spheres are mutually exclusive), the new constitutional rules accept and encourage the overlapping of powers and responsibilities and the 'multilevel' delivery of public goods, where the core problems involve coordination and financing.

There is also a constant tendency to give constitutional recognition to municipal autonomy, and to go so far as a model with three nominally independent levels of government. This adds a new factor to the dynamics of public management, policies and taxation. While the concept of municipal autonomy predates the latest wave of reforms, new importance is now being given to this once-neglected level of self-government, as a result of a conjunction of circumstances: swelling urban populations, the new problems and issues – environment, transportation, quality of life – that arise as cities reach megalopolis dimensions, and the need to tailor policies and programs in response to very specific and pressing local community demands which the central government could never satisfy.

The arguments for reform, then, go beyond considerations of political philosophy and offer a justification of decentralization in terms of efficiency, a favorite criterion of economic theory for rationalizing the benefits of local self-government: the presumption is that the lower levels of jurisdiction are better placed to identify and deliver public goods and services

where the benefits are regionally confined (Musgrave and Musgrave, 1989: 445–55), because governments at this level have more information and greater incentives to manage local public goods in keeping with the needs and preferences of their voters (Stiglitz, 1995: 732).

There have also been attempts (either in constitutions or in legislation) to establish other institutional arrangements such as ‘regionalization’ (a grouping of provinces or states) or ‘micro-regions’ embracing neighboring municipalities. In practice, however, the results of these ‘new’ forms of decentralization have been modest.

Lastly – in a departure from strictly constitutional analysis – we may note the emerging influence of various trading blocs (*Mercado Común del Sur*, MERCOSUR, the Andean Community, *Alianza Bolivariana para los Pueblos de Nuestra América - Tratado de libre comercio de los pueblos*, ALBA–TCP), which should in due course lead to legislative and tax harmonization among the countries of each bloc and which could place some constraints on local powers of legislation, regulation or taxation as they affect the circulation of goods and services.

Interpretation Challenges

It is useful to assess the implications of the reforms described above and to understand the meaning of the new constitutional consensus. Here we should recall the candid but considered observation of Chief Justice John Marshall, who reminded us that ‘it is a constitution we are expounding’.⁶ This cautioning, issued in the course of a seminal case involving the division of powers at a time when the jurisprudence of the US Supreme Court was first taking shape, provides us with some important points of reference with respect to *rigidity*, *vagueness* and *hierarchy* of source.

The hierarchical rank of the constitutional source means that its rules must be the fulcrum of political debates (beyond the will of ephemeral electoral majorities), and also the touchstone for a contingent judicialization of tax policies. At this juncture, jurisprudence must surely take special care and precautions if it is not to stray into dysfunctional solutions: when called upon to interpret the constitution, judges will be obliged to hear and decide cases not only on the basis of the rules and conventions of juridical interpretation (arguments *a simili*, *a contrario*, *a fortiori*, among others) but bearing in mind as well the complex articulations and derivations of the vertical division of state power in its history and in its political philosophy.

Constitutional rules are also rigid, and any change in them requires a special procedure. Some constitutions in the region, such as that of Argentina, can be amended only by a convention convened for that

purpose. There are other models, such as that of Brazil, where partial reforms can be enacted as legislation, with a qualified majority. Other countries – Venezuela, for example – provide that amendments must be approved by popular referendum. Of Latin American federal systems, only Mexico's follows the US model whereby constitutional amendments must be ratified by the component states of the Union. Some of these procedures may be combined as successive steps in the amendment process, which is in fact an extremely complex mechanism. Marshall indeed argued that this rigidity demanded a careful reading, bearing in mind that 'a constitution [is] intended to endure for ages to come, and, consequently, to be adapted to the various crises of human affairs'.

Furthermore, as noted earlier, a constitution's rigidity is offset to a certain extent by a degree of functional ambiguity or vagueness in its provisions. In the *McCulloch* case, Marshall pointed out that

A constitution, to contain an accurate detail of all the subdivisions of which its great powers will admit, and of all the means by which they may be carried into execution, would partake of the prolixity of a legal code, and could scarcely be embraced by the human mind. . . . Its nature . . . requires that only its great outlines should be marked, its important objects designated, and the minor ingredients which compose those objects be deduced from the nature of the objects themselves.⁷

In the area of concern to us, ambiguity is accompanied by a programmatic or generalizing thrust: the practical empowerment of local entities is usually subject to organic laws of intermediate rigidity, the details of which are not spelled out in the constitution. In particular, we find that constitutional provisions relating to fiscal federalism are 'soft' law, and also 'blank' law: they set out rather vague criteria, the application of which depends on laws of subconstitutional rank, and when they establish prohibitive or imperative principles they leave the way open to 'exceptions' of uncertain scope and unpredictable shape. We must recognize that when it comes to coparticipation and distribution, this is natural enough: indeed, it would be unworkable to enshrine in the constitution a rigid model of distribution, detailing figures, floors and shares, for that model will surely have to change in response to circumstances.

In looking at issues of decentralization and fiscal federalism in light of these four points (hierarchy, rigidity, ambiguity and generality), we must recall that constitutional provisions in many countries do not constitute an endpoint – as they were perhaps in the founding stage of nation states, some of which were in the throes of choosing between the extreme options of union or secession – but rather a starting point that must be understood in the context of institutional history and political philosophy.

4 CONCLUSIONS

The revival of the federalist cause tells us much about the current state of constitutionalism in the region. That revival speaks not only of a still-unfinished agenda of republican reforms: it reminds us, above all, that Latin American constitutionalism is still in an unstable situation, and that there are glaring institutional deficits to be made up and too many demands still unattended. In this context, the question of federalism seems to be gaining in priority within the collective interests that inevitably lead to demands for constitutional reform. This region-wide phenomenon has many causes: among them are growing doubts about the excessive powers that the executive branch still wields and the ever louder voices of groups and communities that were once completely overlooked (and that today, thanks in part to the constitutional status they have won, are again aware of their rights and the justice of their demands).

There is no doubt that the confrontation between opposing models of constitutional organization is still unresolved. In any case, Latin American constitutionalism seems far from having achieved its stasis point. From a 'territorial' viewpoint, the situation reveals a paradoxical state of affairs. As it was in the beginning, the federalist banner is again being raised by two powerful movements that champion the ideal but that do so with contradictory ambitions.

One of those movements, part of a long history of anti-statist struggle, seems poised to spearhead a battle against the welfare state inherited from the mid-twentieth century, and is being led by subnational states and provinces determined to limit the powers of the federal government once and for all. At the same time, however, we see a movement pointed in the opposite direction, one that is not hostile to the old welfare state but furthermore insists on its renewal and expansion. In this case, demands for federalism are being made in the name of ever more firmly entrenched rights, normally of a multiethnic and multinational kind. Thus, the first movement is hostile and resistant to constitutional reforms of a social nature such as those advanced throughout the twentieth century, while the second champions those reforms, draws its sustenance from them and demands that they be expanded rather than limited.

NOTES

1. A perfectionist moral stance holds that what is good for each individual is independent of what that individual may think about the matter.

2. In this respect, good examples may be found in the constitutions of Chile 1823 and 1833, Peru 1839 and 1860, Ecuador 1860, and Colombia 1843 and 1886.
3. Bello suggested further that in this situation the *intendencias* (municipal governments) committed all kinds of outrages and excesses against which the national government was powerless. The fate of individuals was thus hostage to the good will of the local authorities of the day (1997: 258).
4. We decided to focus on these 12 particularly representative nations, in the expectation that the resulting sample would be sufficiently robust for scrutinizing trends and patterns of decentralization and fiscal federalism. The reference materials used for the survey were obtained from the Georgetown University Political Database of the Americas. Unless indicated otherwise, the legal references refer to current constitutional provisions in each country.
5. Normally, the powers we have defined as first-tier (greater) also imply second-tier powers (lesser), but not vice versa. On the other hand, depending on the level of constitutional specification, each of these items may be identified as being of lesser ('limited') or greater ('full') relative development, assigning them a point or a half point as explained earlier.
6. Supreme Court of the United States, *McCulloch v. State of Maryland*, 17 US 316 (1819).
7. *Ibid.*

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3. Fiscal decentralization: increasing social cohesion among widely disparate territorial units

Oscar Cetrángolo and Ariela Goldschmit

1 INTRODUCTION

Latin America is a heterogeneous region marked by a high degree of inequality and wide disparities that are also found at the country level. While it is known to be the region with the sharpest income inequalities, it is also subject to serious imbalances in terms of territorial development. Decentralization of the public sector's delivery of various goods and services has been carried out in differing ways from one country to the next, and it is therefore quite probable that the process has heightened some of the region's pre-existing differences, heterogeneities or inequalities. There are, nonetheless, a number of cross-cutting issues, similarities and shared features that provide a basis for an analysis of these processes at the regional level.

Decentralization has posed a new kind of challenge for societies that wish to plot a course towards a genuine equality of rights. The countries that are at the forefront of this effort must therefore take steps to meet the public policy challenges involved in ensuring equal economic, social and cultural rights for all their citizens and in achieving convergence among the different territorial units in which social expenditure has been decentralized. In order for them to do so, they must understand the importance of rebuilding the sense of society, of belonging and of commitment to shared societal objectives. That is an essential component of any cohesive society that embraces the principle of shared responsibilities (Hopenhayn, 2007).

A renewed appreciation of the importance of social cohesion within the framework of the region's agenda for public policy reform is associated with an effort to move away from one-dimensional approaches which seek to encapsulate a country's degree of socioeconomic integration in a single key comprehensive indicator – an approach that can result in piecemeal sectoral policy recommendations (Vaitsos, 2001). Instead, it can

be argued, as Hopenhayn has done, that this somewhat vaguely defined concept can encompass the broader issues of poverty, social exclusion and governance (Hopenhayn, 2007).

Based on the assumption that the concept of social cohesion can lend itself to a variety of interpretations, the EUROsociAL program has attempted to frame a practical, operational definition:

Social cohesion is an attribute of societies that entails equality of opportunities such that the people can exercise their fundamental rights and ensure their well-being, free of discrimination of any sort and with respect for diversity. From an individual perspective, it means that people feel that they are part of a community, participate actively in various spheres of decision-making and are capable of exercising active citizenship. Social cohesion also involves the development of public policies and mechanisms for fostering solidarity among individuals, collectives, territories and generations. (ECLAC/EUROsociAL, 2007, p. 5)

Particular attention should be devoted to this definition's emphasis on public policies as mechanisms for promoting solidarity among different territorial units. The concept of social cohesion encompasses the idea of progress towards the full enjoyment of people's rights as citizens rather than under conditions of social vulnerability. The feeling of belonging, of being a member of a given society, is thus founded upon the idea that each person is 'an equal' in terms of the rights that he or she enjoys by virtue of being part of the same society. In Latin America, territorial disparities are a major obstacle to the development of a feeling of belonging to a single nation; the challenge to be met by the more fiscally decentralized countries is therefore to ensure that reforms lead to greater, rather than less, territorial equality. As will be seen in the following discussion, the decentralization of public services in Latin America has not always been conducted in a way that achieves this very important objective.

This study will take a critical look at decentralization policies in Latin America that may have had an adverse impact in terms of social cohesion. It will not attempt to develop a new conceptual definition of social cohesion but will rather, based on the existing formulations (as discussed above), assess the effects on social cohesion of public policies on decentralization and contemplate the types of reforms needed to achieve greater social cohesion within a decentralized policy environment.

The fact that should be borne in mind is that the theoretical rationale for decentralization involves the need to boost the efficiency of resource allocation. Nevertheless, as public policies have a strong impact on the level of social equity, this process has created tensions that, in many cases, have placed an additional constraint on efforts to achieve macroeconomic stabilization. At the same time, the distributive and macroeconomic

stabilization functions that are usually associated with central governments' public policy objectives have begun to become a factor for subnational governments. For some, this is reason enough for subnational governments to take on a role in pursuing stabilization by establishing fiscal rules that will counter the macroeconomic effects of decentralization. For others, however, the answer is to focus entirely on resolving distributive problems through transfers to households and territorial units.

Central government policies can certainly have differentiated impacts on each territorial unit when necessary, provided that they are based on an approach that is aligned with the policies applying to the national economy as a whole (Musgrave, 1999). This analysis will highlight the importance of taking the complex web of interrelated policy objectives into account and, from that perspective, will focus on a new wave of reforms based on the redefinition of the relevant sectoral policies as a means of achieving greater social cohesion in the countries of the region.

In order to develop this line of reasoning, the discussion will begin with a brief overview of the way in which decentralization has taken place in Latin America, the inroads that have been made and the reasons why these processes have been undertaken. It will then turn to the tensions and constraints in terms of greater social cohesion that are associated with these reforms, given their effects on fiscal correspondence and solvency. After exploring the options for easing these tensions, their impacts on social cohesion will then be evaluated and a number of policy recommendations will be made.

2 DECENTRALIZATION PROCESSES IN THE REGION

Does decentralization lead to increased social cohesion? Is decentralized service delivery at the local level a more efficient and equitable way of meeting the population's needs and, therefore, does it contribute to greater cohesion at the territorial level? Do decentralization policies offer a way of improving distribution and access to basic social services for the entire population?

Unfortunately, there is no single answer to all of these questions in the countries of the region. The diverse nature of the different decentralization processes hinders their analysis at the regional level, as it is impossible to talk about a single, uniform decentralization process for the entire region. Instead, decentralization has taken place in different ways in each country and territorial unit. The dynamics have differed, as have the advances and setbacks, and the process has been driven by differing reasons and

rationales (some of which depart from the relevant theoretical prescriptions). Different sectors have been involved, and the extent of decentralization has also differed in each case, as has, in consequence, the outcome.

Clearly, given the different vantage points from which decentralization processes have been viewed, there have been a wide range of expectations as to their potential for strengthening development, galvanizing democratic processes, improving social equity, increasing the efficiency of public expenditure or moving towards a more cohesive society. The challenge, then, is to arrive at a balanced view that takes into account the specific conditions of each case. The idea is to find pragmatic approaches for improving the state's delivery of goods and services and thus increase the population's well-being, ensure that people enjoy equal rights and foster a sense of belonging to society. Clearly, then, in order to build social cohesion, different types of policies will be called for in each case.

As noted by Musgrave, the fiscal arrangements of each country, insofar as they relate to its federal organization, are basically a reflection of the imperatives of its political and geographic structure (Musgrave, 1999). No general definitions of fiscal federalism can therefore be established. In any given case of the transfer of public services to subnational governments, the first step is to ask what type of decentralization process is being considered, which public service is involved, to what level of jurisdiction the transfer is being made.¹ Clearly, one inevitable question concerns the way in which the relevant country's institutional structure is organized. In order to shed some light on these questions, a series of considerations will now be examined that will be of assistance in understanding what decentralization entails in Latin America.

First, decentralization in the region is influenced by the existence of a wide array of institutional structures. A distinction has to be drawn between countries with federal systems (Argentina, Brazil, Mexico and Venezuela (Bolivarian Republic of)) and those that have adopted unitary systems of government. In addition, there are different types of federal and unitary structures, which further complicate the construction of a typology. The extent to which the various decentralization processes have taken these types of case-specific conditions into consideration must therefore be examined.

Many of the countries with federal structures are among the largest in size and exhibit sharp internal disparities. There are two types of situation. On the one hand, there are countries, such as Argentina and Mexico, in which federalism is a way of keeping previously autonomous states united. On the other, there are those, such as Brazil, in which it was the central authority that opted for a federal system. In all three of these cases, however, federalism is a legacy of the organizational structure

that existed during colonial times. Venezuela (Bolivarian Republic of) is a different case, since, although federalism was chosen by the central authority, it exists more in name than in fact (Fernández Salgado, 2006). Among the countries with unitary systems, a distinction should be drawn between countries that have the more traditional type of system (for example, Uruguay) and those that are organized as a unitary but decentralized republic composed of autonomous territorial units (for example, Colombia).

Temporal dynamics are also a factor, as the unitary systems were not always unitary and the federal systems were not always federal. This is reflected, in part, in the many different constitutions framed by various countries during the nineteenth century. For example, Colombia's constitutions of 1853, 1858 and 1863 defined the state as having a federal system, whereas those of 1821, 1830, 1832, 1843 and 1886 defined the system of government as unitary (see Rodríguez Rodríguez, 2001, p. 11). In Mexico, the first federal constitution of 1824 was followed by a number of alternating attempts to establish unitary and federal systems of government before the federalist option was definitively endorsed in the constitution of 1857 (Fernández Salgado, 2006).

A second factor, partially linked to the first, is that the role of the municipalities is different in each country. In Brazil, the municipalities have been recognized as politically, administratively and financially autonomous governmental units of the national state ever since the constitutional reform of 1988, whereas Argentina leaves the determination of the municipalities' normative framework up to each province, and, consequently, there are 23 different possible structures.

The clearly distinct characteristics of local governments in Latin America have a bearing on the differing functions that they can perform. Undoubtedly, service delivery capacity and efficiency is not the same when a small government with few resources and capabilities is in charge as when a larger government with a greater financial, administrative and management capacity is. In some cases, the necessary scale for the provision of some public services may exceed that of a given locality. Large metropolitan areas and major cities probably operate on a big enough economic, human and institutional scale to undertake such activities in a fairly autonomous fashion and to operate efficiently and successfully. Smaller local or rural units, however, need to band together and to secure technical assistance and cooperation from others in order to put such initiatives into practice (ECLAC, 2009).

Table 3.1 offers an overview of the regional situation but does not provide a full picture of the wide range of situations that exist. The fact that only some countries have intermediate levels of government (state or

Table 3.1 Number of subnational governments in selected cases

Country	Population (thousands)	Federal		Unitary		Average pop. per municipality
		States	Municipality	Dept.	Municipality	
Brazil	183,910	27	5,508			33,390
Mexico	105,700	32	2,446			43,213
Colombia	44,920			32	1,099	40,874
Argentina	38,370	24	2,150			17,847
Peru	27,560			25	1,836	15,011
Venezuela (Bolivarian Republic of)	26,280	24	335			78,448
Chile	16,170			13	341	47,419
Ecuador	13,040			21	205	63,610
Guatemala	12,290			22	331	37,130
Bolivia (Plurinational State of)	9,010			9	311	28,971
Dominican Republic	8,410			28	153	54,967
Honduras	7,050			19	298	23,658
Paraguay	6,020			17	224	26,875
Nicaragua	5,380			15	152	35,395
Costa Rica	4,250			7	81	52,469
Panama	3,180			9	75	42,400
Uruguay	3,440				19	181,053
Jamaica	2,640				14	188,571
Guyana	883				6	147,167
Suriname	450				10	45,000
Total	518,953	107	10,439	217	5,155	33,279

Sources: Prepared by the authors, on the basis of International Monetary Fund (IMF), *International Financial Statistics*, Washington, DC, February 2006, and *Government Finance Statistics Yearbook, 2005*, Washington, DC, 2005; Inter-American Development Bank (IDB), *Making Decentralization Work in Latin America and the Caribbean. A Background Paper for the Sub-National Development Strategy*, Washington, DC, 1997; and Cetrángolo (2007b).

provincial governments) is worth dwelling on for a moment, since, within the realm of theory, the extent of the powers that this level of government should have with respect to public expenditure is not clearly defined. In most cases, the theory of fiscal federalism regards decentralization as the result of a choice between centralized service delivery or delivery by local governments and then weighs its impact on efficiency. However, the existence of intermediate governments of a size which, a priori, does not correspond to the scale of public service systems merits some analysis,

Table 3.2 Concentration of the population, by municipality (selected countries)

Country	Total number of municipalities	Municipalities in which 50% of the population resides	Percentage of municipalities accounting for 50% of the population
Argentina	2,150	78	3.63
Brazil	5,508	224	4.07
Chile	342	36	10.53
Colombia	1,099	53	4.82
Guatemala	331	54	16.31
Honduras	298	20	6.71
Mexico	2,446	99	4.05
Nicaragua	152	23	15.13
Peru	1,836	85	4.63
Uruguay	19	2	10.53

Sources: Prepared by the authors, on the basis of International Monetary Fund (IMF), *International Financial Statistics*, Washington, DC, February 2006, and *Government Finance Statistics Yearbook, 2005*, Washington, DC, 2005; and Cetrángolo (2007b).

taking into consideration institutional, historical, political and geographical factors.

A third element is that the average size of the region's municipalities (measured by population) is the net result of the figures for capital cities that perform administrative and service activities on an enormous scale, other major industrial cities (for example, São Paulo in Brazil, Rosario in Argentina), and a wide array of medium-sized towns and small villages located in remote rural areas. Since the size and the sociodemographic and geographic features of a given territory have specific implications that need to be considered when designing and implementing public policies, flexible solutions have to be devised that can be adapted to each type of government. In many cases, this is no easy task. In particular, the development of public policy solutions for specific groups within the population (scattered rural population groups, ones that include a larger percentage of indigenous peoples or multilingual populations, for example) is a formidable challenge, especially in the case of education and health policies.

In order to flesh out this picture, Table 3.2 shows population concentration indicators for selected countries that reflect the number and percentage of municipalities in which half of the population lives. As may be seen from the table, in Argentina, Brazil, Colombia, Mexico and Peru, half of the population is concentrated in less than 5 percent of each of those

countries' municipalities. This concentration of the population and the countries' uneven settlement patterns go hand in hand with marked imbalances in opportunities for securing material well-being (ECLAC, 2010). Policy makers should take this situation very much into account when designing policies aimed at improving social cohesion. It is particularly important to remember that the average cost of providing a given service will differ across subnational governments and that some have greater financial and management capacities than others, as well as sources of revenue from the development of natural resources. Situations of this sort can give rise to attempts to achieve territorial autonomy or emancipation that, in turn, exacerbate inequities within a given country and thus undermine its social cohesion.

Before bringing this brief overview of decentralization processes in the region to a close, it should be noted that no single pattern for these processes in Latin America can be identified. It should also be said, however, that this situation is not unique to this region. Many different concepts are generally subsumed under the term 'decentralization', and the decentralization of a public service must be distinguished from its deconcentration, which simply involves the transfer of bureaucratic functions from the central government to local governments. Decentralization can also be a purely administrative process that gives local governments some autonomy, or it can be a policy-based one whereby full policy-making and regulatory powers are transferred to subnational governments. Another consideration is that, while decentralization processes are widespread in the region, they have not been expanded upon at an even pace. In effect, as has been seen, diversity has been the hallmark of Latin American decentralization.

3 INROADS AND MOTIVATING FORCES

Above and beyond any theoretical considerations, the widely varying motivating forces behind fiscal decentralization processes in the region have translated into significant but extremely uneven advances across countries and spheres of government. The spectrum goes from situations in which decentralization is a core component of political reform (Bolivia (Plurinational State of), Colombia, Peru) to those in which sectoral reforms predominate (Chile) and, in the extreme, situations in which fiscal and financial considerations are the sole motivation (Argentina).

Di Gropello and Cominetti (1998) have observed that fiscal concerns were the main motivation for the first generation of reforms, which were launched under undemocratic political systems (Argentina, Brazil, Chile), whereas the reforms undertaken during the second half of the 1980s and

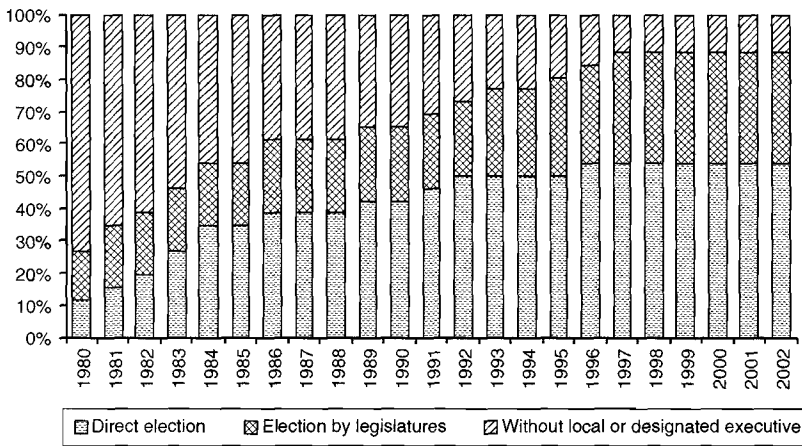
the 1990s were driven by the need to demonstrate the legitimacy of newly installed democratic governments and were therefore more politically motivated. Efficiency-seeking reforms in the services sector, on the other hand, were not seen until the late 1990s.

An analysis of the financial ties between different levels of government shows that the motivating forces behind the first-generation processes in Argentina and Brazil (both with federal systems) can be interpreted as extreme and diametrically opposed cases. In Argentina, the decentralization of health, basic education and other social services was designed by the central government as a means of appropriating resources from the provinces by altering the distribution of functions between levels of government without recognizing specific budget items (see Carciofi et al., 1996; Cetrángolo and Bisang, 1997). This can therefore be regarded as the paradigm of decentralization processes in which the sole aim is the achievement of fiscal sustainability, without regard for the effects on social cohesion. In Brazil, on the other hand, decentralization involved a political process whereby resources were transferred to subnational governments as a way of putting an end to the centralized management style of the dictatorship and thereby promoting the development of democracy (see Afonso, 2003, p. 38).

The first-generation reforms in Chile were of a different sort, although the motivating forces bear some similarities to the case of Argentina. A decentralization process was carried out in the early 1980s by the undemocratic government of the time primarily for political and fiscal reasons (application of the neoliberal model, the aim of downsizing the state and as a means of bolstering the privatization policy), and it combined modifications in the way services were organized at the microeconomic level with the introduction of funding mechanisms related to demand subsidies (see Di Gropello and Cominetti, 1998, p. 51).

In the terms established by the traditional classification of state functions (Musgrave and Musgrave, 1992) it can be argued that the advocacy of decentralization processes is based on their potential advantages from the standpoint of resource allocation. However, in Argentina the chief policy objective of the decentralization of social services was clearly macroeconomic stabilization. In Chile, the redefinition of sectoral policies was a concern, as was a closer correlation with improvements in resource allocation. Equity was not a consideration in either case, even though the items of expenditure that were being decentralized were those of social functions. In any event, it is generally accepted that these examples cannot be fully understood without reference to the political circumstances existing in these countries during the second half of the 1970s and the early 1980s.

Generally speaking, the differences between these cases notwithstanding, decentralization processes were originally carried forward by the



Source: Prepared by the authors, on the basis of Latin American and Caribbean Institute for Economic and Social Planning (ILPES), *Panorama de la gestión pública* (LC/IP/L.243), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), 2004.

Figure 3.1 Introduction of elected posts at the local level

central government, whether for fiscal or political reasons. The case of Brazil, however, is the exception and displays certain aspects that are extremely interesting in terms of the present analysis. In Brazil, the presence of a sizable health-care reform movement that was seeking to expand coverage and gradually build a greater component of solidarity into the system paved the way for a model of decentralization that was to accompany the transition to democracy and that was ultimately crystallized in the constitution of 1988.²

On the contrary, the predominant motivating forces for the second-generation reforms were associated with political considerations and institutional reforms that were being pursued as part of the transition to democracy. These processes initially focused on the political arena, and specifically on the creation of representative democracies at the local level. During the 1980s and 1990s, electoral reforms were approved in a majority of the countries. They included the introduction of elections for the post of intendant at the local level and, to a lesser extent, for governorships, thereby breaking with a longstanding tradition in Latin America and the Caribbean whereby local authorities were designated by the central government (Daughters and Harper, 2007).

As illustrated in Figure 3.1, the region has made a great deal of

headway in terms of the election of local authorities, although in some cases (Argentina, Uruguay) elected posts already existed at subnational levels of government (during those periods, of course, when constitutional rights were respected). In other cases, however, significant changes have occurred, such as, for example, the introduction of mayoral elections in Peru and Colombia in 1998.

Lastly, some features of what could be referred to as a 'third wave of reforms' can be discerned. In the past few years, a debate has begun to take shape and some steps have been taken towards reformulating decentralization policies in ways that take into account their impact on social and territorial cohesion. Some aspects of reforms instituted in certain countries (for example, Colombia and Mexico) could be pointing in this direction. This will be discussed in greater depth in Section 5.

An overview of the motivating forces for decentralization processes in the region confirm the observation that the reasons that have prompted countries to decentralize given utilities or services vary and have not always corresponded to recommendations that have solid theoretical foundations. The countries have also had enormous difficulty in determining what might be characterized as the 'optimum extent of decentralization'. For the most part, the position of each country is the result of a sequence of institutional reforms. Peru, with quite specific dynamics of its own that have led it to go back and forth on this issue, is an interesting example.³

Within the diverse range of situations that exist in the region, the motivating forces for the different decentralization processes have been one of the determinants of the paths they have followed. In cases where fiscal considerations of the central government have been the sole motivating force, pre-existing inequalities may have been heightened when local governments were left to rely on their own financial and management capacities for the administration of social services. In the absence of a coordinated approach, decentralization may not have resulted in the increased equity and social cohesion that, in theory, these reforms are supposed to produce and that, in fact, they have brought about in more developed countries. This question will be examined further in Section 5.

Against this varied backdrop, decentralization processes in the countries of the region have advanced to differing degrees, independently of each nation's level of economic development. Table 3.3 provides an indication of those advances based on the ratio of subnational government expenditure to the total expenditure of the consolidated public sector.⁴

This indicator shows that economic and human levels of development bear no clear relationship with the inroads made by decentralization. If there is any one variable that helps to account for the greater or lesser

Table 3.3 *Advances in decentralization, by group of countries*

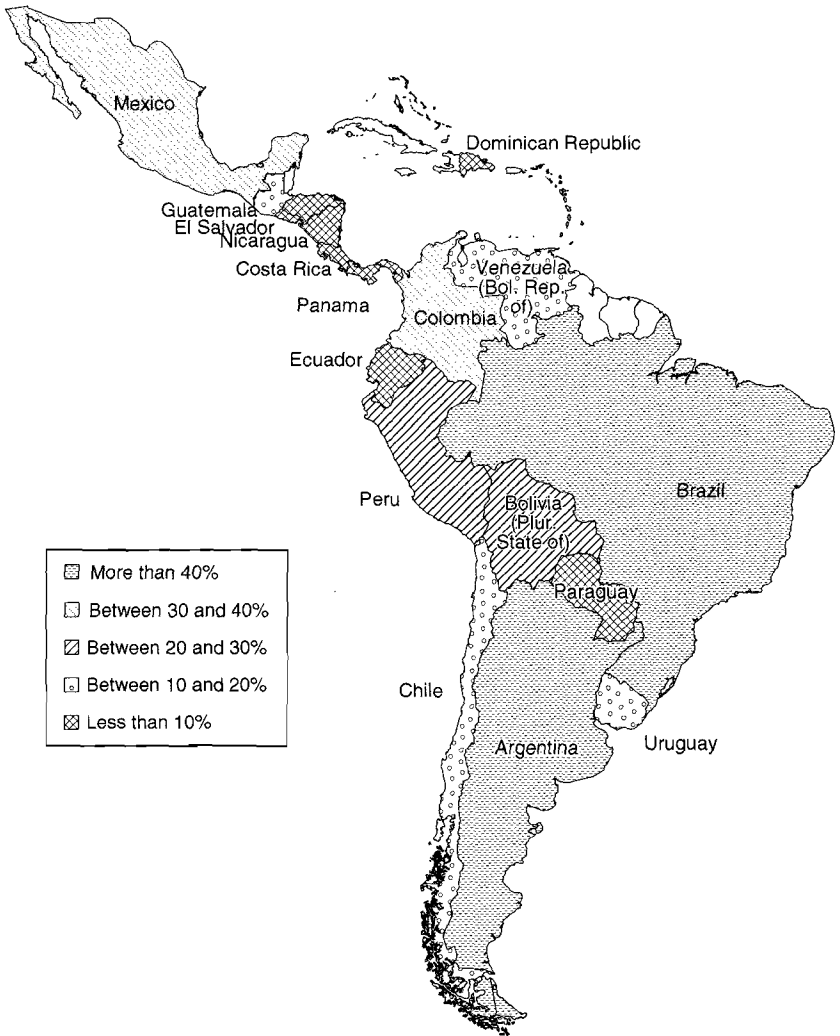
Group of countries		Level of decentralization (subnational public expenditure as a percentage of the total)		
		Greater than 20%	Between 10% and 20%	Less than 10%
High per capita GDP	High HDI	Argentina (49.5%)		
	Mid-range HDI	Chile (12.2%)		
	Low HDI	Uruguay (14.5%)		
Mid-range per capita GDP	High HDI	Mexico (31.8%)	Venezuela (Bol. Rep. of) (19.6%)	Panama (3.2%)
		Peru (26.8%)		El Salvador (4.6%)
	Mid-range HDI			Costa Rica (3.3%)
				Dominican Republic (2.9%)
Low per capita GDP	Low HDI	Brazil (45%)		
		Colombia (39.0%)		
	High HDI	Bolivia (Plur. State of) (29.7%)		
	Mid-range HDI			Paraguay (6.2%)
				Nicaragua (5.2%)
	Low HDI		Guatemala (12.4%)	Honduras (8.0%)
				Ecuador (7.5%)

Note: HDI is the Human Development Index ranking.

Sources: Prepared by the authors, on the basis of data from ECLAC, UNDP, and Cetrángolo (2007b).

extent of decentralization, it is the size of the territory concerned. The larger its territory, the more likely a country is to have adopted a federal system and to have decentralized the execution of public expenditure to a greater extent. Figure 3.2 illustrates that relationship in the region.

The countries that have decentralized their social services the most have been the larger countries with federal systems and some of the sharpest territorial inequalities (Brazil, Mexico and, to a lesser extent, Argentina). This would seem to indicate that decentralization policies are an inevitable consequence of the demands associated with governing large territories,



Note: The boundaries and names shown on this map do not imply official endorsement or acceptance by the United Nations.

Sources: Prepared by the authors, on the basis of data from ECLAC, and Cetrángolo (2007b).

Figure 3.2 *Degree of decentralization in the countries of Latin America and the Caribbean (public expenditure by subnational governments as a percentage of the total)*

rather than the outcome of a policy decision. There are also other countries with medium-sized territories (for example, Colombia and Peru) with unitary systems of government that have decentralized to the extent that the ratio of subnational expenditure to the total is quite high relative to other countries in the region and other smaller or island territories (for example, most of the Central American countries), which have decentralized very little. In contrast, an examination of the situation in Europe shows that there is no significant correlation with the size of national territories there. Decentralization therefore appears to be an option for all the European governments, with some countries having a high percentage of subnational expenditure (for example, Spain and Sweden) and others having a low ratio (for example, Greece).

4 DECENTRALIZATION AND SOCIAL COHESION: TENSIONS AND CONSTRAINTS STEMMING FROM CONSIDERATIONS OF SOLVENCY AND FISCAL CO-RESPONSIBILITY

As discussed in the preceding section, decentralization processes in the region have been quite diverse. Unfortunately, however, studies that would serve as a basis for assessing their impact on income distribution and social cohesion are not available. The wide array of factors that contribute to territorial inequalities, the fact that decentralization is relatively recent and the lead time involved in this type of reform make it difficult to arrive at a conclusive analysis.⁵ However, it is possible to suggest that many of the distributive improvements that were expected to result from the transfer of responsibility for providing basic social services to local governments have not materialized. This topic will be explored further later on. The region continues to exhibit a high degree of inequality, and ensuring equitable access to basic social services for a large part of the population remains a challenge. In some cases, territorial inequalities may even have increased as a result of decentralization, and the absence of sufficient financial and management capacity at the local level has acted as a serious constraint on efforts to achieve the delivery of decentralized services on an autonomous basis.

Does this mean that the approach taken to decentralization has been flawed and that the countries of the region will need to change their course in this respect? What organizational constraints on the decentralized delivery of public services have not been taken into account?

As has been pointed out, the wide range of economic, social, political and institutional circumstances that exist in the countries of the region

delimit the scope and potential of decentralization processes and therefore give rise to a policy dilemma regarding the objective of increased social cohesion. Solutions that do not take into account the particular features of each location are out of the question, and this fact has served as the basis for a well-developed line of argument in favor of decentralization policies and efforts to bring decision making closer to the local level. However, this diverse range of situations also raises the usual doubts as to whether the institutional and financial capacity to address issues of social cohesion exists at the local level. This points to one of the trade-offs between decentralization and social cohesion that is associated with the existence of striking disparities in different production sectors within the region. In this context, territorial disparities are seen as constraints on efforts to achieve equality. This is the result of the direct impact of inequality and, indirectly, of the uneven financial capacity of subnational units as a consequence of the distribution of the tax base.

While efforts have been made to accelerate the economic development of the underprivileged areas as a way of achieving greater territorial cohesion, they have never been as effective as their counterpart initiatives in Europe. The extent of the disparities and the existence of significant unmet public policy demands throughout the region have prevented these initiatives from being more successful than they would otherwise have been (this question will be examined in greater detail in a later section). In addition, the recent literature on the dynamics of the development of production, competitiveness and territorial concerns indicates that the global economy is now returning to a focus on the role of subnational and local production systems. The need to take the geographical proximity of small and medium-sized enterprises into consideration can generate external economies and foster an 'industrial atmosphere' at the local level (Boscherini and Poma, 2000; Poma, 2000). The implication is that, in the absence of active counterbalancing policies, the development of the production sector will exhibit an endogenous tendency to replicate and exacerbate existing inequalities. Beyond these initial observations, however, the question of development policies designed to reduce disparities in the production sector will not be examined in this analysis.

Another issue to be addressed in the discussion and analysis of decentralization processes in the region involves their effects on fiscal accounts. In many cases, the transfer of responsibilities to subnational levels of government has not been accompanied by a transfer of the corresponding budget allocations. This has had a serious impact on the financial situation of local governments, often sparking a great deal of fiscal tension between different levels of government and, in some cases, heightening

local governments' funding requirements. In addition, as noted earlier, when there is greater local autonomy, richer areas tend to resist funding public policies in poorer areas, which runs counter to the objective of greater social cohesion. The resulting tensions may lead to problems of fiscal insolvency. Thus, although efforts have been made to decentralize many different sectors to varying degrees, the results reflect the strengths and weaknesses of each country and, in particular, the associated funding mechanisms.

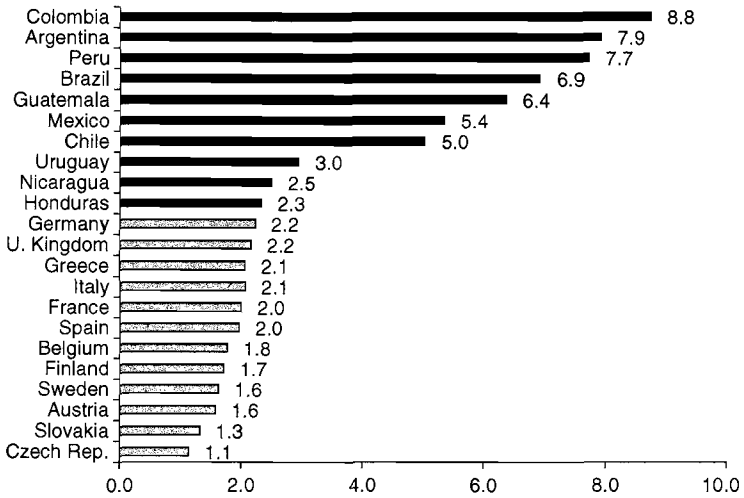
The following subsection will introduce an often neglected issue that has a substantive bearing on the achievement of decentralization policy objectives. The geographical distribution of the tax base in each case makes it very difficult to meet the fiscal co-responsibility targets that many of the decentralization processes now under way require.

Territorial Disparities

The nature of equity problems within national territories should be a key factor for addressing decentralization processes and their financing in Latin America. Although indicators of personal income distribution are assumed to bear some relation to territorial features, the analysis here focuses on territorial aspects. Accordingly, Figure 3.3 maps the divides between highest and lowest per capita output among subnational jurisdictions for a group of countries.⁶

This indicator is seen to differ substantially between European and Latin American countries. With the exception of the smaller Central American countries and Uruguay (which has a markedly unitary system of organization and better equity indicators), Latin America shows larger gaps between rich and poor jurisdictions than any European country. The per capita output of Argentina's richest province (Santa Cruz), for example, is 7.9 times that of its poorest (Formosa). In Colombia, the per capita output of Casanare is 7.7 times that of Chocó, and in Brazil the per capita output ratio between the Federal District and Maranhão is 6.9. The average ratio for European countries is 1.8. Without considering these differences, it would be difficult to improve social cohesion and advance towards a new agenda of reforms aimed at framing equal rights for the entire Latin American population. It is yet more cumbersome to equalize rights in the context of decentralized policies, since the poorest regions are precisely the ones with the smallest tax base for funding local public spending priorities, such as infrastructure, health and education.

Unbalanced regional development leads to concentration of tax bases in a few territories within the countries, inevitably impeding full fiscal

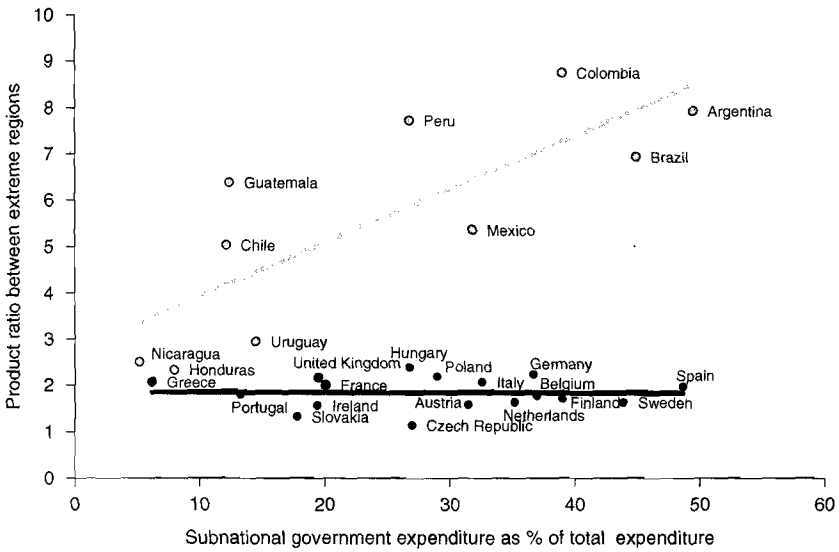


Sources: Prepared by the authors, on the basis of data from the OECD, ECLAC, CEPALSTAT (<http://websie.eclac.cl/sisgen/ConsultaIntegrada.asp?idAplicacion=1>), and Cetrángulo (2007b).

Figure 3.3 Gaps in regional per capita GDP in Latin America and Europe

co-responsibility and preventing the deployment of virtuous decentralization processes in the terms proposed by the theory, as will be seen later. This does not mean that decentralization is an obstacle to social cohesion, but it does flag tensions which must be considered, as well as the need to establish ways to coordinate sectoral policies, including compensatory mechanisms for more disadvantaged regions (as will be discussed in the following sections).

Figure 3.4 shows how the degree of decentralization relates to territorial inequality, measured by the output ratio between extreme regions. Whereas in Europe decentralization shows up as a variable independent of regional inequality (which is, in any event, not particularly large), in Latin America the decentralization option is heavily associated with regional disparity: the more decentralized countries show greater territorial inequality. As discussed earlier, this reflects the fact that both degree of territorial disparity and level of fiscal decentralization are directly related to the size of the country. This tells us nothing about the dynamics of territorial disparities and decentralization, which it remains for subsequent research to explore further. Little speculation has been ventured on this subject given the absence of suitable indicators and the multitude of factors that can account for territorial inequalities.⁷



Sources: Prepared by the authors, on the basis of data from the OECD, ECLAC, CEPALSTAT (<http://websie.eclac.cl/sisgen/ConsultaIntegrada.asp?idAplicacion=1>), and Cetrángolo (2007b).

Figure 3.4 Gaps in regional per capita GDP and decentralization in Latin America and Europe

5 DECENTRALIZATION AND THE TENSIONS THAT PREVENT GREATER SOCIAL COHESION

The decentralization process does not lead unerringly towards greater social cohesion. On the contrary, it runs up against a number of tensions which public policy must address. Having established that decentralization is not a single or uniform process in the region, it would be absurd to propose a single solution to the tensions it generates. It has been consistently argued here that, since the realities in the countries are very different, the proposed responses must line up with the situation in each one. Nevertheless, some general criteria may be offered on the basis of past experience and of the structural conditions prevailing in the region.

Taxation system flaws generate unmet demands for public policy action, which cannot be resolved by simply shifting responsibilities to a different level of government. At the same time, two barriers prevent the principle of fiscal co-responsibility from operating properly: the large proportion of

tax payments going to central government and, of particular interest here, the great disparities between territories and within countries regarding their development level. Fiscal transfer systems must therefore perform a twofold function. First, they must right the vertical imbalances between the income and expenditure of different levels of government and the concentration of tax revenues in the central administration. Second, they must redistribute resources between territories in order to resolve horizontal imbalances and thereby provide equality of rights (Ahmad and Craig, 1997). The more decentralized the government functions *vis-à-vis* redistributive objectives (health and education, for example) the greater the role transfers should play. This section will bring some of the arguments raised earlier to bear upon transfer systems, social policies and their links with efforts to build greater social cohesion.

Difficulties Arising from Extreme Territorial Disparities

Given the way in which decentralization processes are implemented, their impact on social cohesion can hardly be assessed without considering financial transfer schemes between levels of government. In theory, decentralization processes operate under different modalities depending on the purpose for which they are created. Leveling transfers (those aimed at reducing disparities between different states' financial capacities to provide public goods and carry out other subnational functions) generally take the form of unconditional schemes. The relative size of these transfers indicates the local governments' degree of autonomy and, at the same time, defines the decentralization modality through which subnational governments may receive higher levels of financing without changing their decision-making powers. This is particularly important in federal countries, whose subnational governments are more autonomous. From the macroeconomic point of view, the problem with these systems is that they make endogenous transfers to increases in tax collection and therefore introduce a heavily pro-cyclical element into subnational spending. Political scientists, moreover, argue that resource transfer systems encourage the development of clientelist networks within subnational governments (Lardone, 2004) and erode incentives to collect taxes of their own, thus replicating the rent-seeking situations common in states whose financing comes from natural resources (Gervasoni, 2010).

A number of case studies conducted in the Latin American countries⁸ served as a basis on which to attempt a classification of transfer systems:

- *Revenue sharing between the national level and intermediate government levels* This occurs in federal countries such as Argentina,

where there is no system of automatic transfers to municipal governments.

- *Revenue sharing between the national level and different subnational government levels* In Brazil, transfers are made to both states and municipalities.
- *Revenue sharing between intermediate and municipal government levels* These are particularly important where central governments do not make direct transfers to local governments, such as in Argentina.
- *Systems that include revenues from natural resources* In Mexico and Peru, for example, the distribution includes resources that are not specifically tax based (mining, hydrocarbons, forestry).
- *Systems with exceptions* In Honduras, municipalities which benefit from port activity are excluded from certain transfers, as a way of promoting resource leveling.
- *Horizontal revenue sharing* An example is the Municipal Common Fund (FCM) of Chile.
- *Revenue sharing with entities other than subnational governments* These usually arise in the context of efforts to overcome fiscal constraints. For example, resources are shared with a number of bodies in Argentina and with universities in Bolivia (Plurinational State of).
- *Sharing of funds from non-tax sources* For example, the distribution of funds arising from debt relief arrangements between Bolivia (Plurinational State of) and the International Monetary Fund (IMF).

The various transfer modalities arise from the countries' different efforts to level the provision of public goods and services throughout their territories. There are serious barriers to the achievement of that aim, however. The greatest one, as seen before, is the sheer magnitude of the disparities. This is not to say that transfers do not have a leveling effect; rather, their effect is only partial. In countries with large territorial development disparities, the impact of leveling transfers is limited by the developed regions' willingness to cede resources. It could be said that these regions choose (through the decision-making mechanisms in each case) how much internal social cohesion to forgo in the interest of greater cohesion nationwide. Often, shortcomings in territorial cohesion, combined with a degree of factor mobility, encourage migration to the more developed regions. Although this may reduce some gaps, it also makes the latter regions less willing to transfer resources to increase territorial cohesion countrywide.

A second factor (which is related but has traits that set it apart) derives

from the fact that the demand for greater equity and social cohesion requires public policies that cannot be financed across the board, making regional redistribution an incomplete solution. The problem is not only a financial one: management and administrative capabilities and other types of capacities are also highly uneven. This is why the resource transfer systems developed are not independent of decentralized sectoral policies.

The role of sectoral policies in transfer systems is apparent from a review of resource distribution criteria. At one extreme is Argentina, which since 1988 has operated a system of fixed ratios defined not by explicit territorial criteria, but by criteria for allocation between funds for specific purposes (Cetrángolo and Jiménez, 2004). Mexico, conversely, combines indicators on population distribution and tax collection from the different regions. Guatemala uses a slightly more complex scheme, with different distribution segments being allocated in equal parts, by population, by per capita income, by the number of villages and hamlets, and by inverse proportion to municipal per capita income. Peru maintains a Municipal Compensation Fund (FONCOMÚN) which distributes resources from different taxes between provincial and district municipalities according to a large array of indicators, while also differentiating between rural and urban municipalities. Honduras has a much simpler system, in which distribution is based on two criteria: equal parts and number of inhabitants. In contrast, some schemes, in the context of what is referred to as the 'third wave of decentralizing reforms' afford more attention to the objectives of decentralized sectoral policies and their impact on social cohesion, as will be seen below. First, however, a short discussion on social cohesion in Latin America follows.

How Does Decentralization Relate to Social Cohesion?

It is no simple matter to assess social cohesion in each country. It is difficult indeed to reduce social cohesion to a single dimension or to express it as a synthetic indicator. On the contrary, the essence of social cohesion is the balance between the behavior and performance of a society and that of its economy overall. Thus, cohesion can hardly ensue from any policy in isolation, however sweeping. Instead, it must reflect the different types of inequity, capacities, access to opportunities conditions and exclusion from them and, in general, the economic, social and cultural rights of all a country's citizens.

Decentralization processes in Latin America and the Caribbean often take as reference the experience of developed countries, especially European countries and Canada. Latin American countries have certain traits that affect the dynamics of decentralization and that set them apart

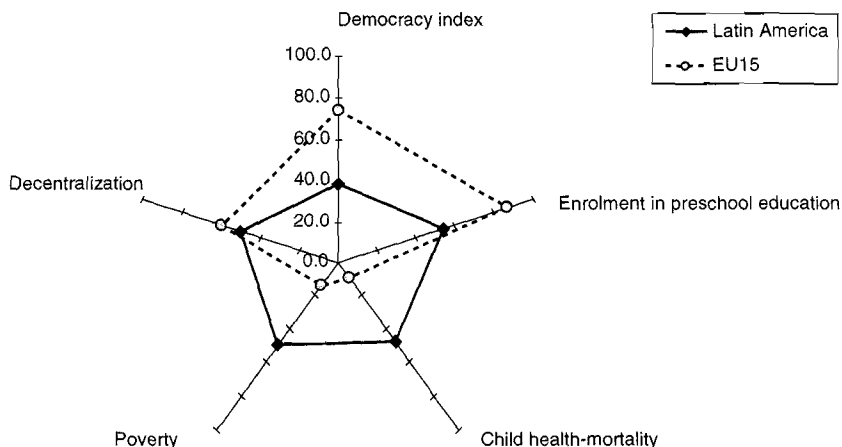
from the rest of the world. One of the main difficulties with the design of public policies in the region has been the fact that it has been treated as homogeneous, with a tendency to apply certain prescriptions regardless of the specific traits of each territory. This has emerged strongly in the debate on the virtues and difficulties of decentralization. In other words, while the whole region does have some shared characteristics, the particularities and heterogeneities of each country and territory must also be recognized.

The differences between Latin America and the developed world are of particular interest for the issues addressed here. To analyze them, a number of indicators were borrowed from the *System of Indicators for Monitoring Social Cohesion in Latin America* (ECLAC/EUROsociAL, 2007): distance, institutional inclusion–exclusion mechanisms and sense of belonging.

The distance component includes the outcomes, or visible expressions, of the operation of inclusion–exclusion mechanisms and refers to the material conditions of the groups and communities excluded from participation in life-sustaining social activities, the exercise of their fundamental rights and access to resources and opportunities needed for the development of their potential. The dimensions of the component considered here include indicators of poverty, education and health, which are found to be closely tied to services heavily affected by decentralization processes. Although the indicators used for poverty and health are the usual ones (population below the poverty line and child mortality), the indicator used for education is enrolment in preschool education, since this variable clearly differentiates the cases studied and reflects recent efforts to expand the coverage of education systems at earlier ages.

Institutional inclusion–exclusion mechanisms refer to those actions carried out by various institutional actors that may have an effect upon the structure of opportunities, the accumulation of advantages and disadvantages, and processes and outcomes of inclusion–exclusion. The different dimensions of these institutional mechanisms operate through the democratic system and the rule of law (fighting corruption, equity in the administration of justice and human security policies), policies and markets. The indicator used in this case was the Freedom House index.⁹

Lastly, the sense of belonging component includes all those psychosocial and cultural expressions that show the degrees of people's linkages and identification with society as a whole and the groups that comprise it. These bonds form the basic glue that keeps society together and, at the same time, they influence the ways in which different actors respond to the specific modalities of inclusion–exclusion. The dimensions of the sense of belonging component are multiculturalism and non-discrimination, social capital (informal social networks, confidence and participation), prosocial

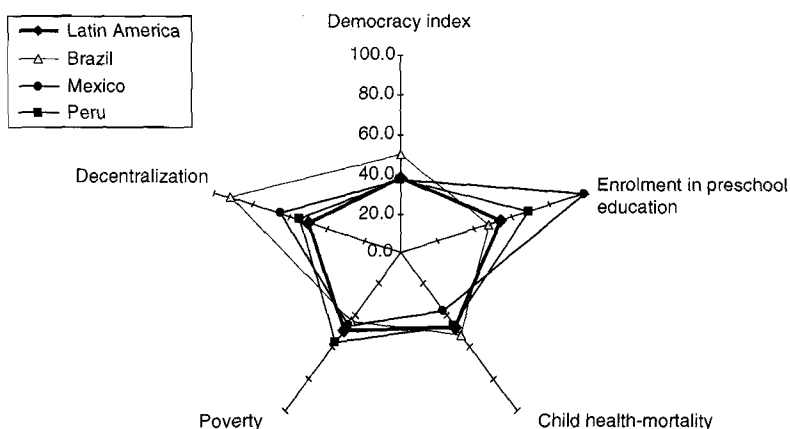


Sources: Prepared by the authors, on the basis of data from the OECD, ECLAC, CEPALSTAT (<http://websie.eclac.cl/sisgen/ConsultaIntegrada.asp?idAplicacion=1>), and Cetrángolo (2007b).

Figure 3.5 *Indicators of social cohesion and decentralization in Latin America and Europe*

values and solidarity, future expectations and prospects of social mobility, and sense of integration and social affiliation. Owing to the lack of comparable information for these areas, no indicator was calculated for sense of belonging at this initial point. This is not to deny, however, that the sense of belonging to a single nation among the inhabitants of different territories is important for the considerations set forth here.

Taking as a reference developed countries of Europe,¹⁰ and the different dimensions identified, by comparison, Latin America shows worse indicators, on average, for democracy, poverty, child mortality and education. This indicates lower levels of well-being and draws attention to the need for public policies for increasing equity. Although the democracies of the Latin American countries have come a long way in procedural aspects, basically in the electoral sphere,¹¹ they remain more weakly developed than those of European countries. Conversely, with regard to decentralization, if the ratio of public spending managed by subnational government to total public spending in each country is taken as an indicator, the average level in both regions masks such large internal differences that it is hard to say which is more decentralized. Figure 3.5 summarizes the information on the selected indicators and helps form a picture of the concept of social cohesion and degree of decentralization.

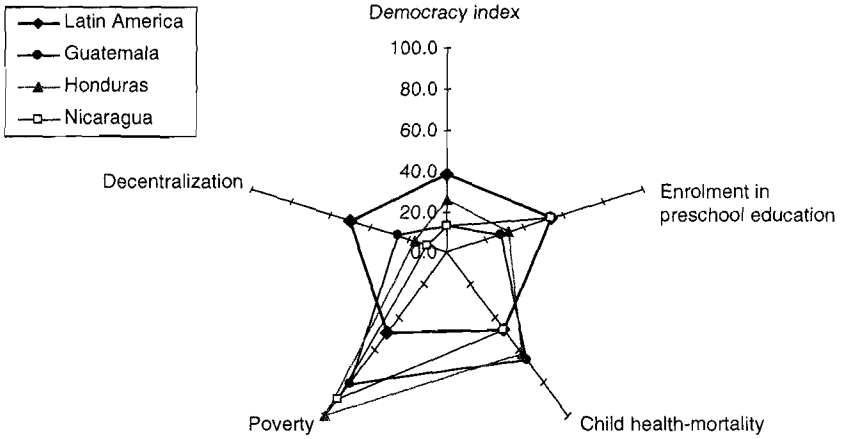


Sources: Prepared by the authors, on the basis of ECLAC, CEPALSTAT (<http://websie.eclac.cl/sisgen/ConsultaIntegrada.asp?idAplicacion=1>), and Cetrángolo (2007b).

Figure 3.6 Group A: close to the regional average

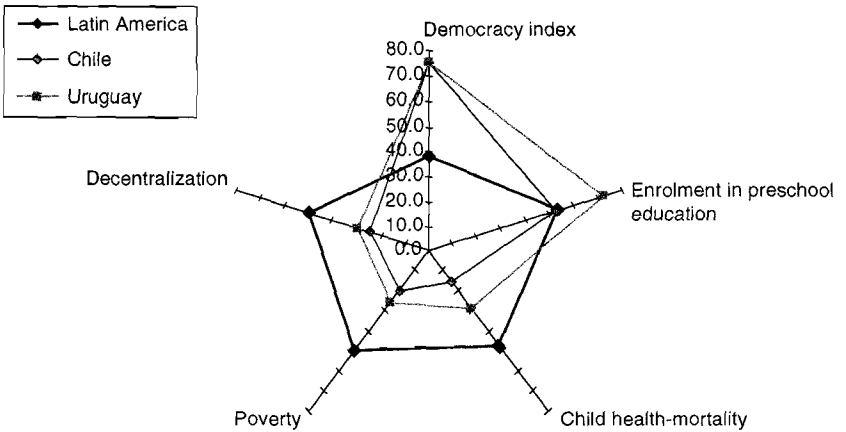
The heterogeneity of situations within the region is illustrated with graphic representations of these indicators for several Latin American countries, classified in five groups:

- *Cases closest to the regional average (A)* Peru is the country closest to the regional average, whereas Brazil shows a greater degree of decentralization and Mexico has a particularly high rate of enrolment in preschool education (Figure 3.6).
- *Lowest level of decentralization and poorest social cohesion indicators (B)* This refers to the Central American countries surveyed (Guatemala, Honduras and Nicaragua) which are smaller and have a lower level of development (explaining their lesser decentralization) (Figure 3.7).
- *Low level of decentralization and high level of social cohesion (C)* Uruguay and Chile are two countries with a unitary organization and a long history of public policies aimed at improving social cohesion, although there are marked differences between the two. These are the cases closest to the European reference group (Figure 3.8).
- *High level of decentralization and good social cohesion indicators (D)* Argentina is the example of a federal country with a relatively high level of human development in the region. This case also comes close to the situation in the European countries (Figure 3.9).



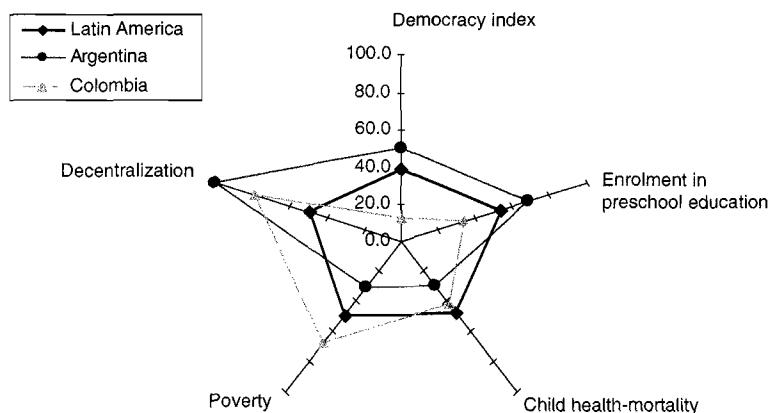
Sources: Prepared by the authors, on the basis of ECLAC, CEPALSTAT (<http://websie.eclac.cl/sisgen/ConsultaIntegrada.asp?idAplicacion=1>), and Cetrángolo (2007b).

Figure 3.7 Group B: low level of both decentralization and social cohesion



Sources: Prepared by the authors, on the basis of ECLAC, CEPALSTAT (<http://websie.eclac.cl/sisgen/ConsultaIntegrada.asp?idAplicacion=1>), and Cetrángolo (2007b).

Figure 3.8 Group C: low level of decentralization and high level of social cohesion



Sources: Prepared by the authors, on the basis of ECLAC, CEPALSTAT (<http://websie.eclac.cl/sisgen/ConsultaIntegrada.asp?idAplicacion=1>), and Cetrángolo (2007b).

Figure 3.9 Groups D and E: high level of decentralization and different levels of social cohesion (high in Group D and low in Group E)

- High level of decentralization and poor social cohesion indicators (E) Colombia (Figure 3.9).

This information would seem to indicate that no clear relation exists between the different indicators examined and the depth of fiscal decentralization. In any event, the different degrees of decentralization coexist with a broad range of structural situations in which it is difficult to establish any clear causality. In Latin America, at least, the choice of decentralization must be assessed in the light of each country's policies regarding territorial disparities. This leads to a debate on the role of central government and compensatory sectoral policies, which will be discussed in the following subsection.

Towards Greater Social Cohesion with Decentralized Public Policies

The previous subsection showed that decentralization does not explain the greater or lesser degree of social cohesion in the Latin American countries. If the aim of public policies is to achieve socially more cohesive societies on the basis of equal rights, then the decentralized organization of public policies must be viewed as forming the spokes of sectoral policies, which must, in turn, be redefined bearing in mind two constraints. First, the problems set out here concerning territorial disparities. Second, the fact

that social policy formulation is undergoing deep reform in the region, especially after the exhaustion of the old welfare state model. Although this subject falls outside the analysis undertaken here, some elements of that debate have an impact on decentralization in light of sectoral policy reformulation and must be considered accordingly.

The most recent reforms to decentralization processes have taken into account – more or less across the board and some more explicitly than others – the demands imposed by the particular rationale of each sectoral policy. The process of decentralization itself has handed down major lessons in this regard. In some sectors, the decision to decentralize has been taken following an analysis of technical, economic and institutional operation, identifying alternatives for redistributing territorial competences and responsibilities according to the different phases and segments of the process (planning, regulation, financing, operation, scaling, and so on), but in others this has not happened (ECLAC, 2009).

Many of the reforms have conditionalities built into transfers between different levels of government. By itself, however, conditionality offers no guarantee of strengthening sectoral policy: it is increasingly clear that the specific operating rationale and different components and dimensions of policies, as well as the most desirable distribution of territorial competences and responsibilities, must be carefully thought out in order to improve the impact of public policies and enhance their efficiency. The transfer system that accompanies the decentralization of a service must, in short, be part of the reform itself – not a way of compensating for its effects. It is, therefore, very important to control the sequence in which processes occur.¹² In practice, the experience of the region has not been particularly encouraging in this regard.

6 CONCLUDING REMARKS

The brief account of the different types of transfers between levels of government and their conditionalities is intended to provide a final link in the argument for the need to redress the region's failures in terms of territorial imbalances and their impact on equality of rights and social cohesion. The point here is that if these problems are to be effectively tackled, decentralization should not be the main concern of public policy reform efforts. Instead, given the need for policies to improve income distribution (among other demands), social policies should be redefined with a heavy emphasis on the role to be played by central governments. In this approach to the problem, decentralization should be viewed only as an institutional consideration or a means of organization used to enhance sectoral policy. The

same goes for transfer schemes, which must be incorporated into sectoral policy design.

For example,

A strategy to achieve equality in education must give priority to expanding the coverage of preschool education and lengthening the school day in public schools, improving secondary completion rates in socio-economic sectors with lower achievement levels . . . and reducing the learning and knowledge gaps built up over the education cycle. (ECLAC, 2010, p. 207)

This requires a redefinition of the functions of school and of the education system overall, in which the decentralization and resource transfer involved cannot be treated as separate policies.

Conversely, with regard to health system reform, the region must combat fragmentation and ensure broad and egalitarian access to health services, providing the population with explicit guarantees regardless of income level and area of residence. To make this possible, as well as coordinating the public and social security subsectors (and properly regulating provision by the private sector), countries must set up health-care networks in which subnational territories (whether the system is decentralized or not) are in communication with each other and tightly interconnected. Here, each level of government has different responsibilities and the catchment areas of particular health facilities may not coincide with political jurisdictions or with school catchment areas.

These tasks in the areas of health and education are just some examples in which decentralization is only part of the problem that needs to be solved to improve social cohesion. Unlike many discussions on decentralization, this chapter has argued that particular attention must be afforded to the role placed by the national level of government. This is the level which must take measures to compensate for differences between regions, ensure basic thresholds for the provision of certain services and coordinate public policies which have a shared axis, albeit with greater or lesser degrees of decentralization. Lack of social cohesion almost always leads to the degradation of human and social rights, the breakage of essential social links and the impoverishment not only of the individual but also of the relations which define social place and identity.

The only way of optimizing the role of conditional transfers between levels of government is to take into account the design of each sectoral policy. Transfers must be consistent with policies implemented at the sectoral level. This is especially true in view of the productive and territorial inequalities typical of the region's countries, the different management and human resource capacities of each government and the competing tensions

imposed on the fiscal accounts by different public policy objectives. The action of transfers alone cannot possibly resolve all these difficulties.

Where these tensions exist, the heart of the matter in social policy decentralization is finding a formula to make the different objectives compatible, and it cannot be assumed that all these objectives will necessarily be met simultaneously. Unless care is taken in the design of such reforms and depending on the nature of the tensions in each case, the solution may create additional fiscal pressures and the increased demand for fiscal resources may generate new tensions or fuel existing ones. This would seem to be the ideal place for a discussion of the combined impacts on social cohesion and fiscal sustainability. It might be said that if social cohesion depends on the existence of a shared aim in which the different members of a democratic society feel included, then fiscal coherence is necessary to make the aim sustainable.

Lastly, it is important not to treat the map of responsibilities of the different government levels as an inalterable template of reform decisions. Throughout history, public policies have had to assume new demands which have required periodic reviews of the distribution of functions and resources. Latin America itself offers notable examples of this. Illustrations have been given here of the need to support health and education reforms in decentralized systems. It might well be recalled that in the nineteenth century health care was not considered a major function of the state, as it certainly was by the end of the twentieth, following on from innovations that would impact greatly on the population's health and well-being. It was not until the mid-twentieth century that the development of 'local health systems' began to be debated. Later, with the emergence of social security, the need for new infrastructures and – to cite an example which had no small impact on the public accounts – the obligation to meet increasing debt liabilities, new functions arose which often came to rest by default on central government initially, with the discussion on how best to assign them between different levels of government starting only later.

Today, new issues must be placed on the table. New schemes of conditional transfers to low-income families draw attention to the role of local governments, although their impact on equity is such that they must certainly be financed centrally. Mexico and Brazil offer examples in this area. In e-government, new technologies are being incorporated into government administration, with an impact on transparency (digital cities), efficiency (public procurement) and solvency (tax administration), and this seems to be developed in a higher degree in the most advanced regions, which is worsening territorial gaps. Something similar has occurred with experiences of local productive development, in which successful cases occur frequently in the most advantaged regions. These matters are

particularly interesting insofar as they have the potential to become part of the solution or part of the problem as regards territorial inequalities, and they have a great bearing on possibilities of improving social cohesion. In all this, it must not be forgotten that the challenges Latin America faces in closing gaps and reducing inequality must be tackled in systemic and multidimensional ways that allow for action on different fronts of development.

NOTES

1. 'Economic theory offers limited guidance for assigning expenditure responsibilities among different levels of government' (Ahmad and Craig, 1997, p. 25).
2. An interesting analysis of these reforms can be found in Falletti (2009, ch. 2).
3. In 1979, a decentralization effort started in support of democracy: elections of municipal officials were reinstated, and new areas of responsibility and authority were established. In the late 1980s, however, this process lost credibility and, during the 1990s, with the return of a centralist government, the regional governorships were eliminated and the municipalities' autonomy was restricted. Then, in 2001, decentralization began to gain momentum once again (Flores, 2005).
4. A number of different decentralization indicators have been tried out in recent years. The one used here is the most suitable for the focus in this analysis. For a discussion of alternative indicators, see ILPES–ECLAC (2007) and ECLAC (2010, chapter IV).
5. Besides these limitations, it should be noted that, for example, in Argentina (one of the first countries to decentralize education and health services), the further decentralization of public sector expenditure has been associated with a deterioration in equality indicators (ECLAC, 2008).
6. The indicator used is unfortunately not ideal, due to difficulties arising from the national accounts of the Latin American countries. Not all the countries keep data on subnational output (very few calculate subnational revenues), they use differing methodologies with varying degrees of reliability, and the jurisdictions for which calculations are performed are also highly diverse and depend on the institutional organization in each case.
7. Nevertheless, Shankar and Shah (2008, p. 169) offer a classification of countries by degree of convergence in regional income. They find Brazil, a highly decentralized country, to be one of the most divergent. Mexico is in an intermediate position and Chile (which has a low degree of decentralization) is classified as convergent in terms of territorial income.
8. In particular, those conducted by the Sustainable Development and Human Settlements Division of ECLAC in the framework of the project 'Urban poverty: an action-oriented strategy for urban governments and institutions in Latin America and the Caribbean' (see Cetrángolo, 2007a).
9. The democracy index prepared by Freedom House summarizes average ratings gained by countries in an expert assessment of 10 political rights questions and 15 civil liberties questions. The assessment of political rights looks at three categories: electoral process (3 questions); political pluralism and participation (4); and functioning of government (3). The assessment of civil liberties includes four categories: freedom of expression and belief (4); associational and organizational rights (4); rule of law (4); and personal autonomy and individual rights (4). The inverse of the index is graphed for illustrative purposes. For details on the survey methodology, see <http://www.freedomhouse.org>.
10. This refers to EU15, that is, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the United Kingdom.

11. According to UNDP (2004) electoral democracy refers to the existence of free, competitive and institutionalized elections and rules and procedures for forming and running a government, as the essential components of democracy and those which comprise its most basic sphere. But democracy is not limited to this realm either in terms of its reach or range of action.
12. Falleti (2004) notes that the shift in the balance of power between government levels is highly dependent on the sequence in which administrative, fiscal and political decentralization is carried out.

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4. Reflections on two decades of social-spending decentralization

**José Roberto Afonso, Sulamis Dain,
Vivian Almeida, Kleber Castro and
Ana Cecília Faveret**

1 INTRODUCTION

The literature on federalism often evokes an association between redemocratization and decentralization, in which the consolidation of democracy is associated with a strengthening of federalism and a trend towards administrative, political and fiscal decentralization (Souza, 1999). The fact that this is driven by the need to provide resources and supply better-quality public services, makes analysis of the distribution of social spending highly relevant. Accordingly, the aim of this chapter is to analyze the trend of social spending in Latin America.¹

Several Latin American countries have been pursuing an intensive process of fiscal decentralization over the last two decades; and, at the same time, almost the entire region has made changes to its social policies. These two processes reflect, first, the desire to generate allocation efficiency gains, which have an impact on expanding the decision-making, fiscal, and financial autonomy of local governments; and, second, the desire to strengthen democracy. The latter has had repercussions on social policy actions and services, generating broader coverage and higher monetary benefits, together with improved access, expansion of coverage, and the decentralization of jurisdictions and resources for service provision.

In some countries, decentralization was seen as a way to resolve institutional problems caused by a loss of resources and the ability of federal governments to finance social policies and restructure service provision, while at the same time adapting to the growing importance of local areas in federative resource sharing and autonomous governance.

Besides this, the desire to increase equity and allocation efficiency has inspired numerous attempts to organize the providers and financiers of services, with a view to improving the balance and match between supply

and demand. Moves have also been made to restrict the scope of decentralized social policies, which, in many cases, become associated with policies to reduce poverty and guarantee minimum benefit packages for the destitute. In that context, a thorough review of the concept of universalism is unfolding, as universal health and education policies tend to give way to targeted policies.

Neither decentralization nor social policy reforms have followed the same model in all countries, since the problems, needs and previous institutional history, along with concepts and values, are different in each society. Nonetheless, it is possible to analyze social policy decentralization in selected Latin American countries by focusing on specific issues, such as: (a) an evaluation of the relation between social expenditure and fiscal policy; (b) a review of the impact of social policy decentralization on poverty and income distribution; and lastly, (c) an attempt to identify trends in the impacts of decentralization, specifically on policies such as health, education and social assistance.

The complexity of social policy decentralization processes is reflected in the diversity of approaches to the topic. In an attempt to clarify the distribution of social spending and the behavior of the corresponding investments in Latin American countries, this chapter is organized as follows. Section 2 outlines perspectives and approaches in the current debate on social-spending decentralization in the region. Section 3 discusses the rationale of fiscal decentralization and its relation to social spending, in a methodological approach. Section 4 looks at the global context. Section 5 analyzes the trend of social spending in Latin America, both total and by sector. Section 6 characterizes and evaluates the public policies of selected countries. Finally, Section 7 sets out the main conclusions of the study.

2 THE CURRENT DEBATE: PERSPECTIVES AND APPROACHES

There are numerous arguments to justify the existence of decentralization. First, the fiscal perspective of decentralization focuses on the transfer or devolution of the federal government's taxation and spending powers to subnational governments (Ter-Minassian, 1997; de Mello, 2000). Motivations for decentralization include allocation efficiency gains and cost reduction (economic, administrative, and managerial), in which decentralization is seen as a response by the various levels of government (principal-agent) to incentives for efficient and cost-effective service delivery (de Mello, 2004).² This devolution depends on the circumstances and specific design of the policies in question. Thus, central government should

remain at the forefront of redistributive policies and provide intergovernmental transfers to mitigate differences in average income levels between subnational units, instead of granting tax breaks and transfers to individuals (McLure and Martinez-Vazquez, 2000, in de Mello, 2004).

These observations give rise to a distinction between classical social protection policies, of the social insurance and assistance type, which pay monetary benefits and thus do not require decentralization; and those involving actions and services of varying complexity requiring universal coverage, such as health and education, which are suited to decentralization and burden sharing between the different spheres of government.

Other authors stress efficiency, decision-making transparency, and sensitivity to demand (Shah, 1998), along with greater representation and social participation. To some extent, countries that have recently emerged from dictatorships, such as Brazil, have clearly perceived a link between centralization with authoritarianism, or, conversely, between decentralization and redemocratization (Dain and Vianna, 1989).

Analysts have identified various forms of decentralization formats giving different degrees of autonomy to local entities, such as deconcentration, devolution and non-centralization (Finot, 1998). This is true both for federative experiences (Watts, 1996), and for unitary states (de Mello, 2004).

Privatization, when part of processes to separate the provision and production of public policy services, and public regulation, also encompasses the decentralization trend considered here (Medici, 2005) and characterizes the 'non-state public' sphere (Afonso, 2007). Box 4.1 examines public and private services in Brazil's single health system.

In addition, the decentralization process requires knowledge of the diversity of institutional frameworks currently prevailing in the continent, along with differences in economic and social conditions; the existence of state bureaucracies able to formulate and implement policies at the local government levels; and, in the case of federations, the capacity to mobilize internally generated tax revenues, in addition to transfers received from higher levels of government. Analysts aware of these differences have highlighted the difficulty of evaluating decentralization processes, both from the standpoint of using efficiency and efficacy indicators, and in terms of the equity of outcomes. They also draw attention to the complex configuration of cause-and-effect relations, in the framework of an analysis of decentralization confined to intergovernmental fiscal relations (de Mello, 2004).

Despite the logical possibility of constructing a system of decentralization indicators, many of the results achieved stem from policy design rather than from the level of decentralization, and its repercussions on

BOX 4.1 PUBLIC AND PRIVATE SERVICES IN BRAZIL'S SINGLE HEALTH SYSTEM

In Brazil, the process of building a single and decentralized command structure for health policy over the last decade has strengthened its state dimension, since funding was transferred to subnational governments endowed with a network of publicly owned services. At the same time, however, it involved service production by the private network. This shows that it is possible to combine public funding, universal access and improved management with autonomous provision of services, whether state or private, or both (Dain, 2000).

In countries that have opted to outsource health services, both the public and private sectors have operated management mechanisms that are typical of competition, such as the adoption of incentive systems or performance-based contracting. These performance-inducing mechanisms have been applied both to the services provided and to human resource policy (*ibid.*).

A recent trend in the intensification of decentralization patterns for many countries, some of them in Latin America, involves significant change in federative systems, with clear rules on the distribution of tax and spending powers, and substantial gains in autonomy for local governments (Afonso and Lobo, 1996).

Although the federative system is predominantly based on the relationship between federal and state governments, municipal authorities have also gained ground in recent years, either as executors of public policies via the delegation and deconcentration of state power, or by being defined as federative entities, with full autonomy.

The dilemmas and conflicts are manifold. First and foremost, they are exacerbated where fiscal and management autonomy is combined with a hierarchical decentralization of services, the organization of networks and role differences between local governments based on population size and infrastructure endowments.

Brazil's single health system provides a good example of this, where the ability to take action depends on a complex vertical and horizontal interaction between political actors and managers. Excessive municipalization, to the detriment of command and control exercised at the state government level, as is the case in

Canada and Spain, makes the process of reaching agreement between government entities in Brazil more difficult and complex; and it makes federal incentives to adhere to national and universal policies less effective (Dain, 2007).

The challenge of responding to the tension between the objectives of social cohesion and conserving fiscal sustainability (Cetrángolo, 2007) results in various solutions being adopted by each of the countries analyzed. From the social cohesion standpoint, inequality, heterogeneity and fragmentation, more than poverty, increase the difficulty of engaging various 'clienteles' around common goals (Dain, 2007).

reducing aggregate expenditure (*ibid.*). Thus, the emphasis on evaluating the decentralization of specific sector policies is justified (Cetrángolo and Gatto, 2009), as an integral part of the analytical framework underlying decentralization processes. Given the diversity of possible responses to the pattern of reforms described above, several questions can be posed:

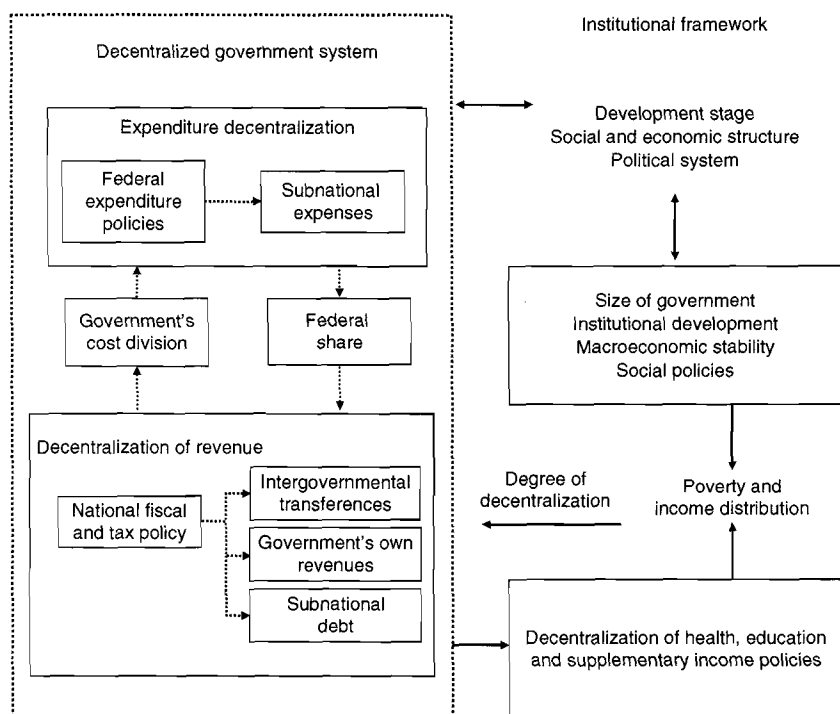
1. Is it possible to identify a unique set of advantages and disadvantages associated with processes and levels of public service decentralization?
2. Do such advantages and disadvantages vary with the nature of the policies, such that decentralization is advisable where geography is the central pillar of the organization of actions and services?
3. From a comparative standpoint, apart from measuring the degree of decentralization or a range of countries through indicators, what other analytical elements should be considered within the principle of comparability? What elements, if considered, make national experiences comparable?
4. Is a corollary of public policy decentralization the strengthening of local government power and decision-making autonomy, thus tending to strengthen and create federative structures? Alternatively, could decentralization be reduced to merely a technical-administrative, and therefore, 'de-politicized' requirement?
5. Might the political and fiscal model of federative intergovernmental relations be better suited, than unitary states, to the adoption of new systems for financing and delivering autonomous, efficient and effective services?

None of these questions has an easy answer; and each requires a set of highly complex specifications. Nonetheless, based on these questions,

the study of decentralization clearly extends beyond its technical–functional and fiscal dimensions. To respond, albeit incompletely, to the numerous issues raised by the topic, the next section will consider the logical framework of the study, in an attempt to explicate the rationale of decentralization processes.

3 METHODOLOGICAL CONSIDERATIONS

Thus far we have considered possible relations between decentralization and federalism and, almost as a corollary, concentration and the unitary state. To explain the relations between these mechanisms, this section will present the underlying rationale of fiscal decentralization and its relation to social public spending.³ Accordingly, Figure 4.1 seeks to schematize that interface between fiscal decentralization, federalism (not necessarily)



Source: Adapted from Martinez-Vazquez and Sepulveda (2009).

Figure 4.1 Fiscal and social-spending decentralization

and social policies, in which one impacts the other. This draws heavily on a similar scheme presented by Jorge Martínez-Vázquez and Cristian Sepúlveda, in a presentation entitled 'The consequences of fiscal decentralization on poverty and inequality', given at the international conference on 'The Political and Economic Consequences of Decentralization', held in Santiago de Compostela, Spain, in November 2009.

Figure 4.1 shows that the approach adopted is grounded in national fiscal and tax policy, intergovernmental fiscal relations (distribution of taxation powers, revenue sharing and the distribution of government responsibilities), national expenditure policies and their subnational counterparts, with the respective incentives for decentralization. These dimensions are conditioned by the institutional framework, with its political and infrastructural determinants, and macroeconomic and social policies as a backdrop.

A conceptual reference respects the distribution of powers to implement social policies between spheres of government (less so in terms of policy formulation) and, consequently, responsibility for implementing public expenditure in the social area. It cannot be overstated that, given its nature, expenditure that has national externalities should be the preserve of central government. This is typical of benefits such as social insurance or assistance (unemployment insurance, income transfers for poor families, and support for children, the elderly, and the disabled), the entitlement to which should be guaranteed equally for all inhabitants of the different parts of national territory; just as the monetary amount also needs to be paid equally to all beneficiaries, to avoid triggering migrations to gain advantages from the benefit.

Another case involves actions and service provision that can be transferred to government units that are closer to the beneficiary population, such as education and health; or typically local actions, such as housing and organization, where subnational government units can be held accountable for their implementation.

That distinction is also reflected in methods of financing. Social expenditures financed through specific contributions (typical of social insurance) also tend to be organized and commanded by central government, since payroll taxation through contributions is an exclusive competency of that sphere (even in the specific case of Brazil, where contributions also impinge on invoicing and profits, it is also the preserve of the federal government). Note that, despite attempting to copy the welfare state based on the European-style 'labor society', Latin America suffers from a structural deficiency: lower contributory coverage which, in most countries in the region, worsened further between 1990 and 2002 (Jiménez, 2006b).

Universal programs, such as education and health, tend to be financed

out of the budget as a whole and, as such, are more likely to be candidates for decentralization. In this case, as many programs have been transferred to intermediate and local governments over the last two decades in Latin America, it has also been common to assign part of the new or additional resources transferred from the central government to those programs. This usually requires intermediate government spheres (when these exist) and local ones, to use a percentage of what they raise directly (in taxes, for example), and a percentage of what they receive in revenue sharing from higher levels of government, to finance an area as a whole (such as maintenance of the education or health system, as a form of block grants), or even specific programs (such as when a specific portion is reserved for basic or secondary education, or for hospital attendance or health surveillance).

Another way to differentiate the decentralization of social spending not only encompasses the action or social service that was allocated to subnational governments, but also includes how these are financed. Note that Latin American social-spending decentralization processes have usually been accompanied by some of these possibilities⁴ – transfer of power to raise taxes directly; an increase in freely usable transfers, generally arising from regular and pre-established sharing in national or regional tax revenues; the ad hoc granting of negotiated transfers, with limited periodicity and objectives, and even financing, targeted on investment projects. Nonetheless, no evidence has been found of a relation between the degree of decentralization and the stage of economic development and social welfare (Cetrángolo, 2007).

Another key consideration for this study concerns methodological aspects of decentralized social public spending statistics, the analysis of which is severely limited by the difficulty of obtaining consistent and up-to-date statistics on same variables for different countries.

While this problem has to be faced even in a simple international comparison, it is more serious in the Latin American case, since the region does not have a common statistical system or base, particularly for public finances – unlike the European Union, which constitutes a common bloc, or even in the case of the OECD, which obtains standardized data from its members. Regarding global statistics from multilateral organizations, however, these barely manage to break down general government spending by sphere of government, still less cross-reference with their functions and programs. The same type of limitation applies to ECLAC, despite its huge and growing effort to better monitor and report on the situation of the region.⁵

Although there is no consistent and comparable statistical base, it should always be remembered that social public spending as a whole encompasses different concepts with very different rationales; and differentiated

standards can be found even within each expenditure category. Education is the best example of how such diversity can be expressed in the federative division of tasks, since it is common for the public school network providing basic education to belong to local governments, often at the intermediate level, while the public university network is directly operated by central government.

Having raised these methodological issues, our next step, with a continent-wide focus, is to relate the trend of social spending in Latin America to the rationale of decentralization and resource distribution, and then analyze social policies at the sectoral level.

4 THE GLOBAL CONTEXT

Despite the succession of international economic crises that have buffeted the world since the early 1990s, Latin American countries have maintained a respectable growth trend in social public spending, which rose from a level of 12.4 percent of GDP in 1990 to around 17.9 percent in 2007. Apart from increasing significantly, social public spending outpaced GDP in the region in proportional terms. As noted by Castro et al. (2003), more than a simple indicator analysis, the trend of social public spending expresses a (albeit imprecise and approximate) way of measuring public action in the social areas, which ultimately aims to promote the population's well-being. To be precise, when we compare public expenditure between different countries and different points in time, we are really comparing the actions taken by governments in each country to promote the quality of life of their inhabitants.

The trend prevailing at the beginning and end of the 1990s – in which the variation in social public spending became decoupled from GDP growth – was restored in the late 2000s.

Another way to analyze the evolution and verify the growth trend of social public spending is to evaluate this indicator in per capita terms.

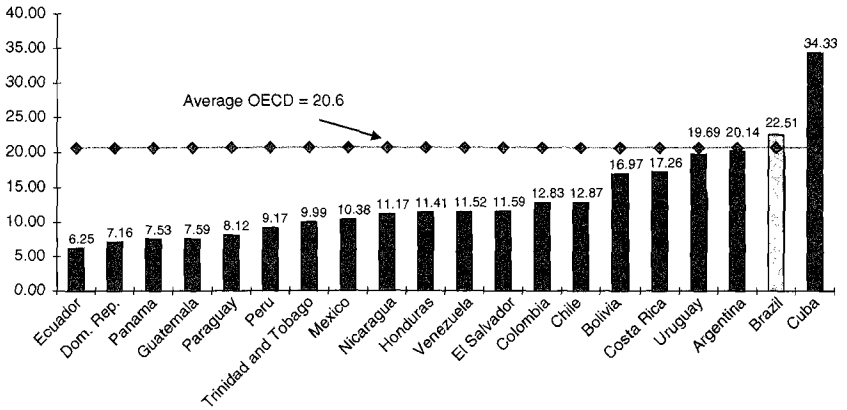
On average, Latin American public spending in the social sectors amounted to roughly US\$318 per person in 1990–91, and had risen to US\$812 per person by 2008 (at constant 2000 prices) – roughly 150 percent growth over the period. Even countries with social spending already above the Latin American average, such as Argentina, Uruguay, Cuba and Brazil, posted significant growth over the last few years, maintaining their positions as the largest welfare states in Latin America. Despite the substantial increase in both absolute and per capita terms, the performance of social public spending is harder to identify when considering total public expenditure. Despite rapid growth between 1990 and 2007, social

public spending remained virtually unchanged relatively at just under 30 percent of GDP.⁶ Given the erratic performance of total expenditure and the regularity of growth in social spending, the ratio between these two items (social public spending/total public spending) rose substantially between the start of the 1990s and 2007. While in the first year of the series the social area accounted for 44 percent of total public spending, by 2007 the proportion had risen to 61 percent.

Another mode of analysis is by comparison with other regions. Initially, the region as a whole can be compared with other world blocs (Clements et al., 2007) using data for 2004, which show general government spending at 12.7 percent of GDP in the social area in Latin America, above the equivalent figure for emerging Asia (8.4 percent) and Mid-North Africa (9.1 percent), but lower than in Eastern Europe (22.8 percent) and way below the 32.6 percent average among OECD member countries.⁷ Breaking down expenditure by segment, social protection was the key component for defining the size of total expenditure and the difference between regions – Latin American countries (5.4 percent of GDP) spent more than Asian and African nations, but just one-third of the average level in rich countries. In relation to the latter, the gap was smaller in the case of education – expenditure in Latin American countries (4.2 percent) was two-thirds of the OECD level; but it was wider in the health sector, where expenditure in the region (2.6 percent) is less than 40 percent what rich countries spend.

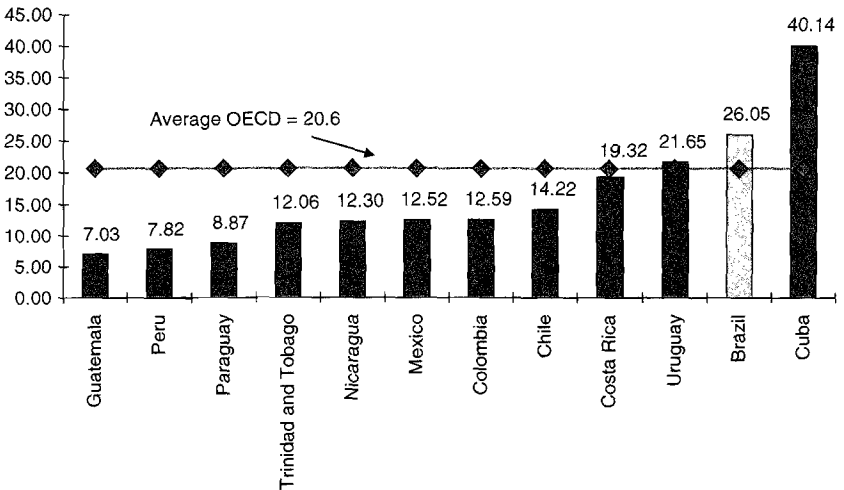
By breaking down Latin American expenditure by country, it is possible to attempt a comparison against long-term average spending, taking a restrictive definition and using OECD statistics.⁸ Figures 4.2 and 4.3 show social public spending by the countries of the region in 2005 and 2008. The figures evaluate the recent trend of social public spending in Latin America in 2005 and 2008, using the OECD average to 2005 (20.6 percent of GDP) as a benchmark. Expenditure in the region displays huge dispersion. Apart from the special case of Cuba, the Southern Cone countries tend to spend more in the social area than other Latin and Caribbean countries, although Costa Rica and the Plurinational State of Bolivia seem to be exceptions. Even using a stricter concept and a long-term average for the OECD, spending in most countries is far below the level in rich countries. Moreover, in the case of those with higher spending levels (the Southern Cone) the distance from the level of rich-country spending is less, but the gap is still enormous considering other results of the provision of basic social services, or even human development indicators.

Nonetheless, the importance of social public spending for increasing the population's well-being cannot be denied. Characterized by high levels of poverty and social inequality, Latin American countries increasingly need



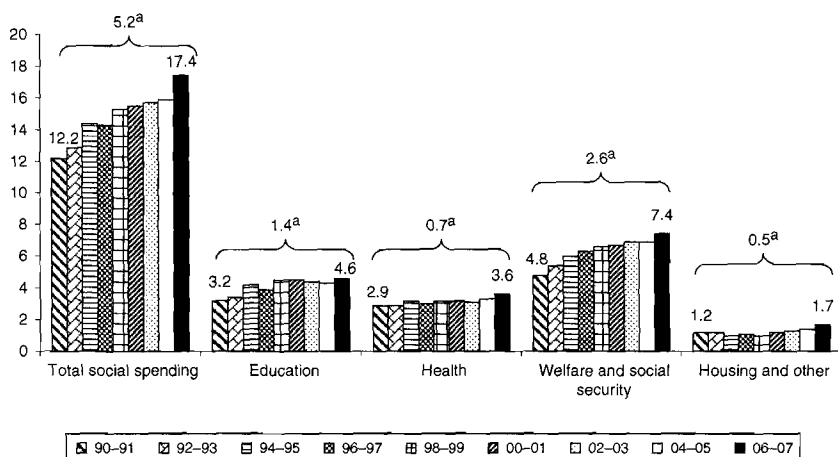
Sources: ECLAC, CEPALSTAT (<http://www.cepal.org/estadisticas/default.asp?idioma=IN>) and OECD, Social Expenditure Database (SOCX) (http://www.oecd.org/document/9/0,3343,en_2649_34637_38141385_1_1_1_1,00.html, 2010).

Figure 4.2 Latin America and the Caribbean: social public spending compared to the OECD, 2005 (% of GDP)



Sources: ECLAC, CEPALSTAT (<http://www.cepal.org/estadisticas/default.asp?idioma=IN>) and OECD, Social Expenditure Database (SOCX) (http://www.oecd.org/document/9/0,3343,en_2649_34637_38141385_1_1_1_1,00.html, 2010).

Figure 4.3 Latin America and the Caribbean: social public spending compared to the OECD, 2008 (% of GDP)



Note: ^a Growth of expenditure in percentage points, between 1990–91 and 2006–07.

Source: ECLAC (2010a).

Figure 4.4 Latin America and the Caribbean (21 countries): trend of social public spending by sector, 1990/1991 and 2008 (% of GDP)

investments in the social area to promote human development; and in that context, the trend of social spending in the region raises a natural question: which sectors have gained most with the increases in social public spending? To answer, a figure extracted from ‘Social Panorama of Latin America 2009’ (ECLAC, 2009) will again be used.

Most of the growth of social public spending in Latin America during the period under analysis was based on targeted programs, such as welfare and social security assistance, as shown in Figure 4.4. Between 1990 and 2007, Latin American social public spending grew by 5.2 percentage points of GDP, with 2.6 percentage points arising exclusively from social security and the rest from education (1.4 percentage points) and health (0.7 percentage points).

A short-term analysis (1996–2005) shows that targeting remains quite intense, since social security and welfare are the main drivers of the growth of social public spending in the period.

Despite representing considerable progress in terms of public policies, the growth of expenditure on social security shows, on the one hand, a targeted effort to meet specific needs, such as social assistance; and, on the other, investments in services that involve the taxpayer directly, such as social insurance. Compared to expenses that are often universal services in

the countries of the region, such as health and education, there is a considerable mismatch between investments in these sectors. This does not mean that investments in social security are not important, because they generate social progress by guaranteeing rights for people who, for various reasons, do not participate in formal labor market mechanisms (retirement, disability, among others). What we want to show is that the universal services that largely underpin equal opportunities, such as health and education, have grown less than social security in terms of public spending.

5 THE SECTOR CONTEXT

Although Latin America encompasses a group of countries with similar cultural, ethnic, political, social and economic characteristics, differences in systems of government across the subcontinent, and particularly the distribution of resources, are striking. Thus, to take better account of the differences between federative countries and unitary states pursuing a decentralization process, the study will consider selected social policies for Argentina, Brazil and Mexico (federations), on the one hand, and Chile and Colombia (unitary states, engaged in significant decentralization processes), on the other.

Before starting this comparative section, a number of disclaimers should be made. As emphasized throughout the chapter, the process of comparing social expenditure, and even its conceptualization, is not a trivial matter. To the extent that social spending can be considered a measure of government efforts to provide well-being to their populations, an initial exercise involves evaluating the real needs of each population. For example, education, which is considered to be a universal expense aimed at reducing inequalities, could require widely differing efforts from country to country. This is because, with different levels (early childhood education, primary and secondary school, and higher education), there are different returns for individuals. A society that mainly invests in higher education, while neglecting basic education, is actually making individual opportunities less equal instead of reducing inequities. This discussion can be extended to expenditure on health, social insurance, social security and all other elements of social public spending. In this chapter, however, we shall confine ourselves to the trend of indicators and the aggregate analyses of social spending.

To perform this comparison, public expenditure will be analyzed in segments, using the rationale presented in Figure 4.4. Initially, total expenditure and its evolution in the selected countries will be shown, including per capita spending, and then the various sectors of the social area that

comprise social public spending will be analyzed separately. These are: (i) social security and assistance; (ii) health; (iii) education; and (iv) housing and other. The last three segments are those in which decentralization is occurring most rapidly in Latin America, as in the rest of the world; this chapter will present the analysis through boxes that individually highlight the most significant characteristics of that process and note key experiences in a number of countries of the region. As Brazil is the country that has made most progress in decentralization, the state of the art in terms of size of social expenditure and its federative division is presented next (Box 4.2).

Social Spending

Except for Chile, the five selected countries and the Latin American average displayed a rising trend in social spending as a percentage of GDP between 1990 and 2007. Considering the Chilean case in slightly more detail, there was a slow growth of social spending starting in 1996, which was reversed in 2003, such that by the end of the series, the level of social public spending was at the same level as at the start. In the other four countries social spending grew to a greater or lesser degree. Brazil led the way with social public spending almost 25 percent of GDP in 2007, 10 GDP percentage points more than at the start of the 1990s. (Figure 4.5.)

Mexico and Colombia show very similar results in a point-to-point comparison, with spending of just over 5 percent of GDP in 1990, trending up to roughly 10 percent in 2007. The difference in the two is in their growth paths: while Colombia promoted very intensive spending growth in the first six years before stabilizing, Mexico grew more steadily throughout the series, but growth was more restrained and regular. The case of Argentina also deserves comment. Despite being the country with the second-largest spending and also having progressed in terms of expenditure growth, its social spending grew more slowly than that of its neighboring countries. Throughout the series there were fluctuations in social spending, which in 2006 and 2007 were well above 20 percent of GDP. Nonetheless, this was not enough to lose its status as the country with the largest expenditure in the area in percentage of GDP.

When the focus of the analysis shifts from percentage of GDP to per capita spending, the results of the countries are mutually very similar, except in the case of Argentina. Unlike what happened in the case of total spending, this country shows the most steeply rising trend of the five selected countries. Whereas in 1990, average spending per person was more than US\$1,000 (at 2000 prices), in 2007 it had surpassed US\$2,000 (in 2000 prices) despite the sharp fall that occurred in 2002–03. GDP

BOX 4.2 DECENTRALIZATION OF BRAZILIAN PUBLIC SPENDING IN 2009

Brazil is a federation, in fact and by law, and that gives its decentralization experience particular relevance – it was motivated much more by political decisions taken during the drafting of the 1988 Constitution, which marked the country's return to democracy and promoted a vigorous decentralization of tax revenue, particularly towards local governments. This means that the decentralization process was not mainly the result of a deliberate plan, but was imposed by the loss of federal government tax revenue, which required its reduction in general government. But a decade and a half ago, general government returned to active social policies. Initially, it adopted deliberate decentralization processes, in terms of basic education and the national health system. Recently, it has prioritized consolidating income transfer programs and expanding social insurance schemes.

Publication of the national consolidation of balance sheets for all governments to 2009¹ makes it possible to produce an up-to-date and detailed table of the state of the art, regarding both the size of the country's public expenditure and its degree of federative division – from the standpoint of the government that actually incurred the expense, but not necessarily the entity that financed it (estimates were made to provide the breakdown by government function).

In 2009, the level of primary and social public spending reached significant levels in Brazil, close to those of the advanced economies.

Total general government primary expenditure amounted to 37 percent of GDP (if interest and debt service are included, it would approach 40 percent), just half of which is executed by the federal government, 30 percent by state governments, and 20 percent by the municipal governments.

According to the same accounts consolidation, expenditure on social programs would amount to 24.7 percent of GDP using a broader definition of social spending. Its relative importance is even greater when one considers that it accounts for two-thirds of general government primary expenditure, and represents around US\$2,300 per inhabitant. Its level of decentralization is not far from the global standard: federal government executed 52 percent of expenditure, with 27 percent being executed by state governments and 20 percent by municipal governments.

Consolidated government in 2009: expenditure by function and federative division (direct execution)

Expenditure/ functions	% of GDP	% of function			Amount	Share
	Total	Union	States	Municipalities	Total	R\$/hab %
= Fiscal	36.99	49.5	30.2	20.3	6,071	100
Pension saving	11.45	80.5	15.6	3.9	100	1,879 31.0
Assistance	1.33	75.1	7.7	17.2	100	219 3.6
Labor	0.98	94.1	3.4	2.6	100	160 2.6
= <i>protection</i>	13.76	81.0	14.0	5.1	100	2,258 37.2
Education	4.54	18.4	38.2	43.4	100	744 12.3
Health	3.73	15.3	35.9	48.8	100	613 10.1
Sanitation	0.32	0.3	30.7	69.0	100	53 0.9
Housing	0.15	0.6	40.6	58.8	100	25 0.4
= <i>universal</i>	8.75	16.1	37.0	46.9	100	1,436 23.6
Safety/ security	1.47	13.0	82.8	4.2	100	241 4.0
Related (*)	0.71	24.1	46.3	29.7	100	116 1.9
= Social	24.68	52.3	27.2	20.6	100	4,051 66.7
= <i>other</i> <i>authorities</i>	2.48	39.3	50.6	10.1	100	407 6.7
= others	9.82	45.2	32.6	22.2	100	1,612 26.6

Note: *Environmental management, culture, sports and leisure, citizens' rights.

Source: Prepared by the author on the basis of the 2009 balance sheet consolidation, published by the Treasury, 3 August 2010.

Those aggregate results conceal quite varied sizes, both in terms of the nature, and (particularly) in relation to the responsibility of each sphere of government.

A breakdown of social spending by type shows that, in relation to GDP in 2009 13.8 percent was accounted for by social protection functions, 8.7 percent by universal services, and 2.2 percent by related programs (such as public safety, leisure, sport, culture). Excluding the last category, under the stricter definition and possibly better for the purposes of international comparison, social spending is on the order of 22.5 percent of GDP (in line with the ECLAC statistics mentioned above). A comparison of the other two shows that targeted programs absorb nearly 1.6 times

more resources than those considered universal, and it is precisely those that are essentially centralized.²

The social protection bloc is led by social insurance (11.5 percent of GDP) which alone absorbs 31.0 percent of Brazilian primary expenditure. As would be expected, 81.0 percent of expenditure is undertaken by the central government, because that level includes the general regime of retirement and pensions, including workers from the private sector (the subnational share of expenditure is explained by the income paid to retired civil servants, and pensioners). Labor (1.0 percent of GDP) includes unemployment insurance among other programs, and for that reason displays the highest level of centralization (94 percent) among social spending. Social assistance has expanded (1.2 percent of GDP), and central government accounts for three-quarters of this, following the consolidation and expansion of the *Bolsa Família* income transfer program.

Universal programs consist mainly of education (4.5 percent of GDP) and health (3.7 percent) because public expenditure on sanitation and housing is very low (0.32 and 0.15 percent, respectively). Decentralization predominates here. Although the federal universities are the largest in the country, the large public basic education network which is increasingly decentralized implies that municipalities account for 43 percent of social spending on education, followed by 38 percent by the states, and just 18 percent by the federal government. In the health sector, although the central level provides most of the financing, expenditure is increasingly decided on by other spheres of government; and, surprisingly, local government alone accounts for half of all spending, compared to 36 percent at the state level, and 15 percent at the federal level. The municipal predominance is also significant in the small amount spent on sanitation and housing, with virtually no expenditure executed by the federal government (although it finances part of that spending).

Although Brazil has a volume of non-social public spending, by the government as a whole, way above the level in other Latin American countries, the federative composition of that spending is not very different from the pattern seen in the other countries.

Social protection is expenditure made mainly by the central sphere of government, especially if there is no special pension regime for civil servants, as there is in the Brazilian case but not

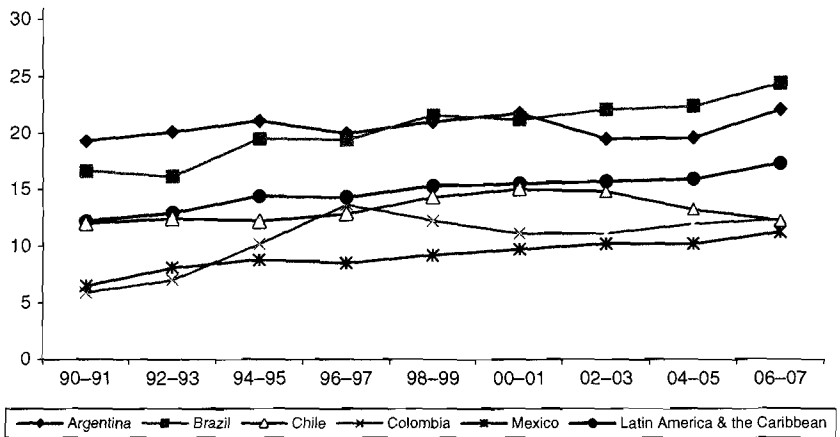
in many other countries. A degree of decentralization is expected only in the case of social assistance when it involves actions (such as shelter for the homeless) that have lost ground in relation to the benefits of income transfer programs.

In a totally different federative scenario, expenses on so-called universal or structural programs, such as education, health, low-income housing and sanitation, tend to be decentralized, with an intensity that is greater to the extent that the country is organized as a federation – in other words, a unitary state that opted for an intensive program of fiscal decentralization. The major difference between Brazil and other decentralized Latin American countries is possibly the importance of municipal governments, which is growing and already a majority in that case.³ In the other countries, the intermediate government spheres must predominate – see the discussion of the role of municipalities in the region's social policies in Cetrángolo (2006).

Notes:

1. The balance sheets of all government entities are consolidated by the Ministry of Finance and published on the National Treasury portal at: http://www.tesouro.fazenda.gov.br/hp/est_consol_geral.asp. It is important to note that publication merely presents a summary of the amounts reported by its balance sheet, without any critical evaluation. For the purposes of this analysis, intergovernmental transfers were eliminated. This means that the standpoint of this calculation is that of the government responsible for direct expenditure execution, for which reason only the expenses actually undertaken by that government level are calculated (moreover, such transfers recorded as expenditure when granted amounted to 8.4% of GDP, but revenue actually collected was 8.1%).
2. The priority for expenditure on protection in relation to universal services can also be seen in terms of the trend in Brazil. It is interesting to note that, in comparison, a similar survey based on the consolidation of government balance sheets for 2004 found an increase of 1.04 percentage points of GDP in expenditure on the three functions identified as social protection (pensions, assistance and labor five years ago spent 11.07%, 0.65% and 1% of GDP, respectively), compared to an increase of just 0.53 percentage points of GDP in the group encompassing the four so-called universal functions (education, health, sanitation and housing spent 4.36%, 3.46%, 0.30%, and 0.12% of GDP, respectively).
3. Comparing the federative division of by Brazilian consolidated government expenditure in 2009 with that of 2004, there is a clear increase in the local share in the two main universal programs: health, which jumped from 41% to 49% of national expenditure, and education from 35% to 43%, in both cases, compared to reduction in the share of the federal and state levels.

Source: Prepared by the author.



Note: Latin America and the Caribbean is defined as a weighted average of the countries. Includes estimates for years where data on certain countries are missing. Colombia: Preliminary figures; from 2000 onwards from the Ministry of Finance not comparable with earlier years. The previous series was obtained from the National Planning Department and the National Statistical Administrative Department (DANE).

Source: ECLAC (2009).

Figure 4.5 Latin America (selected countries and Latin America and the Caribbean): social public spending (% of GDP)

per capita spending in relation to other countries should be highlighted. Compared, for example, to Brazil, the country with the second highest level of per capita spending, Argentina has almost double Brazil's level of social spending per capita. More accentuated still, is the distance in relation to the continental average.

In terms of the rate of growth of per capita social spending, the other four countries all behaved very similarly to the Latin American average. Only Brazil displayed a slightly faster growth at the end of the series. In terms of the volume of spending through time, Brazil and Colombia stand out for opposite reasons. Brazil, despite being close to the average, always had its per capita social spending above the Latin American average, reaching a level of roughly US\$1,000 (at 2000 prices) in 2007. In contrast, Colombia displayed a level clearly below the continent average throughout the time series, barely surpassing US\$500 per capita (at 2000 prices).

The next step is to analyze the trend of social spending separately for each sector mentioned at the start of this section. Before that, however, it is worth noting, in relation to the purpose of this analysis, that the performance of social spending as a whole was matched by increases in

the level of expenditure undertaken by subnational governments in the region. Jiménez (2006a) compared spending by subnational governments as a proportion of GDP from the second half of the 1980s until the first half of the first decade of the twenty-first century; apart from Brazil, he found increases in seven countries of the region (Argentina, Bolivia, Chile, Colombia, Costa Rica, Mexico and Paraguay) – led by a 3.5 percent of GDP increase in the case of Argentina and also Mexico.

Although there is a lack of disaggregated and consistent data that would make it possible to prepare a matrix cross-referencing expenditure by nature and function and government program, there is evidence (to be discussed below, by expenditure blocs) that the greater presence of subnational spheres in Latin American governments over the last few years has been associated with better provision of social services. Nonetheless, if the progress in social spending and decentralization, in themselves, can be seen as positive from the standpoint of democratization of the region and traditional federalism ideas, by bringing service provision closer to the most benefited community, this could also pose new problems if the transfer of responsibility for spending to subnational levels of government were not matched in terms of financing capacity. If such a mismatch existed, it would not be long before problems of jurisdiction, efficiency and macroeconomic stability started to appear. There is thus a very full agenda of issues to be addressed by evaluations of the decentralization process in the region, for which, at least for those that can be done in the regional or continental sphere, the lack of a consistent and up-to-date statistical base needs to be overcome. This is a problem that cannot be overstated in this study.

Social Security and Assistance

As noted above, the expansion of social public spending in Latin America has been based on targeted social programs. Except for Chile, the analysis by country does not address this thesis. Brazil and Colombia, in particular, show very significant growth of spending on social security and assistance (which are typically targeted social expenses) throughout the 1990s and 2000s. Brazil, which in 1990 spent just over 8 percent of GDP on this type of social expenditure, in 2007 was close to 13 percent of GDP. Colombia posted even stronger growth, from around 2 percent of GDP at the start of the series to nearly 7 percent of GDP in 2007 – more than tripling expenditure on this type of policy. It is also worth noting that Brazil became the leader in this type of expenditure among the selected countries. In the mid-1990s, Brazilian expenditure on social security surpassed that of Argentina, and this trend has been maintained.

Mexico is the leading country in this sample. At the start of the series it had virtually no social security expenditure, but by the second half of the 2000s, its expenditure was around 2 percent of GDP. In Argentina, despite some growth in this type of targeted expenditure, the trend increase was very small, and can be better described as stability rather than growth. Chile alone reduced its targeted spending, reaching a level of just below 6 percent of GDP in 2007, compared to nearly 8 percent of GDP at the start of the 1990s.

In brief, on average, targeted social spending in Latin America and the Caribbean rose from around 5 percent of GDP at the start of the time series to nearly 8 percent by the end of the period (2006–07). This movement probably should also cause expenditure on security and social welfare to increase their weight on the budgets of the region's governments, reversing the gap seen from the structure of spending in advanced economies. Between 1970 and 2000, de Mello (2004) noted that this group consumed just 22 percent of central government expenditure, less than 5 percent of intermediate expenditure and under 3 percent of local expenditure, whereas the same proportion was significantly higher on average in the OECD (34, 13 and 15 percent by the respective government spheres). This also means that if this is a typically centralized form of expenditure, the tendency is more accentuated in Latin America than in the more advanced economies.

This gap between regions should have diminished after the turn of the century. There is no doubt that the most dynamic components of the recent trend of social spending in the region were social security and poverty reduction. In this case, it is worth noting that conditional transfer programs are now reaching significant proportions in some countries. According to Jiménez (2006a), the beneficiaries-to-population ratio reached 25 percent in Mexico (*Oportunidades*), 16 percent in Brazil (*Bolsa Familia*), 9 percent in Jamaica (*Avance*) and 4 percent in Colombia, with expenditure levels of around 0.3 percentage points of GDP in these four countries. Box 4.3 examines new issues that are arising for the federative organization of the region, in relation to a specific arrangement used by the formulation and execution of those new programs within the federal and local government spheres, which excludes the intermediate level, with the Brazilian case the most clear-cut example of this process.

Health

Along with expenditure on social security and assistance, public health expenditure, characterized as universal, has also grown since the early 1990s, but in a significantly smaller proportion. As an average for the

BOX 4.3 POVERTY REDUCTION AND FEDERALISM REVISITED

As a response to the structural problem of poverty and the adverse circumstances faced by emerging economies at the turn of the century, several initiatives were undertaken to create and expand income transfer programs.

In Latin America, the motivations were different, and so were the time periods; often more than one program was created in the same country and then consolidated; conditionality was a very common element, but the point that was always common was the design of the policy and implementation of expenditure directed by the central sphere of government. While the initiatives were welcome and, in principle, successful in reducing poverty, new issues were raised for the federative or decentralization debate because the relation between decentralization and the impact of public policies, particularly policy to reduce poverty and social inequalities was not always directly visible (Martinez-Vazquez and Sepulveda, 2009).

Here, again, the Brazilian case is emblematic.¹ The federal government rapidly became the main financier and direct executor of such programs, particularly after consolidating several of them in the *Bolsa Família* program. This led to a direct relation with beneficiaries (apart from that achieved within the general social insurance regime, in which local governments played a secondary role of maintaining *cadastres* (property registers) and monitoring the supported families, whereas state governments had no function – either coordination or evaluation).

In other countries, however, this change may have been even more radical than in Brazil and is causing changes in the federative pattern and even in the organization of states. The vast majority of federations follow a classical model formed by the union of member states; local government is a creation of each state. Thus, in these federative countries, in principle, central government does not deal directly with the local sphere. Brazil has always been an exception to that rule, however.

Progress with income transfer programs, particularly in a region with chronic poverty and inequality such as Latin America, is raising new challenges and important issues for federalism and fiscal decentralization that have not yet been analyzed and

responded to in the necessary depth. The basic issue is: what are the repercussions of the creation and expansion of social income transfer programs by central governments, for intergovernmental relations and for the federative division of resources and expenditure?

The challenge of making public services more efficient and effective requires greater attention to social policies – as Cetrángolo (2006, p. 25) warns, ‘When social programs involve local governments it is necessary to combat cronyism, generate adequate information and establish compensatory financing’.

Intergovernmental relations need to be rethought – in particular owing to the trend of central government to relate directly to the lower spheres of government, producing or even dispensing with interference from the intermediate level of government. The greatest concern is that such assistance programs lack integration with other social and regional development public policies, to make it possible to address the structural issue; and, in the medium or long term, with the acceleration of growth and job creation, welfare benefits could be reduced.

Note: 1. For a detailed analysis of this issue, see Afonso (2007).

continent, expenditure in this sector rose from 3 to 3.5 percent of GDP in 1990 and 2007.

Brazil is the country with the greatest growth in public health expenditure: in 2007, it reached a level of just over 4.5 percent of GDP, close to the Argentine level, whereas in 1990 it was slightly over 3 percent of GDP. Chile and Argentina, despite having different levels of health expenditure, displayed a relatively constant trend, of roughly 1 percent of GDP between one point in time and the other: whereas health expenditure in Chile rose from just under 2 percent of GDP to 3 percent, Argentina grew from just over 4 percent of GDP to around 5 percent.

Public health expenditure in Colombia and Mexico was atypical. In the first case, there was significant growth from 1990 to 1999, rising from 1 to 3 percent of GDP. Nonetheless, the subsequent period until 2003, saw a sharp fall to the level of 2 percent of GDP, before stabilizing at that level. In the second case, expenditure initially fell until 1997 (from 3 to nearly 2 percent of GDP), before slowly recovering to regain the initial level of 3 percent in 2007.

The decentralization of health and education expenditure is a typical

and well-established feature of the most advanced federative experiences in South America. Jiménez (2006a) reported that, in 2003, the subnational governments' shares of national expenditure in these two areas was 59 percent in Argentina, 52 percent in Bolivia (Plurinational State of), 50 percent in Brazil and 48 percent in Colombia (in the last two countries, only municipalities were counted). In a review of the composition of expenditure by nature in each of the three spheres of government in 1970 and 2000, de Mello (2004) showed that health accounted for 70 percent of federal expenditure in Latin American countries, compared to 9 percent among OECD governments, whereas the opposite was true of other government levels (at the intermediate government levels 14 percent compared to 90 percent, and in local government 8 percent compared to 11 percent, respectively). In other words, if the structure of expenditure in wealthy countries was taken as a paradigm, it would be possible to predict that health will lose ground in the central government budget in Latin America, while increasing its size among subnational governments. Box 4.4 discusses a number of characteristics of this process in the region, based on a literature review.

Education

Public expenditure on education is the only category, among the four types of social expenditure being analyzed, in which all five countries have made progress in the 1990–2007 period, despite highly fluctuating paths in some cases – particularly Brazil and Colombia.

Between 1990 and 2007, Argentina is the country that spent most public funds on education, rising from just over 3.5 percent of GDP in the first year of the series to just over 5 percent in the final year. These figures are very similar to those reported by Brazil, where expenditure was slightly lower than in Argentina in the respective years. Nonetheless, public expenditure on education throughout the 1990s was much more volatile in Brazil than in Argentina. Up to 2001, expenditure in Brazil rose and fell successively, before restabilizing. In the Argentine case, there was steady growth until 2003, when there was a fall, before resuming regular growth once again. The behavior of education expenditure in Argentina is similar to the Latin American average compared to Brazil, since it is characterized by a very smooth series without sudden changes.

Chile and Mexico are two other countries displaying a very smooth curve of public education expenditure, implying a steady rate of growth through time. Both countries start from a level of expenditure close to 2.5 percent of GDP at the beginning of the 1990s. Mexican expenditure grew rapidly until 1995, before stabilizing around 4 percent of GDP. In contrast, Chile's expenditure grew slowly but steadily until 2003, when it

BOX 4.4 HEALTH AND DECENTRALIZATION IN LATIN AMERICA

To a greater or lesser extent, each of the five countries selected to represent Latin America in this analysis displays a developed process of decentralization in its respective health system. This characteristic could be projected for the other Latin American countries and be classified as a common feature. This explanatory box reviews a number of Latin American health systems.

Argentina

From the standpoint of intergovernmental relations and decentralization, the Argentine health system has changed little since the 1990s.¹ According to Ugá and Santos (2007), 'although the Ministry of Health is the top authority, the provinces have autonomy to formulate and implement public health policies and are also responsible for service provision. In that system, the municipalities are responsible for implementing the programs and services within their jurisdictions, but municipal autonomy and responsibility are defined by each province. Under these conditions, the 1990s reform basically affected the social security and health system . . . and did not greatly alter the federative system in terms of inter-governmental relations' (Ugá and Santos, 2007, p. 542). Changes to the already highly decentralized system were marginal, as shown in the following table:

Number of public sector establishments, by level of dependency, 1980–1995

Year	National	Provincial	Municipal	Other official dependency	Total
1980	51 (1.1%)	3,507 (75.5%)	903 (19.4%)	187 (4.0%)	4,648 (100%)
1995	16 (0.2%)	4,628 (66.4%)	2003 (28.7%)	324 (4.6%)	6,971 (100%)

Source: Belmartino et al. (2001).

In simplified terms, the health actions of the Argentine public sector can be described as municipalities being responsible for basic health care for the population, with their actions being undertaken independently. Central government operates in the provinces through Health Ministry delegations supported by other agencies. The Ministry of Health and Social Assistance has decentralized agencies, which strengthens the network nature of the country's public health system (Piola and Cavalcante, 2004).

Colombia

The Colombian public health system has become more decentralized since the early 1990s, as a result of the regular transfer of central government powers to the municipalities, which now regulate the private and public agencies that participate in the system. Note that along with the transfer of competencies to regional governments, the 1990s reform also promoted a downsizing of the state's role in providing health services (privatization). A system was created 'of private insurance, financed by public and private funds, and consisting of private health insurance companies – *Entidades Promotoras de Salud* (EPS) – and private and public health service providers – *Instituciones Prestadoras de Servicios de Salud* (IPS) (public hospitals reorganized under the legal form of State social enterprises with private management tools)' (Ugá and Santos, 2007, p. 538).

One of the principles governing the Colombian health system since then has been public financing of private insurance for low-income population groups. In other words, there is targeting within the country's public health system, because only the target public has its expenses financed by the public sector. Even health expenditure, which, in principle, is a universal type of expense, involves means testing with access limited to specific population groups. Thus, as in most Latin American countries, social spending in Colombia is predominantly targeted; this aspect of health expenditure strengthens this situation even further.

Chile

The Chilean health system was decentralized earlier, starting in 2000, during the government of Ricardo Lagos: 'The Ministry of Health started to play a more regulatory role, leaving the health supervisors (*Superintendencias*) to undertake direct actions and

monitor private and public actions. To streamline the system and health units, mechanisms for decentralizing powers to the regional authorities and self-management of hospitals will be introduced in the ministry's work system' (Biasoto, 2006, p. 291).

Mexico

As in the Colombian case, Mexico also developed a health system with a high level of targeting. As part of the fiscal adjustment imposed on developing countries in the 1990s, the Mexican government prioritized 'specialization in the medical sphere in terms of public health, the aim of which was to ascertain the population's needs and meet demand by ensuring equilibrium between those needs and resources' (Almeida and Pêgo, 2002, cited by Ugá and Santos, 2007).

According to Merino (2003), 'two decentralization processes can be distinguished in Mexico. The first occurred during the 1980s in an attempt to decentralize the management of health service delivery. In that process, the management of several hospitals and other health services was transferred, and insurance and health institutions were integrated at the local level. Nonetheless, this process was identified with a deconcentration of functions rather than a decentralization process, since no policy formulation responsibility was transferred to the local level. The second decentralization process began in 1996, when it was presented as one of the key strategies of the health sector reform program of 1995–2000. The central pillar of that program consisted of reversing the excessive centralism of the health system and, consequently, the apparently inefficient resource allocation decisions: failure to specify the responsibilities of each level of government, excessive bureaucracy and inertia in decisions regarding the destination of expenditure between the states (Merino, 2003)' (Ugá and Santos, 2007, p. 540).

Brazil

According to data obtained by Afonso and Castro (2010), public health expenditure in Brazil has featured two contrasting trends since the introduction of the 1988 Constitution: first, from 1988 to 1997, greater centralization, with the Union accounting for one-fifth of expenditure in 1988, and one-half in 1997; second, from 1990 to 2008, greater decentralization, with subnational governments

raising their share of expenditure from just over 55 percent in 1998 to roughly 71.5 percent in 2008. A detailed explanation of the Brazilian health system is provided in Box 4.1.

Note: 1. One of the explanations for this process is the decentralization of health services in Argentina that occurred in 1978.

attained the level of 4 percent of GDP. Since then, expenditure declined until the end of the series, when education expenditure amounted to just over 3 percent of GDP.

Lastly, public expenditure on education in Colombia displayed slow growth in a point-to-point comparison: from 2.5 percent of GDP to roughly 3 percent, with rapid growth until 1998/99, followed by a subsequent decline, also rapid, until the end of the series.

While education expenditure was highly sensitive to the business cycle, it was also essentially decentralized, alongside health, as noted above – at the start of this decade, nearly half of expenditure was made by subnational governments in Argentina, Bolivia, Brazil and Colombia, according to Jiménez (2006a). But unlike the pattern described for health, if the structure of public expenditure in the advanced economies was a paradigm for Latin American countries, the recommendation would be to slightly expand further the municipalization of education but greatly reduce the space that the sector occupies in budgets at the intermediate government level and, in particular, the central level. This is because, according to de Mello (2004), between 1970 and 2000, education accounted for 17 percent of local expenditure in Latin American countries, compared to 19 percent in the OECD, while accounting for 26 percent in central government expenditure compared to 8 percent, and 36 percent of expenditure by intermediate government entities compared to 26 percent. A brief evaluation of that process based on specific bibliographic references on the subject is presented in Box 4.5.

Despite higher spending by all countries in the education sector (also a universal expense), the increase was less intensive than that of targeted expenditure such as social security. It is interesting to note that investments in health and education, which are a priori defensible as universal social-welfare-enhancing expenses, also have potential complementarities, particularly in federative and decentralized countries. In other words, as noted by de Mello and Pisu (2009), actions targeted on policy initiatives in the education area (health and welfare assistance), which seek complementarity in health care (education), can be made more effective by government action to promote social development.

BOX 4.5 EDUCATION AND DECENTRALIZATION IN LATIN AMERICA

Most Latin American countries currently have a decentralized education system. Di Gropello (1997) shows, for the five countries analyzed here (Argentina, Brazil, Chile, Colombia and Mexico), the periods in which there were changes in the responsibilities attributed to the different spheres of government. Chilean municipalities started to manage primary schools in 1981, whereas in Colombia the 1991 constitution made municipalities responsible for schools' physical infrastructure.

The Argentine education system started its decentralization process following the military dictatorship period, which began the process of transferring certain responsibilities to the provinces (Krawczyk and Rosar, 1999). According to Barreyro (2003), the decentralization process gathered pace under the Menem government (1989–99) when school administration passed directly to the country's 24 provinces.¹ 1978 and 1992 can be considered key years for the transfer of management responsibility from the central government to the provinces, in the case of primary and secondary schools, respectively (Di Gropello, 1997), even though the initial attempts at decentralization occurred during the government of Arturo Frondizi (1958–62) (Falleti, 2004). Furthermore, 1994 can be seen as a landmark year, because it was then that the Federal Education Act was signed, in which the central government undertook to transfer resources to the provinces to help finance education.

An interesting feature in the recent history of Argentine educational policies is the emergence of targeting within education expenses, which have typically been classified as universal. Throughout the 1990s, the Argentine government adopted programs that directed resources towards specific schools, leaving the others without those benefits. The funds in question could be used to buy materials, books and equipment; undertake works to repair and expand school facilities; award study scholarships; and finance specific pedagogical guidance (Barreyro, 2003). As the volume of targeted social spending in Argentina already outweighed its universal expenses, this feature of educational policy made targeting even more important in determining the country's social policies.

In Mexico, the process began in 1992, when the states took over responsibility for primary schools. Apart from operational responsibility, the federal government also transferred financial resources, students, and human resources (teachers) to the states. Mexico's educational decentralization is criticized for making state governors mere educational administrators, without power to promote an improvement in educational services (Mizrahi, 2004).

In Brazil, the educational decentralization process intensified following the 1988 Constitution, and became a system characterized by high levels of fragmentation and broad autonomy for federal entities in educational management (Draibe, 2002). Afonso and Castro (2010) use the official statistics of the Brazilian public sector to show that the states and, mainly, municipalities, have increased their share of public education expenditure since 1988. Whereas subnational governments accounted for 58 percent of total public sector education spending in 1988, this proportion had risen to 85.5 percent by 2008.

Note: 1. Dussel et al. (1998) argue that, although the provinces directly manage Argentine schools, there has been a vigorous recentralization of the educational system on four fronts: the establishment of common basic educational contents; evaluation of the education system; teacher training; and the implementation of compensatory policies. In that way, the authors suggest that the decentralization process in Argentina was merely apparent and, in reality, the central government under Menem did not give up control of the country's education policies.

Urban Development

The final point to be addressed in relation to public spending in other social areas, particularly housing, stands out from the rest because it displays two different behavior patterns in the two decades under analysis. Whereas in the 1990s, Latin American countries kept their spending in the sector virtually stable (there was even a slight decline), in the 2000s there was a positive change of direction, with rapid growth until 2007, by which time it reached a level of roughly 17 percent of GDP. This dynamic can be clearly seen in the individual cases of Mexico and Argentina. In Mexico, housing expenditure was just under 1 percent of GDP in 1990, rising to just over 1 percent of GDP in 1999, and ending the series (2007) above 2 percent of GDP. In Argentina, expenditure started at 1.6 percent of GDP, dropped to 1.5 percent of GDP in 1999, before reaching nearly 2 percent of GDP in 2007.

The cases of Brazil and Colombia are opposites in terms of housing expenditure. These countries start from very different levels at the beginning of the series: Brazil with just under 1.5 percent of GDP, and Colombia with 0.5 percent. By the end of the 1990s, the roles reverse, with Brazil spending around 0.5 percent of GDP and Colombia spending 1 percent. Since then, the situation has reversed once again, with Brazil increasing its expenditure and Colombia reducing it. Brazil and Colombia reached the end of the series with public expenditure on housing of 1.7 and 0.5 percent of GDP, respectively.

Housing expenditure in Chile remained stable at roughly 0.25 percent of GDP throughout the series. Compared to other types of social spending, this category is relatively small and it has not grown significantly over the last two decades.

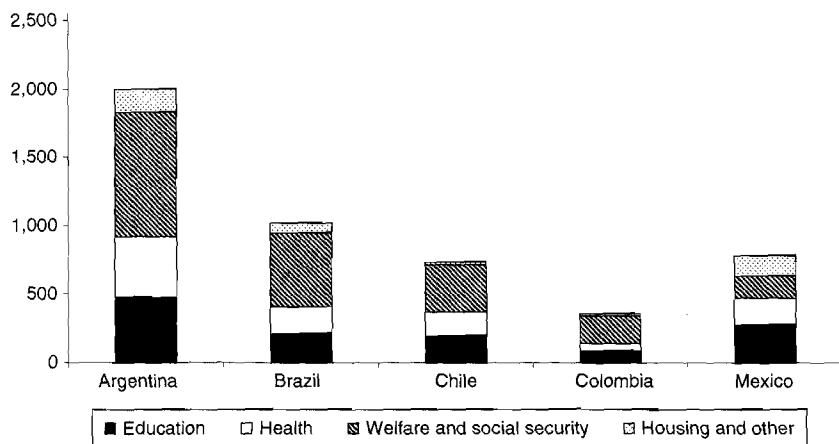
6 TARGETING VERSUS UNIVERSALIZATION: WHAT WORKS IN LATIN AMERICA?

Considering the share of each of the four functions discussed above (welfare and social security assistance, health, education and housing) in each country's social spending, a profile of the social policy bias adopted in each country can be identified; also an attempt can be made to find a pattern that characterizes the contemporary Latin American welfare state.

As shown in Figure 4.6, besides from Mexico, expenditure on social security and welfare assistance predominates in the countries analyzed in the 2006–07 period. When the more highly targeted housing expenditure is included, targeted policies clearly dominate (to the detriment of universal ones) in Argentina, Brazil and Colombia. This relation is almost identical in Chile, but more favorable to universalization in Mexico, owing to the high proportion of education expenditure in that country.

Despite not reporting on the trend of the targeting/universalization relation, the results shown in Figure 4.6 show the current position of Latin American countries in terms of social policies. Although it presents two very important sectors characterized by universal service provision – health and education – it is targeted social policies – social security (or insurance) and welfare assistance – that absorb the largest volumes of social spending, thus demonstrating a clear tendency towards public expenditure targeting. In other words, there is a clear preference for policies that require some type of means-testing to target a specific public, rather than policies that cover everyone regardless of the characteristics of the population in question.

Box 4.6 discusses the controversies in Brazil.



Note: Latin America and the Caribbean is defined as a weighted average of the countries. Includes estimates for years where data on certain countries are missing.

Source: ECLAC (2009).

Figure 4.6 Latin America (selected countries): per capita social spending, 2006/2007 (dollars at 2000 prices)

7 FINAL COMMENTS

This chapter has put forward a number of conclusions that are worth highlighting. It described the functioning and rationale of the distribution of public funds for the social area in Latin America, explaining the rationale of fiscal decentralization and how it relates to social spending. Several issues were raised in this context, such as the need for the decentralization process. The rationale of the functioning of the distribution of expenditure makes it possible to infer and analyze the quality and targeting of such expenditure in the region.

As noted throughout the text, despite the economic crises that buffeted Latin America, particularly in the 1990s, social spending has maintained a growth trend over the last 20 years. In terms of both total expenditure and per capita spending, Latin American countries have shown a rising trend in investment in the social area. This result, however, warrants special attention.

In the global analysis for the group of all countries comprising Latin America, the increase in social spending is concentrated in the social security and welfare assistance sector, which attains a level of roughly 7

BOX 4.6 CONTROVERSIES IN THE BRAZILIAN DEBATE

The polemics surrounding universalization versus targeting have become involved in the tax reform debate in Brazil, and warrant a critical review of the two extreme points of view.

A predominant idea among Brazilians who defend the country's social policies is that all that matters in financing this segment is an arrangement that channels ever-larger amounts of resources to the sectors in question. Accordingly, a social-type tax reform would, at least, leave untouched the current system of earmarking resources for social spending; and, ideally, it would increase such funding sources still further. This would be the 'progressive' school of thought, which focuses the issue of social policy financing on a single point – more resources are needed to finance actions which should be universal (Serra, 2002). This argument, which marked the preparation of the 1988 Constitution, when the overall Brazilian tax burden was around 22 percent of GDP, continues to be repeated in exactly the same form, over two decades later, and despite the tax burden having jumped to over 35 percent of GDP, most of which is explained by the social contributions that were created (financial profit and transactions) or increased (revenues and wages) during the period. Another, 'neoliberal', current of opinion focuses on the efficiency of spending in the social area, and advocates increased targeting of public action so as to reduce the total amount of resources needed for the area (Ministério da Fazenda, 2003; and Neri, 2003). The criticism of universal services aims to gain space in a limited social expenditure budget. The issue of financing, to some extent, will continue to be a matter of size: targeting social policies to achieve less social and total public spending.

An alternative, equidistant between the two extreme points of view, argues that quality also should be considered and even prioritized. This does not mean ignoring quantity, but it needs to be reconciled with better quality in the way it is financed and also spent. As pointed out by Ocampo (2008), a challenge to achieve a better balance between universalization and targeting is to strengthen the tax system and make it more progressive, even increasing direct taxation. This is curious because the following questions are rarely asked, on the revenue side for example:

'From where and how are the public funds to be channeled into social spending obtained?' or, 'What are the economic and social impacts of taxes assigned to the social area?'. On the expenditure side, from time to time other questions are raised, such as: 'What do we spend public funds on and how?' or, 'What is the cost per beneficiary, and what is the return?'. But, these two types of question are seldom asked together: 'Where do the public funds channeled into the social area come from and where do they end up?'. Put more simply: 'Who pays and who receives public funds?'. Studies on the distribution of taxes and expenditure between families by income category are rare in Brazil, as also in the rest of the Southern Cone, although studies have been conducted in a number of countries in the Andean Community (Barreix et al., 2007).

Source: Prepared by author.

percent of GDP. Education and health expenditure currently account for just over 2 percent of GDP.

For a separate evaluation of expenditure by each country, see ECLAC's 'Social Panorama of Latin America, 2009' (November 2009). In classifying the matrices of social protection in the region, countries are divided into groups that weight the level of expenditure and coverage (see pp. 39–40), as follows:

- *Group 1:* Countries with universal regimes.
- *Group 2:* Countries with dual regimes.
- *Group 3:* Countries with so-called 'family' regimes.

Using this division, despite a number of differences, the divergence between expenditure on social security and expenditure on education and health seems to be a trend, as can be seen in Table 4.1. Public spending on social security and welfare assistance virtually doubles health expenditure, except in group 3 countries; and social security expenses generally also outweigh education expenses. In the latter case, group 3 is again the exception, with education expenditure surpassing social security.

One of the conclusions is that, as health and education are sectors with decentralized expenditure, the inherent characteristics of providing social welfare and insurance services result in these services being targeted. Apart from that, all but a few countries have designed social insurance services in

Table 4.1 Latin America (country groups): social expenditure indicators around 2007 (country group averages)

Group of countries	Social public spending per capita (in dollars) ^a	Social public spending as a percentage of GDP ^a	Social public spending in welfare and social security as a percentage of GDP ^b	Social public spending in health care as a percentage of GDP ^a	Social public spending in education as a percentage of GDP ^a
Group 1: Argentina, Brazil, Chile, Costa Rica, Panama and Uruguay	1,102	17.7	7.9	3.9	4.5
Group 2: Colombia, Mexico and Venezuela (Bolivarian Republic of)	638	13.0	4.9	2.2	4.3
Group 3: Ecuador, El Salvador, Bolivia (Plurinational State of), Guatemala, Honduras, Nicaragua, Paraguay, Peru and Dominican Republic	178	10.2	2.6	2.3	4.1

Notes:

^a In dollars at 2000 prices data for 2006–07. Simple average of each group of countries.

^b In dollars at 2000 prices data for 2006–07. Simple average of each group of countries. Does not include Nicaragua.

Source: ECLAC (2009).

the form of individual insurance schemes, where the taxpayer finances his or her future pension. Accordingly, despite guaranteeing a fundamental workers' right in situations of unemployment, social insurance is not a universal expense, nor does it affect the whole population equally, as in the case of universal services.

Another point highlighted in this chapter is that, beyond a descriptive analysis and measurement of indicators, the data provided by the analysis of the distribution of social spending yield an important finding. The amounts in question can be used to infer the design of public policies in the region.

By concentrating social spending on social security, Latin American countries end up designing public policies that are more targeted than universal. Although most countries offer universal health and education services, most investments in highly targeted services ultimately display a clear preference for policies that require some type of means-testing, to target a specific public rather than policies that cover everyone regardless of their characteristics.

In terms of social policies in Latin American countries, an intensification of decentralization is currently coinciding with greater pressure from social movements and changes in intergovernmental relations, which combine with those stemming from the government's federative practices. Changes such as these, which expand participation by society and local government mechanisms – whether in unitary states or in federations – affect the formulation, management and financing of public policies.

The juxtaposition between the various movements described does not mean that they are similarly motivated, however. Various combinations of the main vectors of change can be seen in public policies, not only in the central countries, but also in the less developed nations including Latin American ones. Those combinations end up generating significant changes in public policy design.

The first line of change relates to reforms of the state and social protection systems, which alter the public-private relation, diversify forms of financing and the scope of social protection in the context of the macroeconomic adjustments and stabilization policies initiated in the 1970s in both central and peripheral countries. Those reforms have repercussions in the coverage and amount of monetary benefits, and also in the extension and quality of the provision of public services.

The second line of change concerns the association between redemocratization and decentralization. In Latin America, the reforms discussed above are juxtaposed with the redemocratization of the continent, which largely involves the decentralization of political power and tax revenues, and devolution of administrative autonomy to subnational governments,

particularly municipalities. At the same time, there is a recognition of the population's civil rights, and incorporation of social movements in the formulation, control and execution of public policies, which is essential for strengthening social cohesion. Furthermore, globalization has been stimulating the organization of supranational federations, as shown by the creation of the European Union, as a way to maintain political, economic and social cohesion between nations. Solutions are also sought to problems relating to rising costs, insufficient coverage, inefficient management and dissatisfied clienteles, which strengthen the need for reforms and promote their effectiveness. Those changes, in turn, alter financing patterns, forms of regulating supply (level, quality and the geographical distribution of services, for example), together with strategies for management and purchase of services. This route map, which is frequently, but not exclusively, associated with decentralization, includes separation between service financing and provision, and has privatization as its end point.

The analysis of comparative studies does not seem to offer a single answer to the momentum of change seen in many countries. In other countries, not only were socioeconomic indicators very different at the outset, there were also differences in political processes, administrative structures, resource availability (public and private) and service supply networks. These specific features explain the variety of results obtained. In a comparative study involving 12 federations, Watts (1996) notes that, also in practice, there is no single and permanent model of the central government-subnational government relation in countries that adopt federalism. Oscillation between centralization and decentralization is intrinsic to federative systems and can be seen in the path followed by the countries, he explains. That author also highlights the difficulty of measuring degrees of centralization versus decentralization, since there are many possible arrangements in the legislative, administrative, and fiscal spheres, as well as in constitutional rules and in the characteristics of the decision-making process, which display different levels of dependency, political influence and fiscal control between the various spheres of government.

Despite such differences, several aspects are common to all cases. There has been decentralization of political and administrative power, and also of resources, both in federative structures and in unitary states. Although there is an a priori association between federalism and decentralization, a comparison between countries shows that even in unitary states, the shifts that have occurred have not been limited to a mere deconcentration of management and use of resources, but genuine decentralization has been taking root.

A final comment concerns the limitations faced in undertaking this analysis. There is no doubt that the structural changes undertaken in the

region in the last few years – ranging from fiscal decentralization to an active stance in formulating and executing social policies and culminating in conditional income transfer programs – require a significant redesign and improvement in the collection of expenditure data, in terms of both coverage and disaggregation.

NOTES

1. The concept of ‘social spending’ is not simple to define. The main focus of this study, Latin America, has been displaying a rising trend in social spending, specifically education, health, social security and social assistance; yet the measurement of such expenditure can vary substantially from one country to another. As noted by ECLAC, the calculation of social expenditure in 15 out of the 21 countries considers only central government or the budgetary central government (in other words, it includes only amounts approved in the budget law); two other countries include general government (encompassing all levels of public administration); while three countries also include public enterprises. Only one country includes the entire public sector in the calculation (ECLAC, 2010a).
2. As noted by de Mello (2004, p. 4), ‘The consideration of the principal–agent nature of decentralized service delivery has highlighted a finer distinction between delegation and decentralization. Delegation is preferred when subnational governments are best suited as agents of the center and when clear incentives for efficiency gains can be put in place’.
3. For a detailed discussion on the fiscal decentralization relation and impact on public policies, see Martínez-Vazquez and Sepulveda (2009). See also United Nations (2010) which finds an ambiguous impact of fiscal decentralization on poverty. Another key study of the relation between fiscal decentralization and social cohesion is von Haldenwang (2008), who attempts to show that promoting social inclusion and equity requires a favorable fiscal environment, including characteristics such as horizontal and vertical equities, and a fiscal decentralization regime based on the principles of market conservation, fiscal equivalence and accountability.
4. When constructing indicators for the 1980–97 period de Mello (2004) found reasonable decentralization indicators for Latin America – for example, tax autonomy was 49.5%, compared to 41.4% in the OECD; and vertical imbalances were 28.4% compared to 40.4%, respectively. The situation was different in terms of expenditure, however: subnational expenditure of 3.3% of GDP in Latin America compared to 14.7% in the OECD, resulting in relative weights in total expenditure of 15.0% compared to 31.0%, respectively.
5. ECLAC’s mission includes providing information on the economic and social situation of the region through official documents. For that purpose, the organization regularly compiles data on social spending in Latin America and the Caribbean, which is officially reported through specific documents and/or electronic media. An example is the ‘Social Panorama of Latin America’ (ECLAC, 2005, 2009, 2010b) which, apart from reporting on the trend of social spending, periodically includes a relevant topic on social issues in the region, highlighting the actions taken by Latin American countries in relation to that topic. For example, monetary transfers and the downward trend of poverty and income inequality indicators are the special topic of the 2009 document (ECLAC, 2009).
6. As Figure 4.2 shows, despite fluctuations in the trend of public social spending, the average is maintained over the period.
7. The Organisation for European Economic Co-operation (OEEC) was set up in 1948 to support the Marshall Plan to rebuild member countries after the Second World War. In 1961, it became the Organization for Economic Cooperation and Development (OECD),

and it currently encompasses 31 countries which produce over half of the wealth of the entire planet. These are countries with a high human development index (HDI) a, high level of income per capita (except Mexico and Turkey, which are considered high-middle-income countries) and a high level of socioeconomic development.

8. The data used for this comparison were taken from the OECD's 'Social Expenditure Database (SOCX)', available at: http://stats.oecd.org/Index.aspx?datasetcode=SOCX_AGG. (accessed 13 October 2010). This database encompasses the 30 OECD countries for the 1980–2005 period. The main social policy areas are: the elderly, social security (including social assistance and insurance, health, family, active labor market policies, unemployment, housing and other social policy areas). Given the greater economic and social development of this bloc, a comparison of indicators reflects an attempt to lay down a reference point for promotion, in other words, the closer Latin American indicators are to those of the OECD, the better the provision of resources to society.

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5. Fiscal decentralization and public investment

Luiz de Mello*

1 INTRODUCTION

Latin America's investment-to-GDP ratio is low by international comparison. Although it has trended upwards in recent years, the region's average share of gross fixed capital formation in GDP – the national accounts' standard gauge of investment activity – is somewhat lower than that of the high-income countries in the OECD area and much lower than that of the fast-growing emerging Asian economies, such as China and India.¹ Latin American governments also invest relatively little by emerging-market and developing country standards, a feature of Latin American public finances that can be attributed to macroeconomic volatility in the 1980s and 1990s and subsequently fiscal duress. The private sector accounts for the bulk of investment, but its participation in infrastructure development and upgrading is held back by institutional and regulatory constraints.

At the same time, the state of existing infrastructure in most Latin American countries suggests that spending on operations and maintenance is equally low. The region fares relatively poorly in international comparisons on the basis of a host of indicators of infrastructure quality and in terms of surveys of business sentiment. Arguably, a combination of low investment and poor infrastructure quality is holding back growth. In addition, access to infrastructure is unequal among the different social groups, which acts as a drag on social development.

Decentralization poses challenges for the delivery and financing of investment by the government. Many countries in Latin America have embarked on ambitious decentralization programs, often driven by a return to democratic rule in the 1980s, which have devolved a number of expenditure functions, including investment, and revenue sources to the subnational layers of government. Public finance theory nevertheless highlights important difficulties associated with the decentralization of public investment. In particular, subnational governments are discouraged from financing investments whose benefits are likely to spill over

across jurisdictional borders and whose sunk costs are too high for subnational budgets, especially in the presence of constraints on subnational borrowing. Many Latin American countries have failed to put in place arrangements for joint financing and service delivery across and within the different levels of administration that could address these difficulties.

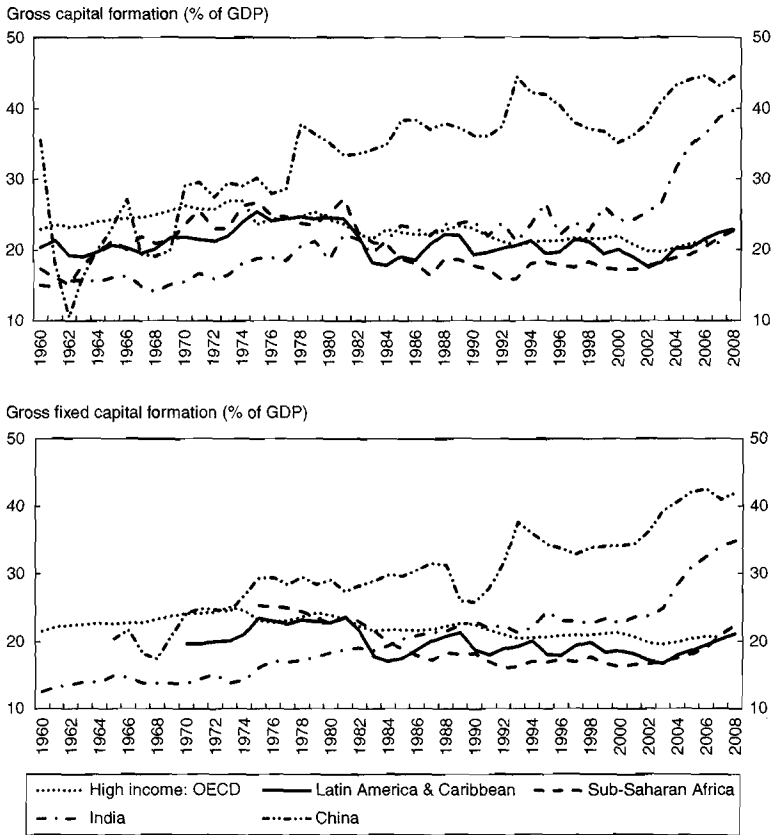
To shed light on the link between decentralization and investment in Latin America, this chapter discusses trends in gross (fixed) capital formation and government spending on investment programs. The chapter also provides some empirical evidence on the effects of decentralization on investment based on a panel of countries for which data on investment are available from the World Bank's World Development Indicators (WDI) and the International Monetary Fund's Government Finance Statistics (GFS) databases since the late 1990s. The empirical analysis suggests that decentralization discourages Latin American subnational governments from investing (acquiring fixed assets) and that lower subnational spending on investment is associated with lower economy-wide gross fixed capital formation. Latin American countries will therefore need to face a double challenge of revisiting the current arrangements for decentralized provision that discourage subnational government investment, while making the most of decentralization as a policy lever to raise private investment.

The chapter is structured as follows. Section 2 reviews trends in investment spending in Latin America and compares and contrasts these trends with those of OECD countries and emerging-market peers. Section 3 reviews the arguments for and against the decentralization of investment functions. Section 4 presents the empirical analysis. Section 5 discusses the main empirical findings and draws lessons for Latin America. Section 6 concludes.

2 HOW DOES LATIN AMERICA COMPARE WITH OECD COUNTRIES AND EMERGING-MARKET PEERS?

Trends in Investment

Latin American and Caribbean countries invest relatively little by international comparison. Gross fixed capital formation accounted for less than 20 percent of GDP on average in Latin America from the early 1980s until the mid-2000s, when it began to rise gradually to close to 22 percent of GDP in 2008 (Figure 5.1). Except for brief periods since 1970, this ratio has been persistently lower than the average of the high-income countries in the OECD area, as well as that of the fast-growing Asian countries, including China and India. To some extent, comparatively low investment-to-GDP

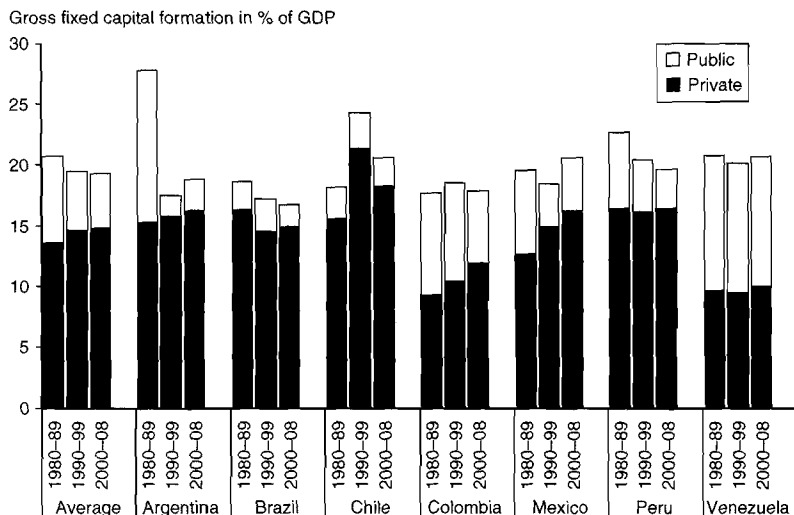


Source: World Bank (World Development Indicators).

Figure 5.1 Investment trends: international comparisons, 1960–2008

ratios reflect the macroeconomic turmoil faced by most of the larger economies in Latin America in the 1980s and early 1990s, characterized by erratic growth and high inflation, which has discouraged investment, especially in infrastructure projects.² An economic boom during 2003–08 has been accompanied by rising investment-to-GDP ratios.

Investment is financed predominantly by the private sector in Latin America and the Caribbean. Government-financed investment accounted for about 4.4 percent of GDP on average during 2000–08 in the Latin American countries for which information is available from the IMF's World Economic Outlook database (Figure 5.2).³ Much as in the case of private investment, government spending also trended downward in



Source: International Monetary Fund (World Economic Outlook).

Figure 5.2 Composition of investment across countries, 1980–2008

relation to GDP from the early 1980s until the 2000s. To some extent falling government investment during the 1990s reflects macroeconomic and fiscal adjustment, which often took a toll on capital expenditure, as well as a change in the composition of total investment away from public sources due to increased private sector participation, including through the privatization of public enterprises in many of the largest economies in the region.⁴

Information is not readily available on a cross-country comparable basis on the sectoral composition of gross fixed capital formation between infrastructure and non-infrastructure investment. Data on government outlays on operations and maintenance of the infrastructure stock are also difficult to come by. It nevertheless appears on the basis of outcome indicators that an additional side-effect of fiscal duress in the 1990s has been a neglect of basic infrastructures.

The Quality of Infrastructure

Latin America fares poorly in international comparisons of conventional indicators of infrastructure quality. In particular, there are important deficiencies in areas that have a bearing on social development, such as water and sanitation, which affect the health status of the population (Table 5.1). Investment deficiencies may therefore compromise

Table 5.1 *Infrastructure quality indicators: Latin America and OECD, 1989–2008*

	Latin America			OECD		
	Mean	Median	No. Countries	Mean	Median	No. Countries
Telecommunications						
Lines (per 100 population)	23.0	21.0	33	40.8	41.6	29
Internet subscriptions (per 100 population)	9.3	5.3	33	22.9	23.6	29
Telephone subscriptions (per 100 population)	110.8	109.8	31	150.4	152.6	29
Cell phone subscriptions (per 100 population)	87.7	91.9	31	109.6	110.4	29
Computer at home (per 100 population)	4.6	2.8	5	49.9	42.6	4
TV (2007)	96.7	96.7	2	97.6	98.3	6
Transport						
Rail (million tons of goods per km)	39,140.6	6,672.5	10	148,118.3	12,039.0	24
Rail (million passengers per km)	36,910.9	313.0	7	23,465.8	6,759.0	27
Road density (km of road per sq. km of land area)	135.4	71.7	3	118.8	115.3	16
Paved roads (% of total)	47.7	38.2	3	73.4	79.3	15
Water and sanitation (1970–2008)						
Improved water source (% of population with access)	86.8	91.0	24	99.1	100.0	23
Improved sanitation facilities (% of pop. with access)	74.7	80.0	24	99.0	100.0	20
Electricity (1970–2008)						
Value lost due to outages (% of sales)	4.1	2.8	18	1.0	0.0	6
Transmission and distribution losses (% of output)	15.6	14.2	21	7.9	7.5	29

Source: World Bank (World Development Indicators).

longer-term development targets. This is important because there has been considerable progress over the years in many areas, but a number of countries in Latin America and the Caribbean remain far from the targets set out in the Millennium Development Goals.

In addition, access to infrastructure is fairly unequally distributed in the region, and area-wide averages mask important differences in access across social groups. Based on evidence for eight Latin American countries, Marchionni and Glüzmann (2010) show that, in some cases, access is extremely concentrated in the upper-income quintiles. For example, in Peru only 1 percent of households from the poorest quintile have a fixed phone line, against almost 70 percent of households from the richest quintile. In the case of access to water/sanitation and gas, however, there does not appear to be a strong bias in access across income groups, at least as far as measured on the basis of household expenditure.

Poor infrastructure may hinder economic growth. It is difficult to gauge the effect of investment in general, and infrastructure in particular, on long-term output growth. Causality often runs in the opposite direction, so that growth tends to drive investment, rather than the converse.⁵ But, while empirical evidence is by and large inconclusive in this area, it is fair to argue that efforts to improve infrastructure would also yield a growth dividend to the extent that it promotes productivity gains and reduces production costs.

3 THE ROLE OF SUBNATIONAL GOVERNMENTS

There are a number of constraints to the full decentralization of public investment functions to subnational governments, especially in the area of infrastructure development and upgrading. First, the sunk costs associated with public investment are often too high to be fully financed by subnational budgets, whose revenue mobilization and borrowing capacity is lower than that of higher levels of administration. Second, subnational governments may be small; it is therefore difficult for them to make the most of economies of scale and network effects in provision, which tend to be large in the case of investment programs, especially for infrastructure services. Third, public investment projects often create externality effects, because the benefits they create would also likely accrue to neighboring jurisdictions, whereas the costs of provision would need to be internalized by the providing jurisdiction.

As a result of these constraints, it is often argued that subnational governments may – and they often do – carry out public investment projects, although financing should be provided at least in part by the center. Joint

financing would allow for dealing with the effects of externalities and economies of scale, which would otherwise discourage subnational provision, and for mobilizing the necessary funds that would otherwise overwhelm subnational budgets.

Financing

Many Latin American countries rely on the earmarking of revenue to finance public investment. This is the case of all levels of administration, not only among subnational jurisdictions. In Brazil, revenue from the excise tax on fuels is earmarked for transport, including capital and recurrent spending. In Peru, local governments can only spend funds from the *canon* and *sobre canon* royalty from natural resources on capital investments. Earmarking is extended to shared revenue in some countries, as is the case of Nicaragua and Paraguay, for example, where a percentage of shared revenue is earmarked for investment in infrastructure. In Guatemala, one-eighth of VAT revenues is earmarked for infrastructure in social and basic services, while a share of the tax on motor vehicle registration is earmarked for maintenance and improvements of roads. In Costa Rica, recent legislation provides for the possibility of increasing transfers to the local governments to assume new competencies, including infrastructure development. In some cases, revenue earmarking is also used as a regional development tool, by favoring investment in economically disadvantaged regions. This is the case, for example, of Ecuador, where a conditional capital investment grant is targeted to the Amazon region. In Mexico, at least 20 percent of the investment grants (*Fondo de Compensación*) from the federal government must be assigned to the poorest 10 states and used by the municipalities of those states.

A reliance on revenue earmarking to finance investment is, in contrast with the experience of most OECD countries, where investment projects carried out by subnational governments are often financed through block, conditional or matching grants from higher levels of government. Among Latin American countries, this is also the case of Chile where financing tends to be provided in the form of central government grants. While recognizing that different grants serve different purposes, there is a trend among several OECD countries towards increased flexibility in the grant system, especially in those countries where current arrangements are administratively cumbersome and where local government autonomy is curtailed by restrictive conditionality. The main disadvantage of revenue earmarking is that it complicates expenditure management and discourages efforts to improve the cost-effectiveness of government expenditures, because policy makers are unable to reallocate scarce budgetary resources to cost-effective activities.

In some cases, financing arrangements focus on investment projects and neglect to provide assistance for the recurrent costs of operations and maintenance to jurisdictions that may be unable or unwilling to finance those associated expenditures. For example, Peru attempted to decentralize much of its road network to provincial and municipal governments but then failed to provide financing for the associated recurrent expenditures (Gutman, 1999). This resulted in a widespread deterioration of the network and, ultimately, recentralization (Humplick and Moini-Araghi, 1996; Burki et al., 1999). In Brazil, federal assistance is now provided to those states that have accepted responsibility for maintaining federal roads in their jurisdictions.

The presence of strict regulatory restrictions on subnational borrowing to finance investment programs also distinguishes Latin America from the OECD area, where borrowing is allowed in most countries subject to a golden rule (that is, long-term borrowing is allowed to finance capital expenditure only). Efforts to curtail subnational profligacy, to align subnational fiscal policies with overall macroeconomic objectives and to consolidate fiscal adjustment at all levels of administration are the main reasons for the introduction of tight controls on subnational borrowing in many countries in Latin America. But arrangements vary across countries. In most cases, subnational governments are not allowed to borrow abroad, whereas in those countries where foreign financing is permitted, central government approval is required. Local government borrowing is banned in Chile, Dominican Republic, Ecuador and El Salvador, for example. In other countries, administrative constraints apply, as in the case of required approval by higher levels of government and/or the legislature (for example, Nicaragua). More-flexible arrangements, whereby subnational borrowing is subject to prudential requirements based on debt service parameters, are in place in Argentina, Bolivia, Brazil, Colombia, Ecuador, Mexico and Peru, for example.⁶

Dealing with Economies of Scale and Externalities

Conditionality is often introduced in intergovernmental transfer systems to deal with externalities in subnational government provision. Earmarked or matching grants can be used to ensure that at least part of the costs and benefits of provision can be fully internalized by local residents. This is the case when the share of delivery costs, that exceeds the benefits of provision that can be internalized by local residents, can be compensated by the donor to the service provider. Of course, in practice, the design of such grants is complicated by the fact that externalities are not directly observable. Matching grants may therefore exceed the level required for mitigating

the disincentives for provision arising from cross-border spillovers. These grants may also be complex to administer. Another difficulty associated with matching grants is that they may be underutilized in poorer jurisdictions, where support from higher levels of administration is most needed, because these jurisdictions may be unable to match the volume of resources available to them. As discussed above, revenue earmarking is the most common arrangement for financing investment in Latin America, and experience with matching grants is considerably more limited. Conditional grants are also less common in Latin America than in other parts of the world.

In addition to intergovernmental transfers and grants, horizontal arrangements can be put in place to internalize benefits that straddle jurisdictional borders and reduce provision costs by maximizing economies of scale. Experience with such cross-border joint ventures is, nevertheless, rather limited in Latin America, in contrast with a number of OECD countries, especially in Europe, where various arrangements are in place, especially for transport, urban waste management, water supply, fire fighting and hospital administration. Norway also has an interesting experience with joint ownership of power plants, which allows neighboring jurisdictions to cut costs in providing energy services. In Latin America, the Brazilian experience with intermunicipal consortia in the area of hospital administration is rather rare in the region.

International Comparisons

Institutional settings vary a great deal, involving different degrees of subnational participation in the design and financing of investment projects. As a result, conventional decentralization indicators, such as the share of subnational capital expenditure in total public investment, can be misleading to the extent that subnational autonomy is not taken into consideration. In addition, internationally comparable data are very difficult to come by, even for very crude measures of infrastructure expenditure decentralization and the associated financial flows across levels of administration, including capital transfers. Despite these caveats, the IMF's GFS data on the acquisition of fixed assets across the different levels of administration allow for a comparison of the composition of public investment in Latin America and the OECD area. Ideally, because of greater consistency between private and public investment and among the different levels of administration, the national accounts would be a more appropriate source of data than budgetary sources.

On the basis of the indicators presented in Table 5.2, there does not appear to be much difference in the composition of investment across the different layers of government between the Latin American and OECD

Table 5.2 *Public investment across levels of government (acquisition of fixed capital in % of GDP, accrual basis, averages since 1995)*

	General government		Different layers of government					
	Investment	Total outlays	Central		Middle tier		Local	
			Investment	Total outlays	Investment	Total outlays	Investment	Total outlays
Latin America								
Argentina	1.3	29.6	0.2	19.5	0.8	11.0	0.3	2.4
Chile	1.4	20.5	1.2	20.5	–	–	0.2	2.6
Colombia	1.9	35.9	0.6	33.6	0.4	4.5	0.9	6.1
Mexico ¹	–	–	0.5	15.9	–	7.0	–	1.4
Peru ¹	2.4	19.0	1.2	18.3	0.4	3.2	0.8	2.3
Venezuela (Bolivarian Republic of) ¹	–	–	1.7	25.7	–	–	–	–
OECD (excluding Chile and Mexico)								
Italy	0.6	47.8	–0.2	39.0	–	–	0.8	15.0
Japan	1.1	37.8	–	–	–	–	–	–
Spain	1.9	38.6	0.4	27.3	0.8	13.6	0.7	6.1
France	0.7	52.6	0.1	45.5	–	–	0.6	10.4
United Kingdom	0.5	42.0	0.0	38.9	–	–	0.5	12.1
Australia	0.6	34.5	0.1	25.3	0.4	13.9	0.2	2.3
Germany	–0.1	46.5	0.0	30.9	0.0	13.1	–0.1	7.2
Switzerland ¹	2.2	37.4	0.1	20.1	1.1	14.6	1.0	9.6
United States	1.2	36.3	0.1	21.0	–	–	–	–
Canada ¹	2.3	40.7	0.3	18.7	1.0	21.4	1.0	7.4

Note: ¹ Cash basis.

Source: International Monetary Fund (Government Finance Statistics).

countries for which information is available, at least as far as the ratio of acquisition of fixed assets to GDP is concerned. Of course, there are limitations to GFS data, including the fact that most countries do not report investment spending for the different layers of administration in a systematic manner and that in some cases investment is carried out through extra-budgetary funds that are not consolidated in the fiscal accounts.

4 EMPIRICAL EVIDENCE

Because of the dearth of data on subnational capital spending, it is difficult to test empirically the extent to which indicators of fiscal decentralization correlate with trends in subnational investment. Instead, simple investment equations can be estimated to compare the main determinants of investment across the different layers of administration and to distinguish the effect of decentralization on investment in subsamples of Latin American and other countries.

Comparison with the Literature

The theoretical literature is inconclusive on the possible effects of fiscal decentralization on investment. The Oatesian and Musgravean tradition of fiscal federalism places limited emphasis on the composition of public investment across the different layers of administration. As discussed above, public investment would be best carried out and financed by higher levels of administration in the presence of economies of scale and spillover/network effects, which would discourage subnational provision and result in a suboptimal supply of public investment. The theoretical literature also shows that horizontal tax competition, which is likely to arise from the decentralization of revenue sources to lower levels of administration, could result under certain conditions in suboptimal investment (Hulten and Schwab, 1997).

By contrast, another strand of literature shows that competition among same-level jurisdictions could affect the composition of expenditure, leading subnational governments to overinvest in public goods that would make their jurisdictions attractive to private investment (Keen and Marchand, 1997). Consistent with this strand of literature, there is some empirical evidence that decentralization is associated with higher levels of subnational spending on infrastructure projects. The cross-country evidence reported by Estache and Sinha (1995) suggests that more decentralized countries, especially in the developing world, tend to spend more (total and subnational) on infrastructure projects. Recent evidence reported by

Kappeler and Väilä (2008) for European countries shows that decentralization tilts the composition of public investment towards more productive projects, notably infrastructure, a finding that the authors attribute to increased fiscal competition brought about by decentralization.

Turning to the quality of infrastructure, there does not appear to be a strong correlation between the extent of fiscal decentralization and the quality of services. On the basis of cross-country data, Humplick and Estache (1995) estimate the impact of decentralization on the performance of several infrastructure projects, including roads, electricity, and water. Using different measures of decentralization in each sector, the authors find that at least one performance indicator improved in each sector as a result of decentralization. Nevertheless, the correlation between decentralization and performance was not strong in general. This finding is consistent with the raw correlations between the decentralization indicator used in this chapter (the share of central to subnational government revenue or expenditure) and indicators of the quality of infrastructure, which are also rather poor, although revenue decentralization is associated with a lower density of fixed telephone lines in the Latin American subsample.

A different strand of literature has delved into the effect of decentralization on the efficiency of investment. Evidence for Spain (Esteller and Solé, 2005) and Bolivia and Colombia (Faguet, 2004) suggest that decentralization has made investment decisions more responsive to local preferences and needs, which improves the composition of the capital stock among the subnational jurisdictions.

Data

The World Bank's WDI database contains information on investment spending (gross fixed capital formation and gross capital formation, which includes changes in inventories) for a variety of developing, emerging-market and developed countries. The split between private and public investment, and the decomposition of government spending across the different layers of administration, which is important for assessing the effect of various arrangements for financing expenditure in a decentralized setting, are nevertheless not available in the WDI database. To some extent, this deficiency can be remedied by using data available from the IMF's GFS database, which provides information on government acquisition of fixed assets for the central, middle-tier and local levels of administration (excluding public enterprises and off-budget expenditures). The GFS series are nevertheless very short, reflecting the transition to a new methodology in 2001 and a dearth of data on subnational finances for the vast majority of countries.

Despite these data deficiencies, it is possible to shed some light on the cross-country determinants of investment using information for a panel of up to 44 countries, including at most six Latin American countries (Argentina, Bolivia, Brazil, Chile, Colombia and Costa Rica), during the 1989–2008 period.

Estimation Strategy

The methodology for estimating the effects of decentralization on investment is simple: the GDP ratios of gross fixed capital formation and government spending (central and subnational levels of administration, separately) on the acquisition of fixed assets are regressed on an intercept, an indicator of decentralization and a set of control variables.⁷ To proxy for decentralization, an indicator constructed as the ratio of central to subnational government (middle tier and/or local governments) total (capital and current) revenue is included among the regressors.⁸

The selection of control variables is guided by the empirical literature and data availability, and include: GDP growth (reflecting the effect of faster growth on the demand for investment), GDP per capita (to proxy for the affordability of investment), the share of agriculture in GDP (to proxy for economic structure and its effect on the demand for investment, especially infrastructure), the ratio of government spending to GDP (to proxy for the size of government), the ratio of foreign direct investment (FDI) to GDP (which reflects supply-side considerations and the availability of external financing for investment projects) and the urbanization rate (reflecting density effects, which are known to affect the price of infrastructure services provided through networks). The control variables are lagged to deal to the extent possible with possible simultaneity. The lagged dependent variable is also included in the regressions, because the investment series tend to be autocorrelated.

A preliminary assessment of the data shows that the decentralization indicators (expenditure or revenue) correlate poorly with the share of investment (gross capital formation or gross fixed capital formation) in GDP at the 5 percent level of statistical significance. In the subsample of Latin American countries, however, revenue decentralization is negatively correlated with the shares of gross fixed capital formation and gross capital formation in GDP. There is also a strong positive correlation between revenue decentralization and the share in GDP of subnational government spending on fixed investment, a finding that is driven by the non-OECD and non-Latin American countries in the sample. By contrast, in the subsample of Latin American countries, revenue decentralization correlates strongly with central (rather than subnational) government spending on fixed investment.

The Baseline Results

The baseline results, reported in Table 5.3, are estimated by fixed effects. On the basis of the Hausman test, the null hypothesis that the fixed effects are uncorrelated with the other regressors is rejected by the data in all specifications at classical levels of significance. As is usual in the empirical literature, the lagged dependent variable is included among the regressors, because the investment or government spending ratios are serially correlated,⁹ resulting in the estimation of a dynamic panel. Because it is correlated with the fixed effects, the lagged dependent variable was instrumented using its own lags (two lags) as instruments, and the adequacy of this instrumentation strategy was assessed on the basis of an overidentification test. Due to the dearth of data on subnational government spending, the lagged dependent variable was not instrumented in the regressions using subnational investment as the dependent variable.

The main results of the regressions are as follows. The lagged dependent variables are positively signed and statistically significant in all models. The estimated coefficients (between 0.33 and 0.69) are statistically different from unity and suggest that the impact of the regressors on investment is considerably stronger in the long term than in the short run. For example, if revenue decentralization were to rise by 1 percent, the share in GDP of subnational government spending on investment would fall by 0.06 percentage points in the short term and by twice as much in the long term. In addition, gross fixed capital formation and central government spending on investment are unaffected by the extent of revenue decentralization.

As for the control variables, GDP growth affects gross fixed capital formation positively but not central or subnational government spending on investment. A country's level of development, proxied by GDP per capita, affects gross fixed capital formation and central government spending on investment positively. Nevertheless, subnational government investment seems to be lower, not higher, in wealthier countries. A large share of agriculture in GDP is associated with higher central government investment ratios. The size of government, proxying for the user cost of capital, is associated with lower subnational spending on investment, while having no discernible impact on gross fixed capital formation and central government investment. The availability of external financing, proxied by the ratio of FDI to GDP, does not seem to be a powerful predictor of investment.¹⁰ The urbanization rate is positively associated with subnational government investment, which likely reflects the role played by lower levels of administration in the provision of urban amenities.

Table 5.3 Decentralization and investment: regression analysis

	Dependent variable:					
	Gross fixed capital formation (log, % of GDP)		Government spending on investment (central government, % of GDP)		Government spending on investment (subnational governments, % of GDP)	
Lagged dependent variable	0.63*** (0.063)	0.69*** (0.062)	0.40*** (0.129)	0.41*** (0.128)	0.52*** (0.152)	0.33** (0.130)
<i>Baseline determinants</i>						
GDP growth (%)	0.01*** (0.002)	0.01*** (0.002)	-0.01 (0.017)	0.00 (0.017)	0.03 (0.040)	0.03 (0.033)
GDP per capita (log, in PPP)	0.16*** (0.054)	0.13** (0.0533)	0.91* (0.497)	0.90* (0.498)	-4.45*** (1.445)	-2.25* (1.268)
Agriculture value added (log, % of GDP)	-0.03 (0.023)	-0.03 (0.022)	0.42** (0.190)	0.41** (0.190)	-0.01 (0.352)	0.11 (0.289)
Government spending (log, % of GDP)	0.06 (0.034)	0.07** (0.034)	-0.72 (0.494)	-0.62 (0.514)	-1.81** (0.771)	-0.69 (0.683)
Decentralization index (log)	0.00 (0.002)	0.00 (0.002)	0.00* (0.013)	0.00 (0.013)	-0.06** (0.026)	0.00 (0.027)
FDI (log, % of GDP)	0.01 (0.004)	0.00 (0.004)	0.00 (0.028)	0.00 (0.028)	0.04 (0.044)	0.00 (0.038)
Urban population (log, % of population)	-0.36 (0.250)	-0.36 (0.243)	-0.16 (2.492)	-0.26 (2.506)	68.62*** (9.858)	39.76*** (10.011)

Interactions with Latin America dummy

Government spending (log, % of GDP)	-0.19 (0.159)	-0.87 (2.750)	-6.39*** (1.440)
Decentralization index (log)	-0.03*** (0.009)	-0.03 (0.122)	-0.12** (0.053)

Model statistics

Estimator	FE	FE	FE	FE	FE	FE
No. of observations	338	338	183	183	62	62
No. of cross-sectional units	39	39	29	29	9	9
R^2 (within)	0.68	0.70	0.29	0.83	0.71	0.82
Hausman: Prob > F (p -value)	0.00	0.00	0.05	0.10	0.00	–
Overidentification test (p -value)	0.02	0.04	0.26	0.32	–	–

Note: All models include an intercept (not reported). Standard errors are reported in parentheses. Statistical significance at the 1, 5, and 10 percent levels is denoted respectively by (***), (**), and (*). The lagged dependent variable is instrumented and two lags are used as instruments (except for the subnational government investment model).

Sources: Data available from World Bank (World Development Indicators) and IMF (Government Finance Statistics); and author's estimations.

What about Latin America?

The subsample of Latin American countries is too small and the time series are too short for estimating separate regressions to shed further light on the effects of decentralization on investment. Instead, the main variables of interest – the size of government and the revenue decentralization indicator – were interacted with a dummy variable identifying the subsample of Latin American countries (that is, the dummy variable takes the value of ‘1’ for the Latin American countries in the sample and ‘0’, otherwise).

The regression results are instructive. While the main findings are comparable to those of the baseline regressions for the control and the lagged dependent variables, there appear to be significant differences between Latin America and the other countries in the sample with regard to the effect of revenue decentralization on investment. In particular:

- Revenue decentralization appears to discourage subnational government investment in Latin America but not in the other countries in the sample. The baseline finding of a negative association between revenue decentralization and subnational government investment is therefore driven by Latin America. Moreover, revenue decentralization also discourages gross fixed capital formation in Latin America, while encouraging it in the other countries. As a result, the baseline finding of no association between revenue decentralization and gross fixed capital formation is also driven by Latin America.
- The size of government – measured as the ratio of government spending to GDP – discourages subnational government investment in Latin America, unlike the other countries in the sample, a finding that drives the baseline result of a negative association between the size of government and subnational government investment. By contrast, the size of government is a good predictor of gross fixed capital formation in the subsample of countries that excludes Latin America. The baseline finding of no association between government size and investment is again driven by Latin America.

5 DISCUSSION OF THE EMPIRICAL FINDINGS: IMPLICATIONS FOR LATIN AMERICA

The empirical findings reported above suggest that there are specific characteristics of fiscal decentralization in Latin America that impinge on investment and distinguish the region from other parts of the world. These characteristics may include, as discussed above, a reliance on

revenue earmarking, the presence of strict restrictions on subnational borrowing and limited use of intergovernmental grants and transfers to deal with externality and economies of scale effects in the provision of investment. Of course, there are important differences in institutional settings among the Latin American countries that should not be neglected. But, as far as the countries in the region share, albeit to different degrees, these main characteristics, two policy challenges can be identified in light of the empirical findings reported above. First, Latin America will need to eliminate the distortions associated with decentralization that discourage subnational governments from investing and, second, the countries in the region will need to create appropriate conditions to make the most of decentralization as a policy lever for lifting private instrument.

Eliminating the Policy Distortions that Discourage Subnational Governments from Investing

Removing regulatory uncertainty

The assignment of expenditure functions across the different levels of administration is particularly complex, especially in the sectors where investment needs tend to be large. In the case of network industries, which include most infrastructure sectors, regulatory, oversight, financing and service delivery functions are often unbundled and assigned to different layers of administration. This may create an overlap of mandates (which creates uncertainty) and incentives for cost-shifting across the different levels of administration (which discourages governments from investing and the private sector from participating in infrastructure development and upgrading). International experience shows that Latin America is not alone in having to grapple with these issues. Because it is one of the most decentralized countries in Latin America, Brazil offers an interesting example in the case of water and sanitation, a sector where jurisdictional uncertainty among the municipalities, the states and the municipal and state water companies has discouraged both private and public investment. *The key policy challenge in this area is therefore to ensure clarity in the assignment of functions across the different levels of administration.*

Making the most of intergovernmental grants and transfers

As discussed above, most Latin American countries have yet to make full use of intergovernmental grants and transfers to finance investment programs and to deal with the spillover effects that would discourage subnational investment. *There is, therefore, scope for greater use of these instruments, especially matching grants, which would have the added*

advantage of encouraging the recipient jurisdiction to mobilize complementary resources locally. Experience with horizontal arrangements that could encourage neighboring jurisdictions to mobilize resources jointly to finance mutually beneficial investment programs is also limited. *Greater support from higher levels of government, ranging from technical assistance to financing and the establishment of a regulatory framework for such initiatives, would therefore be welcome.*

Tackling predatory tax competition

Subnational governments' ability to invest may be thwarted by an erosion of their revenue base. A case in point is predatory tax competition among the subnational jurisdictions to attract private (often foreign) investment. Of course, a distinction should be made between tax competition that is 'desirable', in the sense of acting to constrain an otherwise excessive rise in the subnational tax burden, and that which undermines subnational revenue mobilization. While plausible, this hypothesis has yet to be validated empirically for the different countries in the region. But, as far as the Brazilian experience is concerned, there is fairly compelling evidence of predatory tax competition in the state-level value added tax (ICMS), whereby the states compete among themselves in a Stackelberg manner (de Mello, 2008). In other words, there appear to be 'leaders' among the states, whose moves to change their own tax rates encourage other states to follow suit. To the extent that the reduction in revenue brought about by tax competition leads to underinvestment at the subnational level, revenue decentralization may also discourage private investment and result in a reduction in gross fixed capital formation.

There are options for encouraging salutary tax completion, while preventing predatory practices. In particular:

- Where applicable, *subnational government autonomy in tax matters should be limited to setting tax rates, preferably within bounds set nationally, rather than bases.* Nevertheless, the experience of Brazil illustrates the difficulties of achieving these objectives in a country where subnational governments enjoy considerable autonomy in tax matters. Although the municipalities are no longer free to set the base of their sales tax (ISS) and can only set ISS rates within bounds set in law, legislation has yet to be approved to unify the state-level VAT code. Currently, changes in ICMS legislation, including those related to tax incentives, need to be agreed unanimously by the states, a requirement that has often been breached and resulted in lengthy legal disputes.

- *Autonomy to grant tax expenditures, which narrow tax bases and reduce effective tax rates, should also be curtailed.* Jiménez and Podestá (2009) estimate tax expenditures (all levels of government) to account for 2–2.3 percent of GDP in Argentina, Brazil and Peru; 3.5 percent of GDP in Colombia; and 5–5.9 percent of GDP in Chile and Mexico. This is all the more important because the empirical literature shows that tax incentives are weak determinants of investment decisions by multinational enterprises.¹¹ The deadweight losses associated with tax expenditures are therefore high.

Creating incentives to tap underutilized revenue sources

Subnational governments' own tax bases may be underutilized as a result of perverse incentives brought about by decentralization. There is a large body of empirical evidence on 'common pool' problems associated with reliance on shared revenue to finance subnational provision.¹² Under certain conditions, subnational governments face the incentive to underutilize their own tax bases in favor of shared revenue, because in doing so they can export part of the delivery costs to other jurisdictions. These untapped revenue sources include not only local property taxes, which tend to be underutilized in general, not only in Latin America, but also user charges for infrastructure services. This is despite the fact that subnational governments enjoy ample autonomy in most Latin American countries to introduce user charges and fees for services. The scope for cost recovery through the introduction of user charges also varies across sectors and subsectors. Of course, there are reasons why these revenue sources are underutilized, including distributional and political economy considerations, that go beyond the perverse incentives that may arise with decentralized provision. To mitigate these problems, *incentives can be created for subnational governments to fully utilize their tax bases, not least by rewarding tax effort in revenue-sharing arrangements.*

Dealing with competing demands on subnational budgets

Decentralization has taken place in many Latin American countries at the same time as political liberalization and the emergence of associated social demands that have created claims on the government. A strengthening of social safety-nets and emphasis on redistributive policies – laudable in a continent with a notoriously skewed distribution of income – have resulted in a sharp rise in social spending in a number of countries, including Brazil, Chile, Colombia and Mexico. At the same time, the need to secure long-term funding for these programs has resulted in a proliferation of revenue earmarking and mandated spending provisions. Government investment has therefore suffered not only due to the emergence of

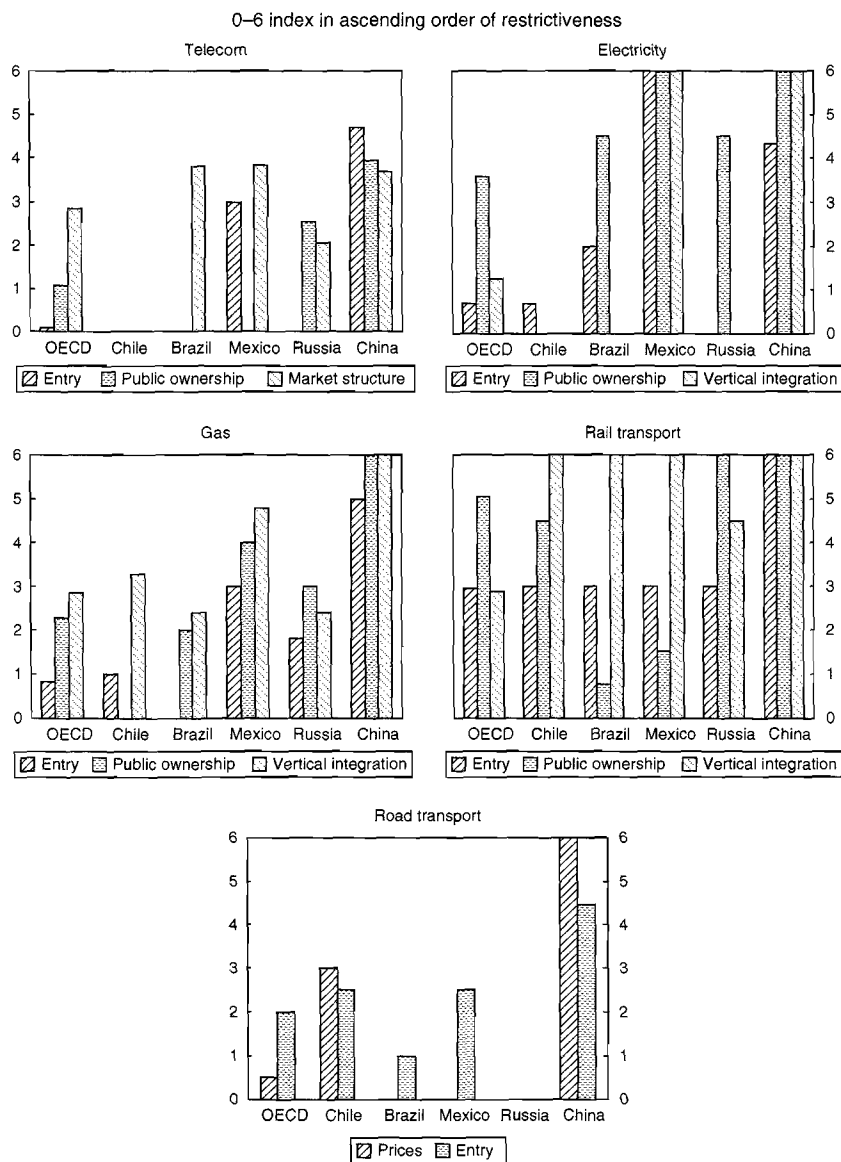
competing demands for scarce budgetary resources, especially in the social area, but also through greater budgetary rigidity, which distorts the composition of spending at the expense of public investment.¹³ Budgetary rigidity also exacerbates the pro-cyclicality of government investment by making capital outlays the easiest expenditure item to cut in periods of fiscal duress. Because budgetary rigidities constrain the ability of sub-national governments to allocate budgetary resources to programs that may be more cost-effective than the protected ones, including possibly investment, *a comprehensive review of the existing arrangements is in order*. Such a review – and subsequent corrective measures – would also have the advantage of identifying ‘hidden’ fiscal space, which could allow for hiking cost-effective investment.

Making the Most of Decentralization to Encourage Private Investment

The results of the regressions reported above show that the deleterious effect of revenue decentralization on subnational government investment is not compensated in Latin America by higher central government or private sector investment, given an overall negative impact of revenue decentralization on gross fixed capital formation. This is disturbing, because decentralization is found to encourage gross fixed capital formation in countries other than those in Latin America, while leaving government spending unaffected. This suggests that, again, there may be features of fiscal decentralization in Latin America that are detrimental to private sector investment.

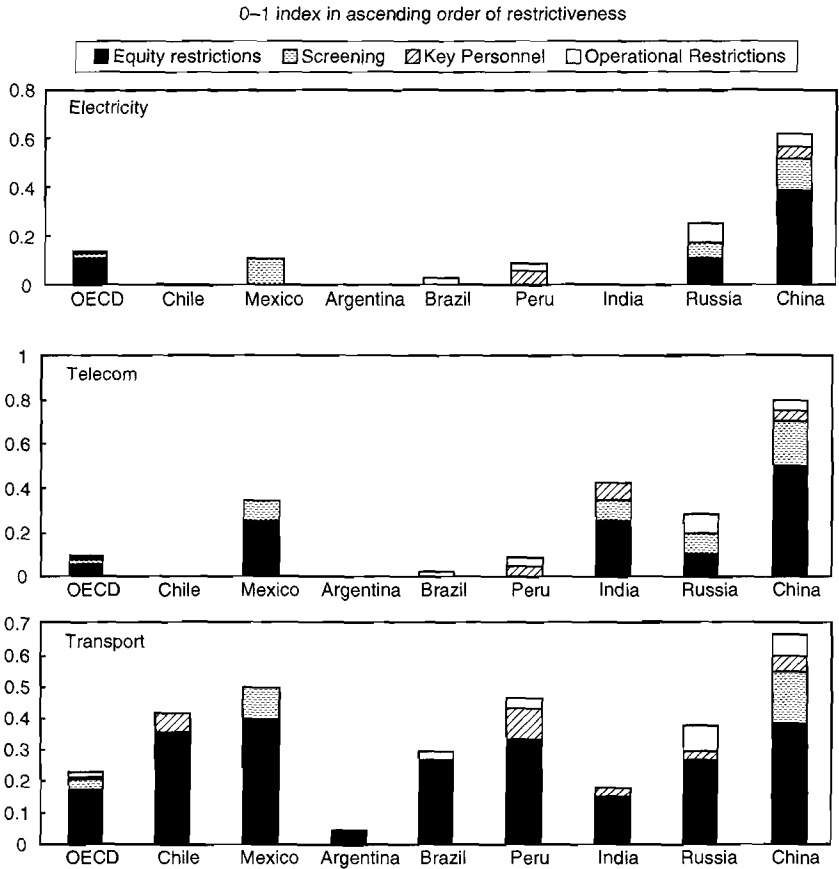
Making product market regulations more pro-investment

There is a growing body of empirical evidence on the effects of pro-competition regulations in product markets on economic performance, especially productivity and growth.¹⁴ Most of this literature focuses on economy-wide regulations, rather than on variations in regulations across the different subnational jurisdictions, which can be substantial, especially in federal countries. In some cases, there may be entry, ownership, pricing and market structure impediments to private sector involvement in investment programs. Cross-country comparison on the basis of the OECD indicator of restrictiveness of regulations in network industries shows that OECD countries have on average less burdensome regulatory regimes than the Latin American countries for which information is available (Brazil, Chile and Mexico). In particular, entry restrictions are particularly stringent in Mexico in telecommunications, electricity and gas (Figure 5.3). Impediments are also particularly stringent in Latin America in transport, especially rail, a sector that also tends to be fairly protected in



Source: OECD.

Figure 5.3 Product market regulations: network industries, 2008



Source: OECD.

Figure 5.4 FDI restrictiveness: international comparisons, 2010

OECD countries. Obstacles to private sector involvement also reflect FDI regimes, which tend to be less pro-investment in Latin America than in the OECD area on average (Figure 5.4).¹⁵ To the extent that sectoral regulations are under the purview of subnational levels of government, as is the case to some extent in Brazil in a number of network industries, there is scope for removing restrictions that hold back private investment.

Avoiding costly regulatory arbitrage

Predatory tax competition among the subnational jurisdictions to attract investment, discussed above, creates room for regulatory arbitrage by

investors, at least as far as tax matters are concerned. But uncertainty about other aspects of regulation, including at the sectoral level, across the different subnational jurisdictions imposes costs on investors, which may ultimately discourage investment. The example, noted above, of water/sanitation in Brazil is a case in point. *It is therefore desirable to make subnational regulations as transparent as possible.*

Alternative forms of participation

Subnational governments have experimented with alternative modalities to encourage private sector participation, including public–private partnerships (PPPs) and concessions. In Brazil, for example, several states were pioneering in setting a regulatory framework for PPPs, often ahead of the federal government. The country also has considerable experience with concessions at the subnational level. These alternative investment modalities require considerable technical capacity, which is in many cases beyond subnational governments' means. Among the key challenges to be addressed when designing PPP contracts is the need for appropriate risk sharing between the private sector and the government. In the case of concessions, the level of subsidization needed to ensure adequate cost recovery poses important design challenges. These matters are discussed in Jiménez and Podestá (2009).

6 CONCLUSIONS

A combination of low investment and poor infrastructure begs the question of how much Latin American countries should invest.¹⁶ The economic literature is rather limited in this area, reflecting to a large extent a dearth of long time series on investment spending, even in the OECD area, which are needed for assessing the effect of investment on economic performance, including GDP growth and social outcomes. Based on standard growth accounting, it is possible to compute the increment in the investment-to-GDP ratio that would be needed to lift an economy's potential growth, while keeping the rates of growth of other factors of production and multifactor productivity unchanged. But this mechanical computation fails to take on board the interactions between investment and productivity and efficiency in the use of capital, for example, as well as the trade-offs that need to be considered for financing an increment in investment.

The empirical evidence reported in this chapter suggests that, controlling for other cross-country determinants of investment, there may be specific features of fiscal decentralization in Latin America that discourage subnational governments from investing. Regulatory uncertainty

in the assignment of expenditure functions across the different levels of administration, the design of intergovernmental grants and transfers that make it difficult to finance investment projects jointly by different spheres of government and institutional constraints on subnational financial management, including borrowing for investment purposes, are likely to be among the impediments to higher subnational investment in the region. There is therefore ample room for policy reform, depending on country conditions and institutional settings, so that decentralization may be used as an instrument for raising productivity-enhancing investment in support of stronger growth.

NOTES

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1. To facilitate comparison, for the purpose of this chapter, OECD-wide averages exclude Chile and Mexico, the two Latin American countries that are also OECD members.
 2. See Martner and Tromben (2005), Jiménez and Podestá (2009) and Rozas (2010) for more information and discussion on trends in Latin America.
 3. This average is consistent with that computed by Lucioni (2009) for the region based on national accounts data.
 4. Privatization has been more prevalent in sectors such as telecommunications and, to some extent, electricity generation and gas. Other vehicles for private sector involvement, including concessions, are more common in sectors such as transport (ports, airports, roads and railroads), water and sanitation, and some segments of the electricity sector (Guasch et al., 2008).
 5. Empirical evidence on the direction of causality between investment and GDP growth is by and large inconclusive. Nevertheless, recent empirical analysis based on cointegration and temporal causality techniques suggests that GDP growth tends to cause infrastructure spending in a temporal sense, rather than the converse. Evidence based on structural model suggests that causality in the growth–investment nexus tends to take place via efficiency gains and a reduction of production costs (Estache and Fay, 2007).
 6. See Martínez-Vázquez (2010) for more information on the different arrangements in place in Latin America and de Mello (2010) for more information on the experience of European countries.
 7. Most of the empirical literature on the determinants of aggregate investment is based on the estimation of growth regressions following the tradition of Barro (1991). In this setting, investment (total or private) depends essentially on the determinants of GDP growth, including human capital, government consumption and initial GDP. Subsequent contributions to the literature have maintained this basic setting, while incorporating other determinants. For example, indicators of macroeconomic uncertainty, which is known to affect investment because of the presence of sunk costs in investment projects, have also been considered in empirical literature (Aizenman and Marion, 1993; Brunetti and Weder, 1997).

8. The baseline results reported below are fairly robust to the use of gross capital formation as the measure of aggregate investment and the redefinition of the decentralization indicator for expenditure, rather than revenue.
9. This is confirmed on the basis of the Wooldridge test for panel autocorrelation.
10. A related literature shows that decentralization is detrimental to FDI. For example, Kessing et al. (2007) find a significant negative effect of the number of government layers of host countries on the amount of inward FDI these countries receive.
11. See Jiménez and Podestá (2009) for a survey of the literature and discussions.
12. See de Mello (2000) for a review of the literature and empirical evidence.
13. See Allier (2006) and Cetrángolo et al. (2010) for an overview of budget rigidities and fiscal space in Latin America, and Afonso et al. (2005) for the case of Brazil.
14. See, for example, de Mello and Padoan (2010) for a review of the empirical evidence.
15. See Kalinova et al. (2010) for more information and an update of the indicator.
16. See Fay and Yepes (2003) for estimations of investment needs in Latin America.

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6. The financing of subnational governments*

**Juan Carlos Gómez Sabaini and
Juan Pablo Jiménez**

1 INTRODUCTION

Objectives of the Chapter

For most of the Latin American countries, the relationship between different levels of government and the reassignment of their respective responsibilities and financing have been of great significance to their economic, political and institutional development. Over the past decades, the region has undergone an intense and extensive process of decentralization, shifting the responsibility of various public functions to different levels of government. Although considerable time has elapsed since this process began, the impact of these various (and not always comparable) reforms has not been adequately evaluated, and the effectiveness of some has been doubtful.

How public services and goods are provided, and the methods to allocate them among different levels of government, are central to achieving a sound, stable intergovernmental system and a sustainable decentralization. Systems of intergovernmental fiscal relationships, and the subnational governments involved, employ a variety of different financing instruments to fulfill the governments' responsibilities. The amount of financing and the particular combination of instruments largely determine the success of the results.

In an attempt to address one aspect of this issue, this chapter examines the allocation of revenue to subnational governments, emphasizing financing changes over the last several decades. Focusing on these objectives, it analyzes the functioning of systems for financing subnational governments, with particular attention given to their changing levels of own resources. The examination of specific cases is designed to spotlight the different self-financing options open to these jurisdictions (intermediate and/or local governments) – this despite the predominance of central

government transfers¹ – as well as the main courses of action that could be taken to strengthen them.

Country Selection and Characteristics

The process of decentralization in the region has been shaped by the diversity of national circumstances: from differences in institutional and democratic features to differing motivations, institutional frameworks, procedural dynamics and sectors involved. Added to these factors are differences in the degree of autonomy of subnational governments and national differences in social and economic structures (Cetrángolo et al., 2009).

Given the differing situations in the various countries, in studying public finance at the local level, it is difficult to draw generalizations about Latin America as a whole. Any analysis must weigh the specific circumstances involved, as will be clear from an examination of Table 6.1, in which a set of characteristics related to the nine countries considered in this chapter is shown.

The first distinctive characteristic among the countries is the system of government. Argentina, Brazil and Mexico have federal systems and intermediate levels of government between the central and local governments – ‘provinces’ in Argentina, ‘states’ in Brazil and Mexico.² The rest have unitary or centralized systems of government. This distinction makes for a significant difference in the taxing power of the lower levels of government.³

The different types of federal and unitary structure further complicate the analysis. In Mexico and Argentina the choice of federalism was intended to achieve unity between previously autonomous states; in Brazil the choice of such a structure was made by the central government. The temporal dynamic must also be borne in mind. Neither unitary nor federal countries have always had their current government system. This is exhibited in the numerous attempts made in constructing the constitutions of various countries throughout the nineteenth century (Cetrángolo et al., 2009; Gargarella and Arballo, ch. 2 in this volume).

A second characteristic is the population density in each jurisdiction, since this proves to be a significant variable in evaluating the cost of transferring functions to local jurisdictions. The higher the population density, the greater are the economies of scale in providing services, especially in education, health and infrastructure, which constitute the principal public outlays at the local level. This in turn entails a need to capture greater resources in order to offer the same level of expenditure per inhabitant.

Table 6.1 Principal socioeconomic indicators for the countries analyzed

Country	System of government	Governmental structure	Estimated population according to United Nations (2010)	Population density (people/km ²), United Nations (2010)	Per capita GDP (US\$ PPP), World Bank (2009)	HDI (coeff. and ranking), UNDP (2007)	Gini coeff. (estimated annual)	Total tax burden 2008 (% of GDP)	% Urban pop. (2005)	Regional disparities (gaps, constant pesos)
Argentina	Federal	23 provinces, one autonomous city and 1,301 municipalities	40,666,000	15	14,559	0.866 (49th)	0.513 (2006)	30.8	91.8	8.1 (2005)
Bolivia (Plurinational State of)	Unitary	9 departments, 112 provinces and 327 municipalities	10,031,000	9	4,426	0.729 (113th)	0.556 (2005)	21.7	64.2	3.1 (2007)
Brazil	Federal	26 states, one federal district and 5,564 municipalities	195,423,000	23	10,427	0.813 (75th)	0.540 (1999)	34.1	83.4	9.0 (2007) (current pesos)
Chile	Unitary	15 regions, 54 provinces and 346 communes (municipalities)	17,135,000	23	14,331	0.878 (44th)	0.475 (2003)	19.6	86.6	4.6 (2008)

Colombia	Unitary	32 departments, 10 districts and 1,096 municipalities	46,300,000	41	8,870	0.807 (77th)	0.537 (2005)	15.9	76.6	11.0 (2007)
Costa Rica	Unitary	7 provinces, 81 cantons (municipalities) and 463 districts	4,640,000	91	11,122	0.854 (54th)	0.577 (2004)	21.4	62.6	–
Ecuador	Unitary	24 provincial councils and 221 cantons (municipalities)	13,775,000	51	8,280	0.806 (80th)	0.526 (2006)	16.5	62.8	16.0 (2007)
Mexico	Federal	31 states, one federal district and 2,439 municipalities	110,645,000	57	14,337	0.854 (53rd)	0.490 (2002)	10.4	76.5	12.6 (2007)
Peru	Unitary	25 regions, 25 departments, 195 provinces and 1,832 municipalities	29,496,000	23	8,647	0.806 (78th)	0.535 (2005)	17.4	72.6	7.7 (2007)

Sources: ECLAC, United Nations, World Bank: Zapata (2007), SUBDERE (2009), Gómez Sabaini et al. (2010) and Rezende and Veloso (ch. 8 in this volume).

Third, it is important to consider each country's per capita income level. One obvious notion is that the greater this indicator for a country, the greater will be the potential tax base available to finance expenditures. However, the disparities between the region's countries are such that, for example, the tax burden in Brazil is nearly 3.5 times what it is in Mexico, although per capita income is 30 percent higher in Mexico.

The fourth characteristic is the degree of territorial inequality, which is of particular relevance in designing and financing decentralized public policy. In contrast to the situation in more developed regions, there are large disparities in the degree of development between different geographical areas within individual countries of Latin America – a circumstance that calls for heightened attention. In light of this, the present work has examined, for a group of countries in the region, the gaps in per capita output between the highest- and lowest-ranking subnational jurisdictions (Cetrángolo et al., 2009). Table 6.1 (column 11) shows that there are vast gaps between rich and poor jurisdictions, suggesting a great difference in the tax bases of different areas within a single country. This circumstance makes it difficult to provide public goods and services based on decentralized expenditure and financing policies, since the poorer, needier areas are precisely the ones that have a smaller tax base to finance their most important local public expenditure (infrastructure, health and education).

Fifth, two highly important social indicators must be considered: the human development index (HDI) and the income inequality index, as measured by the Gini coefficient. These indicators point to the need for strong social policies, in an effort to improve social equity and cohesion in the region's countries.

Sixth, the countries analyzed here have a large number of municipalities and intermediate-level entities (see column 3). Except for Costa Rica, Chile and Ecuador, which have fewer than 500 municipalities each, municipalities number in the thousands for individual countries, with over 5,000 in Brazil. The task of coordinating policies for local governments becomes a major challenge when such a wide range of realities must be taken into consideration.

Seventh (column 9), country-to-country differences in the national tax burden within the region (lower in countries such as Colombia, Ecuador and Mexico, higher in Argentina, Brazil and Bolivia (Plurinational State of)) cause differences in the leeway that local governments have for collecting revenue.

In short, as is evident from the information outlined in Table 6.1, no stylized behavior can be defined for the countries as a whole; it is

therefore difficult to draw general conclusions from an analysis of their data.

2 CONCEPTUAL CONSIDERATIONS REGARDING REVENUE ALLOCATION AND VERTICAL ASYMMETRY

The last two decades witnessed a major trend towards decentralization in Latin America. This is evident in the countries with traditional federal systems (where certain federal government functions were transferred to lower levels of government), in unitary countries with multiple levels of government (where there was a major transfer of functions to local governments) and in what have traditionally been highly centralized unitary countries, which created new intermediate levels of government and assigned them responsibility for formulating and implementing – or, in some cases, merely managing – major public policies (Jiménez and Viñuela, 2004).

Reforms and the process of decentralization in the region's countries have tended to create a high degree of vertical asymmetry in the way that expenditures and revenue are allocated to the different levels of government. This imbalance is the consequence of a misalignment, or lack of correspondence, between the vertical distribution of authorities – with the expenditure responsibilities that accompany them – and the vertical distribution of potential tax revenues (to fund the expenditures) between the different levels of government.

Theory generally suggests that subnational governments should be financed, where possible, by their own resources. Looking beyond the theory to empirical data, however, one sees a strong vertical asymmetry, with expenditures being more decentralized than revenue in most world regions (OECD, 2003).

On the theoretical level, much has been written regarding the allocation of taxes between different levels of government. The quest for an optimal allocation of resources poses questions about how to determine which taxes are to be collected by each level of government, which level of government should be responsible for defining the tax basis, which level should establish tax rates and, finally, which level of government should administer and oversee the taxes once the foregoing questions have been answered (Ambrosanio and Bordignon, 2006).

There is, of course, no consensus or single answer to these questions. The excellent review by Ambrosanio and Bordignon makes it clear that the two extreme positions are based on: (i) the traditional normative theory

of federalism (Musgrave, 1967; Oates, 1972); and (ii) a 'public choice' approach (Brennan and Buchanan, 1985).

According to the first of these two approaches, optimal allocation relates to how expenditure functions are allocated between the different levels of government. As expressed in Musgrave's well-known definition, public sectors are charged with three functions: allocation, redistribution and stabilization. While the first of these is shared by all levels of government, it is desirable for the last two to be carried out at the central level. It follows that income taxes should be a central government function, since they effectively serve both to redistribute income and to achieve macroeconomic stability. As for the allocation function, conventional theory recommends that, for the sake of efficiency, both the central government and subnational governments should allocate taxes according to the principle of benefit. First, according to this principle, local governments should tax real estate or assets, in order to prevent fiscal competition and loss of revenue. Second, the tax basis on which collections are made should be uniformly distributed among the jurisdictions, in order to avoid generating horizontal tax imbalances. Third, the taxes collected by local governments should have relatively stable real returns, thus making it easier to formulate expenditure plans.

In contrast with this method of addressing resource allocation, the Brennan–Buchanan approach emphasizes the idea that taxes are used by the government as a means of maximizing the resources appropriated from the private sector. The positive effect of decentralizing taxes, in this view, is based on the fact that it allows competition between different levels of government, creating constraints on the use of taxation and, ultimately, on the size of the public sector.

Both approaches have been criticized on a number of fronts: the traditional approach for assuming that governments are benevolent (maximizers of social welfare) – thus ignoring the political economy at work in the allocation of resources – and for failing to provide a satisfactory explanation of allocation based on empirical data; the Brennan–Buchanan approach for considering monopolistic governments that do not consider competition between levels of government which, just as in the real world, can introduce serious problems of distortion in the allocation of resources, leading to tax wars that erode the tax base and reduce revenues.

Beyond these differences, the two approaches share the common feature of being normative by nature, while neither is very effective in explaining the real world, as will be seen below.

3 THE PROCESS OF FISCAL DECENTRALIZATION AND FORMS OF FUNDING

The Path to Strengthening Local Governments

The last few decades in Latin America have seen the consolidation of a gradual but clear trend towards decentralizing public spending, from the central government to lower levels.

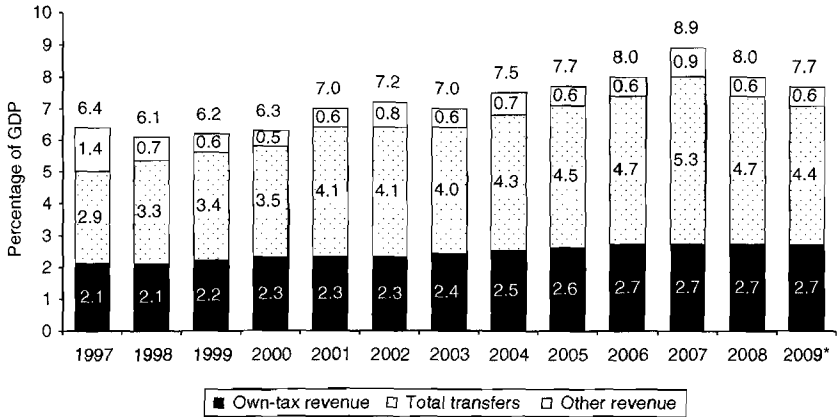
According to Rezende and Veloso (ch. 8 in this volume), efforts to accomplish decentralization occurred in two major 'waves'. The first one gathered strength in the closing years of the 1980s, fueled by the view that decentralization would allow more efficient allocation of public goods to a territorially diverse subnational citizenry, and that this would, in turn, improve channels for citizen participation and enhance political responsibility and accountability. The second wave occurred in the context of the macro crisis of the mid-1990s. Here, the decentralizing reforms took a different approach. Tax coparticipation systems (in most cases unrestricted) were not given the priority they previously enjoyed; rather, preference was given to channeling federal resources to subnational governments for education and health, with a strengthening of mechanisms for earmarked transfers.

In both periods, the decentralization process primarily involved public expenditure rather than revenue, though this varied somewhat from one area to another. In general terms, subnational fiscal decentralization has been most notable in Argentina and Brazil (countries with federal systems) – as measured by either spending or revenue – followed by Colombia and Bolivia (Plurinational State of) (among the unitary countries) (Aghón and Edling, 1997).

Although the allocation of expenditure responsibilities to subnational governments is important, the way in which these governments finance the services involved remains a key concern. Three financing methods (or combinations of the three) are used: (a) generation of own resources, whether from taxes or from non-tax sources (royalties, municipal fees, levies, are among the most relevant); (b) intergovernmental transfers; and (c) borrowing.

In the strict sense, subnational own revenue is defined as consisting of those taxes over which subnational governments have discretionary power to determine the tax burden on citizens (see Brosio and Jiménez, ch. 10 in this volume). This power can be exercised through three different instruments: tax administration, setting tax rates and determining the tax base.

This chapter utilizes a broader definition of own resources, since a combination of all three is present in Latin America, and the necessary information



Note: Throughout this chapter the concept of subnational governments refers to provinces in the case of Argentina, prefectures and municipalities in the case of Bolivia (Plurinational State of), states and municipalities in Brazil, municipalities in Chile, departments and municipalities in Colombia, local governments (cantons) in Costa Rica, provincial councils and municipalities in Ecuador, states and municipalities in Mexico.
* The data for Argentina, Colombia, Ecuador and Mexico are from ECLAC projections.

Source: ECLAC.

Figure 6.1 Changing structure of total revenues in subnational governments (% of GDP): average for Latin America, 1997–2009

is not available in all cases. Therefore, a tax will be defined as subnational to the extent that it is administered by the subnational government.

As shown in Figure 6.1, the total fiscal revenues of the subnational governments have grown considerably in the last 10 years. However, this is due primarily to increasingly important transfers from central governments, rather than to increases in own-tax resources at the intermediate and local levels. On average, total transfers increased by 1.5 percent of GDP between 1997 and 2009, while the growth in own resources increased only from 2.1 to 2.7 percent of GDP.⁴

Table 6.2 shows the current financing structures of the subnational governments of the countries covered in this study. The first notable point is the difference seen in the quantity of own resources (tax and non-tax) as a proportion of total revenue received by these levels of government. As indicated in the table, Brazil's states and municipalities obtain more than half of their revenues from own resources. This is equivalent to 11.9 percent of GDP, 85 percent of which corresponds to tax revenues.

Table 6.2 Structure of total revenues of subnational governments, 2008
(% of GDP and % of total)

	Percentage of GDP			
	Own resources	Transfers	Other revenue	Total
Argentina	5.6	7.6	0.7	13.9
Bolivia (Plurinational. State of)	3.9	7.4	0.5	11.8
Brazil	11.9	7.9	1.6	21.4
Chile	1.5	0.2	0.4	2.1
Colombia	2.9	4.2	0.0	7.1
Costa Rica	0.9	0.0	0.0	0.9
Ecuador	1.2	4.0	0.1	5.3
Mexico	1.5	9.1	0.8	11.4
Peru	0.8	4.8	0.4	6.0

	Percentage of total			
	Own resources	Transfers	Other revenue	Total
Argentina	40.1	54.7	5.2	100
Bolivia (Plurinational. State of)	33.1	62.4	4.5	100
Brazil	55.6	36.9	7.5	100
Chile	71.5	9.5	19.0	100
Colombia	41.0	59.0	0.0	100
Costa Rica	99.2	0.8	0.0	100
Ecuador	22.6	75.5	1.9	100
Mexico	12.9	79.9	7.2	100
Peru	14.1	79.4	6.5	100

Note: Other revenue can include different forms of borrowing, investment, resources from sales of assets, recovery of loans, or capital transfers; own resources include tax and non-tax own revenues.

Source: ECLAC.

In most countries, the subnational governments are highly dependent on the transfer system used by the central government to provide the required funds to finance the expenditures of these lower levels of government (that is, providing public goods to their citizens). Central governments in countries such as Argentina, Bolivia (Plurinational State of), Brazil and Mexico transfer between 7.4 and 9.1 percent of GDP to the lower levels of government. In Colombia and Peru,⁵ the figure is 4.8 percent, while in Ecuador it is 2.5 percent.

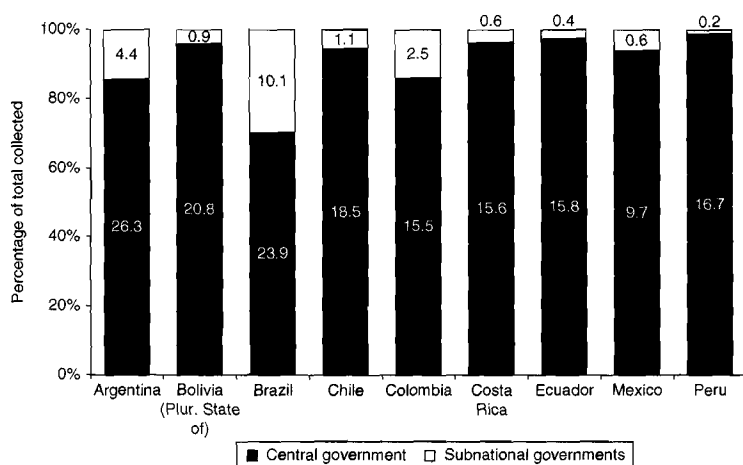
Chile and Costa Rica are exceptions to the Latin American trend. Although the revenues of subnational governments in both of these countries are low in terms of GDP (as in nearly all of the region's unitary states), they are made up principally of own resources. In Costa Rica, the process of fiscal decentralization has not yet advanced significantly. The delegation of responsibility involved has not occurred on either the expenditure or the taxation side. On the contrary, in Chile the preponderance of own resources as the principal source of municipal revenues has two components: permanent own resources, and revenues from the Common Municipal Fund (*Fondo Común Municipal*, or FCM). Since this mechanism of horizontal equalization and solidarity between municipalities is 97 percent reliant on the tax resources collected by these jurisdictions themselves,⁶ in this chapter we consider their pre-distribution influence, that is, as a part of all available own resources, in order to better reflect their potential for financing subnational levels of government.

Tax Revenues of Subnational Governments: Structure and Trends

As explained above, the decentralization of taxing authority to subnational governments has been relatively weak in most Latin American countries, although this varies according to the specific characteristics of the country involved.

Figure 6.2 shows the uneven, and generally small, role of subnational governments in total tax collections in Latin American countries. Brazil exhibits the greater fiscal decentralization, with its states and municipalities accounting for 30 percent of total collections, which represent 10.1 percent of GDP. A second tier of countries includes Argentina and Colombia, where lower levels of government account for approximately 15 percent of total collections.

In the remaining countries central governments have not significantly decentralized tax resources. Subnational tax collections in them average around 3 to 4 percent of the countries' total tax revenues. Tax collections by subnational governments in the region's countries have remained stagnant during the last 10 years. This poor performance is related to weakness in the level and structure of subnational taxation, which in turn is linked to the tax bases available to these governments. As discussed in the sections below, the taxes collected by intermediate and local governments are generally taxes on assets – primarily real estate and vehicles. The most decentralized countries have, in addition, some general consumption taxes; these are levied mostly by intermediate levels of government. Examples are the Tax on Circulation of Goods and Services (*Imposto sobre Circulação de Mercadorias e Serviços*, or ICMS) in Brazilian states, the Tax on All



Source: ECLAC, on the basis of official figures.

Figure 6.2 Tax revenues by level of government, 2008 (% of GDP and % of total)

Services (*Imposto sobre Serviços de Qualquer Natureza*, or ISS) in Brazilian municipalities, the tax on gross income in the Argentine provinces, excise taxes at the departmental level in Colombia and an Industry and Commerce Tax that is collected by Colombian municipalities.

Although the low level of collection is a problem for own taxes, given the amount of expenditure that has to be financed by intermediate and local governments, they have little margin for reallocating taxing powers. What becomes clear is the difficulty that subnational governments face in attempting to exert their existing powers of taxation. This is evident, for example, in the low levels of revenue generated by real estate taxes in Latin American countries.

A detailed analysis of the main features of the principal taxes presented in Table 6.3, outlining their features in the countries being examined, follows.

Property taxes

The most recent research, along with available statistical information, confirms that property taxes are not significant as a percentage of GDP, or as a percentage of all taxes collected (excluding taxes on financial transactions), in any of the Latin American tax systems. Since taxes on assets are the principal instrument used by the region's subnational governments to

Table 6.3 Structure of the principal taxes of subnational governments, 2008 (% of GDP and % of total)

	Percentage of GDP					Total
	Property	Economic activity	Motor vehicles	Personal income	Others	
Argentina	0.4	3.2	0.2	0.0	0.6	4.4
Bolivia (Plurinational State of)	0.5	0.0	0.2	0.0	0.2	0.9
Brazil	0.4	7.9	0.6	0.5	0.8	10.2
Chile	0.6	0.0	0.2	0.0	0.3	1.1
Colombia	0.5	1.3	0.0	0.0	0.7	2.5
Costa Rica	0.2	0.4	0.0	0.0	0.0	0.6
Ecuador	0.1	0.1	0.0	0.0	0.2	0.4
Mexico	0.2	0.0	0.0	0.3	0.2	0.7
Peru	0.1	0.0	0.0	0.0	0.1	0.2

	Percentage of total					Total
	Property	Economic activity	Motor vehicles	Personal income	Others	
Argentina	8.7	72.2	5.5	0.0	13.6	100
Bolivia (Plurinational State of)	59.8	0.0	19.9	0.0	20.3	100
Brazil	3.8	78.3	5.5	4.8	7.6	100
Chile	52.4	0.0	17.4	0.0	30.2	100
Colombia	19.2	52.5	0.0	0.0	28.3	100
Costa Rica	32.5	66.5	0.0	0.0	1.0	100
Ecuador	32.9	14.2	3.4	4.5	45.1	100
Mexico	28.2	0.0	3.7	41.0	27.1	100
Peru	59.9	0.0	4.4	0.0	35.7	100

Source: ECLAC.

generate own resources, they are limited to finance expenditures in areas for which they are responsible.

At the same time, within the broad range of taxes normally imposed on assets, the real estate or land tax is the most commonly accepted, and is the tax most often used as a source of revenue at the lower levels of government, although it represents only 0.1 to 0.6 percent of GDP for the countries covered in this chapter.⁷

Nevertheless, the share of total subnational tax resources represented by real estate taxes varies considerably from country to country. Thus, as

shown in Table 6.3, the property tax provides over half of own-tax revenues in countries such as Chile, Bolivia (Plurinational State of) and Peru (although in this last country the amount obtained is small).

Chile's Property Tax (*Impuesto Territorial*), which sets levels of contributions for real property holdings, is the principal component of municipal tax revenues.⁸ Its rate, tax base and exemptions are established by law. In practice, the municipalities benefit only from the revenues they collect, while playing practically no role in setting the rates. The property tax base is determined by the tax value of the property, as assessed by the Internal Tax Service (*Servicio de Impuestos Internos*), and the rate is set by law. This creates an assets tax with no relation to the local goods and services whose costs must be underwritten by the municipality in which the property is located.

In addition, 60 or 65 percent of the sums collected (a figure that varies from one municipality to another) must be paid into the FCM, while the remaining 40 or 35 percent goes directly to the commune's municipality in which the property is located (Horst, 2009). Thus, the system attempts to incorporate distributive criteria for a tax that usually is based on the concept of direct benefits.

Three aspects of Chile's Property Tax are often cited. The first is its progressive nature: there is an income stratum that is exempt, and the scale is progressive for residential property, with allocations made through the FCM. Second, there is a large exempt tax base, although the revenue produced (0.6 percent of GDP) is 50 percent higher than the average for Latin America. Thus, the amount of exempt property is probably counterbalanced by higher rates than those in the other countries. Third, there is a high cost of administering the tax, as compared with other domestic taxes. This is due to (i) the complex process of property assessment and the cost of maintaining real estate rolls; and (ii) a combination of rates and exemptions that produces low levels of revenue collected.

In Bolivia (Plurinational State of), the Property Tax (*Impuesto a la Propiedad de Bienes Inmuebles*) is collected by the municipalities. It has the peculiarity that the taxpayer can determine how much to pay, based on tables of values for similar areas, as defined by the municipalities and approved by the central government. The sums collected are allocated exclusively to the municipalities, although the tax is regulated by the central government. The tax is calculated on the basis of taxpayer 'self-assessments', rather than by formal tax assessments of land and buildings and a real estate registry system, as is the case in most of the countries (Uribe and Bejarano, 2008).

In Peru, subnational governments obtain revenue from a set of taxes including the property tax, which falls under municipal jurisdiction. Two

methods are used to assess property values: the tax (or 'official') assessment based on standards and specifications defined by the National Taxation Council, and the commercial (or 'market') value, which is supposed to reflect inflation and actual real estate prices. The main problems with this type of assessment are:

1. The information on land area, construction footprint, and a building's material and condition are declared by the taxpayer. Municipalities have few resources to update property registers with verified information and, consequently, to audit the values declared by taxpayers.
2. Both the property values of the land and the unitary values of buildings are out of step with market values. The latter tend to be higher by a factor of two or even three in areas with high-value residences.

Furthermore, the tax rate is cumulative and progressive, varying between 0.2 and 1 percent according to the value of the property. Based on 2006 data from the Ministry of Economy and Finance of Peru, not only is this tax small in relation to GDP, but its collection is concentrated in a few municipalities. Ten municipalities (out of a sample of 1,300) account for 38.8 percent of the total collected, while the top 100 account for a full 86.4 percent of the national total (Gómez Sabaini et al., 2010).

Property tax revenues and collections are affected by the fact that only a small proportion of properties are registered. In addition, there is a high rate of delinquency in paying these taxes, while properties themselves are greatly undervalued. There are numerous reasons for the high delinquency rates, but the most common ones are lack of information by citizens, and the government's failure to disseminate information on the payment process. In addition, there is a public perception that failure to pay carries little risk, while there is a scarcity of information and little transparency in how resources are used.

In the other group of countries studied, the real estate tax provides an even lower percentage of tax revenues than in the countries mentioned above – still an important portion, though not more than 0.2 percent of GDP. Countries in this group include Ecuador (32.9 percent), Costa Rica (32.5 percent) and Mexico (28.2 percent).

In Ecuador, only the National Congress is responsible for the creation, modification and elimination of all types of taxes, although the provincial councils may establish additional taxes and set supplementary rates. However, the real estate tax is the main source of tax revenue for Ecuador's cantons in both urban and rural areas. The tax basis, which is the total value of the property, is updated every two years by the municipal property registry office, based on the value of the land the buildings and

their replacement value, pursuant to rulings by the Municipal Council. Nevertheless, given the logistical problems in most of the jurisdictions, the assessment method relies on information provided directly by the property owner, along with data from land titles. Tax rates for urban properties range from 0.25 to 5 percent, and the rate in rural areas is between 0.25 and 3 percent.

As mentioned above, the taxes collected by Costa Rica's cantons are relatively insignificant in relation to the national total. The principal reason for this is that the municipalities are responsible only for administering certain property taxes and sales taxes.⁹ Local governments are required to make assessments, carry out collections and demand payment of taxes under their jurisdiction. The effective rate, 0.25 percent of the value of the property, is set by the central government, and applies throughout the nation.

In Mexico, each state makes independent use of the authorities that the constitution assigns to them, including the authority to establish taxes. The property tax is essentially a municipal tax¹⁰ and represents the second most important source of subnational tax revenue. In 2008, it accounted for 54 percent of municipal tax revenues and 34 percent of tax revenues in the Federal District (*Distrito Federal*, or DF). Although no legal constraint prevents the federal government from instituting a property tax, this type of tax is assigned to the municipalities to ensure consistency in the tax system and to prevent double taxation. Thus, tax rolls and assessments are the responsibility of the municipalities and of the DF, and common criteria for taxation can only be achieved through agreements between jurisdictions.

However, due to a failure to properly update assessments, in combination with a number of other institutional factors, property taxes have little real ability to provide resources in Mexico. Municipalities need legal authorization from their respective state congresses to alter land assessments, and these legislative bodies have no incentive to increase the land assessment tables, since the citizens, especially in the capital cities, view such increases as unjustified – a situation that makes any decisions to raise the taxes politically unpopular. In addition, the average municipality in Mexico has little technical and administrative capacity to efficiently handle the real estate tax, and there is a high turnover rate among the municipal employees responsible for administering it (Álvarez Estrada, 2009).

In Argentina, Brazil and Colombia, although subnational governments also collect the real estate tax, the tax is subordinate to other types of taxes – such as retail sales tax and the gross income tax – that are larger revenue sources at this level.

In Argentina, the real estate tax is the second most important source of

tax revenue at the provincial level, although it accounts for only slightly under one-tenth of total collections (8.7 percent).¹¹ Moreover, 80 percent of the funds that it generates are concentrated in five of the 24 provinces – with the federal capital and the province of Buenos Aires together accounting for approximately 75 percent of GDP (Gómez Sabaini, et al., 2010).

The assessment method most commonly used in Argentina takes account of both land and buildings, and thus reflects the value of each property in its entirety. Another method used, specifically in the province of Buenos Aires, is based on separate assessments of the land and the buildings (or improvements). Different rates apply to each, with rates on betterment being lower than rates on land. The tax rates vary from one jurisdiction to another, and are generally a percentage of the value of the property. According to the type of real estate involved, a single tax, or a set of different taxes, may apply. Some cities have progressive tax scales, that is, rates that vary with the value of the real estate. In the city of Buenos Aires, for example, the so-called ‘territorial contribution’ has 16 different rates, one for each value bracket. The rates range from 0.2 to 1.5 percent of assessed value.

In December 2006, a new National Real Estate Registry Act (Law 26.209) was passed. This followed longstanding demands to modernize aspects of the country’s property registry system. Changes included: the creation of the new Federal Real Estate Registry Council (composed of all of the provincial registries and that of the Autonomous City of Buenos Aires); the granting of provincial autonomy for such purposes (under the constitution, the provinces have powers and are permitted to make their own laws, provided that these do not conflict with national legislation and are consistent with the Civil Code); and the definition of parameters relating to land parcels, such as georeferenced information on the location of the property (boundaries as defined by the legal descriptions on which they are based, such as lineal measures, angular measures and area).

Brazil has two taxes on real estate, one for urban property, the other for rural property. The Urban Property Tax (*Imposto sobre a propriedade predial e territorial urbana*, or IPTU) is under the exclusive authority of the municipalities and the federal district; the legal tax base therefore depends on rules established directly by each jurisdiction. Revenues from the IPTU¹² amounted to 0.4 percent of GDP in 2008. This tax applies to ownership or possession of real property in urban areas. The tax basis is determined by the market value of the property, while the rates are set by each municipality.

The tax represents only a small share (3.8 percent) of all subnational government tax revenues. Brazil’s urban real estate tax, by contrast, is the

second largest source of revenue for municipalities, providing approximately 26 percent of total tax revenue; it is exceeded only by the ISS, which is discussed in the next subsection. The IPTU differs from the Rural Property Tax (*Imposto Territorial Rural*, or ITR), which consists of the set of taxes assigned to the central government under current legislation and is applicable to rural land without improvements or buildings.

In Colombia, the Unified Land Tax, although it was originally under departmental jurisdiction, came under municipal responsibility as of the 1991 Constitution. The constitution gave the municipalities the authority to determine rates (within a set range), exemptions, preferential treatments and specific permitted uses of revenues from the tax. As might be expected, there can be (and in fact are) as many regulatory frameworks for real estate taxation as there are municipalities, reflecting the particular needs of each jurisdiction. Thus, Colombia's land tax, which represents 0.5 percent of GDP, is levied on all real estate, both urban and rural, whether or not it includes buildings, within the geographical boundaries of each municipality. It is the second most important source of tax revenue at the subnational level, accounting for 19.2 percent of the total revenues of these jurisdictions (see Table 6.3).

The tax basis, in this case, is determined by the assessment made by decentralized registry offices in Bogota, Antioquia, Cali and Medellin, and by a private entity in the other departments. Property values are updated annually by a percentage set by the central government, consisting of between 70 and 100 percent of the consumer price index as of 1 September of each year. However, a number of municipalities in Colombia have experienced problems, both because of the difficulty of using market data to update assessments and due to the intrinsic difficulties involved. They have therefore resorted to using self-assessments of value – with the caveat that the values reported by the taxpayer may not be less than a specified threshold value set by the land registry authority.

Finally, tax rates must be set by municipal authorities, and must be between 0.1 and 1.6 percent of the assessed value of the property. The rate structure must be differentiated and progressive, varying based on socio-economic strata and, in the case of urban areas, on how the land is being used – factors that ultimately determine the tax value of the property in question. Box 6.1 discusses the issue of 'betterment levies'.

Taxes on economic activity

Unlike real estate taxes – where the differences in tax rates between jurisdictions do not create major problems, given the constancy of the tax base – taxes on economic activities entail greater risks if there is a lack of tax coordination, since differences between rates in neighboring regions

BOX 6.1 BETTERMENT LEVIES

In terms of financing urban development in Latin America, Colombia is recognized by academics and public administrations for its important experience in using the *contribución de valorización* (Vejarano, 2008) – a property tax to subsidize a specific public project, levied on property owners who have benefited, or are to benefit, from the project involved. Studies in Peru also point to increasing success in overcoming the obstacles to using such a tax (Gamarra Huayapa, 2001), while studies in Guatemala indicate that it, too, has had interesting experiences with this tax in the past (Eguino et al., 2002). Ecuador is a special case in the region, with this tax accounting for over 20 percent of municipal tax revenues (Pérez, 2010).

This instrument allows the state to recover some of the increase in land value resulting from public works. Thus, the tax functions partly as a means of recovering added value, although there is a limit on what can be charged, based on the total cost of the work carried out. The system does not allow recovery to be based upon the increased value of the land.

Except in a very few countries, such as Chile, rules allowing for the use of this mechanism can be found in various provisions for subsidizing public works or improvements. However, in practice, its application has been limited, owing in most cases to problems relating to the scope of the levy, the criteria for applying it, and difficulties of collecting it.

There is some consensus on the advantages of having some system based on taxing betterment,¹ given the fact that such systems can encourage citizen participation in municipal decision making, while providing community support for projects that offer social benefits and increase property values.

As Macón and Merino-Mañón (1976) note, however, ‘betterment levies tax the increased value of real estate resulting from work carried out by the public sector’, which in fact requires certain knowledge of the value of the real estate before and after the investment. Thus, determining the appropriate tax contribution for betterment has the same problems involved in taxing assets in general, although the problems are all the more challenging given the need to determine how much change has occurred in the value of the assets.

Another issue is that the overlapping effect on external economies generated by public works (for example, sewerage, paving, roads) leads to benefits that extend beyond the people directly affected by the works, to third parties that also use them. Thus, it is difficult to establish the scope of the taxation process, that is, to decide whom to charge for the betterment. This has caused practical problems in implementing such systems.

Furthermore, collecting taxes on the basis of increased value is difficult, and financial problems arise in attempting to do so.

For these and other reasons, studies conclude that this instrument, despite the fact that it deserves consideration as a financing mechanism for municipal governments, has so far fallen short of its expected results.

Note: 1. A brief summary of the lessons emerging from the use of this method of financing public works at the municipal level can be found in a report by Eguino et al. (2002).

can induce taxpayers to 'export' consumption and production/marketing to areas of the country with lower tax burdens (as can also happen internationally with taxes on international trade).

In general, the countries use two different types of taxes on sales and consumption: (a) single-stage taxes (such as the general sales tax that consumers pay in the United States) or selective taxes on specific goods and services; and (b) non-cumulative multiple-stage taxes, such as the value added tax used in all Latin American countries. Less frequent, but also present in the region at the local government level, are cumulative or 'cascading' taxes that apply to each stage in the production, distribution and marketing process. These generate significant revenue with low rates, because they tax the same item multiple times. Examples of this are Argentina's gross income tax and other, similar local taxes consisting of licensing taxes or fees.

The relative ease of administering specific or selective taxes and the possibility of using different rates for diverse regions make these measures a good potential source of revenue for the various levels of government involved, though the jurisdictional principle must be taken into account in applying them.

As long as general sales or consumption taxes, as well as excise taxes, are levied in the location where the consumer lives (the destination principle) rather than where the goods and services are produced or provided

(the origin principle), these taxes will not have distortionary effects on taxpayers' economic decisions (Larios et al., 2004).

It is clear that even when the destination principle is applied to a product, if different jurisdictions have different tax rates there will be an incentive to make purchases outside the buyer's jurisdiction, thereby creating distortionary effects on resource allocation. These issues are difficult to avoid unless the different jurisdictions and areas coordinate their tax rates.

The various technical alternatives used to solve the problem of double taxation at the local level include several options: establishing compensatory funds between jurisdictions, deferring payment of the tax at the time of sale, and creating an integrated system involving both the central and local governments to avoid double taxation. However, the experience of the European Union shows that these techniques have their complexities and technical challenges.

Among the countries studied, four stand out because they grant subnational governments the exclusive power to impose certain sales taxes; in all such cases, this becomes the main source of own-tax revenue for the lower levels of government.

In Argentina, the primary source of tax revenue for the provinces is the gross income tax (a small percentage of which is also allocated to certain municipalities). In 2008, this tax accounted for 72.2 percent of provincial revenues, or 3.2 percent of GDP. Rates differ depending on the province and the particular activity involved. There are also differences from one province to another in the importance of the tax (ranging from 57.7 to 86.5 percent of total tax revenues), although in all cases it serves as the largest source of tax revenue. The gross income tax, along with being difficult to administer when interprovincial activities are involved, generates the inefficiencies known to be associated with 'cascading' taxes. It distorts the allocation of resources by changing the relative price structure, while hurting domestic producers in the international competitive arena, among other problems. However, this tax continues to be used on a priority basis by the provincial governments given its high yield (it generates substantial resources using a relatively low tax rate), and the fact that, at all of its stages, it is difficult to evade. It is also favored because it allows the provinces to obtain substantial resources autonomously.

In Brazil, sales taxes were adopted by all three levels of government, creating difficulties for coordination across jurisdictions. In addition to the Industrial Products Tax (*Imposto sobre Produtos Industrializados*, or IPI), which the federal government applies to a long list of goods, based on a value added calculation, state governments have full power to impose a Tax on Circulation of Goods and Services (ICMS), which is also levied on goods and services at all stages but generally cover a tax base broader than

that covered by the IPI. The municipalities also administer and collect the ISS, which applies, within the geographical boundaries of each municipality, to the services specified in legislation. Each municipality has exclusive authority to set the rate it deems appropriate, up to a maximum of 5 percent of the amount billed. Taking into account the ICMS and the ISS, Brazilian subnational governments raise 78.3 percent of their tax revenue by taxing sales. This means that these taxes provide fiscal resources equivalent to 7.9 percent of GDP, making these two taxes – particularly the state ICMS – the fundamental and largest source of revenue for the country's lower levels of government.

In Colombia, too, sales taxes on goods and services play a major role in the overall tax revenue of subnational jurisdictions. As Table 6.3 shows, collections of these taxes in 2008 amounted to 1.3 percent of GDP, or 52.5 percent of total subnational tax revenue. These resources at the subnational level can be divided into two distinct groups. Regional governments account for 28.9 percent of subnational tax collections, with 61.5 percent of their revenue coming from three selective consumption taxes, on liquor, beer and cigarettes. For the municipalities, which account for over 70 percent of the consolidated revenues of Colombia's territorial entities, the main source of own-tax revenue is the Industry and Commerce Tax (*Impuesto de Industria y Comercio*, or ICA), which generates more subnational tax revenue than the real estate tax. The latter, according to 2008 figures, accounts for 45.2 percent of total municipal tax revenue (and 32 percent of consolidated subnational revenues).

In the case of Ecuador, licensing taxes or fees, which fall under municipal authority, apply to all economic activities of a commercial or industrial nature within the municipal jurisdiction. This tax accounted for 14.2 percent of subnational tax revenues in 2008, and applies to individuals or firms operating as merchants or manufacturers in each canton, as well as to individuals engaged in any form of economic activity.

Finally, while insignificant in GDP terms, licensing fees in Costa Rica are the main tax levied by local governments, providing two-thirds of their tax revenues as of 2008. In this case, the tax basis is the net taxable income and the annual gross sales or income received by natural or juridical persons engaged in gainful activities, with the applicable rate ranging between 0.1 and 0.2 percent.

Motor vehicle taxes

The countries of the region adopt several approaches to taxing motor vehicles. The tax is imposed on the possession or ownership of a vehicle, given that this constitutes, in part, an asset of the taxpayer. Another option is to tax those who use this asset for travel on public roads (a

vehicle registration fee). Finally, through their subnational governments, almost all of the countries tax the transfer of vehicles from one citizen to another.

A number of countries, using a range of alternatives for implementing and using the motor vehicle tax, rely on it as a source of revenue for lower levels of government, although in only a few countries does it represent more than a minimal share of overall subnational tax revenue.

The rationale for this tax is primarily that it can be easily administered and tracked, and that it provides an ongoing and stable source of income, especially for subnational governments whose territories are highly urbanized. Moreover, information on the number of vehicles in a city is useful for implementing environmental taxes that limit the use of cars in order to control environmental pollution. In short, the tax can be used for purposes beyond merely the revenue motive.

Some countries have attempted to implement a tax on vehicles as part of a redistributive policy, although this occurs primarily at the central government level. One method that has proved to be acceptable is to levy a progressive tax on the purchase of new vehicles.

In Argentina, the province of San Juan has a 'progressive' vehicle tax. The tax rate is 3 percent, but varies according to the automobile's model, age and weight. This form of taxing vehicles is administratively complex and may penalize new vehicles that are more efficient and less polluting than older models. Argentina's provinces have the power to levy taxes on motor vehicle ownership, although some provinces have delegated this authority to their municipalities. The relative weight of this tax as a share of provincial tax revenues varies from jurisdiction to jurisdiction, ranging from 0 percent (for example, Salta, Neuquén) to 9.8 percent (for example, Río Negro), with the average being 5.5 percent.

Similarly, Mexico has a Vehicle Ownership or Use Tax (*Impuesto sobre Tenencia o Uso de Vehículos*), which comes under the exclusive authority of the states and the DF. It accounted for a mere 3.7 percent of their total revenues in 2008.¹³ This system has several advantages in terms of a tax that is collectible and equitable. The relevant tax base tends to be relatively stable, in that the number of cars generally increases at the same rate as (or at a higher rate than) the growth in population and income. Moreover, the taxable property is relatively difficult to hide, and the tax burden falls on individuals with the greatest purchasing power. In Mexico, this tax occurs in two forms: an ownership tax and a use tax. In addition, the federal government imposes a tax on new cars. In place since 1968, Mexico's Vehicle Ownership Tax, which applies to both imported and domestically produced automobiles, charges a certain proportion of a vehicle's market value, which varies according to its physical characteristics, model, year of

manufacture, price, and installed equipment. The tax rates on ownership for each fiscal year are administered and collected by state governments, with the resulting funds going to their treasuries. Revenue from this tax source has been trending upward in recent years.

In Brazil, the Automobile Ownership Tax is the second largest source of tax revenue at the state level given the major share of subnational revenues attributable to sales taxes (ICMS and ISS). Nevertheless, it represents only slightly more than 5 percent of state tax revenues, or 0.6 percent of GDP (see Table 6.3).

In Chile the automobile taxes represent a significant proportion of the subnational tax revenues. In spite of its small share of GDP (0.2 percent), the tax paid by automobile owners (at the time of purchase and in annual registration fees) constitutes 17.4 percent of own-tax revenues for subnational governments. The amount of the registration fee is usually based on the schedule established for motor vehicles by the Internal Tax Service, with different rates determined by the Municipal Revenue Law, though in practice the rates are unrelated to the cost of road infrastructure or other services that the municipality provides to those using its roads. While this tax would not seem to bear any direct relation to specific municipalities (since vehicles may use all of the country's drivable roads, not merely those in the municipality where the tax was paid), it is one of the main sources of revenue for the country's municipalities, even after taking into account the mandatory 62.5 percent contribution to the FCM. (In 2008, these transfers accounted for 18 percent of the FCM funds.)¹⁴

The motor vehicle tax administered by municipalities in Bolivia (Plurinational State of) plays a significant role in the tax structure of municipal governments and constitutes the second largest subnational source of tax revenue – 19.9 percent according to the 2008 figures presented in Table 6.3. The country's vehicle tax includes both ownership and transfers from one taxpayer to another. Given that it is a municipal tax, it has its weak points, for example, residents can register their vehicles in a neighboring municipality that has lower tax rates. Departmental jurisdiction over this tax would provide an advantage in this respect, and would also allow for better administration of market-based tax assessments and increased tax collections, particularly if departmental governments were given the power to legislate the tax.

Other major taxes in the countries analyzed

In addition to the characteristic subnational taxes analyzed above, it is worth mentioning some examples of taxes used by these governments to expand the vast range of fiscal instruments employed to obtain revenue.

In Mexico, payroll taxes are a function of state governments, and

accounted for 41 percent of subnational tax revenues in 2008 (0.3 percent of the country's GDP). This type of tax has both advantages and disadvantages. On the positive side, is easy to administer, particularly when it involves taxing large firms, and when a large proportion of the economy is formal. Using relatively low tax rates, it can generate significant resources for regional governments. Its principal disadvantage is that it acts as a barrier to job creation in the formal sector (Larios et al., 2004), and can be a disguise for exporting taxes to other jurisdictions, since it taxes on the basis of origin – this is based on the assumption that origin affects production costs. However, since the bulk of the tax burden is borne by the urban middle class in the form of personal income taxes, the payroll tax base tends to be overused as a source of revenue for both the central government and local governments. This overuse can incentivize informal employment and evasion of the tax system, and should therefore be discouraged.

Also notable is Argentina's stamp tax (*Impuesto a los Sellos*), which serves as an important source of tax revenue for provincial governments. In terms of economic efficiency, the tax – which is designed to bring those engaged in illegal activities into the tax regime – is harmful inasmuch as it works against economic growth by increasing the tax burden. Nevertheless, the stamp tax is the third largest source of tax revenue for these jurisdictions, representing 7.8 percent of total revenue as of 2008, or 0.3 percent of GDP.

In Ecuador, as Table 6.3 indicates, approximately 45 percent of subnational tax revenue is from sources not cited in the above paragraphs. This is primarily because of the high revenues provided by two taxes levied at the subnational level: the Total Assets Tax and the so-called 'Alcabalas Tax', which accounts for 14.5 percent of subnational tax revenues. This is a municipal tax levied on real estate transactions and contracts, and applies to: (i) the transfer of ownership, for consideration, of real estate and vessels; (ii) the creation, transfer, usufruct, use and inhabitation of real estate; and (iii) the giving of assets to persons other than legitimate heirs. The Municipal Tax on Total Assets accounts for 20.2 percent of tax revenues at the subnational level. It taxes commercial, industrial and financial activities that require that account records be maintained, whether the activities are carried out by individuals or companies, de facto companies, or individual businesses (domestic or foreign) domiciled – or with offices, agencies or branches – in the canton, pursuant to the Domestic Tax Regime Law and its Regulations. Taxation of such business activities is based on an enterprise's total assets.

Municipalities in Bolivia (Plurinational State of) have exclusive authority over two taxes complementary to the assets-based taxes: the Municipal

Tax on Transfers of Real Estate and Automobiles (*Impuesto Municipal a las Transferencias de Inmuebles y Vehículos Automotores*), and the Excise Tax on Certain Alcoholic Beverages (*Impuesto al Consumo Específico a la Chicha de Maíz*). These two taxes account for 20.3 percent of subnational tax revenues.

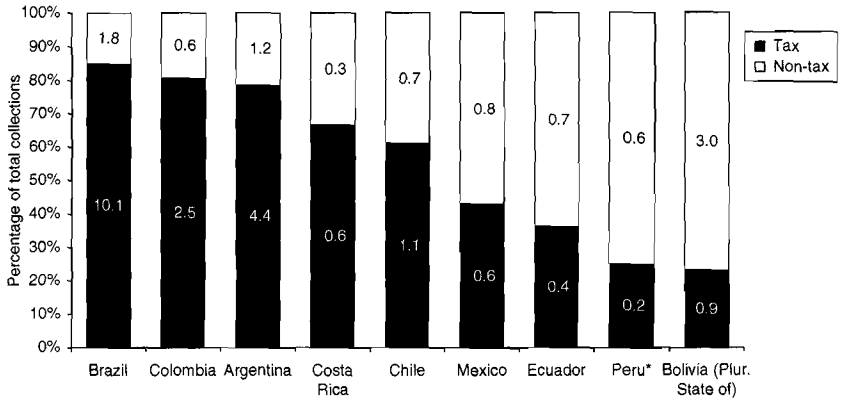
Chile's subnational governments also obtain revenue from business licenses, which are required by municipalities for all professional, trade, industrial, commercial, artistic or other gainful secondary or tertiary activity – whatever its nature or category (including liquor licenses). In 2008, this tax provided 30.2 percent of municipal tax revenues, and represented 0.3 percent of GDP. Of the three main sources of financing for Chile's municipalities (the real estate tax, vehicle registration and municipal licenses), it is only in the case of licensing that the law prescribes a range within which municipalities are permitted to set rates, with rates based on the capital of the firm in question. However, those municipalities that are obliged to contribute resources from these revenues to the FCM must do so by charging the maximum rate. This prevents them from undercutting the amount charged by other jurisdictions.

In Brazil, the aforementioned subnational taxes are supplemented by taxes on the transfer of goods in all forms. Such transfer of goods is taxed by the *Inter Vivos* Tax (known as ITBI), which falls under municipal authority; the Tax on Asset Transfers due to Death [inheritances] and Donations comes under the authority of the states and the federal district. In 2008, revenues collected from these two taxes represented 0.2 percent of GDP.

Non-tax Revenues: Fees and Royalties

Generally, in addition to the various taxes on which subnational governments rely to finance their expenditures, there are major non-tax revenue sources that complement these; in some countries these sources produce even more revenue than taxes do.

Non-tax resources at the subnational levels of government come from a wide range of fiscal instruments and they vary among countries. These resources include: fees for providing – and the right to use – services; use, exploitation and dissemination royalties; profits from business activity; yields on assets; and royalties for the exploitation of natural resources such as hydrocarbons, though no universal criterion exists on this last point. These instruments play the greatest role in the more heavily populated and urbanized municipalities – one reason being the higher level of economic activity in these areas, the other being the greater needs that must be met to serve these populations. The benefit principle governs the application



Note: * Data for 2006.

Source: ECLAC.

Figure 6.3 Own resources of subnational governments, 2008 (% of GDP and % of total collections)

of these measures, since it relates directly to the (actual or potential) tasks assigned to local governments. The line between public and private services is a fine one, and varies according to circumstance. Thus, it is often difficult to differentiate public charges and fees from private ones.

Figure 6.3 shows the differences between the countries analyzed in this chapter with regard to the relative weight of non-tax revenues as a portion of total own resources of subnational governments. Two groups of countries can be identified, each sharing common features as to how fiscal resources are obtained. Brazil, Colombia and Argentina, though they differ significantly in sums collected, show a clear tendency to assign taxing authority to their decentralized entities. In these countries, own resources consist principally of taxes. As in most of the region's countries, this type of financing in itself is insufficient and must be supplemented by a system of central government transfers.

Except for Costa Rica, whose cantons' own resources are very limited (no more than 1 percent of GDP), non-tax revenues represent a growing share of total revenues. One important aspect of these non-tax components is the royalties assigned to subnational governments in whose territories economically exploitable non-renewable natural resources are present.

Thus, the countries that appear on the right in Figure 6.3 (Mexico, Ecuador, Peru and Bolivia (Plurinational State of)) are precisely those in

which the production and trade of primary commodities provide a major source of subnational revenue. In most cases, the predominance of fiscal resources of this type as a source of public financing for subnational governments implies greater volatility in revenue streams (as opposed to the relative stability of own-tax revenues), along with greater interregional disparities, since some jurisdictions are endowed with such non-renewable resources, while others are not.

4 CONCLUSIONS AND CHALLENGES

A system of stable fiscal relationships and a successful decentralization process require that there be a proper system of financing, in order for each level of government to carry out its assigned functions. However, the amount of financing at specific levels of government is not the only concern; also relevant, at the subnational level, is the mix of tax and non-tax resources, intergovernmental transfers and, in some cases, borrowing options.

This chapter has focused primarily on own revenues, both tax and non-tax, in the region's most decentralized countries. The findings make clear the need to strengthen information on subnational financing, and to have a uniform basis on which to make reliable comparisons between the region's countries.

In part because of the fact that theoretical approaches provide little guidance on the optimal allocation of revenue for each level of government, allocation in the real world seems to be based mainly on institutional history, tax administration and political wrangling between the different levels of government.

One of the central features of intergovernmental relations in Latin America is the high degree of vertical imbalance. The low quantitative importance of taxes collected by local governments, compared to the national tax burden, is the most commonly shared feature. This shows the lack of autonomy of local governments, especially in light of information regarding the transfer of functions over the last several years.

Also common is an inequality, between different local governments, in sources of own revenue, with variances based on the size of the population, the availability of natural resources within the jurisdiction, and the extent of respective tax bases. This is the case under both unitary and federal systems of government. In Argentina, for example, 62 percent of the provincial taxes collected are concentrated in the city and province of Buenos Aires; in Brazil, one-third of the states' tax revenues are concentrated in São Paulo; in Mexico, 46 percent of the real estate tax revenues

are collected by the DF; while in Colombia, Bogota receives 30 percent of the total.

Although property taxes are the most appropriate instrument to capture tax revenues at the local level, collection rates are low in all the countries. Problems with the property registers, discrepancies between assessments and market value, lack of automated management processes and, above all, lack of political will to collect the tax, constitute the main challenges.

Similar problems must be faced taxing property betterments, although these involve greater technical complexities – but not insurmountable ones, as experience in some countries has shown.

In taxing productive activities, licenses and sales at the local level, there are serious technical obstacles regarding the transfer of taxation to other jurisdictions. In addition, the cumulative nature of these taxes tends to create distortions in resource allocation. Nevertheless, in countries that grant local governments such taxing authority, these taxes provide the greatest revenue for local governments.

Selective consumption taxes on goods and services, based on the destination principle, could be a significant, as yet underutilized, source of additional funds. The same applies to certain taxes on assets, such as vehicle ownership taxes.

One particular feature distinguishes Latin American countries from other world regions with regard to the allocation of taxes among the different levels of government, namely, the total absence of a subnational income tax, even in the form of surtaxes.

Another recurrent issue in the countries analyzed, though not examined in this chapter, is the problem of weaknesses in, and poor performance of, tax administrations. This is traceable both to a lack of capital needed to improve the systems, and to serious problems in human resources – whether in terms of high turnover rates or lack of professionalism. This problem is aggravated by the reluctance of local authorities themselves to improve the effectiveness of tax administration, given their close relationship with local power structures.

Past experience with overindebtedness by local governments has emphasized the need to establish alternative criteria to avoid impacts on national finances. The areas covered by the criteria range from coordination with the central government to the application of quantitative guidelines as part of fiscal responsibility legislation. Suffice it to say that the problem of indebtedness has not been exclusively a local government problem, but also involves action at the central level, particularly in light of the fact that various functions have been transferred to the subnational levels without providing the current resources needed to finance them.

NOTES

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1. Although most Latin American countries have intergovernmental transfer systems that are vital to financing the subnational governments, this chapter focuses on other alternatives to obtain resources. For an exhaustive review concerning intergovernmental transfers in Latin America, see Rezende and Veloso (ch. 8 in this volume) and Martínez-Vazquez and Sepulveda (ch. 9 in this volume).
 2. Leaving aside Venezuela (Bolivarian Republic of), which is not included in this analysis.
 3. For a detailed analysis of the evolution of the constitutional organization of the region's countries, see Gargarella and Arballo (ch. 2 in this volume).
 4. For a detailed analysis of the transfer systems used in each of the region's countries, see Jiménez and Podestá (2009).
 5. Data from the Ministry of Economy and Finance of Peru from the year 2006.
 6. For a detailed analysis of the functioning, composition and distribution of this Fund, see the SUBDERE National Municipal Information System (SINIM), Chile, available at: http://www.sinim.gov.cl/desarrollo_local/selfcm.htm.
 7. For more details on the performance of property taxes in Latin America, see Sepulveda and Martínez-Vazquez, (ch. 7 in this volume).
 8. Calculations of the subnational tax burden in Chile used the DIPRES (Dirección de Presupuestos-Chile) methodology, which eliminates duplications involved in using the FCM. Thus, adding the residual difference to the respective taxes that make up the Fund, one can see exactly how much is collected in each operational revenue category, although this does not track information on what each municipality receives through its participation in the Fund.
 9. There is also a 'construction tax' of 1% of the budgeted value, payable by the owner of the building being built or remodeled.
 10. However, as De Cesare and Lazo Marín (2008) explain, municipalities must submit to their respective state congresses annual proposals of their rates and value-per-unit tables for land and construction.
 11. Some municipalities, however, may establish rates and exceptions.
 12. For a detailed analysis of this tax, a recommended source is Bruno de Carvalho (2006).
 13. According to disaggregated data from the National Statistical and Geographical Institute (INEGI, 2009).
 14. Half of the revenue from the Vehicle Transfer Tax is also transferred, on a shared basis, to the FCM, but this accounted for only 3% of the Fund in 2008.

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7. Explaining property tax collections in developing countries: the case of Latin America

**Cristian Sepulveda and
Jorge Martinez-Vazquez***

1 INTRODUCTION

The property tax is arguably the most important source of own revenues for local governments around the world. Many fiscally decentralized economies as well as an increasing number of countries that have embarked upon a decentralization process look at the property tax as the main source of revenue autonomy for their subnational governments. This practice is well matched with policy principles. There is widespread agreement among economists and decentralization experts that, although not entirely perfect, the property tax possesses several characteristics that are desirable in the context of subnational government finance.

Besides its theoretical advantages, however, in practice all is not well with the property tax. It is difficult to implement, costly to administer, and unpopular among taxpayers. It is well known that many countries around the world struggle to produce any significant amounts of revenue from this tax source. These difficulties are more prevalent among developing countries and, particularly in Latin America, the property tax continues to be a predominant policy concern among policy makers. With very few exceptions, Latin American countries have not been able to develop revenue-productive property tax systems. Moreover, Latin America has been identified in the economic literature as a region with relatively low tax effort (Bird et al., 2006), and with a level of tax revenue performance that is lower than the average in developing and transition countries (Ahmad and Brosio, 2008; Bird et al., 2008). The problems of low tax effort and revenue performance are especially acute and challenging in the case of the property tax.

The main objective of this chapter is to analyze the causes of the poor tax performance of the property tax in Latin America and to identify

policies that could help with the current impasse. Part of what we find is conventional wisdom. The lack of financial and technical means to assemble accurate, comprehensive and updated *cadastres* (property registers) is clearly one of the main reasons explaining the lackluster performance of the property tax. In fact, there is an extensive literature addressing these issues and suggesting more feasible alternatives to the assessment of property values. All these lessons are relevant to Latin America and they should be internalized by policy makers. But we also arrive at less conventional findings. Previous analyses of the performance of the property tax have given much less attention to the design of the fiscal decentralization system within which the property tax must operate. The arrangement of fiscal incentives in the decentralization system, we contend, can also play a crucial role in determining the extent to which the property tax is used in practice. We argue that the realignment of fiscal incentives must be an important part of the solution for a more effective use of the property tax in the region.

We emphasize the mutual dependence between a sound fiscal decentralization process and the successful devolution of the property tax to local governments. In order to become a productive revenue source, the decentralization of the property tax also requires that local authorities be politically accountable to their communities, be endowed with a significant degree of fiscal autonomy, face the correct incentives within the context of central government policies, and have sufficient administrative capacity to carry out tax and expenditure policies.

A few words on the scope of the chapter are in order. The concept of property is a broad one, encompassing different forms of wealth over which different taxes can be applied. In general, we can differentiate between real or immovable property, which includes land and structures, from personal property, consisting of those tangible and intangible assets that are not attached to the land. In addition, taxes can be applied to the stock of properties, their transfer, or the capital gains realized on their sale. This chapter focuses on the annual taxation of the stock of immovable property, which is generally considered among the most efficient modes of property taxation and constitutes the bulk of property tax revenues around the world.¹

In this chapter we also distinguish between the analysis of property tax collections at the subnational level within a country and that across countries. We explain that certain variables that are exogenous for subnational governments within a country, such as the legal and institutional frameworks, are likely to be endogenously determined at the country level, and thus they should also be considered as components of the national tax effort. Unfortunately, the information available at the subnational

government level is, in general, still very limited, so the econometric analysis tends to be more informative at the international level. Moreover, even in that case, the data available for Latin American countries are quite incomplete, which naturally limits the validity of our results. Our dataset consists of an unbalanced panel of nine countries with years of observation covering the 1990–2007 period.

We suggest that the improvement of property tax collections and the realization of effective revenue autonomy may require, paradoxically, a more active involvement of the central government in the implementation, administration and collection of the property tax. The central governments in the region might provide technical and financial assistance to the less administratively developed local governments, and in some cases might temporarily retain some responsibilities over different aspects of this revenue source. In addition, the central government could contribute by helping to strengthen the relationship between autonomy and accountability at the subnational level, and by redesigning the intergovernmental transfer systems in a way that does not provide incentives to reduce subnational own-tax collections.

The rest of the chapter is organized as follows. In Section 2, we provide an overview of the main characteristics and importance of the property tax in Latin America. In Section 3 we evaluate the property tax in terms of the desirable properties of a good subnational tax. In Section 4 we develop an analytical framework in which we identify the determining factors of tax collection performance of subnational governments. This analytical framework provides a sounder basis for the comparison of performances of subnational governments within a country and across different countries, where performance is measured on the basis of actual revenue collections *vis-à-vis* the potential collections reflected by existing fiscal capacities. In Section 5 we present the empirical analysis. The last section concludes.

2 PROPERTY TAXATION IN LATIN AMERICA

Despite the generally accepted potential of property taxes in tax systems all over the world, in practice they are a minor source of public revenues, specially by comparison to other taxes also commonly used worldwide such as income taxes, VAT or sales taxes. The property tax is especially far from being a mainstay of the revenue system in developing and transitional countries.

To put the performance of property taxes in Latin America into perspective, we compare it with the performance of other regions of the

Table 7.1 Property tax as a share of GDP in representative groups of countries (%)

	1970s	1980s	1990s	2000s*
All countries	0.77	0.73	0.75	1.04
(number of countries)	(37)	(49)	(59)	(65)
OECD countries	1.24	1.31	1.44	2.12
(number of countries)	(16)	(18)	(16)	(18)
Transition countries	0.34	0.59	0.54	0.68
(number of countries)	(1)	(4)	(20)	(18)
Developing countries	0.42	0.36	0.42	0.60
(number of countries)	(20)	(27)	(23)	(29)
Latin American countries	–	–	0.36	0.37
(number of countries)	–	–	(8)	(10)

Note: Figures in parentheses represent the number of countries considered in each computation.

* The data for 2000s are for five years from 2000 to 2004.

Sources: Bahl and Martinez-Vazquez (2008) and CEPAL.

world. As shown in Table 7.1, property taxes in developing and transitional countries raise less revenue relative to GDP than OECD countries. In the early 2000s property taxes in OECD countries represented 2.12 percent of GDP, while for developing countries this figure was 0.6 percent and, for transition countries, 0.68 percent. The trend for revenues in all three groups of countries has been slightly upwards since the 1970s. The figures in Table 7.1 suggest that the overall performance of the property tax in terms of GDP is associated with the level of economic development; for example, OECD countries rely more on the property tax than do developing countries. However, that relationship is not necessarily monotonic and Latin American countries are found to perform less well than the average developing country.

Table 7.2 presents the measures of property tax performance for some Latin American countries. Even though the reliance on the property tax is low, there is still a significant degree of variation across countries. For example, in Peru property tax revenues in recent years (2005–07) represent 0.16 percent of GDP, while in Bolivia (Plurinational State of) for the same period that figure is about four times larger, at 0.62 percent of GDP. There is no clear trend over time but on average the relative importance of property taxes has decreased. There are also some cases where property tax performance has consistently increased over time, such as in Brazil, Colombia, Ecuador and Guatemala; while in Mexico property

Table 7.2 *Reliance on the property tax as a share of GDP in Latin American countries*

	1990–94	1995–99	2000–04	2005–07
Argentina	0.65	0.62	0.59	0.44
Bolivia (Plurinational State of)	–	–	0.69	0.62
Brazil	0.37	0.41	0.42	0.44
Chile	0.55	0.65	0.70	0.59
Colombia	0.25	0.46	0.48	0.54
Ecuador	0.10	0.13	0.13	0.14
Guatemala	0.09	0.07	0.14	0.16
Mexico	0.18	0.18	0.18	0.18
Paraguay	–	0.36	0.39	–
Peru	–	–	0.17	0.16
Uruguay	0.52	0.70	0.71	–
Latin American countries	0.33	0.40	0.38	0.36

Source: CEPAL.

taxes have represented 0.18 percent of GDP, without changing since the early 1990s.

Central to this chapter is the question of which factors may help explain variations in the use of property taxes in Latin America. It seems quite certain that property taxes remain the great unrealized promise for local tax autonomy. Like in some other regions of the world, the yield of the property tax remains lower than its potential; but in Latin America the distance between potential and reality appears to be much larger, and the reasons for this are multiple. In this chapter we explore several of these, including low political will and disincentive effects of revenue sharing and transfers, and outdated and poorly equipped tax administrations. These factors would seem to translate into generous exemptions and low tax rates, obsolete and infrequent property value assessments, incomplete registries and *cadastres* and lack of willingness and means of enforcing collections.

This lackluster performance of property taxes in Latin America and the differences observed among countries are likely to be related to the different arrangements for discretion on rate setting or administration of the property tax. Some of the main institutional features in the assignment and administration of the property tax across Latin American countries are presented in Appendix Table 7A.1.² For the most part, Latin American countries assign the property tax to municipal governments, although there are ‘full’ exceptions such as the case of the Dominican

Republic where this tax remains a central tax, and 'partial' exceptions where some authority over taxes remains at the central level (for example, Brazil for rural taxes, Guatemala, and Panama) or at the provincial level (Argentina). In most cases, municipalities are also given some authority to change tax rates, at times within legislated limits, but here there are also exceptions. For example, Chile does not give that authority to the municipalities, and the states or provinces in Mexico and Argentina also share in that authority. For the administration of the tax, the central governments (the provinces in the case of Argentina) are most frequently responsible for updating the *cadastre*; in Costa Rica, Honduras, and Mexico the *cadastre* is a municipal function. In terms of assigning the responsibility for billing and collections there are a large variety of practices with these functions at times exclusively assigned to the central or municipal governments and other times shared by different levels of government. Finally, the predominant approach to the assessment of properties is market valuation.

A priori, we can theorize on the positive and negative aspects of the assignment of specific functions *vis-à-vis* the revenue productivity of property taxes. For example, the assignment of administrative functions at the municipal level may have certain advantages, such as better information about the properties and potentially stronger incentives to collect taxes, but the central authorities might also have advantages, such as better-skilled and better-remunerated officials and stronger authority to make things happen. In the next section we explore in more depth the role of property taxation in financing local governments and the advantages and disadvantages of different administrative schemes. Ultimately, we shall rely on our empirical analysis to discern the direction and statistical significance of the effects of different administrative arrangements on tax collections from the property tax.

3 THE ROLE OF PROPERTY TAXATION ON LOCAL GOVERNMENT FINANCING

There is widespread agreement among economists and policy makers about the appropriateness and convenience of assigning the property tax to local governments. Indeed, while the theoretical normative analyses developed in the economic literature suggest that the property tax is a good source of local government revenue, in practice most of the decentralized economies in the world have assigned, at least partially, the responsibility over the property tax to local governments. This matching of theory and practice, however, does not imply that the decentralization of the property tax has always been carried out in accordance with the

normative prescriptions developed in the economic literature. In many cases, either because of the difficulties associated with its implementation, or because of poorly designed incentives, the property tax has not become a significant source of revenues.

The economic role currently assigned to property taxation has been shaped by a vast and longstanding literature analyzing the advantages and disadvantages of alternative tax revenue sources. In this section we briefly describe the economic arguments used to recommend the property tax as one of the major sources of own local government revenues. We start by discussing the general characteristics of good tax revenue sources, in general and at the local level, and then we briefly stress the importance of tax revenue autonomy in a decentralized system of government.

A Preliminary Evaluation of Subnational Property Taxation

Tax policy is carried out in complex environments where institutional, cultural, political, and economic variables interact in order to determine not only the economic effects of certain tax instruments, but also their feasibility as policy tools. In reality, there are no easy answers regarding the desirability of one tax instrument over another, and economists usually rely on a set of widely accepted criteria or principles in order to describe a 'good tax' and evaluate the appropriateness of alternative tax instruments. Among the most commonly used principles we find the following:

- *Efficiency* A tax should not induce significant behavioral responses of individuals and firms; in other words, it should not distort the adequate allocation of resources in the economy. When taxpayers bear their burden in accordance with the benefit they receive (that is, when the 'benefit principle' is fulfilled) then the tax approximates the role of a user fee and is considered as an efficient tax. Indeed, the behavioral responses induced by (rightly set) user fees can be interpreted as the result of a correcting incentive (similar to what happens in private markets), because the adjustment in the behavior of the individual or the firm is made in order to pay the correct price of the public good.
- *Equity and fairness* The principle of horizontal equity calls for (or regards as fair) an equal treatment of taxpayers in identical conditions. In contrast, the concept of vertical equity allows for several possible arrangements in which a tax can be said to be regressive, proportional or progressive as long as the tax burden increases in a lower, equal or higher proportion with the ability to pay. The ability-to-pay principle states that taxpayers with greater ability to

pay should bear a greater tax burden, but the judgment on what is to be considered fair is a matter to be solved by each community or society. In any case, in order to become a good revenue source, a tax should be considered fair by the taxpayers.

- *Revenue adequacy* A tax should raise a significant amount of revenues relative to the costs of collection and expenditure needs of a government. In addition, the tax base should be stable and rather insensitive to cyclical fluctuations.
- *Low costs of administration and compliance* Administration costs reduce the share of tax collections available to finance public goods and services. Similarly, compliance costs reduce the share of taxpayers' income available for private consumption. If these costs are relatively high then other tax revenue sources might be preferable.
- *Political acceptability* A tax that is not acceptable either to the taxpayers or to a significant portion of the political class might simply be impossible to implement. Even if it is implemented, in order to be successful, a tax requires a high degree of cooperation of all relevant agents and institutions. Failing to reach this cooperation might result in low voluntary compliance, inadequate or unrealistic laws, and deficient enforcement.
- *Minimize tax avoidance and tax evasion* A tax should not induce significant, legal or illegal, efforts to elude the tax burden. Both types of responses erode the tax base, create deviations from the targeted incidence, distort the relative prices in the economy and might aggravate problems in horizontal and vertical equity.

No tax instrument perfectly fulfills all these principles nor could it be considered as superior to all alternative tax instruments in all conditions. In reality, although these principles of taxation serve as a guide to describe the characteristics of a 'good' tax instrument, they must be evaluated in the specific context where a tax is implemented. A general evaluation of the property tax, therefore, can be expected to lead to different conclusions depending on its structure, whether the property tax is assigned to the central government or to the local governments, and so on.

Table 7.3 summarizes the relative advantages and disadvantages of assigning the property tax to the central or to the local governments.³ Local governments have an advantage in terms of economic efficiency because their proximity to the taxpayers allows them to better fulfill the benefit principle. Indeed, the central government is more subject to the 'common pool problem', by which those who contribute to financing the public goods (the country as a whole if the tax is assigned to the center) are not necessarily the beneficiaries of public expenditures. In general, the

Table 7.3 Comparative analysis of property taxation at the central and local levels of government

Principle	Property tax as a central government tax	Property tax as a local government tax
Efficiency	Disadvantage: the 'common pool problem' increases with the size of the government	<i>Advantage:</i> the property tax approximates a user fee, especially as the jurisdiction size decreases
Equity and fairness	<i>Advantage:</i> both vertical and horizontal disparities can be addressed at a national level	Disadvantage: heterogeneity and different tax bases impose unequal conditions in different jurisdictions
Revenue adequacy	<i>Advantage:</i> less mobility and variability at the national level	Disadvantage: revenues can be more volatile in smaller jurisdictions
Low administration costs	<i>Advantage:</i> better administrative and fiscal capacity Disadvantage: economies of scale might not be substantial	Disadvantage: implementation costs might simply be unaffordable <i>Advantage:</i> first-hand knowledge of the taxpayers and the tax base
Low compliance costs	(Depend on the complexity of the system and the taxpayers' willingness to contribute)	
Political acceptability	Disadvantage: the property tax is very visible	<i>Advantage:</i> visibility helps to link taxation with public goods benefits and increases accountability
Tax compliance	Disadvantage: inflexible terms and 'common good problem' reduce willingness to contribute	<i>Advantage:</i> closer match of taxpayers' preferences and better knowledge of their ability to pay

Source: Authors' elaboration.

lower the size of the jurisdiction and the greater the share of the property tax on local revenues, the greater the ability of local governments to use property taxation as a benefit tax.

The central government seems to have a clear advantage in terms of the ability to address the problems of horizontal and vertical equity and

fairness. Since Musgrave (1959) the economic literature distinguishes macroeconomic stability, an equitable distribution of income and the efficient allocation of resources as the three fundamental economic objectives of the (general) government, and broadly accepts that local involvement should be restricted only (or mostly) to contribute to the objective of allocation efficiency. The reason is that local authorities cannot consider the macroeconomic consequences of their decisions, nor are they capable of, or interested in, ensuring fairness in the national context. According to this argument, local governments should not even intervene in redistributive policies within their own jurisdictions, but rather might limit themselves to avoiding worsening the distribution of income at the local level.⁴ This consideration is especially relevant in Latin America, a region where the distribution of income is among the worst in the world (Lopez and Perry, 2008).⁵

Independently from the relative magnitude of property tax collections, the fact that mobility is lower at the national level implies that the property tax collections would be more stable for the central government. At the local level individual taxpayers can move out as a response to excessive tax rates and lower the market value of properties. Firms might also decide to leave the jurisdiction and in that case, in addition to the property value effect, the loss in tax collections would be greater if commercial use is taxed more heavily than residential use.

Due to their potentially significant magnitude, the administration costs play a crucial role in determining the ability of a government to adequately implement and collect the property tax. In particular, the assessment of property values is complex and requires well-prepared personnel; building a complete *cadastre* is a long and expensive task. In this context the central government usually has advantages in terms of its ability to finance and develop comprehensive *cadastres*. Moreover, local authorities in developing countries usually lack the enforcement mechanisms available to central governments, such as legal staff, the police, and other means to take advantage of their proximity to tax officials and taxpayers.

Importantly, local property taxation might also have an advantage in terms of the political acceptability. One payment (or a few) per year of a relatively large amount of money makes the property tax a visible and an unpopular revenue source. Local authorities are in a better position than the central government to show the taxpayers the way in which property tax revenues are used to finance public services, and therefore to justify the tax payments as a fair price for the benefits received. If local authorities manage to effectively match public service provision with the preferences of the community, then the taxpayers might well feel inclined to voluntarily comply with the tax law, reducing the practice of tax evasion. In this

sense, an adequate supply of public services might provide incentives to taxpayers to remain in the jurisdiction even if tax rates are relatively high with respect to neighboring areas. The local authorities also have a better knowledge of the taxpayers' ability to pay inside the jurisdiction; thus they might be able to better monitor and enforce compliance as well as make proper adjustments to the local tax policy. Torgler (2005b) finds that the size of the informal sector is an important determinant of tax compliance in Latin America. The informal sector represents an important share of the economy in developing countries, and in Latin America is estimated to be around 41 percent of the GNP (Alm and Martinez-Vazquez, 2007). The question is whether local governments can exploit their advantage of being 'closer' to the constituencies in order to bring more activities into the formal sector and encourage increased voluntary compliance. Little research has been done on this issue.

In summary, both central and local governments have advantages and disadvantages for administering the property tax, and it is not possible to assert a priori which level will perform better. In practice, however, their strengths can be combined in mixed arrangements of authority and responsibilities. On the one hand, the visibility of the property tax, usually considered as a disadvantage for the central government, is a key aspect of the problem that calls for a keen participation of local authorities in rate setting and also in the administration of the property tax. At the local level the tax authorities might be able to use such visibility to present the property tax as a benefit tax, enhancing political acceptability and taxpayers' participation in local decisions, and potentially reducing non-compliance. On the other hand, central government intervention might be helpful to develop comprehensive *cadastres*, to assist in the formation of administrative capacity and to provide policy parameters within which the creation of inefficiencies can be contained.

The literature has identified a number of additional desirable features of a 'good local tax'.⁶ Among these features we count, again, the correspondence between tax payments and benefits received (benefit principle), the perception of fairness, and the stability of revenue collections. In addition, and pondering some of the arguments provided earlier in this section, the visibility of the tax instrument is considered as a good characteristic of local taxation. Other desirable features that are applicable specifically within the local context are:

- *The tax base should be relatively immovable* According to the Tiebout's (1956) hypothesis, taxpayers would 'vote with their feet' and efficiently reallocate themselves after considering the combination of taxes and services offered by different local governments.

In practice, however, tax competition among subnational governments might also lead to a 'race to the bottom', if local governments are forced to reduce their tax rates in order to retain the taxpayers inside the jurisdiction. As a result, the overall amount of subnational public expenditures may remain at a suboptimal level.⁷ A consensual, but rather conservative, position to deal with the unclear effects of mobility in economic efficiency consists of assuming that any fiscally induced change in taxpayers' behavior represents a distortion of the efficient allocation of resources in the economy and consequently reduces economic welfare. Moreover, it is clear that a relatively immovable tax base would allow for more room in tax policy decisions.

- *The tax should be geographically neutral* Taxes should not interfere with the commercial flow of goods and services and business location decisions across the jurisdictions. In this case we again assume that tax-induced changes of taxpayers' behavior should be avoided.
- *Taxes should not be easily exported* The benefit principle does not hold if non-residents are charged for the provision of local services. In addition, such a situation implies that the costs assumed locally are reduced, which might also lead to overprovision of public services.
- *Significant tax revenue sources should be evenly distributed among jurisdictions* Sizable variations in the size of the tax base create high fiscal disparities among jurisdictions and impose undesirable differences in the degree of revenue autonomy. In general, local governments with more (less) revenue autonomy are also able to exert more (less) discretion in their expenditure decisions, and this might translate into greater (lower) ability to tailor the public service provision to the preferences of the community. Great differences in the size of the tax base, therefore, might generate discontent and even confusion regarding the importance of own-revenue collections and, in general, the role of local governments in a decentralized system.

The extent to which these conditions hold, or are adhered to in practice, is likely to vary from one tax instrument to another. In general, it seems reasonable to expect that only some taxes, if any, will satisfy all of them. For instance, there are few taxes that satisfy the benefit principle and are not exportable, among which the property tax and the tax on vehicles stand as the most typical examples. However, both of these are subject to tax competition, which can create economic inefficiencies and erode the tax bases. In addition, in most cases the magnitude of the tax base varies significantly across jurisdictions, particularly between urban and

rural areas. In this sense, we can also expect a certain degree of correlation between the size of the tax base and the administrative capacity of the local government, such that the initial disparities are aggravated by the relative difficulties in raising local revenues.

All things considered, the property tax represents a promising but still imperfect source of own revenues at the local level. Even with significant decentralization of the property tax, poorer local governments will likely remain dependent on alternative sources of revenues, notably intergovernmental transfers. In addition, special attention will be required to create a tradition of taxpayers' participation and voluntary compliance, and to provide the right incentives for efficient levels of tax effort by local governments.

The Importance of Tax Revenue Autonomy

The decentralization theorem (Oates, 1972) states that if the decisions about the type and amount of public goods are allowed to be made locally, then the level of social welfare would be greater with respect to a situation where public goods are centrally, and uniformly, determined for all localities. The reason is simply that the local governments are better able to tailor public goods provision to the particular needs and preferences of each jurisdiction.⁸

In order to adapt the type and amount of public goods to local needs and preferences, the local authorities require, by necessity, a certain degree of autonomy on their expenditure decisions. But even if granted by law, the expenditure autonomy cannot be practiced without sufficient technical and administrative capacity and the ability to discretionally increase the amount of local revenues. The existence of effective expenditure and revenue autonomy is widely recognized in the literature as a basic requirement for realizing the welfare gains of fiscal decentralization. Unfortunately, this economic prescription does not always concur, and might even collide with, the practical drivers of decentralization. The international movement towards greater fiscal decentralization has responded more to political forces such as the demand for deeper democratization, the resolution of ethnic conflicts, or the failure of central governments in securing national objectives, than to a search for greater economic efficiency as portrayed in the decentralization theorem.⁹ In many countries the implementation of an economically efficient decentralization design, although desirable, might well not be a priority.

According to Ahmad and Brosio (2008), one of the main factors weakening the decentralization process in Latin America has been the lack of attention given to the subnational revenue assignments. In this context, it

does not seem too audacious to suggest that the widespread decentralization of the property tax is partially explained by the fact that the central authorities have several more efficient, easier to administer, and less unpopular revenue sources under their control. Similarly, central authorities are usually reluctant to devolve effective autonomy to the subnational governments in most areas of taxation. The reason for this may be the lack of technical and administrative capacity at the subnational level, but it is also reasonable to presume that central authorities are not willing to renounce their power over budgetary decisions.

In short, even though the choice of the property tax as a main source of local own revenues seems to be correct from an economic perspective, the assignment of this revenue source to the local governments by no means guarantees that local governments will be able to exert expenditure autonomy in the margin and to realize the benefits of decentralization.

4 EXPLAINING PROPERTY TAX COLLECTIONS: AN ANALYTICAL FRAMEWORK

The amount of property tax revenues that governments are able to collect varies widely across nations and across jurisdictions within any country, and depends on a wide range of institutional, cultural, political and economic factors. The problem of property tax collections (or the lack thereof) has been extensively analyzed in the economic literature. The complexities of the problem and data limitations, however, still impose severe restrictions on the empirical analyses; as a result, no conclusive answers have been reached about the factors determining property tax collections.

In this section we develop a model of property tax collections, show their dependency on the concept of tax effort, and explain how the design and implementation of the fiscal decentralization process can affect the performance of the property tax. We begin by presenting a general model of revenue collections and then we analyze, separately, the revenue collection problem at the subnational and national levels.

A Simple Model of Property Tax Collections

Following Bahl and Martinez-Vazquez (2008), and assuming that the property value assessment is based on market value, the amount of property tax collections (TC) can be defined as:¹⁰

$$TC = \frac{TC}{TL} \cdot \frac{TL}{TAV} \cdot \frac{TAV}{TMV} \cdot \frac{TMV}{MV} \cdot MV, \quad (7.1)$$

where

- TL : property tax liability,
- TAV : taxable assessed value,
- TMV : taxable market value,
- MV : full market value.

The first term on the right-hand side, property tax collections over tax liability, corresponds to the collection ratio. In the ideal case the amount of tax collections should be identical to the tax liabilities and this term would be equal to one. In practice, however, either the tax authorities might fail to properly enforce the tax law or the taxpayers might fail to comply with it; thus the collection ratio is normally lower than one. The value of the collection ratio can be interpreted as a measure of the observance of the tax law and the ability of the authorities to enforce it through fines or even jail sentences. According to Bahl and Martinez-Vazquez (2008), a normal value for the collection ratio in developing countries is around 50 percent, which is explained as mainly due to lax tax enforcement, and in some cases can even be as low as 20 percent.

The second term on the right-hand side of equation (7.1), the share of tax liabilities over taxable assessed value, is the statutory tax rate, usually set at some value lower than 1 percent. The third term represents the assessment ratio, the share of taxable assessed value on taxable market value, by which the law establishes the share of the taxable market value over which the tax liability is actually going to be computed. When the assessment ratio is specified by law, then it normally takes a value between zero and one, but if it is not specified, then its implicit value is one. The assessment ratio is nothing more than an adjustment to the statutory tax rate and it is used to induce acceptability of the tax system and reduce complaints about the assessment criteria, because it gives taxpayers the impression that they are not being taxed for the full value of their property.¹¹ Finally, the fourth and fifth terms on the right-hand side of equation (7.1) jointly represent the tax base (TB) that is actually available for taxation. The fourth term is the ratio of taxable market value over (full) market value, and summarizes all the effects of preferential treatments, exemptions on the tax base, and errors in assessing the true market value of the property (the last term in the equation). Equation (7.1) can now be rewritten as:

$$TC = \frac{TC}{TL} \cdot t^a \cdot TB, \quad (7.2)$$

where t^a is the statutory tax rate 'adjusted' by the assessment ratio.

As explained, the collection ratio measures the degree of observance of

the tax law, and can be different from one only in the presence of ‘distortions’ imposed by the behavior of government authorities or taxpayers. There are several possible sources of distortions that can explain a low degree of observance of the tax law. On the government side, the tax law can be deficiently enforced (*DE*) if the tax authorities are either unable or unwilling to capture the whole revenue potential of the property tax. We might also be in the presence of corruption (*C*), in which case the tax authorities appropriate for themselves a share of the revenues collected.

On the taxpayers’ side, revenues might be lost due to tax evasion (*E*), generally defined as any illegal form of taxpayers’ non-compliance.¹² The traditional model of tax evasion explains taxpayers’ non-compliance by considering the probability of auditing and detection, the cost of enforcement and the costs of non-compliance, which can be summarized under the concept of penalties (*P*).¹³ In the case of the property tax, however, illegal non-compliance is limited by the very nature of the tax base. If properties are immovable, then they cannot easily be hidden from the tax authorities. As a result, tax evasion can take place only under certain circumstances. For instance, the taxpayers might take advantage of the inability or unwillingness of the tax authorities to correctly assess the value of the property, or might also attempt to lie in order to qualify for preferential treatments and exemptions. In these cases the factor explaining tax evasion is deficient enforcement. Alternatively, corrupt tax authorities might accept bribes for reducing taxpayers’ tax bills.

Another possible form of tax evasion consists of simply refusing to pay the tax liabilities. This decision would be economically rational and even become a common practice, if taxpayers perceive that the tax law is not enforced or if the costs of tax evasion are relatively low. In contrast, if the tax law specifies high penalties and is being properly enforced, then tax evasion would certainly be too costly and eventually lead to the expropriation of the property; thus it is less likely that the taxpayers would choose this strategy.

The economic literature has recently incorporated the concept of tax morale (*TM*) in order to account for the fact that taxpayers are usually inclined to voluntarily comply with the tax law even in the absence of effective enforcement.¹⁴ Analyzing opinion survey data from the United States and Turkey, Torgler et al. (2008) find that positive attitudes towards the tax authorities and the tax system as well as trust in public officials significantly increase tax morale, while the perception of corruption has the opposite effect. Additionally, Torgler (2005a) shows that the willingness to pay taxes increases with the level of direct democracy in a jurisdiction. The evidence provided by the tax morale literature suggests, therefore, that tax evasion also depends on the taxpayers’ perception about the behavior and

performance of the tax authorities, and the extent to which they conform to the preferences of the community. In our model we summarize these determinants of tax morale with the concepts of corruption and government responsiveness (R). Tax morale is expected to decrease (and tax evasion to increase) with a higher perception of corruption; the opposite would occur if the tax authorities are truthfully responsive to the preferences of the taxpayers.

Summarizing, tax evasion can be said to respond positively to deficient enforcement and negatively to the size of penalties and tax morale, and we can write in shorthand that $E = E[DE, P, TM(C, R)]$. Furthermore, the amount of tax liabilities (TL) can be decomposed into the observance of the tax law, represented by tax collections TC , and the non-observance of the tax law, represented by the tax revenues forgone due to deficient enforcement DE , corruption C , and tax evasion E :

$$TL = TC + DE + C + E[DE, P, TM(C, R)]. \quad (7.3)$$

Solving this equation for TC and dividing by TL , we can introduce it into equation (7.2) to express the amount of tax collections as:

$$TC = \left\{ 1 - \frac{DE}{TL} - \frac{C}{TL} - \frac{E[DE, P, TM(C, R)]}{TL} \right\} t^a \cdot TB, \quad (7.4)$$

where tax collections appear to be a function of deficient enforcement, corruption, penalties of tax evasion, government responsiveness, the adjusted statutory tax rate, and the size of the tax base. The analytical advantage of equation (7.4) is that now tax collections are exclusively expressed as a function of exogenous variables, which allows us to more easily identify the factors that determine the actual amount of tax revenue collections.

The amount of taxes a government is able to collect largely depends on policy variables that can be influenced either by the tax law or by the tax authorities. This conclusion stresses the role of the tax laws and the responsible government authorities as opposed to the role of taxpayers in explaining tax collections. A government in need of rising additional revenues is not limited to legally determining the tax rate and the tax base. In reality, several alternative channels might serve the same purpose. For instance, the tax law might incorporate measures to minimize and sanction corruption, set adequate levels of penalties for evasion, and restrict preferential treatments and exemptions. Alternatively, the tax authorities might choose to effectively enforce the tax law, improve the assessment process in order to more accurately measure the tax base, and to deepen the involvement of taxpayers in the public spending decisions. As De Cesare (2002, p. 11)

points out in the context of a review of several independent experiences in Latin America, 'it [is] clear that the political will is the principal element for explaining differences in the performance of property taxes'.

So far the discussion about the basic determinants of tax collections has not distinguished between the levels of government responsible for collecting the property tax. This distinction is important because different levels of government are given different responsibilities and decision-making powers, and also because typically they possess dissimilar levels of administrative capacity. In principle, the more discretion a subnational government is allowed, the greater the influence it can exert on the variables determining the amount of tax collections. In any case, equation (7.4) also shows that even with limited power over the design of the tax policy, a subnational government has a wide variety of channels available to alter the amount of tax collections. Indeed, due to their proximity to the collection process and to the taxpayers, the subnational authorities could enjoy some advantages with respect to the central government. Corruption, for instance, might be easier to detect and correct at the local level; strengthening the enforcement of the law and reducing tax evasion might well be facilitated by enhancing the taxpayers' participation in local expenditure decisions. Although not conclusive, the economic literature provides some evidence suggesting that fiscal decentralization reduces the level of corruption in a country. When authorities enjoy a significant degree of autonomy they not only have more ability to correct the distortions that reduce the level of tax collections, but they also are more accountable to the community.¹⁵

Comparing Tax Collection Performance at the Subnational Level

A subnational government responsible for collecting certain taxes would likely have some degree of discretion over several, and maybe all, of the explanatory variables described in equation (7.4). In this context, tax performance can be evaluated by comparing the amount of taxes collected by different subnational governments under similar conditions. A good (poor) level of performance would consist in collecting a relatively high (low) amount of tax revenues with respect to other subnational governments that face a comparable tax base and enjoy a similar level of discretion.

The natural question is what amount of tax collections should be considered as the benchmark to distinguish between good and poor performance. In principle, for each level of government, the total amount of revenues raised should be able to cover all the expenditure needs. Therefore, in a decentralized system of government the benchmarking

amount of tax collections can be defined, jointly for all tax instruments available, as the share of expenditure needs that remain unfunded after the vertical imbalance has been corrected via intergovernmental transfers. Unfortunately, this benchmark requires a precise measure of the vertical imbalance, which in practice is difficult to obtain. A more feasible alternative is to set the benchmark at the average effective tax rate, \bar{t}^e , such that any government whose effective tax rate is higher (lower) than the average would be said to exert a relatively high (low) 'statutory' tax effort.¹⁶

Now we can multiply both the numerator and the denominator of the right-hand side of equation (7.4) by \bar{t}^e , and rewrite the equation to describe the tax collections of any jurisdiction i as:

$$TC_i = \left\{ 1 - \frac{C_i}{TL_i} - \frac{DE_i}{TL_i} - \frac{E_i[DE_i, P, TM_i(C_i, R_i)]}{TL_i} \right\} \frac{t_i^a}{\bar{t}^e} \cdot \bar{t}^e \cdot TB_i. \quad (7.5)$$

Note that P and \bar{t}^e are the only variables not determined inside the jurisdiction. In general, the tax law assigns different responsibilities to the different levels of government, and authority over variables such as the penalties of tax evasion might be reserved to the central government or even be an exclusive prerogative of the congress. Because of this, the penalties of tax evasion as well as any policy variables that are not under the authority of subnational governments can be considered to be determined exogenously.

On the right-hand side of equation (7.5), the product of the terms inside the bracket and the ratio of adjusted statutory tax rate over the average (benchmark) effective tax rate represents a 'relative effective tax rate', which takes a value greater than, equal to or lower than one as long as the tax rate effectively applied on the government unit i is greater than, equal to or lower than the sample average. This is precisely the definition of what the economic literature refers to as the tax effort (TE) exerted by a particular government. Moreover, the product of the last two terms in the equation, the average (benchmark) effective tax rate times the tax base of the government unit i , describes the concept of fiscal capacity (FC), which is usually defined as the amount of tax revenues that could be collected if a given level of effort were applied to the available tax base. Equation (7.5) can therefore be reduced to the following identity:

$$TC_i = TE_i \cdot FC_i, \quad (7.6)$$

where the taxes collected by a government i are defined as the amount of revenues obtained by applying the level of effort exerted by that government to a 'fair' measure of its potential tax revenues.

By expressing the amount of tax collections as a function of the level of tax effort, equation (7.6) stresses the fact that, given the size of the available tax base, and a certain degree of fiscal autonomy, each subnational government is largely responsible for the amount of taxes actually collected within its jurisdiction. In this sense, tax effort is a choice variable that can be altered by voluntary decisions of subnational authorities and those of taxpayers, and therefore it can be used as a measure of tax collection performance. Equation (7.6) implies that we can estimate the tax effort of a subnational government as the ratio of its actual tax collections over its fiscal capacity:

$$TE_i = \frac{TC_i}{FC_i} \quad (7.7)$$

In order to evaluate the performance of each subnational government we only need to compare its tax effort with the tax effort of the other subnational governments of the same level. Moreover, since data about subnational revenue collections are usually available for most countries, the main challenge lies in estimating fiscal capacity.

A correct interpretation of the concept of tax effort requires a careful consideration of the actual degree of fiscal autonomy enjoyed in each jurisdiction. If all subnational governments enjoy the same degree of (significant) fiscal autonomy, then a relatively high (low) level of fiscal effort might simply suggest that the jurisdiction's residents are demanding a relatively large (small) amount of subnational services. Given that the efficiency gains of fiscal decentralization arise from tailoring the provision of public services to the needs and preferences of each community, then even a very low level of tax effort could be regarded as optimal. Indeed, if the system of intergovernmental fiscal relations is properly functioning then there would be nothing right (wrong) with a high (low) level of tax effort, and no reward (penalty) would be justified. In practice, however, and especially in the initial states of a fiscal decentralization reform, subnational fiscal autonomy might be limited by several factors. For instance, there might not be a longstanding tradition of taxpayers' contributions to the public sector, and thus taxpayers might not be willing to voluntarily comply with the law and nor would the tax authorities be willing to enforce it. Decentralization reform, in this sense, can actually imply a radical cultural change for some communities. Another limitation, very common among poor jurisdictions, is that of the lack of technical and administrative capacity to manage subnational finances and collect the taxes. A subnational government cannot be expected to assess the tax base, compute the tax liability and collect the taxes without proper means to carry out these functions. But this basic contradiction is a rather

common occurrence among subnational governments in Latin America, especially in the rural areas. In order to address this problem either an asymmetric decentralization of public functions or central government assistance to develop adequate capacity would be required.

Given that the factors limiting subnational fiscal autonomy usually affect different jurisdictions unevenly, the observed variations in tax effort and performance may no longer be the result of subnational choices. It follows that in order to make the subnational authorities (and the communities) fully liable for the differences in tax effort then they should enjoy equal, or at least comparable, levels of effective fiscal autonomy.

In spite of this argument, in order to increase own-revenue collections, some countries decide to reward high tax effort with additional intergovernmental transfers, and sanction low tax effort with no additional, or fewer, intergovernmental transfers. These incentives might serve as an effective tool to encourage greater subnational tax collections, but it is important to recognize that they would plausibly lead to counterproductive results. The reason for this is very simple and deals with the trade-off faced at the subnational level between own-revenue sources and intergovernmental transfers. Assuming that there are no savings, the total amount of government expenditures in public services (G) is equal to own-tax collections plus the amount received in the form of intergovernmental transfers (T),¹⁷ thus for any subnational government i we can write the budget constraint as:

$$G_i = TC_i + T_i, \quad (7.8)$$

from which it is clear that subnational expenditures can be expressed as a function of intergovernmental transfers, $G_i = G_i[T_i]$. Replacing TC_i by its definition in equation (7.6), dividing by fiscal capacity FC_i and solving for the level of tax effort TE_i , we find that:

$$TE_i = \frac{G_i[T_i] - T_i}{FC_i}, \quad (7.9)$$

such that the tax effort exerted by the subnational government i is equal to the difference between the total amount of public expenditures and the intergovernmental transfers received, over the fiscal capacity of the jurisdiction. In other words, tax effort corresponds to the extent to which a subnational government exhausts its own tax base.

According to equation (7.9) the direct effect of intergovernmental transfers, with a negative sign, is to reduce tax effort. An additional effect, however, can be observed in the amount of public goods and services

provided. Considering fiscal capacity as exogenous, the net effect of transfers on tax effort will depend on whether public expenditures will increase in a greater, equal or lower proportion than the transfers received. As a consequence, the final effect of intergovernmental transfers on tax effort will ultimately depend on the elasticity of public goods provision with respect to a marginal increase of the subnational budget. Jurisdictions where public goods are elastic will respond to additional intergovernmental transfers by increasing the level of tax effort, but those where public goods are inelastic, or comparatively less desirable, will reduce their tax effort.¹⁸ This implies that, regardless of the level of fiscal autonomy of subnational governments, tax effort can certainly be affected by intergovernmental transfers.

This analysis might suggest that the final effect of intergovernmental transfers on tax effort is efficient in the sense that it responds to the demand of public services within each jurisdiction. However, this conclusion is not necessarily correct. The demand for public services is affected by preferences and also by the quality of public services, and in turn this quality can be expected to vary across jurisdictions.¹⁹ Some local governments might not be able to provide public services with desirable standards of quality, which would reduce their demand and the resultant level of tax effort. The obvious equity problems that arise will have to be solved in accordance with the national preferences for redistribution.

Estimating Fiscal Capacity of Subnational Governments

For the most part, the empirical literature on the property tax has focused on measuring tax effort at the subnational level by considering fiscal capacity as an exogenous factor with respect to the tax revenue performance of subnational units. The reason for this is that any exercise of discretion implies a certain degree of responsibility and thus allows us to evaluate tax performance on the basis of effective power over tax collections. In this sense, subnational governments are by presumption passive with respect to their fiscal capacity and this concept can be regarded as irrelevant for performance evaluations.

In the previous discussion we showed, however, that a good measure of fiscal capacity is critical to accurately estimate the tax effort and evaluate their tax performance. Measuring the fiscal capacity with respect to the property tax is particularly difficult because of the great financial, technical and administrative requirements for developing comprehensive *cadastres* of immovable properties. Any measure other than the *cadastre*, and independent from the actual value of properties, will provide a questionable estimation of the potential property tax base.

Unfortunately, developing countries struggle with the complexity and costs associated with the construction of the *cadastre*, but still the prospect of not taxing properties seems to be a much worse solution. In practice, the use of indirect methodologies for estimating the fiscal capacity associated with the property tax can help to partially solve this problem. The literature has described a number of these methodologies, which have been designed to do as much as the availability of information allows.

One of the simplest methodologies consists of using historical property tax collections from one or several past periods. This methodology assumes that past collections can be representative of the fiscal capacity of local governments. However, there are several factors that might create a difference between potential and actual tax collections. The presence of centrally imposed exemptions eroding the tax base, or greater administrative and compliance costs, and the taxpayers' willingness to contribute to the provision of public goods, are some examples of factors that might truly reduce fiscal disparities. But historically low tax collections might also be caused by inefficiency, political favors and corruption. In this context, it is desirable to have some information about the determinants of fiscal capacity. For instance, we might expect that measures of income, production or consumption could be related to the size of the tax base, including the property tax base. In general, the use of this type of 'proxies' is preferable to the use of historical data, but in developing countries we can rarely count on this information at the local level.

There are several additional methodologies for estimating fiscal capacity and their usefulness, of course, depends on whether the data are available or not.²⁰ In any case, it is important to stress the fact that deficient measures of fiscal capacity lead, necessarily, to equally deficient estimates of tax effort.

Comparing Tax Collection Performance across Countries

The comparison of property tax performance across countries follows the same logic as the comparison of subnational tax performance. Maybe the most important difference consists of which institutions are ultimately responsible for the relative variations in tax performance. In the analysis of subnational tax collections, subnational governments are responsible for their performance up to the point where they do not have further discretion to affect tax collections. Such a limit is imposed, for instance, by the tax law, which can usually be regarded as exogenous for any subnational government and even for the central government. In contrast, regardless of which level of government is responsible for administering a tax source, at the country level the tax law and the public policies in general should

be considered as endogenous and other national institutions such as the congress and the judiciary system also become responsible for the resultant level of national tax performance.

In this cross-country context, most of the variables determining property tax collections can be considered to be endogenous, and we can define the total amount of tax collections for any country j as:

$$TC_j = \left\{ 1 - \frac{DE_j}{TL_j} - \frac{C_j}{TL_j} - \frac{E_j[DE_j, P_j, TM_j(C_j, R_j)]}{TL_j} \right\} \cdot \tau_j^q \cdot TB_j \quad (7.10)$$

where besides the change in subscripts the only difference with respect to the subnational case is that the penalties for tax evasion (as well as any other determinant that might be exogenously imposed by the tax law) are expressed as endogenous (choice) variables.²¹

Moreover, given that a country has full discretion to define the tax base, and provided that the market value of all land and structures (V_j) is available for taxation in the national territory, then the share of the actual tax base over V_j becomes by itself a component of the national tax effort. As a consequence, the country has discretion over all the variables in the right-hand side of the equation, and tax effort can be defined simply as:

$$TE_j = \frac{TC_j}{V_j} \quad (7.11)$$

This equation states that national tax effort can be estimated as the ratio between actual tax collections and the market value of lands and structures available for taxation within a country, while the last term determines the potential tax collections or fiscal capacity of the country. In turn, cross-country comparisons can be carried out by simply comparing the values of national tax effort.

Of course, as in the case of subnational tax performance, the main challenge with estimating national tax effort is measuring the fiscal capacity of the country. If this is possible, however, the cross-country analysis of tax effort and performance offers important advantages in terms of data availability, because much more data about institutional, political, cultural and economic variables are available at the country level.

Given that each country defines its own property tax base and might use different valuation methods to estimate the tax base, a wide variation of financial and technical arrangements can be observed among different countries. As a consequence, even if available, national estimates of the property tax base are not comparable. Bahl and Wallace (2010) suggest a standardized approach in order to solve this problem: The measures of

national wealth provided by the World Bank (2006) can be used to estimate the size of the potential property tax base under a single criterion and for a large number of countries. In Appendix Table 7A.2 we present the estimates of the potential property tax bases for a number of Latin American countries. Unfortunately, the measures of national wealth are currently available only for the year 2000; thus even if useful, they do not provide information about how tax bases vary across time. In the next section we use these estimates in the econometric analysis of international property tax performance.

5 THE DETERMINANTS OF PROPERTY TAX COLLECTIONS IN LATIN AMERICA

An empirical test of the main propositions of our analysis requires information that, in general, is not available at the subnational level in Latin American countries, so we are not able to properly account for the determinants of property tax collections at the within-country level. For this reason, we begin with a simple OLS regression analysis in order to verify how intergovernmental transfers received by local governments in Brazil and Peru (in national currency) are correlated with per capita property tax collections.²²

The results are presented in Table 7.4. Because of data availability, we are able to include only a few other control variables to get a clearer picture of the potential impact of intergovernmental transfers on property tax collections. These control variables are the total amount of current revenues in each jurisdiction, revenue autonomy (defined as own taxes over total revenues), population, regional GDP in the case of Brazil, and the relative incidence of poverty and the percent of urban population in the case of Peru. We should also note that total current revenues and revenue autonomy should be expected to be endogenous with property tax collections; however, lacking valid instruments we cannot correct this problem. Nevertheless, a few interesting observations may be drawn from the results.

The most relevant result in Table 7.4 is that current intergovernmental transfers per capita are negatively and significantly correlated with property tax collections per capita in the two countries. This would seem to suggest that on average current transfers act as a disincentive for property tax collections. However, we need to interpret this result with caution. There may be an endogeneity bias in these estimates because lower property tax revenues per capita may also induce larger current intergovernmental transfers per capita. On the other hand, the coefficients of capital

Table 7.4 *Determinants of property tax collections in Brazil and Peru*
(dependent variable: per capita property tax collections)

	OLS regression: Brazil	OLS regression: Peru
Current transfers per capita	-0.1124*** (0.0237)	-0.2263*** (0.0130)
Capital transfers per capita	0.0058 (0.0063)	-0.0080 (0.0191)
Current revenues per capita	0.1081*** (0.0223)	0.2165*** (0.0123)
Revenue autonomy (%)	2.5051*** (64.9611)	1.6772*** (49.8014)
Per capita GDP (2000)	-0.0006** (0.0003)	
Poverty		0.0097 (0.0427)
Urban population (%)		-0.1065*** (0.0390)
Population (thousands)	-0.0015 (0.0047)	-0.1159*** (0.0439)
Constant	-8.7593*** (3.3112)	6.6278 (4.0486)
Observations	4,998	1,428
R-squared	0.5218	0.8769

Notes:

Robust standard errors in parentheses.

** significant at 5%; *** significant at 1%.

intergovernmental transfers are not statistically significant, suggesting that the distribution of this revenue source because of its unpredictability or periodicity does not affect local property tax collection performance.

The coefficients of total current revenues and revenue autonomy are positive and statistically significant. But these results are expected due to the construction of those variables; by definition the larger the property tax collections the larger will be the amount of current revenues as well as the share of own revenues in the local budgets. However, they might also suggest, subject again to a possible endogeneity bias, that local governments with larger budgets and more revenue autonomy might be better able to collect property taxes.

The regressions also include proxies for local fiscal capacity, which help to estimate the relative size of the property tax base as well as the administrative capacity of local governments. The per capita GDP variable is

available for Brazilian local governments. Its coefficient is negative and significant at the 5 percent confidence level. This result is contrary to our expectations, as long as GDP per capita is expected to be highly correlated with the property tax base; but it could also be that a higher GDP per capita signals the availability of other tax bases, such as Brazil's ISS (local tax on services), which is relatively more important than the property tax in local budgets. The availability of other tax sources may push down local efforts to collect the more difficult and unpopular property tax.²³ However, we must note that the estimated coefficient is relatively unimportant in terms of magnitude, implying that property tax collections are not that responsive to this factor. In the case of Peru there are no measures of GDP at the local level. Instead, we use a measure of poverty defined as the share of the population under the poverty line; this variable displays no significant correlation with property taxes. In addition, we consider the share of the population living in urban areas, which is expected to be directly related with the size of the property tax base; however, here again the coefficient is instead negative and statistically significant, perhaps signaling the availability of other more 'convenient' revenue sources in urban areas.

Finally, the regressions also include population as a control for the jurisdiction size. In both cases the coefficient is negative, but it is significant only for Peruvian municipalities. This is somewhat surprising because we would expect to observe economies of scale in property tax collections. However, this result might be explained, for instance, by the presence of economies of scale on the expenditure side; or, alternatively, by a positive correlation between the extent of informal properties and the jurisdictional size.

The empirical analysis of property tax collections at the local level is still subject to very important data limitations, and the inability to properly control for other determinants can easily lead to significant omitted variable bias. In contrast, even though at the international level the data are also limited, there are several additional variables that allow us to control for macroeconomic, political and institutional factors that are relevant in determining property tax collections. In the end, however, there is a clear trade-off since using international cross-country data is also subject to aggregation biases and omitted country fixed effects.

The cross-country analysis of the determinants of property tax collections considers nine Latin American countries for which relevant data are partially available for the 1990–2007 period: Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Mexico, Paraguay, and Peru. The dependent variable, property tax collections, is defined as the share of property tax collections in GDP. Based on the discussion in the previous section, we

expect property tax collections to decrease with deficient enforcement, corruption, tax evasion and the predominance of transfers, and to increase with the size of the property tax base, government responsiveness, and the average tax rate. Even though there are direct measures of all these variables, some of them are not available for long periods of time for all Latin American countries. In order to maximize the number of observations, we use alternative (more common) variables as proxies of our variables of interest.

We consider a variety of factors accounting for the design of fiscal arrangements, the level of development, the size of the property tax base, relevant differences in the implementation of the property tax, and basic characteristics of the political system.²⁴ The structure of fiscal arrangements is described through measures of fiscal decentralization, the level of transfer dependency, and the size of government. Fiscal decentralization is defined as the share of subnational expenditures over total government expenditures, and it is used to represent the extent of the fiscal devolution to the subnational governments.²⁵ The dependency on transfers is defined as the share of intergovernmental transfers in total subnational revenues. As explained, intergovernmental transfers reduce the need for collecting own revenues and, therefore, might reduce tax effort and the collections of the property tax. Finally, government size is used to account for the relative magnitude and relevancy of the public sector and its components, including transfer programs, in the overall economy.

The level of development is represented by the per capita GDP. This variable provides information, among other things, on the levels of accumulated physical and human capital. For example, local governments in richer countries might have access to highly skilled personnel and more sophisticated equipment, so that their ability to administer and collect taxes is greater than that of less-developed countries. However, different levels of development can also be related to diverse patterns of subnational governments' financing, and thus the sign of the influence on property tax collections remains uncertain.

Property tax collections also depend on the value of land and structures in a country, which accounts for the potential property tax base. We approximate this value, following Bahl and Wallace (2010), with estimations computed on the basis of national wealth data provided by the World Bank (2006) (see Appendix Table 7A.2). We also control for the share of the urban population, because the size and composition of the tax base as well as the amount of property tax collections can be expected to be quite different in rural and urban areas. In addition, we include two dummy variables to control for the specific characteristics of Chile, where the administration and the authority over the property tax remain fully

centralized, and of Ecuador and Mexico, the only countries in the sample where the *cadastre* is developed by the subnational governments (see Appendix Table 7A.1).

In practice, subnational governments can effectively enjoy additional fiscal autonomy only if the decentralization process also enhances the political representation of the population. Indeed, the share of local government expenditure over total government expenditures does not say much about the ability of taxpayers to choose their representatives and express their preferences for public goods, which, in turn, determines the extent of effective accountability of government officials and the degree of responsiveness to taxpayers' preferences. In order to account for these factors we consider two variables: the competition for public positions and an index of democracy. The degree of competition for public positions, we argue, serves to limit the ability of local authorities to take advantage of their political power, and thus helps to increase accountability and to contain corruption. Complementarily, the index of democracy serves to represent the ability of taxpayers to truly express their preferences.

Table 7.5 presents the results of our empirical analysis. The first regression (1) uses a fixed effects model in order to control in the estimation for all unobserved specific-country characteristics. As we might expect, the coefficient of fiscal decentralization is positive and statistically significant at the 1 percent level. A greater devolution of expenditure responsibilities to subnational governments requires relatively more revenues, providing incentives for greater property tax collections. The coefficient for the dependency on transfers takes a negative sign, and thus is negatively related to property tax collections, and it is statistically significant at the 5 percent level. This result is important because it supports our conjecture that the predominance of transfers can have a negative effect on tax effort. In order to control for the relative magnitude of intergovernmental transfers we also include an interaction term between transfers and the size of the (general) government with respect to the GDP. The coefficient of this variable is positive and significant, suggesting that the negative effect of transfers of property tax collections is reduced as the size of the government increases. A bigger public sector might need to count on other (than property) tax sources, and might also be better able to improve tax administration at every level and to implement 'non-distorting' or 'incentive-neutral' transfer programs. On average, the net effect of transfers on property tax collections becomes positive when the size of the public sector corresponds to 17.7 percent of the economy (displayed at the bottom of Table 7.5).

The level of development, represented by the GDP per capita, has a negative effect on property tax collections, which is significant at the 1 percent

Table 7.5 Determinants of property tax collections (dependent variable: property tax collections (PTC) as a share of GDP)

	Fixed effects (1)	Random effects (2)	Random effects (3)	Random effects IV ^a (4)
Fiscal decentralization (%)	0.00919*** (0.00242)	0.01617*** (0.00150)	0.01445*** (0.00135)	0.03038*** (0.00637)
Dependency on transfers (%)	-0.01047** (0.00509)	-0.01053*** (0.00234)	-0.00502** (0.00255)	-0.02031*** (0.00697)
Interaction term (dep. on transfers × government size)	0.00059** (0.00028)	0.00072*** (0.00014)	0.00043*** (0.00015)	0.00086*** (0.00029)
Government size (% GDP)	-0.01288 (0.01554)	-0.02731*** (0.00901)	-0.00776 (0.00952)	-0.04679** (0.01991)
Log of per capita GDP	-0.17295*** (0.04730)	-0.28330*** (0.05883)	-2.65021*** (0.84908)	-1.10259 (0.11616)
Log of per capita GDP squared			0.12901*** (0.04562)	
Log of estimated property tax base (as computed in Appendix Table 7A.2)		0.27237*** (0.02755)	0.26629*** (0.02683)	0.40590*** (0.08117)
Urban population (%)	0.00438 (0.00743)	-0.01564*** (0.00280)	-0.01050*** (0.00326)	-0.04710*** (0.01429)
Municipal <i>cadastre</i> (dummy)		-0.35632*** (0.02223)	-0.36153*** (0.02096)	-0.33473*** (0.05178)
Chile (dummy)		0.85010*** (0.05660)	0.83174*** (0.05267)	1.17456*** (0.16223)
Competition for public positions	0.09501*** (0.02422)	0.12712*** (0.02600)	0.12667*** (0.02439)	0.14642*** (0.04218)

Table 7.5 (continued)

	Fixed effects (1)	Random effects (2)	Random effects (3)	Random effects IV ^a (4)
Index of democracy	-0.03259*** (0.00727)	-0.05281*** (0.00804)	-0.05330*** (0.00702)	-0.08504*** (0.01904)
Constant	1.68607*** (0.63587)	3.53144*** (0.45747)	13.66880*** (3.72743)	4.51384*** (0.74078)
Observations	115	115	115	115
Number of countries	9	9	9	9
R-squared within	0.5913	0.4667	0.4487	0.1603
R-squared between	0.1392	0.9795	0.9921	0.9252
R-squared overall	0.1288	0.9332	0.9396	0.8367
Test of overidentifying restrictions p-value				0.233 0.6294
The mg. effect of GDP on PTC turns positive when GDP per capita is:			28,892	
The mg. effect of transfers on PTC turns positive when government size is:	17.7	14.6	11.7	23.6

Notes:

Robust standard errors in parentheses.

All regressions include time period dummies (not shown)

* significant at 10%; ** significant at 5%; *** significant at 1%.

^a The instrumented variables are fiscal decentralization, dependency on transfers, and the interaction term between the later and government size.

The instruments are log of population, political competition, openness to international trade and the price level of government expenditures.

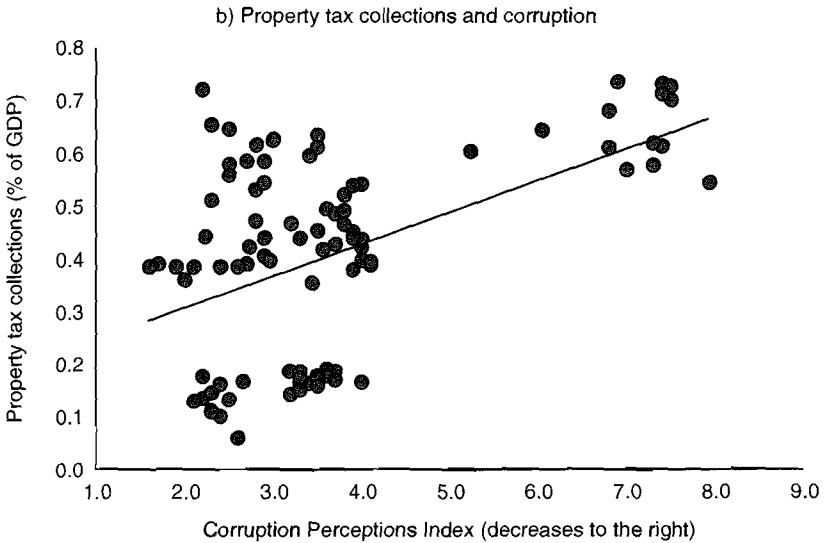
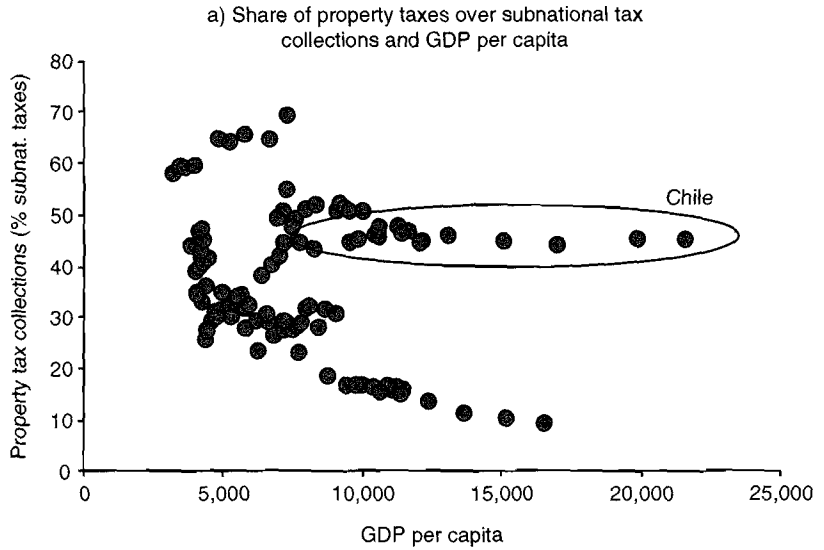
level. This result might appear as counterintuitive, because a greater level of development is usually associated not only with improved tax bases and administrative and tax collection capacity, but also with greater ability (and maybe willingness) to pay property taxes. An alternative explanation of this result would go along the same lines discussed above for the case of Brazil; higher GDP per capita may signal the availability of other tax sources of some significance and therefore a relative decrease in the reliance on property taxes as a source of local revenue. A simple analysis of the subnational tax mix and GDP per capita would seem to point in that direction; Figure 7.1(a) plots property tax collections as a share of subnational taxes against GDP per capita. There appears to be a clear negative relationship between these variables, suggesting that the relative importance of the property in subnational governments' financing decreases as the country GDP per capita increases.²⁶

Finally, among the other controls only competition for public positions and the index of democracy are statistically significant. As expected, the variable used to represent accountability and the limits to corruption – competition for public positions, is positively related to property tax collections. In contrast, the coefficient of the index of democracy has a negative sign, suggesting that the property tax might not enjoy political acceptability.²⁷

The second column of Table 7.5 presents the results of a random effects model in which we are able to include time-constant variables, at the same time partially controlling for country-specific effects. The results under this specification are fairly consistent with the findings under fixed effects, but all controls are now significant at the 1 percent level. In particular, government size and the percentage of urban population appear to be negatively correlated with property tax collections.

The time-invariant variables that are included in this estimation are (the logarithm of) the estimated size of the potential tax base, a dummy that takes the value of one for Chile, and a dummy that assigns a value of one to the two countries of the sample in which the *cadastre* is developed locally, Ecuador and Mexico. The signs of the coefficients of the time-constant variables are in line with our expectations. The greater the size of the potential tax base the greater the relative amount of property tax collections.²⁸ On the other hand, Ecuador and Mexico appear as collecting fewer taxes due to the reliance on, presumably ill-equipped, subnational tax administration; Chile performs better than the average of the sample due to the opposite reason.

Regression (3) in Table 7.5 introduces the square of the GDP per capita in order to allow for a non-linear influence on property tax collections. The general results do not significantly differ from the previous regression,



Sources: (a) ECLAC (property taxes and subnational tax collections) and Penn World Table (GDP per capita); (b) ECLAC (property taxes) and Transparency International (Corruption Perceptions Index).

Figure 7.1 Relationship of property tax collections with GDP per capita and corruption

and the square of the GDP per capita is positive and statistically significant at the 1 percent level; implying that the negative marginal effect of development on property tax collection decreases with per capita GDP.²⁹

A relevant concern about the econometric specification is the existence of an endogenous relationship between some of the explanatory variables and property tax collections. In particular we may expect a certain degree of reverse causality; that is, we can expect the extent of fiscal decentralization and the amount of transfers to be influenced by the level of property tax collections. In order to address this problem, in regression (4) we use a generalized two-stage least squares (G2SLS) random effects model, where we introduce instrumental variables (IV) to correct possible biases in the estimators. The instrumented variables are fiscal decentralization, dependency on transfers, and the interaction term between dependency on transfers and the size of government. As instruments we choose the log of population, the degree of political (party) competition, openness to international trade and the price level of government expenditures.³⁰ The set of instruments is highly correlated with the three endogenous variables but uncorrelated with property tax collections. Moreover, the test of overidentifying restrictions (in the table) fails to reject the null that the set of excluded variables are valid instruments.³¹ In general, although the magnitude of the coefficients exhibit relevant corrections, their signs and statistical significance remain roughly unaffected.³²

Summarizing, property tax revenue performance improves with the extent of fiscal decentralization, the presence of accountability mechanisms, and the size of the potential tax base. In contrast, tax collections decrease with the index of democracy, higher dependency on transfers, and the fact that the *cadastre* is administered locally.

Finally, a variable that we have considered as a potentially important determinant of property tax collections is the perception of corruption, which even if available, has been excluded from the econometric analysis due to the small number of observations. Figure 7.1(b) presents a scatter plot where we verify an apparent correlation between property tax collections as a share of GDP and the Corruption Perceptions Index. The Corruption Perceptions Index assigns a greater value to those countries that are less corrupt, thus the positively sloped trend line suggests that less corrupt countries are, on average, able to collect more property taxes.³³

This analysis provides important insights about the determinants of property tax collections in Latin America. In principle, given that we do not have information about what the 'correct' level of property tax collections is, we cannot say a priori whether increasing tax collections is a desirable thing. However, it is well known that Latin American countries perform below international standards, and since we have no

reason to presume that their subnational expenditure needs are particularly low, then we can conclude that certain factors have an excessively (undesirable) negative influence on property tax collections. The dependency on transfers and local responsibility for the implementation of the *cadastral* are two relevant factors in reducing property tax collections and over which the authorities might have some degree of control. For instance, the design of the fiscal decentralization might incorporate new subnational own-revenue sources, such that the local authorities and their constituencies internalize the value of revenue autonomy and start exercising higher tax effort in order to finance expanded local services. Nevertheless, greater autonomy at the local level does not mean that complex, long-lasting and expensive tasks such as building a complete *cadastral* of properties can be undertaken without assistance from the central government. The movement towards greater revenue collections and autonomy, especially in developing countries, must be gradual, with a central government that is able to support and assist local administrations in their transition to more decentralized and efficient arrangements.

6 CONCLUSIONS AND POLICY RECOMMENDATIONS

Successful decentralization in terms of efficiency and fiscal responsibility depends critically on the provision of adequate revenue autonomy to subnational governments. The property tax is widely considered as the most appropriate instrument to promote tax autonomy at the local level, while other taxes such as vehicle taxes, local excise, piggyback personal income taxes, or business permit taxes should also play an important role in the promotion of local tax autonomy. However, it is difficult to argue strongly for greater property tax autonomy when many local governments in Latin America appear not to be taking advantage of the autonomy that is currently granted in the laws. An important piece of any potential indictment is that, judging from what is collected in other regions of the world, actual property tax collections in the region are a small fraction of what appears to be the revenue potential. In this context, any attempts to achieve more efficient forms of decentralization in the Latin American region via increased revenue autonomy for local governments would need to grapple with the question of how to achieve significant improvement in local property tax collections.

Property tax collections are determined by a wide array of factors. These factors include, among others, the extent or depth of fiscal decentralization

reforms, the structure of subnational financing, the level of development, the potential size of the property tax base, and basic institutional characteristics of the public sector. In particular, we find that the predominance of intergovernmental transfers in the subnational finance systems have a negative effect on property tax collections and that, for the most part, subnational governments are unwilling or do not seem capable of taking advantage of the devolution of this revenue source. In this context, getting the property tax to perform correctly may take more than just addressing the issues, complex on their own, of designing, administering and enforcing the property tax itself. For instance, we argue that government responsiveness towards taxpayers' needs and improvements in cultural factors such as tax morale might be necessary to increase property tax collections.

Effective devolution of the property tax to subnational governments should be accompanied by certain preconditions. Some of these preconditions are not currently met by some Latin American countries, and thus provide a good starting point to draw meaningful policy recommendations to guide future reforms. Of course, country circumstances and conditions differ, so not all recommendations should be expected to apply to each case.

There is a clear need for most local governments to develop their administrative and technical capacities. This rather obvious recommendation has long been recognized in the literature, but it remains as an unavoidable and pending task. Two possible strategies to move forward in this regard are the implementation of asymmetric property tax assignments and the provision of technical and financial assistance to those local governments with lower administrative capacity. Moreover, improving the performance of the property tax in the region would also benefit from strengthening institutions and reshaping cultural attitudes. In particular, it is necessary to make local authorities understand the importance of own-tax revenues and to show taxpayers the connection between property tax payments and local services. This will not be an easy task, but successful experiences such as those provided by the cities of Bogota and Lima might serve as relevant examples (see Martinez-Vazquez, 2010). Finally, some reforms to the intergovernmental finance system may be necessary. It is particularly important to correct the incentives provided by the system of transfers. In this chapter we provide some evidence of a potential negative effect of intergovernmental transfers on property tax collections. These issues still need to be carefully investigated.

Overall, and somewhat paradoxically, greater revenue autonomy for Latin American local governments in the form of a more effective use of the property tax might depend in some cases on a deeper involvement of the central government in the administration, collection and enforcement

of the property tax. Making property taxes work more effectively will continue to be a complex challenge and no simple 'silver bullet' simple solutions are in sight. Attention must be given to 'internal' factors, including issues of administration and local capacity, but equal attention must also be given to an array of factors that are 'external' to the property tax collection process itself.

NOTES

- * We are thankful to ECLAC for financial support and Juan Pablo Jiménez and Gustavo Canavire-Bacarreza for helpful comments. We are also thankful to Andrea Podestá for useful research assistance.
1. The taxation of property comes in many different modalities and within each one of them different approaches have been used in the international practice, all of which offer different advantages and disadvantages. Many of these are reviewed in Bird and Slack (2004) and Bahl et al. (2008a, 2010).
 2. For a detailed description of property tax systems in Latin America, see De Cesare and Lazo Marín (2008).
 3. The advantages of the property tax as a local tax are reviewed, among many others, in Oates (1999), Bird (2006), and Bahl et al. (2008b).
 4. The concept of equity in the distribution of income ultimately deals with who bears the burden of the tax, or the incidence of the tax. Zodrow (2007) provides a brief review of the property tax incidence literature.
 5. Based on an empirical analysis encompassing 34 developing countries and 22 developed countries, Sepulveda and Martínez-Vázquez (2011) suggest that the local governments might actually contribute to improving the distribution of income. However, this conclusion is subject to a public sector playing a significant role in the economy (more than 20% of the GDP), a condition that is not observed in Latin American countries, where total expenditures of the general government represent, on average during 2007, less than 15% of the GDP (Penn World Table, Heston et al., 2009).
 6. Discussions about the property tax and the characteristics of a good local tax are discussed, for instance, in McLure (1994), McCluskey and Williams (1999), McCluskey and Plimmer (2007), Bahl and Bird (2008) and Martínez-Vázquez et al. (2010).
 7. Brennan and Buchanan (1980) suggest that tax competition has a corrective effect on the overall amount of public expenditures, because it limits the natural tendency of governments to spend more than the efficient amount.
 8. Oates (2006) provides a more recent discussion about the decentralization theorem and the channels through which fiscal decentralization can lead to net welfare gains for society.
 9. See Shah (2004) for a discussion about the possible factors explaining the widespread decentralization movement among developing and transition countries.
 10. In the equality provided by Bahl and Martínez-Vázquez (2008) both sides of the identity are divided by the GDP. By doing this, the tax collections are expressed in relative terms, thus the figures for different countries are comparable and the analysis can be carried out on a cross-sectional basis. This equality was previously presented, for instance, in Bahl (1979).
 11. If the collection ratio is assumed to be set at 1 by the tax authorities, then this term might still have a value different from one, which could be interpreted as a deviation of the 'true' market value of taxable properties due to an inaccurate assessment of the value of taxable properties. In this framework, however, we assume that the

market value is correctly measured and that the collection ratio serves only as a policy instrument.

12. The literature reserves the term 'tax avoidance' to refer to any legal form of non-compliance. Tax avoidance corresponds to the taxpayers' initiatives to minimize their tax burden by taking advantage of preferential treatments and exemptions contemplated in the law. In this model, tax avoidance is accounted for as a reduction of taxable market value of properties, and thus a reduction of the property tax base.
13. The basic structure of the traditional tax evasion model is developed by Allingham and Sandmo (1972) and Srinivasan (1973), and the cost of enforcement is incorporated by Slemrod and Yitzhaki (1987). Two surveys on the theory of tax compliance are provided by Andreoni et al. (1998) and Sandmo (2005).
14. A comprehensive review of the concept of tax morale and the relevant literature is provided by Torgler (2007).
15. See, for instance, Fisman and Gatti (2002) for an empirical analysis providing strong support to the hypothesis that fiscal decentralization reduces corruption.
16. t^e can be computed as the total amount of taxes actually collected among all government units divided by the overall tax base. This definition corresponds to the weighted average of the effective tax rate for all government units. A different alternative, not less convenient, consists in computing the benchmark as the simple average of the effective tax rates for the available sample (of countries or subnational governments). The weighted average will be expected to be greater (smaller) than the simple average as long as per capita collections tend to increase (decrease) with the jurisdiction size.
17. Other sources of own-revenue collections (for example, fees and financial debt) are excluded, without loss of generality, in order to simplify the analysis. Here we also disregard whether the intergovernmental transfers are earmarked or not, but this does not alter the fact that any degree of discretion over own-revenue collections translates into discretion 'in the margin' over the total amount of government expenditures.
18. As a corollary of this result we could say that if intergovernmental transfers increase, do not change, or decrease tax effort in a jurisdiction, then the demand for public goods within that jurisdiction has been revealed to be elastic, have unitary elasticity, or be inelastic.
19. Equation (7.8) corresponds to a strictly budgetary identity, but it can be modified in order to model the supply and demand for subnational public goods and services. The left-hand side would have to incorporate a production function describing the amount and quality of public goods and services, and in the right-hand side the tax collections would represent the willingness to pay for these outputs.
20. For a review and an extensive discussion about the alternative methodologies available to measure fiscal capacity see, for instance, US ACIR (1986) and Boex and Martinez-Vazquez (2007).
21. One might argue that foreign tax policies also affect tax collections because they can induce the taxpayers to emigrate in order to capitalize on tax advantages. This is especially relevant in cases where taxpayers are very mobile, as in corporations. In any case, mobility is fully accounted for in this equation by a decrease in the size of the tax base. Another way in which foreign tax policies may also affect tax collections is through spatial tax competition across countries. In this case tax rates and other policies set in foreign countries can affect the tax policy choice in any one country.
22. The choice of these countries responds to data availability. Both Brazil and Peru provide public information about subnational finances and basic demographic and development indicators. The main data sources are the National Treasury of Brazil and the Ministry of Economy and Finance of Peru.
23. A similar result is found in the analysis of property tax collections at the international level, which is presented later in this section, and where we discuss possible interpretations in more detail.
24. The description and sources of the variables used in the analysis, as well as the summary statistics, are presented in Appendix Tables 7A.3 and 7A.4, respectively.

25. Even though this variable does not capture the effective autonomy of subnational government, lacking any better option we follow the most common practice in the decentralization literature and use this variable to proxy for the level of fiscal decentralization.
26. The data for Chile, within the oval in Figure 7.1(a), exhibit a distinctive pattern, which has been accounted for by the country dummy in the econometric specification.
27. In order to account for additional country-specific characteristics we also considered regional disparities in GDP per capita as an additional control variable. The correlation between this variable and property tax collections as a share of GDP is -0.686 , suggesting that countries with greater regional disparities tend to collect fewer property taxes. However, we do not present the results for this variable because its inclusion in the estimating equations drastically reduces the number of observations.
28. The explicit consideration of the potential tax base might also help to explain the negative sign of the urban population's coefficient. Once the size of the tax base has been accounted for, a negative relationship between urban population and property tax collections might suggest that urban areas have a greater concentration of unregistered properties and exempted taxpayers than is the case in rural areas.
29. The average effect of development on property tax collections turns out to be positive when the GDP per capita is US\$28,892. That point, however, is irrelevant because no country in the sample reaches that value.
30. See Appendix Tables 7A.3 and 7A.4 for a description of the variables used and summary statistics.
31. The test of overidentifying restrictions was developed for Stata by Schaffer and Stillman (2006).
32. The only exception is the level of development, which turns out to be statistically insignificant. We cannot know, however, if this change is due to the correction of a bias or due to possible collinearity introduced by the instrumentation for the endogenous variables.
33. The Corruption Perceptions Index is prepared by Transparency International, and the data can be retrieved from http://www.transparency.org/policy_research/surveys_indices/cpi.

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APPENDIX 7A

Table 7A.1 *Main characteristics of property tax systems in Latin America*

Country	Revenue assignment	Authority to change the tax structure	Administration			
			<i>Cadastral</i>	Billing and collection	Appeals	Assessment
Argentina	Provincial and local govts	Provincial and local governments	Cadastral office	Provincial and local governments	Formal appeal processes at both government levels	Market value
Bolivia	Municipal governments	Central govt (Ministerio de Finanzas) along with municipal governments	Dirección Nacional de Catastro Urbano	Municipal governments		Market value
Brazil	Central (rural) and municipal (urban) govts	Central and municipal governments	Central (rural) and municipal (urban) govts	Municipal governments		Market value
Chile	Municipal governments	Central government	Servicios de Impuestos Internos (SII)	Central government (Treasury)	Internal Tax Service, Special Appeals Court on Property Valuation, Supreme Court	Area by location for land, construction value for buildings

Colombia	Municipal governments	National Congress defines tax base and rate. A range of rates is established within which municipals are free to choose
Costa Rica	Municipal governments	
Ecuador	Municipal governments	Central govt along with municipalities' ability to set rates
Guatemala	Central and municipal governments	Central and municipal governments
Honduras	Municipal governments	Municipal governments

Instituto Geográfico Agustín Codazzi (IGAC)	Municipal governments (Secretarías de Hacienda)	Cadastral Division, petition tax administration	Market value
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Municipal governments (Catastro Nacional)	Municipal governments		Market value
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Municipal governments	Municipal governments		Market value
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Central government (Dirección General de Catastro)	Mainly central govt, except for municipalities with technical and administrative capacity		Market value
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Municipal governments	Municipal governments		Market value, use of the land, location and improvements
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Table 7A.1 (continued)

Country	Revenue assignment	Authority to change the tax structure
Mexico	Municipal governments	State and municipal governments jointly
Nicaragua	Municipal governments	Central government with municipalities' ability to grant additional exemptions
Panama	Central government	Central and provincial governments
Paraguay	Municipal governments and departments	Central government (Ministerio de Finanzas Públicas)

Administration

<i>Cadastré</i>	Billing and collection	Appeals	Assessment
Municipal governments	Local governments (local Treasury offices)	Fiscal authority judicial branch	Market value
Comisión Nacional de Catastro	Municipal governments		Cadastral value
Central government	Provincial governments		
Mainly central govt, except for those municipals with technical and adm. capacity	Municipal governments		Market value

Peru	Municipal and district governments	Central, municipal and district governments	Central government (Comisión Nacional de Tasaciones: CONATA)	Municipal and district governments	Market value
Dominican Republic	Central government	Central government	Central government (Dirección General del Catastro Nacional)	Central government	Value greater than approximately US\$150,000
Uruguay	Departments	Central and municipal government, along with departments	Central govt (rural; Dirección Nacional de Catastro) and departments (urban)	Departments	Market value plus additional 20% for improvements the rural cases
Venezuela	Municipal governments	Municipal governments	Municipal governments	Municipal governments	Market value

Source: Martinez-Vazquez et al. (2010).

Table 7A.2 *Estimates of potential property tax base by country and region, 2000 (in US\$ per capita)*

Region	Country	Potential rural tax base			Potential urban tax base Urban land + structures*	Potential base of the property tax
		Cropland	Pasture-land	Cropland + pasture-land		
	<i>Latin America</i>					
SA	Argentina	3,632	2,754	6,386	18,301	24,687
CA	Belize	5,201	133	5,334	9,298	14,632
SA	Bolivia (Plurinational State of)	1,550	541	2,091	2,021	4,112
SA	Brazil	1,998	1,311	3,309	9,234	12,543
SA	Chile	2,443	1,001	3,444	10,235	13,679
SA	Colombia	1,911	978	2,889	4,665	7,554
CA	Costa Rica	5,811	1,310	7,121	7,989	15,110
SA	Ecuador	5,263	1,065	6,328	2,721	9,049
CA	El Salvador	404	395	799	3,935	4,734
CA	Guatemala	1,697	218	1,915	2,967	4,882
SA	Guyana	5,324	252	5,576	3,192	8,768
CA	Honduras	1,189	595	1,784	2,934	4,718
NA	Mexico	1,195	721	1,916	18,155	20,071
CA	Nicaragua	867	410	1,277	1,646	2,923
CA	Panama	3,256	664	3,920	10,551	14,471
SA	Paraguay	2,193	1,215	3,408	4,290	7,698
SA	Peru	1,480	341	1,821	5,326	7,147
SA	Suriname	2,113	210	2,323	5,571	7,894
SA	Uruguay	3,621	5,549	9,170	10,330	19,500
SA	Venezuela (Bolivarian Republic of)	1,086	581	1,667	13,049	14,716
	<i>The Caribbean</i>					
	Antigua and Barbuda	1,003	468	1,471	37,151	38,622
	Barbados	190	210	400	17,398	17,798
	Dominica	5,274	553	5,827	14,661	20,488
	Dominican Republic	1,980	386	2,366	5,480	7,846
	Grenada	572	67	639	15,444	16,083
	Haiti	668	112	780	576	1,356
	Jamaica	824	152	976	9,723	10,699
	St. Kitts and Nevis	0	0	0	34,197	34,197
	St. Lucia	3,394	108	3,502	13,018	16,520

Table 7A.2 (continued)

Region	Country	Potential rural tax base			Potential urban tax base Urban land + structures*	Potential base of the property tax
		Cropland	Pasture-land	Cropland + pasture-land		
<i>The Caribbean</i>						
	St. Vincent	2,106	109	2,215	10,041	12,256
	Trinidad and Tobago	444	54	498	13,871	14,369
<i>Regional averages</i>						
	Latin America	1,973	1,114	3,086	10,608	13,695
	Central America (CA)	1,848	493	2,342	4,116	6,458
	South and North America (SA and NA)	1,983	1,164	3,147	11,137	14,284
	The Caribbean	1,232	226	1,458	5,139	6,596

Note: *As computed by Bahl and Wallace (2010). The tax base reported by the WB includes other produced capital that we would not tax (durable goods for example). The WB report follows Kunte et al. (1998), who assume that urban land corresponds to 33% of the value of structures and, in turn, that structures correspond to 72% of the value of total capital.

Source: World Bank (2006).

Table 7A.3 Variable description and data sources

Variable	Description and sources
Property tax collections	Share of property tax collections over GDP (in percentage) <i>Source:</i> CEPAL
Fiscal decentralization	Share of subnational expenditures over total government expenditures (in percentage) <i>Source:</i> CEPAL
Dependency on transfers	Share of intergovernmental transfers over total subnational revenues (in percentage) <i>Source:</i> CEPAL
Government size	Government share of real GDP per capita (in percentage) <i>Source:</i> Penn World Table, PWT6.3, Heston et al. (2009)
Log of per capita GDP	Based on per capita real GDP (in purchasing power parity, PPP) <i>Source:</i> Penn World Table, PWT6.3, Heston et al. (2009)
Log of estimated property tax base	Based on the sum of the potential property tax base for rural and urban areas, as computed in Appendix Table 7A.2 with data from World Bank (2006). Figures correspond to year 2000, and are expressed on \$US per capita
Urban population	Share of the total population living in urban areas (in percentage) <i>Source:</i> World Development Indicators
Competition for public positions	Competitiveness of Executive Recruitment: extent to which subordinates enjoy equal opportunities to become superordinates <i>Source:</i> Polity IV Project. 2009. Political Regime Characteristics and Transitions, University of Maryland, College Park, available at: http://www.bsos.umd.edu/cidcm/inscr/polity/index.htm
Index of democracy	POLITY2 is a modified version of the POLITY, which is obtained by subtracting the value of the scaled value representing AUTOCRATIC (range 0–10) from the value of DEMOCRATIC (range 0–10) in order to provide a unified polity scale ranging from +10 (strongly democratic) to –10 (strongly autocratic) <i>Source:</i> Polity IV Project. 2009. Political Regime Characteristics and Transitions, University of Maryland, College Park, available at: http://www.bsos.umd.edu/cidcm/inscr/polity/index.htm
Log of population	Based on population (thousands) <i>Source:</i> Penn World Table, PWT6.3, Heston et al. (2009)

Table 7A.3 (continued)

Variable	Description and sources
Political competition	It combines two concepts: the degree of institutionalization, or regulation, of political competition, and the extent of government restriction on political competition. It ranges from 1 (suppressed competition) to 10 (institutionalized electoral) <i>Source:</i> Polity IV Project. 2009. Political Regime Characteristics and Transitions, University of Maryland, College Park, available at: http://www.bsos.umd.edu/cidcm/inscr/polity/index.htm
Openness to trade	Openness in constant prices: exports plus imports divided by real GDP per capita; Laspeyres (in percentage) <i>Source:</i> Penn World Table, PWT6.3, Heston et al. (2009)
Price of government expenditures	PPP over government consumption <i>Source:</i> Penn World Table, PWT6.3, Heston et al. (2009)

Table 7A.4 Summary statistics

Variable		Mean	Std dev.	Min	Max	Observations
Property tax collections	overall	0.39	0.21	0.06	0.74	N = 115
	between		0.20	0.12	0.64	n = 9
	within		0.06	0.16	0.52	T-bar = 12.8
Fiscal decentralization	overall	21.93	13.86	0.65	47.16	N = 115
	between		13.71	1.17	44.76	n = 9
	within		3.78	5.65	30.15	T-bar = 12.8
Dependency on transfers	overall	58.62	19.09	20.53	93.04	N = 115
	between		19.03	23.16	89.46	n = 9
	within		4.21	39.44	69.23	T-bar = 12.8
Government size	overall	15.22	2.92	11.39	22.55	N = 115
	between		2.55	12.47	18.88	n = 9
	within		1.74	8.83	19.74	T-bar = 12.8
Log of per capita GDP (PPP)	overall	8.86	0.42	8.06	9.98	N = 115
	between		0.41	8.20	9.36	n = 9
	within		0.19	8.37	9.48	T-bar = 12.8
Per capita GDP (PPP)	overall	7,690	3,511	3,164	21,548	N = 115
	between		2,998	3,639	12,189	n = 9
	within		1,981	2,600	17,050	T-bar = 12.8
Log of estimated property tax base (per capita US\$ of year 2000)	overall	2.48	0.50	1.41	3.21	N = 115
	between		0.56	1.41	3.21	n = 9
	within		0.00	2.48	2.48	T-bar = 12.8
Urban population	overall	74.21	11.21	54.66	91.80	N = 115
	between		11.36	57.21	89.59	n = 9
	within		1.81	69.54	79.36	T-bar = 12.8
Competition for political positions	overall	2.71	0.53	1.00	3.00	N = 115
	between		0.30	2.22	3.00	n = 9
	within		0.44	1.49	3.49	T-bar = 12.8
Index of democracy	overall	7.44	1.81	0.00	10.00	N = 115
	between		1.06	5.22	9.00	n = 9
	within		1.46	2.22	10.22	T-bar = 12.8
Log of population	overall	10.27	0.96	8.60	12.15	N = 115
	between		1.11	8.71	12.10	n = 9
	within		0.07	10.11	10.43	T-bar = 12.8
Political competition	overall	8.27	0.99	7.00	10.00	N = 115
	between		0.87	7.00	9.13	n = 9
	within		0.67	7.16	9.71	T-bar = 12.8
Openness to trade	overall	50.74	21.99	21.22	138.80	N = 115
	between		24.44	23.54	107.66	n = 9
	within		8.86	28.20	81.89	T-bar = 12.8
Price level of gov't expenditures	overall	40.02	15.67	14.04	75.44	N = 115
	between		11.87	18.07	55.91	n = 9
	within		10.76	6.34	66.38	T-bar = 12.8

8. Intergovernmental transfers in subnational finances

Fernando Rezende and João Veloso

1 INTRODUCTION

Over time, fiscal decentralization in Latin America has been accompanied by the growing importance of intergovernmental transfers in subnational finances. There are three main explanations for this: first, the impact of global markets and technological advances on the mobility of the tax base traditionally tapped into at the subnational level, which has imposed additional constraints on the decentralization of tax powers; second, the increasing role played by provincial and local governments with regard to the provision of urban and social services, as well as in public investments that are essential to promote economic development and improve social well-being, such as education, health and urban infrastructure; and third, a rise in costs to fulfill subnational governments' responsibilities, which reflect societies' demands for a higher standard in the provision of public services together with the need to apply costly solutions to tackle urban and social problems in a highly dense and unequal environment.

The outcome of contradictory moves – greater spending responsibilities in a context of higher producing costs and less room for raising own revenues through taxes – is an increasing financial gap. Furthermore, when regional and social disparities are high, as is the case in most Latin American countries, huge differences arise with respect to the financial gap faced by distinct jurisdictions (the so-called 'horizontal disparities'); that is, it is not possible to deal properly with this situation by attempting to bypass the limitations to raising taxes at the subnational level.

Reliance on transfers is indispensable, besides being necessary, even though it leaves subnational governments vulnerable to external events, such as cuts induced by macroeconomic fiscal adjustment needs, the impact of an economic downturn on budgetary receipts, the likelihood of restrictions being imposed on the use of transfer-originated resources, and the fact that central government financial authorities prefer to raise taxes not included in the transfer system.

The financial risks subnational governments face by relying on transfers are not only related to their magnitude. More important are the characteristics of the transfer system and the rules governing its operation. As such, a high share of transfers in total revenues should not be seen as inferior compared to another case that shows a lower ratio. Each case should be examined before conclusions are reached about the quality of the national finances.

What, then, are the characteristics that a transfer system should exhibit to be seen as favorable from the viewpoint of the financial needs of subnational governments? How can the situation encountered in a handful of Latin American countries be appraised in the light of such an approach? To what extent is the adherence to some basic principles – which should be observed in the design and operation of intergovernmental transfers – important to reduce distortions, diminish risks and avoid setbacks?

Such questions point to a new approach to appraise the quality of subnational finances. Should the focus be primarily concerned with the need to reduce the weight of transfers on subnational revenues, or should due attention be paid to the identification of how far removed existing regimes are from the basic principles of a sound intergovernmental transfer system? To what extent can the latter provoke a debate that may lead to the recognition of the importance of substituting a thorough reform for piecemeal adjustments in order to overcome the well-known flaws of most regimes?

This chapter opts for this new approach. It begins with a short summary of the main characteristics exhibited by the transfer regimes of eight Latin American countries, highlights changes provoked by reactions to the economic crisis of the 1990s, points to the main flaws and concludes with a proposal for an agenda to reform these regimes in order to remove their flaws and make them compatible with today's needs.

2 TAX AND TRANSFERS IN SUBNATIONAL FINANCES

Gómez Sabaini and Jiménez (ch. 6 in this volume) stressed the importance that intergovernmental resource transfers play in subnational budgets. Among the eight countries surveyed in this chapter, Brazil shows the lowest transfers/total revenues ratio, while Mexico exhibits the highest. Contradicting common sense, differences are not explained by the political organization of the state or the country size. Subnational governments in Argentina, Colombia and Bolivia (Plurinational State of), like Mexico, are dependent on transfers. The timing of the fiscal decentralization process is

an important factor to explain the differences, as the three countries that embarked on a decentralization spree in the 1980s – Brazil, Colombia and Argentina – show the lower ratios. Bolivia (Plurinational State of), which was not among the forerunners, has recently made rapid progress in shifting responsibilities and resources to subnational governments.

The first wave of fiscal decentralization, which gained impetus in the late 1980s, was accompanied by a widespread defense of the virtues of familiarizing governments with their constituencies, so as to improve efficiency in managing public resources, achieve efficacy by adjusting the provision of public services to local priorities, and allowing for accountability of the governmental authorities. This should also enhance democracy following the demise of authoritarian regimes in some parts of Latin America.

Transfer systems put in place at that time were designed in accordance with the expected benefits of fiscal decentralization. The basis of the intergovernmental transfer systems in Brazil and Argentina was a revenue-sharing regime designed to reduce fiscal disequilibria. They included provisions to ensure the automatic operation of such a regime and gave subnational governments freedom to make the appropriate decisions concerning the use of resources. Colombia also introduced changes to improve the quality of its system but kept decisions on the use of resources in the hands of the central government.

However, the situation of the 1980s did not last long. The international economic crisis that hit the region in the late 1990s contributed to its premature demise. The ensuing need to adjust the fiscal accounts and restore macroeconomic stability led to substantial changes that impinged on the management of fiscal resources at the subnational level by adding instability and introducing conditions in the use of transfers.

On the political side, the measures adopted to restore fiscal discipline also reduced the possibility that those governments that had to apply unpopular policies would stay in power. Therefore, the second wave of fiscal decentralization was accompanied by a strong call for the new leaders to give top priority to policies aimed at reducing income inequalities and improving the living standards of the poor.

Thus the second wave took a different approach. It moved away from the prevailing revenue-sharing regime and gave preference to channeling federal resources to subnational governments, earmarked for education and health. This was seen not only as a means to reduce social inequalities, but also as an important instrument for raising the prospects of economic development. A direct apportionment of cash to families that are below the poverty line, either directly or with the help of subnational governments, was also favored.

However, this second wave of fiscal decentralization did not replace

the previous one. It modified the nature of the earlier regimes and added new sources of intergovernmental transfers on top of the existing ones, leading to a fragmentation that added further distortions. These will be analyzed in detail in the next section. The point being made here is that the effect of the accumulation of distinct approaches was an increasing importance of transfers in subnational finances (Jiménez and Gómez Sabaini, 2009).

A strong reliance on transfers led to several criticisms of fiscal decentralization (Prud'homme, 1995). This method of financing the transfer of responsibilities to lower levels of government was said to hinder efficiency in the provision of public services, impinge on the accountability of local politicians and risk jeopardizing the goal of sustaining a sound management of the fiscal accounts at the national level. Efforts to reduce the subnational governments' dependence on intergovernmental transfers by increasing their ability to tax should, therefore, be encouraged.

Such criticisms are no doubt worthy of serious concern. However, we should take into account what can realistically be done to deal with the problems we face nowadays in financing the decentralization of responsibilities to subnational governments, for example, new limits on increasing the ability to tax at the local level.

In a paper that explores these limits, Vito Tanzi (Tanzi, 2005) raises important issues that point to further constraints on raising own taxes at the subnational level, in addition to those that are related to socio-economic (small basis) or political reasons (local authorities unwilling to tax wealthy residents). These new limits refer to the unprecedented mobility of the tax base commonly tapped into at the subnational level, acquired recently as a result of the impact of globalization and the incorporation of new technologies into the production process.

In addition to real estate, which cannot move (although the residents can) and personal services, all other activities became very sensitive to taxation costs; that is, attempts to impose a high burden may force people to move away, or even abroad. In some cases, geography poses barriers to leaving, but the rapid improvement in the speed of moving goods, even heavy ones, around the world is reducing the protection that geography can offer. Better means of communication made taxation of services even more sensitive to tax burdens, which in the case of financial services is also enhanced by the proliferation of tax havens.

From a national perspective, the idea of having distinct jurisdictions imposing different burdens on the same goods and services is farfetched, since it may increase regional disparities, provoke antagonisms and jeopardize political unity. The alternative to this is a fully harmonized tax system, in which subnational governments may share the proceeds of

national taxes, but may not dispose of any degree of freedom to establish the rules applied to the imposition of these taxes.

Of course, between these extremes there are other options, such as allowing taxpayers to deduct all or part of their property tax liabilities from the national income tax, or allowing for some form of dual VAT to be adopted at the provincial level. Recourse to user charges can also be considered. However, it is not in the scope of this chapter to dwell on such options. The message that these references to further limiting subnational taxation conveys is the need to focus on the design of the intergovernmental transfer systems to improve the quality of subnational finances. Much can be achieved with regard to this objective by adhering to some principles of a good transfer regime, even if it is not possible to reduce their importance in the subnational budgets. A first step in that direction is to present the main flaws of the current regimes.

3 INTERGOVERNMENTAL TRANSFERS IN LATIN AMERICA: MAIN FLAWS

The main flaws of intergovernmental transfer regimes of the countries included in this study are listed below. This list does not imply that all of them are affected equally with respect to these flaws, although every country has certain elements of each, albeit to a different degree:

1. absence of a transfer system organized under principles and objectives clearly stated;
2. multiplicity of transfer sources and distinct criteria applied to the sharing of funds;
3. instability of the rules that govern the operation of each component of the transfer regime;
4. high, and growing, interference in the subnational governments' use of their budgetary revenues; and
5. absence of provisions for a periodical revision of the transfer regime.

To a great extent, these flaws were the outcome of changes introduced over time in response to pressures to reduce fiscal deficits at the national level for macroeconomic reasons, and to impose conditions on the use of the resources to induce the adherence of subnational spending to national priorities.

Macroeconomic pressures had a greater influence in countries that embarked on a fiscal decentralization binge in the 1980s following redemocratization. At that time, fiscal reforms aimed at increasing transfers,

enhance stability in the flow of resources to subnational governments, give autonomy with regard to their use and apply criteria that were intended to redress vertical and horizontal disparities in fiscal capabilities. Such was the case in Argentina, which implemented changes in the coparticipation regime in 1988, in Brazil, with the 1988 constitutional reform in the revenue-sharing system, in Mexico, as a result of constitutional amendments adopted in 1983, and in Colombia, where a partial reform implemented in 1986 led to the new system adopted by the 1991 Constitution.

The expected results of such changes did not materialize. The outbreak of an economic crisis that reached Latin America a few years later forced a change of course. In general, the measures adopted reduced the amount of money channeled into the subnational coffers and moved away from a regime that presented some good features, substituting transitory rules that later became permanent.

A new economic scenario could have allowed for a return to the former path, but somehow the enchantment with the decentralization ideal seems to have faded. As central government tax revenues recovered alongside a return to economic growth, the measures adopted to deal with an emergency could have been reversed, but were not.

In a way, a political realignment explains the new orientation, as the forces that supported the reforms implemented in the 1980s lost their grip on national politics. Increasing social disparities changed the balance of power towards politicians who embraced a critical view of past economic policies on the assumption that such policies disregarded the needs of the poor. The inauguration of governments aligned with such a position led to a new approach in the field of intergovernmental transfers.

This new approach focused on the use of transfers to support national policies oriented towards programs that exert a direct impact on the living standards of the poor, namely education, health and urban infrastructure.¹ This led to great interference by the central government in the allocation of subnational revenues by means of establishing conditions for the use of transfers, shifting responsibilities to lower levels of government, or through an increase in the participation of earmarked revenues in the intergovernmental transfer regime.

A similar pattern can be observed in cases where fiscal decentralization is a more recent phenomenon. This is, for instance, the case in the Andean countries – Bolivia (Plurinational State of), Peru and Ecuador – as well as, albeit on a smaller scale, in Chile. In those countries, a surge in the price of mineral commodities allowed for an increase in central government revenues, which was translated into a significant increment in transfers to subnational governments earmarked for social programs carried out at the regional and local levels.

As evidence in the available literature shows, even though the relative importance of intergovernmental transfers in subnational revenues varies to a significant degree, reflecting historical, institutional, geographical and political factors, different routes followed did not preclude the transfer regimes of the distinct countries reviewed in this chapter from evolving in such a way as to exhibit similar general traits, as pointed out earlier, showing a disregard for well-established principles set up in the literature and for good-practice standards applied in other countries (Boadway and Shah, 2007).

The multiplication of transfer sources that resulted from the accumulation of initiatives adopted in different periods and as a reaction to particular pressures, together with the overlapping of rules that govern the actual working of these regimes, are the most significant evidence of that disregard. Therefore, a similar general pattern is accompanied by important differences with respect to details. Jiménez and Podestá (2009) describe the mosaic of features exhibited by 11 Latin American countries with respect to sources, rule sharing obligations and the main recipients of central government managed funds.

The disregard for principles is also reflected in fiscal disparities, mainly the so-called 'horizontal disparities', that is, those that present huge differences in the financial capabilities of independent units of a same level of government, whether states, provinces, departments or municipalities (Cetrángolo and Goldschmidt, ch. 3 in this volume).

Disparities in financial capabilities are not the only problem. Worse still is the mismatch between the territorial distribution of the fiscal resources and the corresponding localization of the demands for government-sponsored activities, which arises from the overlap of distinct criteria applied to the distribution of each specific transfer. The ensuing inefficiency in the management of policies carried out at the subnational level generates waste and does not contribute to better outcomes.

The endless prorogation of provisory rules reinforces distortions generated by the multiplicity of transfer sources. As the speed with which the socioeconomic dynamic changes the way in which economic activity and population move around the national territory gains momentum, difficulties in reconsidering decisions adopted in the past, even not so long ago, lead to further imbalances in the localization of the fiscal resources and the corresponding localization of the demands faced by subnational governments. Mounting conflicts make it harder to reconsider past decisions, especially as more time elapses since the decisions were made, due to the multiplicity of interests that have to be dealt with in political negotiation.

The Argentine case provides the most important evidence of the political difficulties faced in moving from a successive prorogation of provisory

norms coupled with an ad hoc adjustments trap. Brazil follows closely since the provisory rules adopted in 1989 to distribute the share of federal taxes to states and municipalities has lasted for more than two decades.² The provisory regime adopted in Colombia is now scheduled to end in 2017 (eight years after the original date) when a new rule will apply.³ We shall have to wait to see whether Ecuador will be able to avoid such a trap.

Another problem arises as a result of how conditions are imposed on the subnational governments' use of transfers. As socioeconomic disparities are usually high, asymmetric rules should be preferred to make it easy to adjust subnational budgets to local preferences, but political constraints rarely favor such an approach. Symmetric norms mean that it is highly unlikely that the money will be distributed in a way that reflects particular needs, especially if one takes into account the fact that each sector differs with regard to the degree of decentralization that best suits its specific case.

Intergovernmental cooperation in public investments and services provision could mitigate the problems generated by a high degree of disparity in the distribution of fiscal resources, but it is highly unlikely that cooperation will emerge in the absence of incentives due to political rivalries that are fostered in a context of huge disparities. Furthermore, cooperation is also hindered when an unstable regime leads to uncertainties concerning the inflow of resources, either the amount or when they are expected, mainly when cooperation implies obligations to be satisfied in the medium and long terms.

4 PRINCIPLES AND PRACTICES

Principles

The flaws accumulated over time reflect a progressive abandonment of some principles that should be observed in the design of intergovernmental transfers. The basic principle refers to the proposition that every national citizen should be enabled to move up the social ladder regardless of birth or where he/she lives. It should be the state's responsibility to give the underprivileged access to the basic services that are necessary to fulfill such conditions. Because in most cases this responsibility has been shifted to subnational governments, which depend on transfers to enable them to fulfill their duties efficiently, the design of transfers should observe the following:

1. ensure a reasonable balance among the distribution of the fiscal resources and the corresponding distribution of demands to be met

by each level of government within the boundaries of their respective jurisdictions;

2. allow for a reasonable degree of flexibility with regard to the use of transfers at the subnational level so that decisions relating to the use of transfers can reflect differences in demand patterns across the nation;
3. insert provisions that enable the system to periodically adapt to changing socioeconomic circumstances that alter the localization of fiscal resources and local demands in the national territory;
4. provide stability in the flow of resources that comprise the subnational budgets to give local administrators the necessary conditions to better manage their responsibilities; and
5. avoid situations that raise the volatility of transfers due to economic or political reasons.

Flexibility concerning the use of intergovernmental transfers cannot be unlimited, if the basic principle (to ensure that every citizen, regardless of where in the national territory he/she lives, has equal access to basic needs) is to be observed. Flexibility should be accompanied by equilibrium, which also depends on provisions for a periodic adjustment to changing circumstances. Adaptation to a new environment may not imply instability concerning the flow of resources to subnational governments, whereas a less vulnerable transfer base is important to avoid a loss in flexibility that results from less room for maneuver in an economic downturn.

The way in which each country's transfer system combines the five elements stated above determines the degree of resilience of the subnational finances to changing socioeconomic circumstances. A system that does not promote equilibrium, has very little flexibility, cannot be easily adapted and does not give confidence to subnational managers with respect to the inflow of transfers, will be poorly rated from the resilience perspective and therefore, will not create more favorable conditions for the efficiency and efficacy of social policies carried out at the subnational level. There are, of course, no clear-cut formulas for appraising the extent to which each case better adheres to the principles referred to above, but a qualitative analysis of the situation encountered in different countries may throw some light on one important aspect of subnational finances.

The available literature on intergovernmental transfer regimes in place in different Latin American countries presents evidence that shows how far they are from meeting these prescriptions. Take first the need for equilibrium between resources and responsibilities. As the process of fiscal decentralization began to focus on social sectors – education and health, mainly, but also urban infrastructure – it became even more difficult to achieve equilibrium, given the diversity of factors in the localization of

financial needs, making it hard to deal with given the fragmented regime in the absence of guidelines that pay due attention to specific needs.

The previous section pointed to the proliferation of transfer regimes. Brazil stands out in this respect. Altogether there are now 19 regimes combining old revenue-sharing mechanisms, health and education earmarked transfers to support the decentralization of such services, compensation for exempting exports from the state value added tax, subnational governments' share of the proceeds of royalties from the exploitation of natural resources (oil) and annual allocation of funds in the federal budget. In contrast, Argentina shows a lower degree of fragmentation since its coparticipation regime responds to the bulk of intergovernmental transfers.

Fiscal disparities that mounted in the wake of the proliferation of transfer regimes made it hard to follow the prescriptions. As sector-oriented transfers gained importance, the systems became less capable of adapting to socioeconomic dynamics since the earmarking of resources entails the consolidation of lobbies that resist changes. In addition, multiple regimes mean a diversification of interests, implying a more complex situation to obtain political support for broader reforms, with piecemeal adjustments being incapable of achieving much gain.

An increase in transfers earmarked to social sectors also impinged on the flexibility of the transfer system, as a significant part of the resources are subject to rules designed at the national level with little room to adapt to the specific needs of distinct subnational governments.

The compounded effect of the multiplicity of regimes, lack of conditions to adapt to changing circumstances and a low degree of flexibility resonate on the call for stability. Distinct rules applied to several particular objectives mean that changes in any particular source of transfers can be carried out regardless of its impact on the whole. Independent changes on any component of the transfer system may have side-effects that reduce the resources needed to meet other objectives. As earmarked transfers take a higher share of the pie they crowd out those activities that do not rely on some kind of protection.

This increases the vulnerability of subnational finances since it is politically hard to cut spending in health and education in the event of a fall in revenues. All the other activities that are carried out at the subnational level experience difficulties, especially when, as is the case of the Andean countries, most of the resources that support the transfers are based on taxes that are highly sensitive to changes in the international economic scenario.

What follows highlights some aspects of the transfer regimes of each country covered in this chapter, extracted from the information gathered

in Appendix 8A, which shows to what extent they observe or ignore the above-mentioned principles.

Practices

Mexico

The Mexican case is the only one in the group that clearly states the coexistence of two regimes – Ramo 28 and Ramo 33 – which share almost equally the resources allocated to transfers. The first imposes no conditions with respect to the use of resources, whereas the second is mainly earmarked for education and health spending. If the operation of these two regimes attempted to combine the reduction of fiscal disparities with the specific needs of each sector, the Mexican case could be regarded as presenting a reasonable adherence to the principles mentioned above, but that is not the case. Instead of reducing fiscal disparities, the criteria applied to the unbounded transfers lead to the opposite result – 90 percent of Ramo 28 transfers benefit the richer and more highly populated states. As change can only occur at the margin (the nominal amount received in one year cannot be smaller than that in the previous year) adjustments to this situation depend on favorable economic conditions or on institutional reforms. All other things being equal, resources earmarked for education and health reinforces existing distortions. In the case of education, 95 percent of the resources are used to pay teachers' salaries, following the shifting of responsibilities in this area to the states. In health, the physical location of health units commands the distribution of resources (Cabrera-Castellanos and Lozano-Cortés, 2008).

Local governments receive 20 percent of their respective states' share in federal revenues under the same scheme and conditions.⁴ As such, inequalities in the distribution of federal transfers among sectors and states are reproduced at the municipal level. Furthermore, similar municipalities in different states will get distinct sums of money to support their basic functions as well as to finance social programs. The territorial inequalities in financial capabilities translate into income distribution inequalities to fulfill their basic needs. In addition, as state legislations establish the distribution of the local governments' pie, the likelihood of this leading to great horizontal inequalities at the municipal level is fairly high.

The balance among the two transfer regimes suggests that the Mexican case shows a reasonable degree of flexibility (subnational governments can dispose freely of about 40 percent of federal transfers) and stability (the bulk of transfers rely on a broad base).⁵ The same cannot be said of the other attributes that are essential for a sound regime of subnational finances. Besides failing to promote equilibrium, the transfer system put

into place in 1988 (Sistema Nacional de Coordinación Fiscal (National System of Fiscal Coordination): SNCF) lacks adaptation to changing circumstances (transfers reflect historical facts) and presents a significant degree of vulnerability, as non-tax revenues (mainly from oil) account for a huge part of the transfer base.⁶ Given the difficulty of cutting spending on social programs, this may also lead to less flexibility in subnational budgets since free resources are likely to be diverted to cover a fall in oil revenues.

Colombia

The Colombian regime focuses on the specific needs of each sector. Its most important component – the General Participation System (SGP in Spanish) distributes almost all of its resources (85 percent) to three sectors: education, health and infrastructure.⁷ In addition, the distribution of royalties from the exploitation of natural resources also prioritizes investments to force those jurisdictions that did not meet national standards in the same areas to catch up. Perhaps for that reason, the Colombian case does not look good from a flexibility perspective, since resources transferred under the SGP as well as the distribution of royalties are subject to stringent conditions regarding their utilization.⁸

The Colombian regime combines transfer to departments and to municipalities in different ways depending on the particular aspects of each sector. The portion allocated to each level of government varies according to the conditions faced during the process of decentralization and thus might reflect historical trends. The money flowing to the departments seems to reflect an attempt to better organize the provision of social services and infrastructure investments at the regional level. Moreover the policy applied to the destination of resources from royalties not only aims to make laggards catch up with national standards in the social area but also seeks a reduction in regional disparities.

Provisory norms that have been in place since 2001 establish that the amount of resources to be transferred to subnational governments in Colombia is fixed on the basis of previous data and adjusted to take into account the rate of inflation and the pace of economic growth. This provisory regime should have lasted until 2008, but has recently been extended to 2017, when the average increase in central government current revenues will be used to correct present values.

As the Colombian regime focuses on education and health, and the criteria applied to the sharing of resources earmarked to these sectors reflect the location of demands for such services, it performs well under the equilibrium criteria if not under flexibility. Since royalties do not play a crucial role, the provisory rules provide reasonable stability while at the same

time reducing vulnerability to adverse economic conditions. Subnational managers, however, cannot adjust their budgets to a fall in domestic revenues or to particular demands from their constituencies.

Bolivia (Plurinational State of)

Vulnerability seems to be the main characteristic of the Bolivian case from the perspective of subnational finances, given the high participation of oil and gas revenues in total transfers. It does not perform well from the stability perspective, since uncertainties related to the occurrence of external crises and restrictions to compensate for a fall in externally induced revenues by means of an increase in domestic ones does not give subnational managers adequate means to sustain a stable inflow of resources.

Oil and gas revenues – royalties and specific taxes – are the sole source of transfers to Bolivian departments. Basically, the formula applies a mix of devolution and distributive criteria. Sixty percent of the royalties and 40 percent of the revenues from the hydrocarbon tax are returned to their origin. Leaving aside a fraction of the tax earmarked for public universities, what is transferred to other departments is aimed at reducing regional disparities.

Bolivian municipalities share 20 percent of all national taxes, except the hydrocarbon one, and get a little more than one-third of the latter from their respective departments. A minor source comes from resources of an international program for highly indebted poor countries (HIPC). Besides receiving a large amount of money, they benefit from a special formula that is aimed at reducing disparities in the horizontal distribution of local governments' per capita revenues. Coupled with attempts to reduce regional disparities, an equalization approach to the distribution of the local governments' share of national taxes leaves the Bolivian case on reasonable terms with regard to equilibrium.

The available evidence (see Appendix Table 8A.1) suggests that the Bolivian regime gives local governments significant leeway to manage their own business; that is, it appears to present a reasonable degree of flexibility since the conditions attached to the use of transfers are easily adjustable. From another perspective, the vulnerability of transfers to international prices means that subnational managers may face difficulties in adapting to a fall in revenues during a downturn cycle if education and health claim a high proportion of their budgets.

Ecuador

Subnational finances in Ecuador may gain more stability as a result of the rules implemented in 2009. These rules substituted a consolidated regime in which at least 15 percent of the central government's permanent

revenues, plus 5 percent of the temporary ones, were shifted to subnational governments. Since the General State Budget for 2009, a transition disposition entitles subnational governments to receive the same amount of money as in 2008.

Before the reform, subnational governments received money from 19 distinct sources under criteria that incorporated population and lack of means to provide access to basic needs. A generic condition that resources should be almost wholly used to finance capital expenditures allowed for a reasonable degree of flexibility in the use of resources, but a high dependence on oil revenues conferred vulnerability to the subnational finances.

The new regime improves the Ecuadorian model on two accounts. A broad transfer base means better stability, whereas the formula adopted to distribute the resources among subnational units might reduce fiscal disparities and allow for a dynamic adjustment to changing circumstances. Note, however, that these outcomes depend on maintaining the full scheduled implementation of this new regime. It is possible that the transitory period may be postponed, as has been the case elsewhere, given the difficulties involved in the operation of the formula for sharing resources, which relies on variables that are hard to measure and may be a source of endless conflict.

Peru

The Peruvian regime seems to resemble the old Ecuadorian model: several transfer sources are governed by independent distribution criteria. Departments and municipalities receive transfers from the central government current revenues as well as from specific sources. Regional governments get resources earmarked for regional investment projects and the Municipal Compensation Fund (FONCOMÚN in Spanish) resembles an equalization regime for the municipalities with no conditions attached. The distribution of FONCOMÚN aims at guaranteeing that no one gets less than eight UIT (*unidades impositivas tributarias*) (about US\$1,200).

The main source of transfers in Peru is the so-called '*canons*', which transfer to subnational governments part of the revenues from the exploitation of natural resources, the most important being those related to oil and gas,⁹ which get 12.5 percent of the value of oil and gas production. Other *canons* comprise 50 percent of the income tax collected from the related enterprises and/or an equal share of concession rights. Both regional and local governments share these resources on an origin basis; the former gets 20 percent and the latter 75 percent, with the remaining 5 percent going directly to public universities.¹⁰ The criteria applied to distribute the local governments' share among the municipalities combine population and a measure of uncatered-for basic needs, besides applying

a separate regime for a special category of municipality (*municipios distritales*). The distribution of the *canon petrolero* follows a complex formula.

For local governments, the second most important transfer source is the FONCOMÚN whose resources come from national taxes earmarked for this fund. The fund aims to provide local governments with money to fulfill their responsibilities. There is no special provision concerning the utilization of these resources, but the multiplicity of criteria adopted to determine each municipality portion in this fund is unlikely to lead to a reasonable equilibrium.

On the basis of the collected information, the Peruvian regime does not perform well from the viewpoint of reducing fiscal disparities and providing subnational governments with a stable source of revenues and a less vulnerable inflow of resources due to a high dependence on revenues that are sensitive to international prices (Casas, 2009). For the same reasons, there is little likelihood that subnational managers will adapt to adverse economic circumstances. However, it does give local governments some leeway with respect to the use of transfer resources, since the main conditions refer to the obligation to finance capital expenses.

Chile

The transfer regime in Chile combines a kind of equalization program with some specific support to selected sectors. The first is the object of the Municipal Compensation Fund (FCM in Spanish) comprising about 60 percent revenues from property and vehicle taxes and is distributed by means of a formula that aims at reducing actual fiscal disparities. Resources from the FCM accounted for 33 percent of the municipal spending in 2007. The second is part of the National Fund for Regional Development (FNDR in Spanish) that transfers resources to regional governments based on projects approved by regional councils after being cleared at the federal level. Criteria for distributing FNDR resources lack transparency. Ninety percent of the resources are allocated at the beginning of the fiscal year taking into account poverty and infrastructure needs, the remaining being set apart for emergencies and to create incentives for efficiency. FNDR resources are established in the national budget. Other minor transfer sources managed by the national government support day-to-day regional governments' needs and local governments' demands to finance infrastructure projects, education, health and cultural activities.

The high degree of central government interference in the management of subnational finances is a distinctive aspect of the Chilean regime. This could favor a less unequal distribution of resources if decisions concerning the allocation of FNDR resources counteract the FCM contribution to the attenuation of municipal fiscal disparities. Since municipalities can

dispose of FCM resources at their own discretion, the Chilean regime can be said to offer a reasonable degree of flexibility. From another perspective, a high dependence on resources defined during the budgetary process exposes the subnational finances to an unstable scenario besides being vulnerable to changing political circumstances.

Argentina

In the Argentine case, the main problems faced by the intergovernmental transfer system are a consequence of the difficulties faced in suppressing the provisory rules applied to the coparticipation regime. The 1988 reform broadened the transfer base, leaving aside the foreign trade and other taxes that are shared under special regimes, and set at 57 percent the portion of federal revenues to be shared with the provinces.¹¹ It also substituted fixed coefficients based on the actual numbers of the previous three years for the old coparticipation formula and included the Buenos Aires and Tierra del Fuego provinces among the beneficiaries of the federal transfers. To protect the provinces from the erosion of the transfer base provoked by a federal government reliance on taxes that are not included in it, the 1988 reform also established that the provincial share cannot be lower than 34 percent of total tax revenues collected at the national level.

As in Mexico, local governments in Argentina do not receive money directly from the federal government, but in contrast to the Mexican case, there is no national rule defining how much municipalities must receive from the provincial pie and for what purpose. It is up to the provincial legislators to set up coparticipation regimes for the municipalities and design the rules applied to the operation of their particular regimes, provided that they specify how the money will be distributed and define an automatic mechanism for delivering the funds.

Successive modifications introduced afterwards did not alter the essence of the Argentine regime, nor did they bar the inclusion of the Buenos Aires and Tierra del Fuego provinces among the beneficiaries of the coparticipation. These modifications were mainly concerned with macroeconomic needs to reduce fiscal imbalances, given the pressures from provincial governments, in order to be rewarded from the unilateral transfer of responsibilities to provide social services. Ad hoc changes introduced in response to such contradictory pressures added further distortions that distanced the Argentine case from the objectives of reducing fiscal disparities and giving subnational governments some room to adapt to changing socio-economic circumstances.

The response to provincial demands led to a multiplication of special regimes that followed the regional trend of increasing the role of socially oriented transfers in the intergovernmental transfer system. The most

important of these regimes aimed at helping the provinces take greater responsibility for education and other social services, including the provision of urban infrastructure. As the rules applied to the horizontal distribution of these resources reflect past localization of such services, these special regimes do not have a distributive impact.

Nevertheless, coparticipation still represents the bulk of resources transferred to the provinces; that is, they may dispose of such resources as they see fit. Although a unilateral transfer of federal government responsibilities in the social area impinged on the provincial autonomy, the subsequent addition of special transfer regimes made life a little less hard for the provincial governors, so the Argentine case can be appraised favorably from the viewpoint of flexibility compared to the situation faced by other Latin American countries.

A broad transfer base and a safeguard against it being eroded by political maneuvering also provides a reasonable stability in distribution of resources, but horizontal disparities accumulated over time as a result of the fixed coefficients applied to the distribution of the provincial share of the coparticipation regime led to diverse situations concerning the ability of provincial managers to adapt their budgets in the case of adverse economic conditions, even though coparticipation is not highly vulnerable to external crisis. Since it is up to the provinces to set the rules for the local governments' share of intergovernmental transfers, disparities at the municipal level will reflect what occurs at the provincial one regarding resources and legislation.

Brazil

In Brazil, the 1988 constitutional reform cleared the way for the progressive dismantling of the regime designed in the 1967 Constitution. The revenue-sharing system adopted in 1967 entitled state and local governments to receive an equal portion of the two most important domestic federal taxes, designed specific formulas for distributing these resources in order to reduce fiscal disparities and ensured an automatic delivery of funds to subnational governments.¹²

The most important change introduced in 1988 was the creation of a new family of federal taxes – the so-called 'social contributions' – whose proceeds are earmarked for pensions, health and social assistance programs. Furthermore, the 1988 Constitution enhanced municipal autonomy by granting local governments the status of members of the Brazilian federation pioneering the full implementation of a three-tier federation.

These changes have profound consequences for the workings of the transfer system and for the management of subnational finances. Regarding the original revenue-sharing system, the formula applied to

distribute the portion of income and manufacturing taxes shared with states and local governments under specific funds (21.5 percent to the states and 23.5 percent to the municipalities)¹³ was abandoned in favor of fixed coefficients devised such as to guarantee less-developed states a larger share.¹⁴ In parallel, the ever-growing reliance on the social contributions to fulfill the federal government financial needs reduced the revenue-sharing base and led to the expansion of transfers earmarked for social expenses along with the decentralization of such responsibilities (together, transfers to health and education rival in size those of the state participation fund on the income and manufacturing federal taxes). As in Argentina, ad hoc measures adopted in response to macroeconomic and political pressures added other components to the transfer regime which, albeit smaller in financial terms, contributed to enhancing the distortions.

The two most important outcomes of the above-mentioned changes were a significant increase in fiscal disparities and a reduction in subnational governments' ability to dispose of their budgetary resources. With respect to the latter, a distinctive aspect of the Brazilian case is the earmarking of subnational revenues, including those from their own taxes. The constitution mandates that states and municipalities must apply 25 percent of their revenues to education and that health must be allocated 13 percent and 18 percent, respectively, of the state and municipal budgets. Added to the increase in federal transfers earmarked for these sectors, the Brazilian case became fairly rigid from the viewpoint of the subnational finances.

The multiplication of transfer sources coupled with the freezing of the coefficients applied to the distribution of the two constitutional funds among the 27 states and more than 5,000 municipalities, led to huge horizontal inequalities both at the state and at the municipal level. Furthermore, the earmarking of uniform percentages of the subnational budgets for education and health spending without considering these inequalities contributed to a territorial mismatch among resources earmarked for social programs and the demands that subnational governments were supposed to meet, thus leading to waste and inefficiencies.

A constitutional amendment enacted in 1988 attempted to correct this situation for the education area by pooling state and municipal earmarked resources into a special fund (*Fund for the Development of Basic Education* – *FUNDEB* in Portuguese)¹⁵ from which each one can draw resources according to enrollment figures in public schools in order to comply with a per capita spending floor. This provision attenuates distortions in education financing, but since the redistribution occurs only within each state jurisdiction, students in low-income states are underprivileged, even

though the federal government makes some contribution to cover the regional gap.

Furthermore, due to a tradition of specifying details in the constitution, Brazil, compared to other Latin American countries, has a limited ability to adapt to changing socioeconomic circumstances. Added to this, different criteria applied to each transfer source do not give subnational managers confidence in a stable inflow of financial resources.

Comparative Remarks

The conditions set out at the beginning of this section for appraising the intergovernmental resource transfers from the viewpoint of subnational managers can now be used in a preliminary attempt to compare the situation encountered in the eight Latin American countries surveyed in this chapter. We should stress that due to the complexity of this endeavor we may have misjudged specific aspects of some cases, but this is unlikely to harm our aim of provoking further discussions by focusing on the role that intergovernmental transfers play in processes of fiscal decentralization.

To that end, the main aspect of each country transfer system reviewed can be taken as a preliminary qualitative appraisal of the way in which intergovernmental transfers affect the resilience of subnational finances to changing circumstances, such as external shocks, political maneuver or domestic socioeconomic dynamics. The proposition is that resilience is greater if the transfer system guarantees a stable flow of resources, allows for a reasonable degree of flexibility with respect to the allocation of funds, promotes equilibrium in the distribution of resources and responsibilities and does not present a high degree of vulnerability to outside or domestic events. The higher the vulnerability, the greater is the need for a more flexible regime. Unfavorable conditions for adapting to changing circumstances demand a reasonable equilibrium, whereas significant inequalities call for periodic revisions to avoid distortions.

As the previous analysis indicates and the information summarized in Box 8.1 shows, the transfer regime of some of the most important Latin American countries fails to pass such an examination. None of the countries in the sample can be said to fulfill the conditions set out above. Those systems that pay attention to the need to reduce fiscal disparities and give some degree of freedom to allocate the resources (Chile and Bolivia (Plurinational State of)) are vulnerable to external shocks and political interference (or both) creating uncertainties that undermine the ability of subnational governments to better manage their budgets. Those that are less vulnerable and relatively stable (Argentina, Brazil and Colombia) present undesirable characteristics from either an equilibrium

BOX 8.1 INTERGOVERNMENTAL TRANSFER SYSTEMS FROM THE SUBNATIONAL GOVERNMENTS' PERSPECTIVE

Mexico

Unconditioned transfers under Ramo 28 enable subnational governments to overcome difficulties in the event of a decrease in resources earmarked for social sectors (Ramo 33) due to external shocks or domestic crises. Overall there is some flexibility, but the diversity of criteria to share earmarked transfers in a context of high vertical and horizontal disparities may create many difficulties in individual cases. A high dependence on oil and gas revenues creates a very unstable situation that also impinges on the ability to adapt to an adverse scenario.

Bolivia (Plurinational State of)

Fairly general conditions and rules for reducing fiscal disparities among local governments and departments provide a reasonable degree of flexibility with regard to resource use and ability to adapt. Dependence on oil and gas revenues imparts an unstable characteristic to the flow of resources that under certain circumstances make it difficult for subnational governments to manage their finances.

Colombia

A highly inflexible regime leaves subnational managers very little room to adapt their budgets to a fall in national revenues or to particular needs of their constituencies. The sectoral focus helps to adjust the distribution of resources to local demands, but does not guarantee good results from the viewpoint of regional disparities. The system provides a reasonable stability in the flow of resources, but the small amount of money transferred without conditions means that jurisdictions with a low tax base will face difficulties in fulfilling their responsibilities in an economic downturn.

Peru

Vulnerability to external prices and a very fragmented regime with multiple criteria for distributing the resources contributes to fiscal disparities, unstable flow of resources and difficulties in adapting

to changes. Adaptation may be favored by less-detailed conditions required to allocate the resources, but is also hindered by political difficulties in administering gains and losses of piecemeal reforms.

Ecuador

It is still too early to make a full assessment of the new Ecuadorian regime. If the new rules were to be fully implemented, this would herald a considerable all-round improvement. However, the likelihood of Ecuador being caught in the prorogation trap may consolidate present distortions, namely high fiscal disparities and an unstable flow of resources. Under this scenario a fairly flexible regime may alleviate subnational managers' problems, but the consolidation of existing disparities will lead to very dissimilar situations.

Chile

A project-based approach to regional transfers coupled with a kind of equalization regime for local governments may generate good results from an equilibrium perspective if the former aims at reducing regional disparities. Flexibility seems to be high at the local level as money transferred to local governments with specific conditions attached is insignificant, but central government control over the disbursement of regional funds leads to a mixed situation. Likewise with regard to stability: it is reasonable for local governments that have exclusive transfer sources and less so for regional ones that depend on resources that are defined annually during the budgetary process. Stability and flexibility mean that local governments have some room to adapt to adverse situations.

Argentina

The predominance of the coparticipation regime is a plus from the viewpoint of providing a stable amount of resources and allowing subnational governments significant leeway over the use of resources. However, disparities accumulated over decades of prorogation of provisory rules followed by fixed coefficients for sharing the resources among the provinces has made life harder for those who suffered financial losses and had to cope with the impact of the domestic socioeconomic dynamics on demands

from their constituencies. Therefore, despite its flexibility, the ability to adapt to changing circumstances is unevenly distributed.

Brazil

Constitutional norms, fragmentation of sources and the independence of criteria for integrating the different transfer regimes make it extremely hard to adapt the subnational finances to changing circumstances, since any reform proposal becomes bogged down in complex conflicts of state and local government interests. Even though half the transfers are not earmarked, flexibility at the subnational level is low since they have to comply with conditions imposed by the federal constitution. Furthermore, huge horizontal inequalities enhanced by the freezing of the coefficients for sharing the constitutional funds among states and municipalities results in a fairly uneven situation concerning the possibility of adapting to adverse conditions, despite a low degree of transfer vulnerability to external shocks.

or a flexibility perspective (or both). And those that are fairly flexible (Mexico and Peru) do not have good conditions with regard to the other characteristics. For particular reasons, though, it is worth contemplating reforms that add a subnational financial managers' perspective to the design of intergovernmental transfers. Suggestions for formulating a reform agenda are the subject of the next and final section.

5 A REFORM AGENDA

The erratic process followed by the countries surveyed in this chapter to adjust their intergovernmental transfer regimes to macroeconomic and political pressures makes it clear that it is time to substitute a broad reform for the ad hoc and piecemeal modifications adopted in the recent past. The 2009 Ecuadorian reform is the sole exception to this pattern, but it is still too soon to attempt an appraisal of its results.

A common background has been the absence of a clear definition of the principles and goals that should inform a reform proposal to correct the main flaws that these regimes have accumulated over time. Therefore the first step is to set in motion a national debate, supported by technical recommendations, aimed at gaining political support to implement a broad reform agenda.

The basic principle to be stressed concerns the responsibility of the state to ensure that every national citizen is exposed to similar conditions in which it is possible to climb the social ladder, regardless of where he/she lives. This demands that access to a minimum standard of provision of merit goods be guaranteed to everyone, either by the public provision of such goods or by means of cash transfers to poor families.

This proposition highlights the importance of a well-designed transfer system. Inter- and intraregional socioeconomic disparities prevent this condition from being fully met by means of an increase in subnational governments' tax powers. Thus, the redistribution of fiscal resources by an intergovernmental transfer regime is required. This regime should address two dimensions of fiscal disparity: the vertical, that is, disparities in fiscal capacity among distinct layers of government, and the horizontal, which deals with disparities among the units that comprise the same government level.

Traditionally, these two dimensions are dealt with simultaneously by means of a revenue-sharing regime to which a formula is applied to address horizontal disparities, which in some developed federations takes the form of an equalization mechanism. Originally, both the Argentine coparticipation regime and the Brazilian state and municipal participation funds followed this pattern. The 2009 Ecuadorian reform took the same approach.

The question of whether this should be the path to be followed in a reform agenda for Latin America relates to the priority social goals gained in the process of fiscal decentralization in the region. Insofar as the decentralization of education, health and urban infrastructure policies call for the implementation of national standards in service provision and demand that attention be drawn to the specific financial needs of each case, it is very hard to attain a satisfactory solution by applying a general formula to deal simultaneously with the vertical and horizontal fiscal disparities.

In a combined approach, a revenue-sharing system should mix devolution and equalization criteria to achieve a basic equilibrium in the vertical and horizontal distribution of the fiscal resources. Furthermore, supplementary regimes should focus on the specific financial needs of the education, health and urban infrastructure sectors to which incentives for intergovernmental cooperation and obligations to meet predetermined targets might be attached.

One additional issue to be tackled concerns the definition of the amount of resources involved. The size of the transfer system varies according to how the ability to tax is assigned to each level of government and to the prevailing magnitude of economic and social disparities. Where tax powers of subnational governments are limited and socioeconomic disparities are

huge, as is the case in most of Latin America, transfers demand a sizable part of the fiscal pie and are of great significance for subnational finances.

However, there is no universal rule for setting up an ideal size for an intergovernmental transfer regime. Even though economic globalization and the incorporation of new technologies into the production process have given unprecedented mobility to the tax base traditionally exploited by subnational governments, inhibiting their use, they also open new possibilities for applying user charges to the utilization of urban infrastructure and health facilities, for example.¹⁶ Another possibility is to give local taxpayers the right to deduct some of their property tax from the central government income tax liabilities. Electronically integrated registers and administration can also provide greater opportunities for regional and federal governments in large countries to share a harmonized consumption tax.

The size of a transfer regime that adheres to the principles and objectives here stated must also take into account the following aspects:

1. the degree to which public responsibilities are decentralized and the rules applied to each case;
2. the existing socioeconomic disparities; and
3. the national standards to be achieved with regard to citizens' access to basic needs.

A high and symmetrical level of public responsibility decentralization will require a greater amount of resources to fulfill their objectives compared to a similar one in which asymmetric rules that take due account of distinct socioeconomic and administrative conditions within the nation apply. These differences rise with increasing regional disparities and when the national standards for providing access to basic needs are high.

An explicit consideration in efficiency in the management of resources earmarked for the provision of basic needs may reduce the transfer bill. This can be achieved if these transfers attach special commitments to the attainment of specific targets identified in strategic plans. In that case, transfers should take the form of matching grants, in which the central government match might vary according to the financial capabilities of the recipient unit.

Another important condition refers to the need for the transfer regime to adapt to a changing socioeconomic environment and its impact on the location of economic activities and the population within the national territory. To that end, special provisions should call for a periodic revision of the rules that govern the regime so as to prevent a drift away from the original equilibrium and the objectives devised.

The preceding paragraphs point to issues that should be included in a reform agenda that might seek answers to the following questions:

1. To what extent might the consolidation of a public responsibility decentralization process be jeopardized by a high vulnerability of transfers to the economic cycle, the political environment or the fluctuation in international prices?
2. What factors should be considered in the design of criteria for distributing transfer resources among distinct subnational units in order to achieve better results from the viewpoint of reducing fiscal disparities and focusing on the objective of leveling the field so that every citizen has similar opportunities to climb the social ladder?

The search for answers to these questions should involve the aspects that influence the quality of a transfer regime dealt with in the previous section. A smaller, or highly sensitive transfer base, raises the vulnerability of subnational finances to a changing economic and political environment, doing great harm to social sectors that demand a stable flow of resources to achieve the expected results. A broad transfer base to which automatic distribution rules apply is less vulnerable compared to a similar one in which the central government exercises some degree of control over the delivery of transfer resources. In any case, the vulnerability of subnational finances may be mitigated if provisions for a periodic revision of the rules are in place.

Transfers that are designed to address the specific needs of social services may achieve better results when they operate in tandem with a fiscal equalization regime, since this particular arrangement allows more flexibility to match the territorial distribution of the fiscal resources to the corresponding distribution of demands for the provision of such services, thus enhancing the efficiency and efficacy in the provision of these services.

NOTES

1. Direct cash apportionment to families with incomes below the poverty line has also been added to the list. Brazil championed this initiative.
2. A Supreme Court mandate for the states to put up new rules in 2012 is already causing serious concern.
3. From 2017, General Participation System (SGP) resources will rise in line with the average growth of the national current revenues in the previous four years.
4. Two exceptions are transfers specifically designed to finance infrastructure projects in poor urban areas.
5. Almost all federal taxes together comprise the transfer base (Recaudación Federal Participable (assignable taxes): RFP), as well as non-tax revenue from the oil business.

6. Data for 2007 show that non-tax revenues accounted for three-quarters of total transfers.
7. Education gets the lion's share – more than half of that allocated to these three sectors.
8. Less than 10% of SGP resources is distributed without specific strings attached.
9. There are six *canons* comprising revenues from oil, gas, other minerals, fishing, hydro-electricity and forestry.
10. Distinct rules apply to the *canon* and *sobre canon petrolero* in which the amounts allocated to regional and local governments differ (see Appendix 8A for details).
11. In fact the above percentage applies to the net coparticipation base, since the federal government retains 15% of the gross value.
12. Some 20% of the income and manufacturing taxes were shared through specific constitutional funds on a formula basis.
13. The percentages were increased during the transition to a democratic regime in the 1980s.
14. For local governments, the coefficient defines the amount to be transferred to all municipalities of a given state, the individual quota varying according to their respective populations.
15. Basically, FUNDEB collects 20% of states' and municipalities' own and transfer revenues and allocates these resources on the basis of enrollment numbers. Depending on the location of education facilities, some subnational units are net contributors to this fund whereas others are net recipients.
16. Urban tolls and electronic cards are useful for that purpose.

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APPENDIX 8A

Table 8.A.1 Overview of transfer systems in selected countries

Country	Subnational government ¹	Main transfer regimes (% total transfers) ²	Transfer base (composition and level)	Legal status	Most important distribution rules	Conditions applied to the use of funds ³	Subnational finances' resilience
Argentina (Federative State)	<i>Provinces</i> <ul style="list-style-type: none"> • 23+1 jurisdictions • 48.3% provincial revenues 	Coparticipation (72.7%) Suburban fund ⁴ (6.7%) Educational financing (5.5%)	<ul style="list-style-type: none"> • All the federal taxes except duties on imports and exports • Specified in law 	Defined in the 1994 Constitution, but specified in infra-constitutional laws	Fixed coefficients established in laws and decrees, especially for the coparticipation regime	<ul style="list-style-type: none"> • 83% general • 12% block (education, science and technology, social services and basic infrastructure) • 5% specific (<i>electrification</i> and reduction of fiscal imbalances from rail services cost) 	<i>Pros:</i> ability to predict the inflow of resources, high flexibility in resources use, and low degree of vulnerability to external shocks or political maneuver <i>Cons:</i> lack of conditions to adapt the distribution of the resources to changing socioeconomic circumstances

<p>Bolivia (Plurinational State of) (Unitary State)</p>	<p>Departments</p> <ul style="list-style-type: none"> ● 9 jurisdictions ● 93.8% departmental revenues ● 41.2% transfer system 	<p>Departmental royalties (68.3%) Participation in the Direct Tax on Hydrocarbons – IDH (23.2%) Transfers from Special Tax on Hydrocarbons – IEDH (8.5%)</p>	<ul style="list-style-type: none"> ● Mainly taxes and royalties on hydrocarbons ● Specified in law
	<p><i>Municipalities</i></p> <ul style="list-style-type: none"> ● 327 jurisdictions ● 73.1% municipal revenues ● 58.8% transfer system 	<p>Participation in national taxes (53.5%) Participation in the Direct Tax on Hydrocarbons – IDH (43.3%) Transfers from Special Tax on Hydrocarbons – IEDH (3.2%)</p>	<ul style="list-style-type: none"> ● All central government tax revenues plus the special tax on hydrocarbons ● Specified in law

Partially established in the 2009 Constitution, but defined mostly in infra-constitutional laws

Formulas based on regional production of hydrocarbons

- 12% general
- 23% block (economic development, health, education, public safety and employment promotion)
- 65% specific (investment projects and programs in defined areas)

Pros: some flexibility in resources use and criteria for reducing fiscal disparities among departments and local governments
Cons: high vulnerability to international prices

Partially established in the 2009 Constitution, but defined mostly in infra-constitutional laws

Formulas based on the number of inhabitants and the population weighted by poverty measures

- 14% general
- 43% block (local economic development, health, education, public safety and employment promotion)
- 43% specific (investments projects and programs in defined areas, maintenance of school and health infrastructures)

Table 8A.1 (continued)

Country	Subnational government ¹	Main transfer regimes (% total transfers) ²	Transfer base (composition and level)
Brazil (Federative State)	<i>States</i> <ul style="list-style-type: none"> ● 26+1 jurisdictions ● 22.8% state revenues ● 38.9% transfer system 	State Participation Fund – FPE (41.3%) Fund for the Development of Basic Education – FUNDEB (23.1%) Integrated Health System – SUS (10.4%)	<ul style="list-style-type: none"> ● Manufacturing and income federal taxes ● Social contributions earmarked to education and health programs ● Specified in law
	<i>Municipalities</i> <ul style="list-style-type: none"> ● 5,566 jurisdictions ● 63.1% of municipal revenues ● 61.1% of transfer system 	Municipal Participation Fund – FPM (28.4%) Participation in the states' VAT (26.0%) Fund for the Development of	<ul style="list-style-type: none"> ● Manufacturing and income federal taxes ● States VAT ● Social contributions earmarked to education

Legal status	Most important distribution rules	Conditions applied to the use of funds ³	Subnational finances' resilience
Established in the 1988 Constitution	Fixed coefficients for the FPE Enrollment in public schools (education); population and location of health facilities (health)	<ul style="list-style-type: none"> ● 55% general ● 20% block (education, health) ● 19% specific (programs of transport infrastructure, expenditure on social assistance, specific programs of basic education) ● 6% no info. 	<p><i>Pros:</i> well-defined rules make it easy to predict the inflow of resources whereas a low vulnerability of the transfer base to external shocks provides a more stable transfer of funds</p> <p><i>Cons:</i> rigid norms and huge horizontal disparities do not contribute to equilibrium in the distribution of funds and to adapt the regime to</p>
Established in the 1988 Constitution	Population for the share each municipality gets on their states' FPM quotas Mainly origin based for the	<ul style="list-style-type: none"> ● 63% general ● 21% block (education, health) ● 14% specific (transport infrastructure, expenditure on social 	

			Basic Education – FUNDEB (19.7%)	and health programs ● Specified in law
Chile (Unitary State)	<p><i>Regions</i></p> <ul style="list-style-type: none"> ● 15 jurisdictions ● 99.9% regional revenues ● 43.2% transfer system <p><i>Municipalities</i></p> <ul style="list-style-type: none"> ● 346 jurisdictions ● 51.3% municipal revenue ● 56.8% transfer system 	<p>National Fund for Regional Development – FNDR (40.5%)</p> <p>National subsidy to public transport (19.7%)</p> <p>Provision for Educational Infrastructure (8.1%)</p> <p>Municipal Common Fund – FCM (59.9%)</p> <p>Participation in Land Tax (21.5%)</p> <p>Urban Improvement Program and</p>	<ul style="list-style-type: none"> ● The national budget ● Defined during the regular budgetary process ● Property and vehicle taxes ● Specified in law 	

	state VAT	assistance, specific programs of basic education)	changing socioeconomic circumstances
	Enrollment in public schools (education); population and location of health facilities (health)	<ul style="list-style-type: none"> ● 2% no info. 	
Established in the 1980 Constitution but set mainly in the annual budget law	Based on submission of projects	<ul style="list-style-type: none"> ● 5% general ● 1% block (investment) ● 94% specific (basic public services, health infrastructure, education infrastructure, productive promotion) 	<i>Pros:</i> a fiscal equalization approach to FCM, a high degree of flexibility and a reasonable stable transfer base favor adaptation and predictability for local governments
Partially established in the 1980 Constitution, and partially in infra- constitutional laws	Population, number of buildings exempt from land tax, per capita income and own local tax collections	<ul style="list-style-type: none"> ● 75% general; ● 3% block (education, health, development works) ● 22% specific (decentrali- zation, 	<i>Cons:</i> FNDR lacks transparency, depends on budgetary decisions and is subject to central

Table 8A.1 (continued)

Country	Subnational government ¹	Main transfer regimes (% total transfers) ²	Transfer base (composition and level)
	communal facilities – PMU (7.2%)		
Colombia (Unitary State)	<i>Departments</i> <ul style="list-style-type: none"> ● 32+1 jurisdictions ● 66.8% ● departmental revenues ● 39.8% transfer system 	General System of Participation – SGP (75.5%) Royalties from oil and minerals (19.3%)	<ul style="list-style-type: none"> ● Fixed amount indexed to inflation and GDP growth ● Specified in law

Legal status	Most important distribution rules	Conditions applied to the use of funds ³	Subnational finances' resilience
Established in the 1991 Constitution	Disparities in access to education and health services and departmental production of hydrocarbons and minerals	<p>modernization and efficiency in municipal administration, emergency prevention, infancy, bonus to municipal officials, cultural activities)</p> <ul style="list-style-type: none"> ● 5% block (mining, environment, regional investment) ● 92% specific (payment of education officials, maintenance and operation of educational institutions, health activities, pension liabilities) ● 3% no info. 	<p>government interference on the use of resources</p> <p><i>Pros:</i> A broad base and a reasonable equilibrium in the distribution of resources plus a low vulnerability to external shocks</p> <p><i>Cons:</i> lack of flexibility on the use of resources hinders the adaptation to changing socioeconomic circumstances</p>

	<p><i>Municipalities</i></p> <ul style="list-style-type: none"> ● 1,120 jurisdictions ● 53.9% municipal revenues ● 60.2% transfer system 	<p>General Participation System – SGP (78.6%)</p> <p>Royalties from oil and minerals (90%)</p>	<ul style="list-style-type: none"> ● Fixed amount indexed to inflation and GDP growth ● Royalties ● Specified in law
Ecuador (Unitary State)	<p><i>Provincial councils</i></p> <ul style="list-style-type: none"> ● 24 jurisdictions ● 84.0% provincial revenues ● 31.8% transfer system 	<p>Distribution of 15% (45.9%)</p> <p>Fund for the Amazonian Regional Eco-development – Ecorae (6.1%)</p> <p>Sectional Development Fund – Fondesec (5.5%)</p>	<ul style="list-style-type: none"> ● Central government permanent revenues ● Specified in law

Established
in the 1991
Constitution

Formulas based
on equity,
population
served
and serve
by public
education,
continuity
of resources
invested in
public health,
and relative
poverty and
proportion
of urban
and rural
population

- 25% block
(investment
projects, mining,
environment)
- 68% specific
(payment of
education
officials,
maintenance
and operation
of educational
institutions,
school transport,
school meals,
health activities)
- 7% no info.

Established
in the 2008
Constitution

Formula based
on
population
with unmet
basic needs,
proportion of
land area and
population

- 9% general
- 44% block
(investment
projects, public
works)
- 8% specific
(programs of
development,
urban
infrastructure,
technical
assistance and
training)
- 39% no info.

Pros: A broad
fiscal base. A
fairly flexible
regime and a
distributional
formula that
intend to reduce
fiscal and social
disparities
Cons: high vulner-
ability to
international
prices means a
less stable flow
of funds

Table 8A.1 (continued)

Country	Subnational government ¹	Main transfer regimes (% total transfers) ²	Transfer base (composition and level)
	<p><i>Cantons</i></p> <ul style="list-style-type: none"> ● 221 jurisdictions ● 74.2% cantonal revenues ● 68.2% transfer system 	<p>Distribution of 15% (47.8%)</p> <p>Voluntary donations from income tax (7.9%)</p> <p>Sectional Development Fund – Fondesec (5.9%)</p>	<ul style="list-style-type: none"> ● Central government permanent revenues ● Specified in law
Mexico (Federative State)	<p><i>States</i></p> <ul style="list-style-type: none"> ● 31 + 1 jurisdictions ● 85.0% state revenues ● 83.8% transfer system 	<p>General Participation Fund – FGP (32.3%)</p> <p>Fund for Basic Education – FAEB (24.9%)</p> <p>Fund for Health Services – FASSA (4.9%)</p>	<ul style="list-style-type: none"> ● Almost all federal taxes plus non-tax revenues (28% from oil) ● Specified in law

Legal status	Most important distribution rules	Conditions applied to the use of funds ³	Subnational finances' resilience
Established in the 2008 Constitution	Formula based on population with unmet basic needs, proportion of land area and population	<ul style="list-style-type: none"> ● 5% general ● 58% block (investment projects) ● 8% specific (programs of development, urban infrastructure, technical assistance and training) 	
Partially established in the constitution, but defined mostly in infra-constitutional laws	<p>Formulas based on state GDP growth weighted by population, increases in own tax revenues</p> <p>Enrollment in public schools</p>	<ul style="list-style-type: none"> ● 29% no info. ● 41% general ● 43% specific (basic, regular and special education services, teacher training, scientific and technological research, health services, disease prevention, 	<p><i>Pros:</i> a broad base and reasonable degree of flexibility on the use of resources</p> <p><i>Cons:</i> disparities in the distribution of resources and great vulnerability to</p>

	<p><i>Municipalities</i></p> <ul style="list-style-type: none"> ● 2,446 jurisdictions ● 67.7% municipal revenues ● 16.2% transfer system 	<p>General Participation Fund – FGP (31.2%)</p> <p>Fund for Strengthening Municipalities and the Federal District Regional Boundaries – FORTAMUN-DF (20.7%)</p> <p>Fund for Municipal Social Infra-structure – FAISM (17.3%)</p>	<ul style="list-style-type: none"> ● Almost all federal taxes plus non-tax revenues (28% from oil) ● Specified in law 	Partially established in the constitution, but defined mostly in infra-constitutional laws	<p>and the proportion of state spending on basic education</p> <p>Formulas based on criteria established by state laws, including population, territory and municipal poverty index</p>	<p>sanitary control, basic social actions)</p> <ul style="list-style-type: none"> ● 16% no info. ● 53% general ● 37% specific (basic social actions, public safety) ● 10% no info. 	external shocks due the weight of non-tax revenues on the transfer base
Peru (Unitary State)	<p><i>Departments</i></p> <ul style="list-style-type: none"> ● 25+1 jurisdictions ● 17.5% departmental revenues ● 16.7% transfer system 	<p>Mining <i>canon</i> (43.4%)</p> <p>Oil <i>canon</i> and <i>sobrecanon</i> (11.1%)</p> <p>Gas <i>canon</i> (9.4%)</p>	<ul style="list-style-type: none"> ● Mainly duties, royalties and income taxes on minerals and hydrocarbons ● Specified in law 	Defined in infra-constitutional laws	Formulas based on the departmental production of minerals and hydrocarbons	<ul style="list-style-type: none"> ● 8% general ● 66% block (investment in basic services and sustainable development) ● 3% specific (training and technical 	<p><i>Pros:</i> flexibility in the use of FONCOMÚN resources for local governments</p> <p><i>Cons:</i> High vulnerability to international</p>

Table 8A.1 (continued)

Country	Subnational government ¹	Main transfer regimes (% total transfers) ²	Transfer base (composition and level)	Legal status	Most important distribution rules	Conditions applied to the use of funds ³	Subnational finances' resilience
	<p><i>Municipalities</i></p> <ul style="list-style-type: none"> • 1,836 jurisdictions • 87.5% municipal revenues • 83.3% transfer system 	<p>Municipal Compensation Fund – FONCOMÚN (27.7% grants)</p> <p>Mining <i>canon</i> (25.1%)</p> <p>Gas <i>canon</i> (5.4%)</p>	<ul style="list-style-type: none"> • Duties, royalties and income taxes over minerals and hydrocarbons • National taxes earmarked to FONCOMÚN • Specified in law 	Partially established in the 1993 Constitution, but defined mostly in infra-constitutional laws	Formula based on population, infant mortality rate, illiteracy rate among those over 15 years, unmet basic needs, and on the departmental production of minerals and hydrocarbons	<p>assistance, preservation of the environment and ecology)</p> <ul style="list-style-type: none"> • 23% no info. • 30% general • 37% block (investment in basic services and sustainable development) • 4% specific (purchase of milk products, training and technical assistance, preservation of the environment and ecology) • 29% no info. 	prices and significant fiscal disparities means an unstable flow of resources and lack of conditions to adapt to changing circumstances

Notes:

- ¹ Percentages may vary each year: 2008 data for Argentina, Bolivia (Plur. St. of), Brazil, Chile, Colombia, Ecuador and Mexico, and 2009 data for Peru.
- ² Percentages may vary each year: 2008 data for Argentina, Bolivia (Plur. St. of), Brazil, Chilean municipalities, Colombia, Ecuador and Mexico, 2009 data for Peru and 2010 for Chilean regions.
- ³ Percentages may vary each year: 2007 data for Colombia, 2008 data for Argentina, Bolivia (Plur. St. of), Brazil, Chile, Ecuador and Mexico, and 2009 data for Peru.
- ⁴ Fondo del Conurbano in Spanish.

Sources: Political Database of the Americas/Georgetown University (2005); Cetrángolo (2007); Chauvin and Pérez (2007); Zapata (2007); Castro (2008); Casas (2009); Cetrángolo et al. (2009); Instituto Nacional de Estadística y Censos – INDEC (Argentina); Instituto Nacional de Estadísticas – INE (Bolivia (Plur. St. of)); Instituto Brasileiro de Geografia e Estatística – IBGE (Brazil); Chile (1995, 2010), Instituto Nacional de Estadística de Chile – INE (Chile); Departamento Administrativo Nacional de Estadística – DANE (Colombia); Instituto Nacional de Estadísticas y Censos – INEC (Ecuador); Instituto Nacional de Estadística y Geografía – INEGI (Mexico); Instituto Nacional de Estadística e Informática – INEI (Peru).

9. Intergovernmental transfers: a policy reform perspective

**Jorge Martinez-Vazquez and
Cristian Sepulveda***

1 INTRODUCTION

A number of Latin American countries have now accumulated several decades of experience with fiscal decentralization reforms. Although considerable progress has been made on many fronts, that experience has not helped to avoid some serious common pitfalls in the assignment of revenue sources to subnational governments in the region.¹ Subnational finances in Latin America are generally characterized by relatively small shares of own-revenue collections and non-existing or – with some rare exceptions – poorly designed equalization transfer programs.² In this chapter we argue that the use (and abuse) of revenue-sharing schemes in the region has prevented the development of sound financial structures at the subnational level.

The comparative advantages of subnational governments with respect to the central government are usually concentrated on the expenditure side of the budget. Because of this, expenditure decentralization is usually more pervasive than revenue decentralization, and intergovernmental transfers play a crucial role in the fiscal balance of almost all fiscally decentralized systems. The main challenge for an intergovernmental transfer system is the computing and timely delivery of the right amount of transfers to each subnational government. Failing to do this well can result in sending out the wrong signals regarding the efficient level of public expenditures at the subnational level, thus eroding the efficiency gains expected from the decentralization process itself. These are, in our opinion, some of the risks currently faced by many Latin American countries. Their heavy reliance on revenue-sharing schemes and the lack of clarity about the role and proper composition of the transfer system has in many cases led to an inefficient distribution of revenues combined with significant horizontal fiscal imbalances.

The situation has not been helped by the fact that the academic literature does not provide definite advice about the optimal composition of subnational revenues. In particular, the current academic literature does not provide concrete guidance on how revenue-sharing schemes should be combined with other transfer programs to achieve more optimal revenue assignments.

In this chapter we address these topics. One of our main conclusions is that revenue-sharing schemes should be limited to finance only those expenditure functions where subnational governments do not enjoy any significant degree of discretion. In contrast, those functions where subnational governments do enjoy a significant degree of discretion should be financed primarily by own revenues and carefully designed equalization transfers.

The chapter is organized as follows. Section 2 provides an overview of the main principles to be considered in the design of subnational financial structure, paying particular attention to revenue-sharing schemes. In Section 3 we review the characteristics of Latin American transfer systems; we highlight the most common patterns in the region and evaluate their performance. In Section 4 we propose a simple framework for the redesign of the system of intergovernmental transfers in the region. The last section concludes.

2 THE ROLE OF INTERGOVERNMENTAL TRANSFERS IN FISCALLY DECENTRALIZED SYSTEMS

The classic economic justification for fiscal decentralization is due to Oates (1972), and focuses on the comparative advantages of subnational governments to determine the optimal provision of public goods within their jurisdiction. He argued that if preferences are not homogeneous across jurisdictions and subnational governments are capable of providing goods and services efficiently, then allowing for the expenditure decisions to be made 'closer to the people' would result in a better fit of each jurisdiction's preferences and therefore in welfare gains for society.³ This argument translates into the so-called 'subsidiarity principle', by which an expenditure responsibility should be assigned to the lowest level of government capable of efficiently providing that function. Those services with spillover benefits beyond single jurisdictions should be provided by higher levels of government. In general, there seems to be agreement about what expenditure responsibilities should be assigned to subnational governments, and in practice most countries around the world decentralize similar expenditure functions.⁴

On the revenue side of the budget, however, both the debate and the practice of fiscal decentralization reforms are far from having reached consensus. In order to devolve effective decision-making powers and promote efficient expenditure choices at the subnational level, it is generally accepted that it is necessary to ensure some degree of revenue autonomy. Revenue autonomy is also important because it enhances the accountability of government officials and citizens' participation. The problem is that revenue autonomy is also related to important efficiency costs. The presence of economies of scale in tax administration, collections and enforcement usually implies that the subnational governments are less effective than the central government in raising a given amount of revenues for most tax instruments. After weighting benefits and costs of own-revenue collections, it is generally efficient to provide less than full budgetary autonomy at the subnational level, thus decentralizing revenue sources in amounts that are insufficient to cover all subnational expenditures.⁵

The overall asymmetric decentralization of expenditure responsibilities and revenue sources leads to fiscal disparities, roughly defined as the difference between the costs of providing the goods and services that a government is responsible for and the revenue that the same government is able to gather from its assigned revenue sources. The magnitude of fiscal disparities varies across different levels of government and among governments at the same level, creating what are known as 'vertical' and 'horizontal' imbalances, respectively. In terms of vertical imbalance the central government typically exhibits a negative fiscal disparity, whose absolute value is (by definition) equal to the sum of all fiscal disparities at the subnational level. In addition, horizontal imbalances are also common because governments of the same level normally face dissimilar economic conditions, including the costs of public service delivery, the needs of different population groups, the size and elasticity of tax bases, and so on. Reducing vertical and horizontal imbalances necessarily requires the use of intergovernmental transfers, which thus become a fundamental component of any well-functioning fiscally decentralized system of government.

Although there is wide consensus among scholars and policy makers that own-source revenues and intergovernmental transfers are both indispensable sources of subnational finance, there are no clear guidelines regarding their optimal combination.⁶ The academic literature stresses the importance of own-revenue collections at the subnational level, but the exact extent of own-revenue collections is not precisely defined.⁷ In the following discussion we provide some principles to be considered for the design of an efficient structure of subnational revenues.

Towards a Normative Prescription for Optimal (Subnational) Revenue Structure

A widely accepted principle of fiscal decentralization design states that 'finance follows function'. This principle emphasizes that both the amount of revenues required by a government as well as the adequate choice of its revenue sources depend on the specific characteristics of the assigned expenditure responsibilities and the cost of financing them (see, for example, Bahl, 1999). Although there are many ways to categorize expenditure assignments to subnational governments, an essential distinction is whether: (i) the assignments correspond to own subnational responsibilities, which explicitly call or rely on discretionary decisions made by subnational governments; or (ii) they correspond to responsibilities that have been delegated to the subnational governments by the central government, which fundamentally involve non-discretionary decisions by subnational governments. Note that, strictly speaking, subnational autonomy is required if and only if an expenditure function has been assigned as an exclusive or own responsibility to the subnational level. In contrast, even though delegated functions are implemented by subnational governments, the ultimate responsibility over these functions may be interpreted as falling upon the central government. So discretion, if allowed, could only be exerted within certain limits and controls. Frequent examples of delegated expenditure responsibilities are education and health services. Service delivery in these sectors is normally assigned to subnational governments, and regardless of whether or not the distinction is made in the law between own and delegated, significant shares of the subnational education and health budgets are devoted to meet national standards regarding quality and coverage. In contrast, service delivery, for example, for street cleaning and lighting, whether or not the laws make the distinction between own and delegated responsibilities, generally are associated with decisions that are fully discretionary at the subnational level.

Figure 9.1 illustrates the ideal correspondence between subnational expenditures, divided into discretionary and non-discretionary categories, and subnational revenues. Assuming for expositional purposes and convenience that there are no savings, subnational revenues must be equal to subnational expenditures. The presence of a vertical imbalance typically implies that subnational expenditures are larger than subnational own-revenue collections, and in order to eliminate this vertical imbalance the central government must provide additional resources in the form of intergovernmental transfers.⁸

Non-discretionary (delegated) expenditure responsibilities should be primarily financed, as it is conventionally accepted, by conditional

Subnational expenditures	Subnational revenues
<i>Discretionary</i> decisions (on 'own' responsibilities)	Own subnational government revenues
	Equalization transfers
<i>Non-discretionary</i> decisions (on 'delegated' responsibilities)	----- Revenue sharing
	Conditional transfers

Figure 9.1 Basic structure of subnational governments' budget

intergovernmental transfers. If the central government is committed to achieving certain national standards then it should provide the funds required to ensure that those standards are met nationwide. Intergovernmental transfers are also necessary to finance own subnational responsibilities, but this financing must be unconditional in order to allow for discretionary subnational decisions.

Revenue sharing is a particular type of intergovernmental transfer in which a predetermined proportion of central government collections from one or more tax instruments is set aside and distributed either on a derivation basis or by formula among subnational governments. This arrangement exploits the central government's advantage in tax collection while allowing subnational governments to gain access to buoyant revenue sources and minimizing distortions due to uncoordinated tax administration and tax competition (Rao, 2007). Revenue-sharing schemes are widely used in the world and represent a significant share of intergovernmental transfers in most Latin American countries. In part, this is because they are considered an adequate means of providing greater revenue autonomy to subnational governments. Sometimes, due to a certain perception of entitlement, revenues shared on a derivation basis are (wrongly) labeled as subnational 'own' revenues.⁹

Even though revenue sharing and other intergovernmental transfers are an important source of subnational revenues in many countries, unfortunately the literature has not yet provided clear normative prescriptions regarding the extent to which subnational finances should rely on these revenue sources. The conventional decentralization theory states only that subnational governments should be able to control the level of revenues *at the margin* (McLure, 2000); but autonomy at the margin refers only to the ability to alter the amount of own-revenue collections and says nothing about the revenue structure.

In particular, the existing literature has not properly emphasized the fact that intergovernmental transfers are costless from the recipient governments' perspective, which means that they may not provide adequate information about the marginal cost of public funds. Such costs include the marginal costs of administering and collecting additional revenues as well as their social welfare costs, and they indicate the (minimum) level of marginal benefits required for the last unit of public expenditures to be economically desirable. Intergovernmental transfers substitute away own-tax revenues (and financial debt), and since the marginal cost of public funds usually increases with the amount of own revenues, then the marginal cost perceived by the subnational governments can be expected to decrease with the level of intergovernmental transfers, and at any rate not to match the actual marginal cost.¹⁰

Efficient autonomous decisions in both public expenditures and own-revenue collections require that a government has a correct measure (or at least a close approximation) of the marginal costs of public funds, and aligning the marginal cost of funds is one of the main objectives of the intergovernmental transfers.¹¹ As Bird and Smart (2002: 899) put it, '(t)he basic task in transfer design is to get prices "right" in the public sector'.

Although not readily obvious, the objective of aligning the prices faced by subnational governments is entirely compatible with the traditional objectives reserved for an equalization transfer program. Equalization transfer programs are meant to reduce differences in the ability of subnational governments of the same level to cover the cost of providing a standard package of public goods and services.¹² In this context, the 'right' marginal cost of public funds corresponds to that level at which subnational governments collect the revenues required to finance the standard package of public goods and services. Thus, an equalization transfer program can serve to provide the subnational governments with the conditions required to make efficient autonomous decisions. Of course, the greater the equalization transfer fund, the greater the room to effectively equalize subnational fiscal conditions.

Note that besides the equalization transfers there is no need for

additional transfer programs aimed at fostering decision-making autonomy at the subnational levels of government. Moreover, in order to ensure that the equalization transfer program can effectively reach its objective, it would be desirable not to allow the sum of conditional transfers and revenues shared on a derivation basis to exceed the amount of expenditures needed for delegated or non-discretionary functions. This condition should hold not only for each level of subnational government taken as a whole, but also for each subnational government. Likewise, discretionary expenditure responsibilities should be financed primarily via own-revenue collections and equalization transfers, which can jointly inform subnational policy makers about the correct level of the marginal cost of public funds.

3 INTERGOVERNMENTAL TRANSFERS IN LATIN AMERICA

Even though most Latin American countries have been engaged in lengthy fiscal decentralization processes, subnational revenue autonomy is still limited. Revenues collected by regional and local governments in the region frequently represent a small fraction of their revenues and in the few cases where they represent a sizable share of local budgets, generally they are not especially important in the national context. Table 9.1 shows the share of own-tax collections over total revenues at the local and regional levels in a group of Latin American countries, as well as the relative importance of the two levels of government in terms of the distribution of revenues in the public sector. All local governments in the sample collect less than 50 percent of their own revenues. Chilean municipalities display the greatest share of own-tax collections, but in that case revenue autonomy is tempered by the limited extent of the fiscal decentralization process in that country. At the regional level the experience is mixed. The Argentine provinces collect a significant share of their revenues through turnover, stamp and property taxes, and the Colombian departments are able to raise some revenues from excise taxes. In other countries such as Bolivia, Mexico, Paraguay and Peru, however, regional governments collect few or no taxes.

This evidence suggests that most countries in the region suffer from significant vertical imbalances and a high level of dependency on intergovernmental transfers from the central government.¹³ In order to address these problems, all countries in the region are currently implementing a variety of intergovernmental transfer programs. In the following discussion we provide an overview of transfer systems, and then we examine the possible equalizing and efficiency effects of the main transfer programs.

Table 9.1 Share of own taxes and fees on local revenues in 10 Latin American countries

Country (year)	Local governments		Regional governments	
	Share of own-tax collections on local revenues	Share of local revenues on general govt revenues	Share of own-tax collections on regional revenues	Share of regional revenues on general govt revenues
Argentina	2.0% (2004)	8.4% (2004)	68.9% (2004)	16.6% ^a (2008)
Bolivia ^b	17.2% (2007)	23.3% (2007)	0.0% (2007)	21.0% (2007)
Brazil	20.1% ^c (2007)	9.0% ^c (2007)	–	34.8% ^d (2008)
Chile	48.1% (2006)	9.6% (2006)	–	–
Colombia	34.8% ^e (2008)	22.9% (2003)	27.7% ^e (2008)	17.6% (2003)
Costa Rica	36.2% (2006)	5.9% (2006)	–	–
Ecuador ^c	34.6% (2007)	12.0% (2007)	–	–
Mexico	15.6% ^c (2007)	6.0% ^c (2007)	2.7% ^f (2006)	40.6% ^f (2006)
Paraguay	41.3% (2006)	6.2% (2006)	0.0% (2006)	2.1% (2006)
Peru	10.8% (2005)	13.7% (2005)	0.0% (2005)	19.0% (2005)

Sources: Government Finance Statistics (September 2010); ^aInstituto Nacional de Estadística y Censos, Argentina (considers only tax revenues); ^bZapata (2007); ^cMartinez-Vazquez (2010); ^dNational Treasury of Brazil; ^eDirección Nacional de Planificación (Colombia); ^fInstituto Nacional de Estadística y Geografía (Mexico, 2009).

Current Practices in Transfer Design¹⁴

Given the great diversity of intergovernmental transfer programs observed in Latin America it is difficult to describe common strategies and approaches to address the problem of vertical imbalances. Programs vary widely in terms of their funding rules, the distribution mechanisms and the conditions imposed on their use. In part, these variations respond to the different objective to be accomplished, but it is also common in the region

to observe programs where there is no clear correspondence between design and objective, or where there are two or more rather incompatible objectives.

Examples of well-designed and effective transfer programs can be found among the numerous conditional transfer programs implemented in the region. The use of this type of transfer in Latin America is not as extensive as in other regions of the world, but nevertheless a significant share of subnational revenues is subject to one or more conditions. In general, they are especially effective in facilitating the fulfillment of (minimum) national standards of services and in increasing the delivery of services with positive externalities. Most countries have sizable transfer programs earmarked for either capital expenditures or important subnational functions such as education and health. For example, Bolivia, Guatemala, Nicaragua and Paraguay provide examples of capital transfers to local governments; El Salvador and Peru are cases where the municipal governments compete for the capital transfers through project proposals. In Brazil, conditional transfers for education and health are directed first to the states, which are primarily responsible for these functions; in Chile, the transfers for these functions are distributed directly to the local governments. There are also several examples of conditional transfer programs directed to vulnerable groups. In Bolivia, for example, there is a program (*Seguro Materno Infantil*) aimed to finance health services for infants and mothers, and in Peru a similar program (*Vaso de Leche*) covers basic nutrition needs of poor children, pregnant women and mothers.

The mechanisms for the funding of transfer programs can be defined independently from the conditions imposed on the use of the transfers. One of the most common ways to finance transfer programs in the region is by defining revenue-sharing schemes, and several major conditional transfer programs use this alternative.¹⁵ In Colombia and Guatemala revenue-sharing funding for local governments is conditional on being used for basic education, health, and infrastructure; and 25 percent of revenues from hydrocarbons and mining must be spent in roughly the same sectors in Venezuela. In addition, Nicaragua and Paraguay set a minimum proportion of the revenue-sharing transfers received at the local level to be spent on capital infrastructure, and in Peru a similar rule applies to the funds received by regional governments, part of which can only be spent on capital investments and infrastructure maintenance.

Given a certain amount of revenues collected from the shared sources, the most important effect of revenue-sharing schemes is that they set, usually unambiguously, the size of the transfer funds. This characteristic makes such schemes useful in providing subnational governments with buoyant and predictable revenues, and for the same reasons they seem

to be very attractive in ensuring a certain degree of budgetary autonomy. This likely explains the popularity of revenue-sharing schemes, and why the countries in the region often prefer to impose no conditions on the use of the most important transfer programs.

Virtually all Latin American countries use some form of revenue-sharing scheme defined on the basis of central government general revenues or a group of their most important taxes, such as personal income tax, value added tax (VAT) and other taxes on corporate profits or sales. In principle, this approach can be harmless, but serious problems can arise when: (i) the bases are volatile; (ii) the criteria to distribute them among subnational governments are not related to relative expenditure needs; and (iii) they represent a significant share of subnational revenues.

An important example of volatile transfers is given by those cases where the sharing bases are taxes on extractive industries, a somewhat common situation among countries with abundant natural resources. In Mexico, one-fifth of the revenues collected by the states must be shared with their municipalities; tax-sharing revenues for municipalities in Bolivia and Nicaragua are also defined in terms of natural resources; and in Peru 50 percent of the revenues collected from the corporate income tax on extractive industries are shared with regional and local governments. In all these examples, the size of the transfer pool has been subject to wide fluctuations associated with changes in the international prices of natural resources.

Revenues from taxes on extractive industries can be especially distortionary when shared on a derivation or origin basis. For example, the subnational share of the corporate income tax on gas, oil and minerals' extractive industries in Peru, the *canon* and *sobre canon*, is distributed exclusively among the regions, provinces and municipalities where the extraction of the natural resources has taken place. A similar allocation arrangement is found in Bolivia, where most of the revenues shared go to the regions in which they are collected, but a small fraction (less than 10 percent) is reserved for regions with no natural resources. Ecuador and Venezuela are other examples of countries where the revenues from extractive industries are shared on a derivation basis. The presence of natural resources is unlikely to be correlated with the public expenditure needs in each jurisdiction; therefore, this allocation criterion can create severe economic distortions at the subnational levels of government, as well as a perception of unfairness regarding the way public funds are being distributed across the country. An additional problem related to this type of revenue is that it might provide a strong sense of entitlement to the beneficiaries, who perceive it as a legitimate right that cannot be taken away. In Peru, for instance, discussions about how to solve the existing horizontal fiscal disparities have only led to proposals requiring new funds to compensate

the losers, and any reform to the distribution mechanism of the (already excessive) available funds is currently considered as politically unviable.

Less detrimental, but not harmless, forms of sharing revenues on a derivation basis are defined over bases more homogeneously distributed across the national or regional territory. The Brazilian states, for instance, have a tax-sharing scheme funded with 25 percent of their regional VAT revenues. From this fund, 75 percent is distributed among municipalities on a derivation basis, and the rest by a formula that considers population, land area and other variables.

A much better (if not the best) way to allocate unconditional shares of revenues consists in using formulas that contain some equalization features. This is a quite common approach in Latin America, although each country seems to choose different equalizing objectives and implements its own combinations of funding mechanisms and distribution criteria. In Brazil the amount of the Federal District and State Participation Fund (FPE) and the Municipalities Participation Fund (FPM) are defined, respectively, as 21.5 and 22.5 percent of the revenues collected from the three most important federal taxes (personal income tax, corporate income tax and VAT). The FPE is distributed in fixed proportions among the five macro regions, with the objective of reducing historical disparities. The poorest macro region, the northeast, receives 52.46 percent of the fund; an additional 25.37 percent is allocated to the north, and the rest to the center-west, southeast and south. The FPM is distributed mainly in proportion to the population of each municipality, but for large municipalities an adjustment by per capita income is introduced.

Equalization transfers in the region are most commonly financed by the central governments and distributed across subnational governments in accordance with some proxy for poverty or (expenditure) needs. Examples of these programs can be found in virtually all Latin American countries, although they broadly differ in their design and importance in subnational public finances. Of course, equalization transfer programs do not need to be financed exclusively by the center. An alternative approach in the region is given by the Chilean Common Municipal Fund, which is financed by own revenues from the richest governments and distributed among the rest of the municipalities with a formula that considers population, poverty and other variables. This financing method is known in the literature as a 'fraternal' system, in contrast to the traditional 'paternal' system in which the central government provides all the funds of the program. Another distinctive experience is the HIPC (heavily indebted poor countries initiative) transfer program implemented in Bolivia, where the funds are provided by international organizations such as the World

Bank and the IMF, and distributed among local governments in accordance with their relative population and poverty levels.

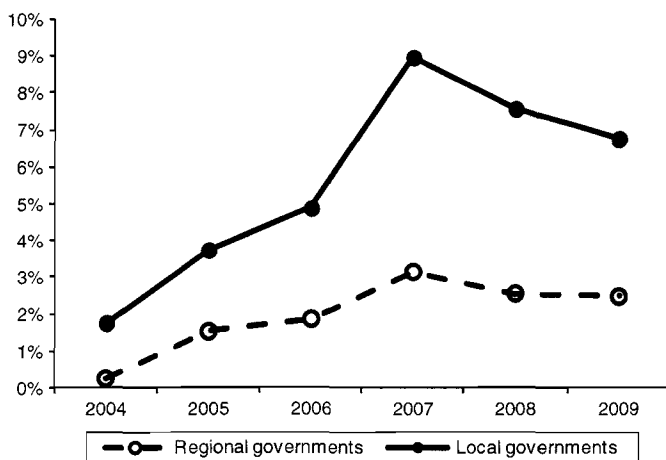
Equalization transfers are usually unconditional, but there are some interesting exemptions to this rule. The Peruvian Regional Compensation Fund (*Fondo de Compensación Regional*) and the Chilean National Fund for Regional Development (*Fondo Nacional de Desarrollo Regional*) provide funds conditioned exclusively on capital expenditures at the regional level, and their distribution is based on equalizing objectives with explicit consideration of poverty indicators.

However, addressing horizontal disparities with a sizable transfer program exclusively devoted to the objective of equalization is not frequent in the region. Revenue-sharing schemes can easily incorporate proxies for relative expenditure needs – such as population and poverty ratios – but it is much more difficult to correct for differences in fiscal capacity.¹⁶ In reality, the equalizing mechanisms used in the region do not provide explicit estimates of expenditure needs, and the equalization of fiscal capacity is usually not considered in the distribution formulas. The problem in this case is that one monetary unit that cannot be collected is exactly equivalent to one monetary unit that is not available to cover expenditure needs. Thus, when fiscal capacity is disregarded it may simply not be possible to equalize the ability to provide comparable public services across the country.

Critical Assessment of Transfer Systems

Certain common characteristics of the intergovernmental transfer systems in Latin American countries are peculiar in the international context. In particular, the heavy reliance on revenue-sharing schemes and their distribution in accordance with some equalizing criteria are distinctive features of Latin American subnational finances (Martinez-Vazquez, 2010). Instead of adequate adaptations to the regional reality, however, these arrangements suggest some degree of confusion regarding the role and consequences of this revenue source in a fiscally decentralized system of government.

Revenue-sharing schemes provide subnational governments with predictable and usually buoyant revenues, but they might also be associated with important costs to the public sector and the economy as a whole. If the revenues shared represent a significant proportion of the public budget then they can be expected to reduce the ability of the central government to implement desirable tax and expenditures policies. One example of this situation is observed in Peru, where the revenues shared increased their relative importance due to greater international prices

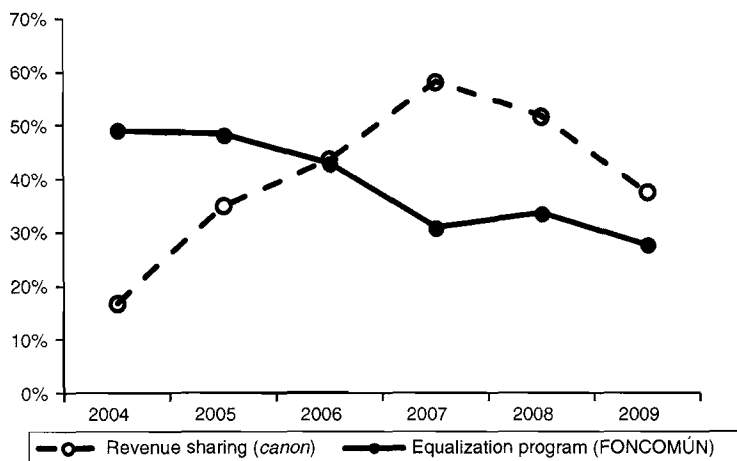


Source: Ministry of Economy and Finance, Peru.

Figure 9.2 Revenues shared over central government tax collections in Peru

paid for Peruvian natural resources. Figure 9.2 presents the evolution of the ratio of revenues shared with subnational government over total central government tax collections. At the beginning of the period, in 2004, the revenues shared with regional and local governments represented only 2 percent of the total taxes collected by the central government. When international prices reached their peak in 2007, however, the transfers to subnational governments explained by revenue-sharing schemes represented more than 12 percent of central government tax collections. Even though these transfers are conditional on being spent on capital investments, they have been quite effective in boosting subnational expenditures and, as a consequence, the central government has seen its ability to control the growth of the public sector in the margin diminished.

Revenue-sharing transfers to local governments have also reduced the effectiveness of the FONCOMÚN (Fondo de Compensación Municipal), the only equalization transfer program implemented at that level in Peru. Figure 9.3 shows the importance of the equalization transfer program and the revenues shared in the transfers received by local governments. In 2004 the equalization transfer program represented half of the transfers received by local governments, but its importance was reduced during the 2007–09 period, mainly due to the increase in revenue sharing. Shared revenues were especially significant during 2007, and they remain the most



Source: Ministry of Economy and Finance, Peru.

Figure 9.3 Composition of intergovernmental transfers to local governments in Peru

important transfer program for both local and regional governments in the country.

A peculiar characteristic of some revenue-sharing schemes in Latin America is their multi-purpose design, which in some cases includes the equalization objective. This practice might help not only to avoid the creation of new horizontal inequalities, but also to reduce, to some extent, the disparities already encountered in the region. This is a particularly relevant topic in Latin America, where individual and regional disparities are relatively large by international standards.¹⁷ Table 9.2 presents two simple measures of regional disparities in GDP per capita for five Latin American countries. Mexico has the greatest regional disparities. The ratio of per capita GDP between the richest state (Campeche) and the poorest state (either Oaxaca or Chiapas) is more than 14-fold and does not show any decreasing tendency. On the other hand, the coefficient of variation of per capita GDP for the sample of Mexican states is greater than 1 for the whole period and reaches a peak of 1.57 in 2006.¹⁸ Other countries such as Argentina, Brazil and Peru display smaller disparities but they are still large compared to those found in other economies in the world. Rodriguez-Pose and Gill (2004), for instance, compute the coefficient of variation for several developed countries, all of which are smaller than 0.30 in 2000, while other developing countries, such as China and India, display a coefficient of variation of 0.58 and 0.44, respectively. Bolivia is

Table 9.2 Disparities in regional per capita GDP in five Latin American countries

	2000	2001	2002	2003	2004	2005	2006	2007
Argentina								
max / min	7.89	8.10	8.79	8.14	7.94	7.84	–	–
coefficient of variation	0.70	0.69	0.84	0.77	0.76	0.77	–	–
Bolivia								
max / min	2.69	2.81	2.64	2.69	3.06	4.14	3.51	4.02
coefficient of variation	0.27	0.28	0.28	0.29	0.35	0.49	0.49	0.55
Brazil								
max / min	–	–	8.45	9.60	9.51	9.45	9.06	9.05
coefficient of variation	–	–	0.44	0.54	0.54	0.54	0.54	0.53
Mexico								
max / min	14.66	15.07	14.35	15.09	17.05	17.26	19.28	18.48
coefficient of variation	1.14	1.17	1.16	1.24	1.40	1.40	1.57	1.40
Peru								
max / min	–	–	–	–	10.89	11.29	12.25	11.37
coefficient of variation	–	–	–	–	0.60	0.61	0.69	0.65

Source: ECLAC, based on national official statistics.

the country with the lowest fiscal disparities in the sample, but this result is partially explained by the high poverty rates present throughout the whole country.

Per capita GDP can be expected to be negatively correlated with needs but positively with tax collection capacity. In that context, a sizable and well-designed equalization transfer program is particularly important to ensure that similar standards of quality and quantity in the provision of public goods are met nationally. In Latin America, however, the equalizing objective does not always play a significant role in the financing of subnational governments. Table 9.3 presents the correlation between per capita GDP and per capita transfers received from revenue-sharing schemes and other transfer programs for the same group of countries. In Argentina, virtually all transfers to the intermediate level of government are provided through revenue-sharing mechanisms; the positive correlation between this revenue source and regional GDP suggests that the overall transfer system has an unequalizing outcome. In Brazil, revenue-sharing transfers

Table 9.3 Correlation between regional per capita GDP and transfers to the regions in five Latin American countries

	2000	2001	2002	2003	2004	2005	2006	2007
Argentina								
GDP – revenue sharing	0.23	0.21	0.36	0.29	0.25	0.23	–	–
Bolivia								
GDP – revenue sharing	–	0.71	0.72	0.78	0.81	0.76	0.68	0.71
Brazil								
GDP – revenue sharing	–	–	0.03	–0.22	–0.30	–0.30	–0.29	–0.31
GDP – other transfers	–	–	–0.17	0.06	0.41	0.35	0.39	0.40
Mexico								
GDP – revenue sharing	0.51	0.57	0.46	0.58	0.64	0.59	0.62	0.57
GDP – other transfers	0.23	0.09	–0.12	–0.13	–0.02	0.14	0.18	0.20
Peru								
GDP – revenue sharing	–	–	–	–	0.19	0.72	0.79	0.80
GDP – other transfers	–	–	–	–	0.31	0.50	0.38	0.07

Notes: For Argentina all transfers to provincial governments are considered as shared revenues. Revenues shared in Bolivia consist of royalties and taxes applied on the exploitation of natural resources. Brazilian revenue-sharing transfers are computed as the participation on the federal revenues plus the compensation for the exploitation of natural resources. In the case of Mexico, the revenues shared are given by the *participaciones* and the other transfers by the *aportaciones*, which are generally defined as conditional transfers. Revenue-sharing transfers in Peru consist of *canon*, *sobrecanon* and mining royalties, all of them defined as corporate income tax on extractive industries.

Source: Own computations based on ECLAC data.

have displayed a negative sign since 2003, implying that they are benefiting more those states with low per capita GDP. That is the intended role of those transfers in Brazil, which, as we saw above, are set as fixed proportions favoring the poorer macro regions of the country. In contrast, other transfers in that country appear to be positively correlated with per capita GDP, suggesting poor equalizing effects in terms of per capita GDP. In Mexico and Peru, the two transfer aggregates also show a positive and high correlation, although the transfers that are different from revenue

Table 9.4 Variability of per capita revenues in Peruvian municipalities, 2008 (in US dollars*)

	Own revenues	Transfers other than equalization	Total revenues minus equalization transfers	Equalization transfers	Total revenues
	(1)	(2)	(1)+(2)	(3)	(1)+(2)+(3)
Simple average	14.6	125.8	140.5	46.3	186.7
Weighted average	31.4	64.0	95.3	28.5	123.9
Minimum	0.0	0.0	0.0	3.5	19.9
Maximum	930.3	8,520.3	9,158.1	448.1	9,184.4
Standard deviation	48.8	350.4	370.0	42.9	374.5
Coefficient of variation**	1.6	5.5	3.9	1.5	3.0
Count	1,834	1,834	1,834	1,834	1,834

Note: * 1 US dollar = 2.87885 nuevos soles. ** The coefficient of variation is computed as the ratio between the standard deviation and the weighted average.

Source: Own computations based on data from the Ministry of Economy and Finance, Peru.

sharing – those with equalization criteria – display a lower unequalizing effect.

The results in Table 9.3 are suggestive, but much more data-based evidence would be necessary in order to assess the overall equalizing effects of intergovernmental transfer programs currently implemented in Latin America. Per capita GDP might be related to the fiscal capacity of subnational governments, but that is not necessarily the case nor is it entirely clear how per capita GDP might be related to the needs of subnational public services.

With the limited data available, a complementary way to evaluate the equalizing effects of the intergovernmental transfer programs is to verify whether they have served to reduce the variability of per capita subnational revenues. In Table 9.4 we present a set of basic statistics about per capita revenues at the municipal level in Peru during 2008. Some municipalities collect no revenues, but there is one (Santa Maria del Mar, in Lima) that collects US\$930.3 per capita. The simple and weighted averages for the 1,834 municipalities are US\$14.6 and US\$31.4, respectively,

and the coefficient of variation is 1.6, which suggests that the variability of own-revenue collections among Peruvian municipalities is rather high. The second column describes the distribution of transfers different from the equalization program, including those from revenue-sharing schemes. The total amount of these transfers is more than twice the amount of own revenues, and with the simple average larger than the weighted average, it is implied that less populated municipalities tend to receive higher transfers per capita. Again, some municipalities receive no transfers, but others receive substantial amounts, mainly from the *canon*, *sobrecanon* and mining royalties which, as explained above, are distributed on a derivation basis. Note that the greatest amount of per capita transfers received by a municipality, US\$8,520.3 – transferred to the municipality of Ilabaya in Tacna, is 68 times greater than average per capita (total) revenues in the country, equal to US\$123.9. The coefficient of variation for these transfers is 5.5, indicating huge differences in the allocation of transfers across municipalities.

Even though we are not considering local expenditure needs in these calculations, it is safe to conclude that transfers (other than those for equalization) are creating major horizontal imbalances at the local level in Peru. The total amount of municipal revenues minus the equalization transfer has a coefficient of variation equal to 3.9, which is very large under any standard. On the other hand, equalization transfers (distributed through the FONCOMÚN program) also display a relevant degree of variability, but that variability seems to be helping to reduce horizontal disparities, given that the coefficient of variation is falling from 3.9 to 3.0. In any case, because of either its limited size or problems with its design (distribution criteria, and so on), horizontal disparities remain very large and the equalization program has had a limited equalizing effect in that country. Note that the minimum amount of per capita equalization transfers is greater than zero, which implies that even those municipalities receiving disproportionate amounts of resources from the revenue-sharing scheme are defined as beneficiaries of the equalization transfer program.¹⁹

The case of Peru is not representative of all countries in the region, but there are some common aspects that deserve to be emphasized. Latin American countries often understand the fiscal decentralization system itself simply as the sharing of central government revenues, without requiring the additional revenues to be properly linked to the level and type of subnational public expenditures (Martinez-Vazquez, 2010).

In general, the excessive reliance on revenue sharing and the corresponding small share of own subnational revenue collections have led to limited accountability and to a soft-budget constraint problem in the region (Ahmad and Brosio, 2008). In order to solve this problem we suggest

strengthening the link between revenues and expenditure by implementing equalization transfer programs that are capable of correcting the marginal cost of funds faced by the subnational governments. This solution must be accompanied by the introduction of adequate measures of expenditure needs and fiscal capacity, as well as by initiatives to improve own-revenue collections in the region (Martinez-Vazquez and Sepulveda, 2012).²⁰ In addition, revenues shared on a derivation basis should be reduced to a magnitude at which they do not prevent the equalization transfer system of correcting the marginal cost of public funds faced by the subnational governments.

4 THE ARCHITECTURE OF AN IDEAL INTERGOVERNMENTAL TRANSFER SYSTEM

A sound financial structure at the subnational level is essential for the success of the fiscal decentralization process. Unfortunately, despite extensive international practice and academic research on this issue, it is still unclear what the ideal structure of the intergovernmental transfer system should be. In this section we review the basic principles for structuring the intergovernmental transfer system and take a look at very simple alternatives to implement an efficient and fair subnational fiscal structure.

Different types of intergovernmental transfers are available to policy makers, but the proper choice is necessarily linked to the specific objectives that are being pursued. The literature distinguishes several possible objectives, among which the following may be the most important:²¹

- reducing vertical imbalances;
- ensuring national standards of certain public goods and services;
- financing development programs;
- correcting for positive and negative externalities;
- reducing horizontal imbalances; and
- enhancing fiscal autonomy.

Provided that subnational governments are generally not able to collect by themselves all the funds required to fulfill their expenditure responsibilities, any transfer from the central government to the subnational governments helps reduce any existing vertical imbalance. The main questions in this regard are: (i) what is the size of the vertical imbalance; and (ii) to what extent is the country willing and able to reduce that imbalance?²² Once the total amount of funds available for intergovernmental transfers has been determined, the specific allocation criteria can be chosen in accordance

with the other objectives that are going to be pursued. Each policy objective can better be served with certain types of intergovernmental transfers, and it is usually preferable to use a separate transfer program to pursue each single objective. This allows for clarity of purpose and design and facilitates the evaluation of particular transfer programs.

One of the most important objectives of intergovernmental transfer programs is to ensure that minimum quantity and/or quality standards are met across the national territory. This objective is very broad and it implies that subnational governments may not be given full discretion over expenditure decisions. In this sense, we can think of minimum standard requirements as a way to define delegated or non-discretionary responsibilities – or non-discretionary components within certain responsibilities – as opposed to own responsibilities where the subnational governments enjoy full autonomy or discretion over expenditure decisions.²³ In other words, these transfers may be conditional in nature. There are many possible examples, but two especially important cases are transfers for education and health, where the central government usually sets national standards and retains a great deal of control over subnational expenditure decisions. Other examples are the transfer programs for supporting pregnant women, children at risk, and the elderly.

Development programs can have national or subnational scope, depending on the design of the development strategy. Transfers in support of this objective are usually conditional on being spent on capital expenditures, but can plausibly be given for current expenditures as well.²⁴ The theoretical literature gives especial importance to the role of correcting externalities. Additional transfers, plausibly determined through matching schemes, can help to encourage greater expenditures of subnational governments in those functions with positive externalities outside the borders of subnational jurisdictions.

Once all revenue sources have been determined and the central government has transferred the resources necessary to attain national standards and development goals, then governments of the same level will display significant differences in financing abilities. These differences are referred to as ‘horizontal imbalances’, and are addressed through equalization transfer programs. Presuming that the central government has provided the funds necessary to fund all delegated functions, the need for equalization is fundamentally related to the financing of own-expenditure functions. As a consequence, equalization transfers should serve to enhance subnational fiscal autonomy, and thus they usually are defined as unconditional. Fiscal autonomy is a necessary condition for efficient subnational decisions, and therefore it is by itself considered as an objective of the transfer program. Provided that there is some degree of tax autonomy, with a sizable

unconditional equalization program in place, however, there is no need for any other transfer program to pursue the objective of fiscal autonomy.

All in all, the design of the transfer system can roughly be organized into four types of transfers to be applied sequentially. First, the central government should attempt to provide conditional transfers in amounts close to the cost of delegated functions, such that national standards of quality and quantity can be met by all subnational governments. Second, a different program of conditional transfers could be set in order to finance development programs, either of regional scope or as a part of local development initiatives. Third, matching grants, which are essentially conditional, could be provided in order to foster expenditures in socially desirable and sensitive services, including those with positive externalities.²⁵ Fourth, the equalization transfer program based on differences in expenditure needs and fiscal capacity acts as the balancing instrument for the whole system of subnational revenues. If defined as unconditional it allows for adjusting the amounts of discretionary expenditures, while the precise amount given to each subnational government also helps to bring the cost of public funds faced by each jurisdiction closer to the optimal level.

These transfers can be defined separately for any level of subnational government and for both current and capital expenditures. Of course, limiting the use of transfers to capital purposes makes them conditional, but such a broad limitation might still leave room for autonomous choices as well as for additional conditions in terms of specific functions and services (Herrero-Alcalde et al., 2010). Note that from a theoretical viewpoint, revenue-sharing schemes are simply not necessary, and that the only key components of the transfer system are the conditional transfers and the equalization program. Indeed, absent externalities it is possible to think of a situation where only these two types of program provide all the funds that subnational governments require in addition to their own-revenue collections.

The Architecture of Equalization Transfer Programs

Bahl and Bird (2008) argue that an intergovernmental transfer system capable of offsetting the dis-equalizing effects of subnational taxation is a precondition for a successful decentralization of significant revenue-raising powers. This is largely a non-controversial issue in the design of decentralized systems; however, most countries in Latin America do not have an equalization program in place, and the existing equalization mechanisms usually have very limited equalizing power. In the following discussion we briefly describe some of the most important concepts related

to the design and implementation of an effective equalization transfer program.

Equalization transfers are intended to provide subnational governments of the same level with similar opportunities to deliver public goods and services of comparable quality in spite of their dissimilar conditions. On the one hand, some of the dissimilar conditions can be observed on the expenditure side of the budget. Different governments are faced with different costs and even production functions, as well as with different needs of the population arising, for example, from age composition. The concept summarizing these factors is called 'expenditure needs', defined as the cost of providing a standard amount and quantity of public goods and services to the local community. On the other hand, on the revenue side of the budget governments are faced with different administration capacity, tax bases, compliance culture and behavioral responses to taxation. These factors determine that jurisdictions can differ in their ability to collect revenues to cover their expenditure needs. In this context, fiscal capacity can be defined as the ability of a government to collect revenues from the assigned sources at a given marginal cost and level of fiscal effort.

The difference between expenditure needs (EN) and fiscal capacity (FC) is equal to what in the literature has been called 'fiscal disparity' (FD):

$$FD_i = EN_i - FC_i$$

where the subscript i denotes any jurisdiction.²⁶ If the fiscal disparity of jurisdiction i is positive (negative) then its government has, under standard conditions, less (more) funds than required in order to cover its expenditure needs. In this context, horizontal imbalances might be defined as the differences in per capita fiscal disparities across jurisdictions, and the objective of the equalization transfer problem is the reduction of those differences.²⁷ In practice, however, equalization transfer programs around the world vary in terms of what their objective is (see Table 9.5). In some cases the equalization is based only on expenditure needs; in others only on fiscal capacity; and there are also many examples where both factors are considered.

By considering exclusively either expenditure needs or fiscal capacity one would implicitly assume that the other factor does not significantly vary across jurisdictions. This could plausibly be true; but it does not seem to be the case in Latin American countries where regional inequalities are pronounced and in most cases arising (to different extents) from both sides of the budget. Moreover, since one additional monetary unit of expenditure needs is equivalent to one monetary unit loss of fiscal capacity, then it is correct to consider both factors as equally important.

Table 9.5 Equalization goals, allocation factors and international practice

Goals	Factors	Country examples
Enable similar levels of service affordability	<i>Expenditure needs</i> indicators, or national expenditure standards	India, Italy, Nigeria's Federation Account, South Africa's Equitable Shares, Spain, Uganda's Unconditional Grant
Enable similar levels of fiscal resource availability	<i>Fiscal capacity</i> indicators	Canada's Equalization Grant
Enable similar levels of service at similar levels of taxation	<i>Fiscal disparity</i> = Expenditure needs – Fiscal capacity, or some other combination of need and capacity	Australia, China, Germany, Indonesia, Japan, Korea, Latvia, Netherlands' Municipal Fund, Russia, Uganda's Equalization Grant, United Kingdom

Source: Boex and Martinez-Vazquez (2007).

The implementation of an equalization transfer program can be structured in three steps. First, it is necessary to determine the size of the transfer fund. The total amount of equalization transfers should be, in principle, related to the excess of expenditure needs over potential revenues different from the equalization transfer itself. In practice, however, the size of the transfer fund depends more generally on the chosen funding system,²⁸ the availability of financial resources at the national level, and on political constraints. Although some countries attempt to almost fully equalize horizontal disparities (for example, Germany), typically the overall funds made available are insufficient to fully eliminate existing fiscal disparities.

The second step consists in estimating relative fiscal disparities. It is usually not possible to accurately compute the actual fiscal disparity of each subnational government. Instead, and depending on the quality of the information available, a country can rely on a number of methodologies to estimate expenditure needs and fiscal capacity in relative terms for all subnational governments.²⁹ In general, it is not recommended to base the estimation of fiscal disparities on historical data related to actual spending and revenues. On the one hand, historical budgets might have been poorly assigned, and thus not associated with efficient fiscal decisions. On the other hand, doing this would provide perverse incentives

because subnational authorities would easily learn to spend more and collect less in order to increase transfers in the future.

There are several methodologies available for estimating expenditure needs; unfortunately, the most attractive options are also the most information intensive and require data that are usually unavailable in developing countries. A feasible and effective option may be the computation of per client expenditure norms adjusted for cost differences across jurisdictions. Under this methodology we only need to determine the total amount of resources to be spent in the most important subnational functions or programs, and then compute the norm by dividing this amount by the total number of clients that are intended to receive the benefits of the program. The expenditure norm might be adjusted to reflect cost differences across jurisdictions, and it corresponds to a nationwide per client expenditure need. The client-based expenditure norm may have a prescriptive or suggestive character, but in any case it facilitates the national debate about fiscal policy reforms.

The estimation of fiscal capacity determines how much revenue each government can raise from its own sources with a standard level of tax effort (and allowing for all other transfers received different from equalization). When subnational governments have some degree of discretion over tax sources, the standard level of effort is sometimes represented by the effective tax rate, defined as the ratio of revenue collections over the tax base. In general, however, what matters is not only the tax rate but also the marginal collection costs faced by each local government. From an optimal taxation perspective, and in order to minimize the costs of the tax system, the marginal cost of public funds collected must be equalized across all governments of the same level. Moreover, since the resultant measure of fiscal capacity is based on equal conditions for all subnational governments of the same level, then it can be considered as both fair and efficient.

In practice, however, the estimation of fiscal capacity in developing countries is challenging due to limited data availability. There are methodologies, such as the representative tax system, that provide appropriate approximations of fiscal capacity, but the data requirements may be out of reach for most Latin American countries.³⁰ More practical solutions might be to consider, at least temporarily while the information systems are developed, either averages of historical collections, or proxies for the size of the tax bases assigned to the subnational governments. The first of these alternatives is not ideal because historical revenues might not be obtained under fairly equal and efficient conditions, but at least the use of an average of several years would reduce the perverse incentives on revenues and expenditure decisions. The second methodology is preferable,

but good proxies such as the GDP in the jurisdiction are usually unavailable. The implementation of this methodology might be more feasible in a second stage of the reform, when more and better data are available to subnational governments.

The third step in the implementation of an equalization transfer program is to compute the amount of transfers to be assigned to each subnational government. If the fiscal disparity of a government is positive then its expenditure needs exceed its fiscal capacity and a transfer will be necessary in order to improve its fiscal situation. On the contrary, if the result is negative then the municipality will have more resources than it needs (according to the established standards) and no transfer will be justified. Excluding those subnational governments with negative fiscal disparities from the benefits of the equalization transfer program is a simple and effective way to improve the equalizing power of the equalization transfer program.³¹ Equalization transfers can be assigned simply in proportion to the size of the positive fiscal disparities, or by prioritizing the governments with the greatest fiscal disparity per capita.

Finally, it is important to note that equalization transfers are not necessarily restricted to current expenditures. The expenditure responsibilities assigned to subnational government require both current and capital expenditures, and as such autonomous efficient decisions over a flow of capital financing might also result in economic gains from greater allocation efficiency. This is a rather unexplored topic in the literature, and one where international experience is still not developed. A good example is given by the Regional Compensation Fund, the equalization transfer program for capital expenditures at the regional level in Peru. In reality, however, the implementation of this program is more an attempt to constrain the use of the equalization funds than an innovative solution to the problems of improving equity and efficiency. Indeed, in Peru regional governments do not receive unconditional equalization transfers, and at the local level the governments are not given equalization transfers for capital spending.

In a recent paper, Herrero-Alcalde et al. (2010) suggest a methodology for a new capital transfer program for Spanish autonomous communities, where a portion of the transfer is given with the objective of equalizing the ability of governments to regularly improve and maintain their stock of capital, and another portion is intended to offset historical differences in the accumulated stock of capital. This is a new area of research that offers alternatives to decentralized countries to improve the allocation of the available funds among subnational governments for capital investment purposes.

5 CONCLUSIONS

Latin American countries have long been involved in fiscal decentralization reforms, but in general they have not yet come up with efficient arrangements for subnational government financing. Some of the main problems in the region are the excessive dependency on revenue-sharing arrangements, poor revenue collection performance at the subnational levels, and inadequate or unimportant equalization schemes. This situation has weakened the accountability mechanisms and the perceived linkages between tax and expenditure decisions.

The fiscal decentralization literature describes some of the necessary conditions for a well-functioning subnational fiscal structure, but it is rather ambiguous regarding its composition and the extent to which revenue-sharing schemes might be used without distorting the incentives faced by subnational governments. In this chapter we provide a novel analysis of the problem and conclude that revenue sharing should be used, if at all, to finance only non-discretionary (or delegated) expenditure functions. Own (discretionary) expenditure functions, in contrast, should be associated with an efficient (positive) marginal cost of public funds, which can plausibly be set in a combination of own-revenue collections and a well-designed equalization transfer program.

Our analysis suggests that Latin American countries might significantly improve their decentralization systems by reducing their reliance on revenue-sharing schemes and expanding and improving the design of sizable equalization transfer programs. These programs can help reduce horizontal imbalances and, when combined with significant own-revenue autonomy, provide subnational governments with the right incentives to spend efficiently and develop their own tax collection capacity.

This chapter also provides general guidelines on how to proceed with the design and implementation of equalization transfer systems in Latin American countries. Sophisticated methodologies for the computation of expenditure needs and fiscal capacity might not be feasible due to limited data availability, but useful good alternatives exist that can be readily implemented in the region.

NOTES

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- 1. We follow a common practice in the literature and use the term 'subnational' to refer to all government units under the central (or national) level. We distinguish two

- subnational levels of government: the intermediate or regional level, which in Latin America may also be said to consist of states, departments or provinces; and the local or municipal level.
2. The minor importance of own revenues and the absence of equalization transfers might have a *common origin*. In particular, heavier reliance on own revenues typically comes together with great disparities in the economic base and thus makes the introduction of an equalization transfer program much more necessary.
 3. Oates (1999, 2006) offers updated discussions about the gains and challenges of fiscal decentralization reforms.
 4. McLure and Martinez-Vazquez (2004) and Shah (2004) provide overviews on the international practices in expenditure assignments.
 5. Another important aspect to be considered is the decentralization of tax administration. Local government accountability may be enhanced when local governments administer and enforce their own taxes (Martinez-Vazquez and Timofeev, 2010).
 6. Subnational borrowings are an additional financial source for subnational governments, but in practice few countries, most of them developed, have been able to extend successfully the use of financial debt among subnational governments. In developing countries it is common to observe that only the capital and a few other large municipalities have gained access to private credit markets.
 7. Some general rules of thumb have been provided. One is that autonomous revenues should be sufficient to finance the expenditure responsibilities of the richest subnational governments. In the following discussion we shall see that even though this can be a good approximation, it can fall short of typifying an optimal assignment of revenues.
 8. Estimating the size of the vertical imbalance is a complex task. As argued in Canavire-Bacarreza et al. (2010), any estimation of the vertical imbalances requires, among other things, an explicit methodology for estimating expenditure needs (corresponding to the current expenditure assignments) and estimates of own-revenue capacity and all types of transfers. In practice, the decision about the actual amount of intergovernmental transfers tends to rest more on political than on technical considerations (Bird and Tarasov, 2004).
 9. Strictly speaking, the label 'own' revenues should be reserved for those taxes for which subnational governments have some control over the rates or the tax base; or at least over the final amount of revenue collections. By definition, all forms of revenue sharing are excluded from that category.
 10. Similarly, Smart (1998) argues that (equalization) transfers reduce the marginal cost of funds for subnational governments.
 11. According to optimal taxation theory, subnational revenues should be assigned in such a way that the marginal cost of public funds is equalized across levels of government and governments of the same level. See, for instance, Dahlby and Wilson (1994).
 12. In Section 4 we shall discuss the objectives and design of equalization transfer programs in more detail.
 13. Although the presence of vertical imbalances is rather obvious, their actual extent is unknown due to the lack of estimates of the expenditure needs and fiscal capacity of the different levels of government in each country.
 14. This section draws partially on Martinez-Vazquez (2010), who offers an exhaustive review of government financing practices at the local level in Latin American countries.
 15. Jiménez and Podestá (2009) provide a comprehensive overview of intergovernmental transfer systems in Latin America and emphasize the volatility of the central taxes shared with subnational governments.
 16. Higher fiscal capacity calls for fewer transfers, but implementing a downward adjustment of the transfer amounts can be technically challenging or politically difficult. Theoretically, there would not be any problem if the proxies used to account for expenditure needs are negatively (and perfectly) correlated with fiscal capacity, but that would rarely be the case.
 17. Goñi et al. (2008) describe the extent of individual inequalities in the region and discuss the causes of the poor performance of redistributive policies.

18. The coefficient of variation is computed as the ratio between the standard deviation and the simple average of per capita GDP.
19. Of course, the equalizing effect of the program could easily be increased by excluding these municipalities from its benefits, but this has not been done yet.
20. A natural consequence of incorporating fiscal capacity into the equalization formula would be that those subnational governments better able to cover their expenditure needs would be excluded from the benefits of the program. This means that the available funds can reduce horizontal imbalances more effectively because more resources would be available to the jurisdictions with greater fiscal disparities.
21. The literature on intergovernmental transfers is extensive. Introductory expositions can be found, for instance, in Bahl and Linn (1994), Bird and Smart (2002), Schroeder and Smoke (2003), Boadway (2007) and Martinez-Vazquez and Searle (2007).
22. There is no single best way to measure vertical imbalance, but most of the measures used look at what share of subnational government responsibilities cannot be financed with own revenues. Clearly, how well the vertical imbalance is reduced depends on how the expenditure needs of subnational governments are defined. For a given set of expenditure standards, the country may be willing or able to satisfy only a part or all of those expenditure needs. The lower the standards defined for the expenditure needs the easier it becomes to reduce the vertical imbalance. Thus the existence and measurement of vertical imbalance depend critically on the quantification of expenditure needs and the extent of revenue autonomy at the subnational level.
23. In some countries the minimum standards are notional (as opposed to compulsory) and they are only employed for budgetary computations. For instance, minimum standards can be implicitly defined in the estimation of expenditure needs in an equalization formula, and subnational governments can employ the received funds without any conditionality. This is the practice, for example, in Ukraine (Martinez-Vazquez and Thirsk, 2011).
24. Searle and Martinez-Vazquez (2007) offer an extensive discussion on conditional or tied grants.
25. Creating disincentives for certain expenditures with negative externalities would require economic sanctions, which might be implemented, for instance, as a reduction of equalization transfers.
26. Boex and Martinez-Vazquez (2007) and Dafflon (2007) provide surveys of alternative definitions of fiscal disparity, most of which are directly related to the concept of expenditure needs, fiscal capacity, or their combination.
27. Fiscal disparities are more easily defined in per capita terms for comparability purposes.
28. The funding rule could be a revenue-sharing scheme or left as an ad hoc decision to be determined in the annual national budget. Predictable and stable sources of revenues are preferable because they provide more certainty for subnational budgets.
29. A revision of the methodologies described in the literature can be found in Boex and Martinez-Vazquez (2007). See also US ACIR (1986, 1990, 1993) for more detailed discussions on fiscal capacity estimations.
30. A description of this methodology can be found, for instance, in US ACIR (1993).
31. Under a 'fraternal' (or Robin Hood) system like the one used in Chile, the pool of funds would be fed with contributions from those jurisdictions with negative fiscal disparities. This is a way to perform faster equalization across jurisdictions but is not always politically acceptable.

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10. The intergovernmental allocation of revenue from natural resources: finding a balance between centripetal and centrifugal pressure

Giorgio Brosio and Juan Pablo Jiménez

1 INTRODUCTION

This chapter analyses the allocation of rents from non-renewable natural resources, hydrocarbons and minerals, among levels of government in Latin America. This is a crucial issue not only from the point of view of ensuring good governance at the subnational level, but also from the necessity of avoiding political conflict and strains on national unity. Latin American countries have accommodated fairly well regional claims on natural resources. However, things could change for the worse as a few countries, notably Bolivia (Plurinational State of) and possibly Brazil in the future, experience acute conflicts over assignment of natural resources.

Rents from natural resources reach substantial levels in many Latin American countries (Table 10.1, below). Some of these countries are among the world's most important producers of hydrocarbons and minerals. More precisely, non-renewable natural resources in Latin America contribute to more than 20 per cent of total exports in a large set of countries including Bolivia (Plurinational State of), Chile, Colombia, and Mexico. In Venezuela (Bolivarian Republic of) oil accounts for almost 80 per cent of total exports. Trinidad and Tobago follows closely, with almost two-thirds of exports coming from oil. As a consequence of this economic role, rents appropriated by government represent an important share of public revenue.

Similar to other parts of the world, a salient characteristic of non-renewable resources production in Latin America is the huge geographical concentration of production.¹ Oil and mineral resources are frequently discovered and exploited in sparsely populated areas, creating potentially

huge horizontal imbalances, if rents were assigned exclusively, or mostly, to subnational governments.

Obviously, large imbalances across subnational jurisdictions stimulate political pressures and provide theoretical grounds for national equalization of these resources. At the same time, sparsely populated regions exercise little weight in national politics, particularly in weak democracies with poor mechanisms for checks and balances. This increases their perceived risks of having to bear the costs of exploitation without reaping the benefits, if entitlements to national resource revenues are transferred to the national government. In general, when local jurisdictions have little power at the central level, they increase their demands for decentralization of powers and resources.

As we shall see, the Latin American case is of notable interest from the point of view of the fiscal and institutional mechanisms that are used for sharing the rents between levels of government and for controlling their expenditure. Recent decentralization trends have expanded the institutional role of subnational governments and made them more vocal in demanding a share of the revenues generated within their jurisdiction. Increasing demands to share the benefits of natural resource exploitation are also coming from territories whose population has distinct ethnic characteristics, such as the Andean highlands. At the same time, local and indigenous communities fear the negative impact on their environment that could derive from exploration and exploitation activities. Latin American countries are also characterized by huge regional economic gaps. When not adequately managed and allocated – that is, where national governments prove incapable of harmonizing competing claims between themselves and their regions – natural resources could increase political tensions and exacerbate regional disparities.

This chapter raises some issues and tries to answer the following questions: what are the merits and the risks involved by sharing the rents from natural resources with subnational governments? Are there principles or analytical arguments in favor of it? What are the peculiarities of Latin American systems for rent sharing? What is the equity impact of sharing on the Latin American continent? What are the main ways for improving sharing systems? How can production expansion and environmental concerns be harmonized?

The chapter is organized as follows. Section 2 is analytical, but policy oriented. It explores the issues connected to the sharing of rents from natural resources among levels of government and gives some policy indications on how to perform the rent sharing based on the economic theory of the remuneration of production factors. It also considers the interplay between intergovernmental allocation of the rent, on the one hand, and

assignment of environmental responsibilities, on the other. Essentially, the policy indications stress the consideration that policy makers have to give, when bargaining over shares, to the effective responsibilities carried out by various levels of government, while arguments of principle or a priori should be given very little weight. Section 3 is empirical and analyzes the issue of intergovernmental sharing in eight Latin American countries endowed with oil, gas and minerals with particular emphasis on Argentina, Bolivia (Plurinational State of), Colombia, Ecuador, Peru and Chile. In the last case, however, no sharing has been introduced up to the present time. Section 4 concludes.

2 THE ANALYTICS OF INTERGOVERNMENTAL SHARING

To simplify the problem, no distinction is made in the text that follows between the level of government that taxes the rent and the level that receives the revenue, that is, sharing of taxing powers equals the sharing of revenue. We consider two levels of government: federal/central and regional. There are hence three alternative solutions: federal/central taxation, taxation of natural resources by producing regions, and taxation of rents by regions where the owners are resident. This last alternative is, however, mostly theoretical with almost no implementation in the real world. Therefore it will not be explored here.

Legal/Constitutional Discipline: Ownership versus Taxation and Regulatory Powers

One could naively imagine that the intergovernmental sharing issue could be settled for good by legal and especially constitutional mandates. However, this is not the case in the real world. Constitutions are frequently silent on the issue. In other cases they leave it unsettled by assigning ownership to the people, as in the constitution of Bolivia (Plurinational State of). Most importantly, ownership is not a decisive factor for the allocation of the rents. Ownership defines the entitlement to receive rent and, at the same time, it defines the competence to manage, control and monitor the use of the resources essentially through the granting of concessions to exploiting firms. As a consequence, the entitlement to receive the rent can be thwarted by constitutional mandates referring to taxation and other policies. More specifically, the assignment of taxing powers to a level of government that does not own the natural resources allows this government to extract to its benefit part or all of the rent. This can also

be done through tax instruments that are not directly related to natural resources (such as corporate income tax). A similar result, appropriation of the rent without ownership, can derive from the assignment to a level of government – or even from simple use, even without explicit assignment – of other, in particular regulatory, policies, such as for example the regulation of the domestic markets and/or external exchanges. The rent can also be assigned to consumers through ceilings on domestic prices, quotas on exports and, as we shall see for Argentina, export taxes.

Argentina, as will be explained in more detail later in this chapter, provides a convenient example in support of the assertion that it is not ownership, but rather taxation that determines effective rent sharing. Article 124 of the 1994 Argentine Constitution stipulates that the provinces have the original dominion over the natural resources existing in their territory. Using this constitutional recognition of their rights, the provinces are presently negotiating and signing contracts with firms. However, the federal government retains the power, derived from an ordinary law, to regulate the sector. More importantly, it has also, by constitutional mandate, the power to regulate the domestic market and internal prices, in addition to the exclusive power on import and export taxes and the secured access to company profit taxation (although it does not use it specifically for extracting rent from oil and gas). As a result, the federal government is able to extract to its benefit a share of the rent from natural resources that is much larger than that going to the provinces.

Consequently, one has to look for other arguments to find guidance concerning the sharing of the rent.

Economic Theory

There is quite a substantial branch of economic literature dealing with the allocation of rent among levels of government.² Most of this literature has a prevailing normative flavor and stresses the importance of considering both the microeconomic and the macroeconomic impact of the assignment. In general, the conclusions arrived at in this literature derive from the consideration of how the rent is likely to be spent by the beneficiary government.

The theory maintains that under reasonable assumptions about the expenditure of the rent, central taxation and appropriation is superior on efficiency grounds to other solutions. This is because the combination of federal taxing and spending policies is more likely to introduce geographical neutrality in the allocation of production factors. Furthermore, with regional taxation and appropriation of the rent by regional governments, fluctuations in international prices and in volumes may place excessive

strains on essential public spending during downturns, and waste and unsustainable spending during periods of rising prices and volumes.

This literature is silent about the total share that should accrue to the government, be it central or regional, and concentrates on suggestions on the relative shares of the two levels of government.

Mobility of Factors

This is the main efficiency-based argument used against the assignment of economic rent to subnational governments. A simple illustration (drawn from Boadway and Flatters, 1982, 1993) refers to inefficient migration of labor. A country has two local jurisdictions: A and B. The population of the country is fixed and, for the sake of simplicity, it comprises persons of working age, homogeneous in skills and preferences and perfectly mobile between A and B. Mobility is induced only by economic considerations. More specifically, people maximize their comprehensive income, which is salary, minus the taxes paid to the local jurisdiction, plus the value of the goods and services provided locally. Individuals will migrate to the jurisdiction where comprehensive income, for any reason, is higher.

Initially, no rent from natural resources is collected. Local jurisdictions provide goods and finance them with benefit taxes. The net fiscal benefit, equal to the difference between the value of the locally provided good and the taxes paid to finance them, does not vary across jurisdictions. In this situation, there is no fiscal inducement to migrate and the location of individuals is determined only by the wage they receive. In turn, the wage is determined by the value of the marginal product of labor. Individuals will thus distribute themselves between the two jurisdictions so as to equalize the marginal value of product.

Now consider natural resources. These are discovered and exploited in A, which collects them. The amount of the taxed rent can be used to enhance the quality of the publicly provided goods, or to reduce the taxes paid for them. Individuals will move from B to A attracted by a higher net fiscal benefit. Under the pressure of new migrants, wages will diminish until equality is restored between comprehensive incomes. However, this leads to an inefficient distribution of labor, since the marginal product is lower in A than in B. In fact, to accommodate more migrants, jobs with lower marginal product have been provided.

This means that redistributing individuals from A to B could increase the total national product of labor. This could be obtained, for example, by centralizing the collection of the rent and by using it for the financing of national public goods, or for distributing it in equal per capita amounts between A and B, as suggested by the theory. In practice, resource-rich

regions could be tempted to start inefficient industry attraction policies, by using their rent.

There are very few estimates of the efficiency losses associated with movements of individuals and capital towards those jurisdictions that are most advantaged with regard to natural resources. Mieszkowsky and Toder (1983) have calculated for the seven American states with significant revenue from natural resources, the welfare loss that could derive from misallocation of labor and capital if their entire energy revenue were used for subsidizing alternatively labor and capital. According to their evaluation the 'efficiency losses associated with migration of capital and labour to energy producing states may, on balance, be small' (p. 89).

The magnitude of the loss depends on migration elasticities,³ which depend on region-specific factors. For example, migration elasticities in Alaska are much lower than in the other American states, and also in Canada they seem to be quite low, according to recent studies.⁴

The relevance of the factor mobility argument should be even lower for Latin American countries, where most natural resources are located in very remote, and sometimes even inhospitable, areas.

The Theory of Factor Prices and Distribution

The standard economic theory on factor prices and distribution is, as mentioned above, possibly the economic argument with the highest potential value in terms of policy indications (see Scott, 1975 for an illuminating exploration). To analyze the issue it is useful to turn briefly to the basics of rent definition and formation and to explore the implications.

Rent is the return on a resource whose total supply is fixed and it is measured as the difference between the revenue derived from the sale of the resource and all the economic costs needed for its production. When total costs do not add up to the value of the production, a rent is generated. Rent is in fact a surplus value. It accrues to the owner of the resource, unless governments use their sovereign power to extract for themselves all, or part, of the rent. Another way of defining it is to say that the rent is the payment to the owner of a factor of production that does not alter its economic behavior.

Production involves both exploration and exploitation activities. Costs consist of remunerations to all production factors needed for the production. They include typically labor, material and non-material inputs and capital. The cost of capital also includes a premium for risk that in the case of mining and oil production can be substantially high, due to the uncertainties about the effective size of mines and oil fields, about trends in

costs and, most of all, about fluctuations in the price of the commodities. Figure 10.1 (below) lists the main categories of these costs.

Costs are opportunity costs, meaning that remunerations of production factors are determined in the same way as if they were used in the best available alternative. This is why the rent cannot alter economic behavior whatever happens to it, that is, however it is appropriated.

If the government-provided services contributed effectively to the production, they have to be considered as additional production factors, or as inputs. Examples are roads and communications, schools and health services for those employed in the oil fields and mines, and their families. In other words, all services that oil firms would have to provide (also through higher wages) if government activities were not to be considered. Their cost has to be subtracted from the final price. Governments are entitled to a share of the final price not because they have a sovereign right to the rent, but because they are partners in the production. Payments to them can be calculated very precisely on the basis of the value of these services. This will also determine the individual shares of the central and the regional governments. The relative importance of the costs refunded to the central or to the regional governments will depend on the extent of responsibilities assigned to them. A much decentralized regional government with extensive expenditure responsibilities will receive a large part of the value of the production, independently of its claims to receive a large part of the rent.

Calculation of the costs is not easy. The difficulties also derive from the short duration of natural resource exploitation. First comes the depletion problem: when oil fields or mines are exhausted, the specific infrastructures built for them by governments will have no more use and thus no more value. They are just sunk costs. These costs have to be added to the other costs already listed and refunded to the level of government that has provided the infrastructure. The second problem applies to general infrastructure, such as schools and health centers, and derives from the depopulation that occurs when resources are depleted: workers move with their families to other areas. These workers no longer contribute to the demand for public services or, most of all, to finance them. By moving, they may create new costs to their destination governments by demanding services and thus creating a demand for new infrastructure. The remaining population cannot be held responsible for assuming these costs. The conclusion is that also in this case the cost of infrastructure for providing services to the population that has migrated to an oil field or mine area does not form part of the rent, has to be added to other costs and has to be funded to the government level that has actually provided the services and borne the costs.

The larger the level and the area of government that provides the service and the infrastructure, the easier would be the problem of refunding the costs, because compensation between emigrating and immigrating areas would be easier and alternative uses of the infrastructure are more likely to be found.

Lastly comes the use of, or the damage done to, the environment. Exploitation of natural resources involves, in addition to the depletion of the resources, the use of the environment.

We have to distinguish between two polar cases and see their implications concerning the rent. In the first case, the situation that should prevail, at least in principle, the property rights are perfectly defined and the exploiting firms have to comply with government policies. The government (whose level has still to be defined) sets the standards (regulatory approach), or determines and levies the environmental tax, or, and more unlikely, determines and pays a subsidy to the companies that are exploiting the natural resources. In this case, if the companies comply with the standards or pay the tax, they will have an additional cost to be added to the costs strictly related to the production and to be recognized by them. The use of the environment becomes just another production factor and another cost for the firms since they do not own the environment.

In the second case, the property rights are not defined and the standards are not issued, or not enforced. Firms use, or rather damage, the environment and the cost will be borne by society at large. This is the notorious case of the Delta river in Nigeria or of Amazonian regions of Ecuador, where the environment has been damaged by oil spills, and leakages of gas from the pipelines.

In this case, society has to be refunded the cost it has to bear because of the environmental damage. The compensation, which is paid out of the rent, will not correspond to the expenditure that would have been necessary to comply with the standards or, alternatively, to the forgone tax revenue, but should be related to the amount of damage.⁵ But, who is entitled to this compensation? More precisely, which entity, be it individuals or levels of government, is entitled to receive the payment? In principle, it should be the individuals, who at the end bear the burden of environmental damage – most likely, those locally affected by the environmental impact of mining and other natural resource exploitation. However, since compensation is in principle targeted to repair the damage, this implies collective action and hence the choice of the level of government, be it national, regional, or local, that will effectively undertake the reparation work.⁶

This is not the end of the story, since the amount of the environmental costs and of their refund depends on the interaction between the assignment of responsibility for setting the environmental standards (or for

Table 10.1 Combinations between the assignment of environmental responsibility and the assignment of the environmental rent

		Responsibility for defining and enforcing standards	
		Central	Local
Allocation of the environmental related rent	Central	Case 1	Case 2
	Local	Case 3	Case 4

setting the tax, or the subsidy) on the one hand and on the assignment of the natural resources-related rent, on the other. There are four possible cases, shown in Table 10.1, that combine the assignment of the responsibility for defining and enforcing standards and the assignment of the environmental-related rent among the central and the local level of government.

In Case 1 (upper left) rent is allocated to the central government that is also responsible for the determination of the environmental standards. In this case, since most of the environmental impact is felt at the local level, the central government will have few incentives to impose strict standards and/or to enforce them. The damage to the environment could be substantial, since the incentive for the central government is to receive a large rent.

In Case 2, the determination of environmental standards is the responsibility of the local government, while the allocation of rent is totally centralized. Here, the local government is likely to impose strict limits on natural resource exploitation, since it has every incentive to keep the environment clean and no interest in the rent, because it has no access to it.⁷

In Case 3, the allocation of rent is decentralized, while the determination of the environmental standards is centralized. In this case, the central government may have incentives to apply strict standards, if there is national awareness regarding the need for a clean environment.

In Case 4, both the standards and the allocation of rent are determined by the local government, which will have to face a trade-off between a cleaner environment and a larger rent.

Summing up, the cost of maintaining a cleaner environment and its absorption of the surplus depends on the level of standards. In turn, the level of standards is determined by the intergovernmental assignment of the rent, in addition to the environmental preferences of the responsible government. Figure 10.1 summarizes the results of the factor use, or distribution, theory. Both rectangles show the total value of natural resource production. The rectangles are divided in slices, each of them referring

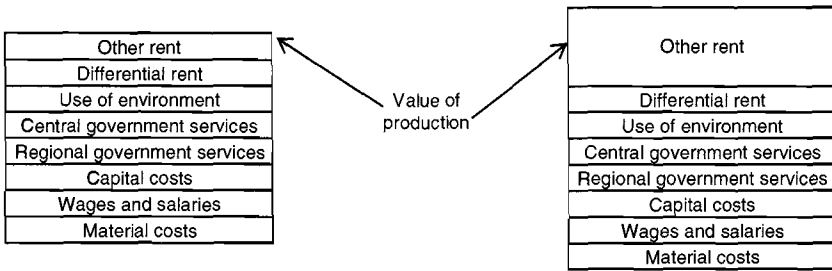


Figure 10.1 The process of determination of the rent from natural non-renewable resources

to one of the various categories of costs that have been singled out. It is possible, but unlikely under the prevailing circumstances, that the sum of these costs will be big enough to absorb all the value of the production and that no rent will be created.

The most likely case is that the absorption of value by costs is not complete, leaving a rent to appropriate. In both cases the use of the factor theory allows considerable progress to be made on the issue of the allocation of the rent by clarifying the entitlements of governments. More precisely, it makes a clear case, based on sound economic theory, for paying part of the value of the production to governments for the services they provide and not on the basis of a sovereign right to the rent, or of other abstract principles.

We can continue with the allocation of the 'true' rent – that is, the share of revenue exceeding the production cost. The rent has two components. The first is the differential rent that is created by all non-marginal producers.⁸ The second is the other rent, which mainly originates from the fluctuations of the price of the resource (it could in principle also originate from fluctuations in costs).

Both rents have to be appropriated by someone, be it the private owner (when he/she exists), or by the government, giving rise to the problem discussed in the normative literature of the appropriate level of rent that has to be extracted by government and of the sharing between levels of government.

Arguments Advanced by the Normative Theory against Assignment of Rent to Subnational Governments

As mentioned before, the main arguments against assignment to subnational government point to the difficulties that subnational governments have to face when managing, and more specifically, when spending the

rent. While surely important, these arguments are not general enough to make a strong, decisive point against assignment to subnational governments, especially when the latter are large in terms of population and have capacity.

Volatility of Revenue

The first and one of the strongest arguments against assignment of natural resource revenue to subnational governments is volatility. The reason is that the central government is better equipped than its subnational units to face revenue fluctuations, considering its access to a wider range of financial instruments. When revenue diminishes abruptly, subnational units have to resort to expenditure cuts, thus endangering even the provision of minimum levels of essential services, such as education and health, when these are decentralized. During upturns in prices, subnational jurisdictions would be literally awash with money they are unable to spend efficiently, or have to enter into spending commitments that might not be sustainable in the longer term.

Another, somewhat more elaborated, way of arguing about volatility is that price fluctuations make non-renewable resource rents a 'non-reliable' source of revenue. The consequence is that funding 'reliable' expenditure, such as salaries and other current expenditures, with volatile revenues carries higher risk for which local governments are not equipped, implying higher cost.

However, the argument loses much of its strength when rent is used for investment, or debt redemption. Reliability would not matter in these cases. Hence, and *de facto*, the argument depends on the size of rent, and on its regional distribution: a small region cannot spend huge rents only on investment, but a large region may be able to. More generally, large regions could, in principle, solve the risk problem, as well as the central government. The obvious example is that of Alberta and Alaska. They are subnational governments, but with a large and sophisticated enough economy to allow them to develop financial institutions sufficiently specialized to manage risk with a capacity not inferior to that available at the federal level. The same would apply to the big cities of Latin America.

Misspending of Rent

Substantial efficiency losses can also derive from misspending. In turn, misspending can derive from insufficient absorption capacity and/or from corruption. The geographical concentration of rent can make its amount disproportionate to the absorption capacity for subnational government

units (sometimes, it is even disproportionate to the absorption capacity of the national government). Non-economic investments can be made, sub-national bureaucracies may indulge in slack and the capacity for controlling costs may decline. While these problems are usually context specific, that is, the central government is not inherently superior in administering funds, the sheer size of revenue may constitute a greater challenge for smaller governments. This is especially true in developing countries with generally weak or incipient traditions of local administration.⁹ Again, insufficient absorption capacity is not an argument that can be used in general terms against subnational assignment, because it depends on context-specific factors.

Corruption

Similar arguments can be made concerning the evaluation of the likely impact of corruption. Prevalence of corruption at either the national or the local level is context specific. It depends, among other things, on the level of information, the peculiarities of the political system, administrative traditions, the homogeneity of local jurisdictions, and the sectoral composition of expenditure at the national and local levels.

However, concentration of resources within a small jurisdiction may endanger rent-seeking or corrupt behavior. Again the argument depends on the size of local government and on the size of the rent.

Nationwide Equalization of Revenue from Natural Resources

None of the previous arguments offers a compelling reason against the assignment of natural resource rent to subnational governments. At the same time, the prevalent concentration of these resources in only a few areas produces an overall inequality in the distribution of revenue to subnational governments that modern governments find difficult to accept. As a consequence, most countries try to reduce the disparities in local revenues created by local assignment of natural resource revenues.

There are two main alternative systems for equalization (see Brosio, 2003): (i) bringing natural resource revenue within the general equalization framework, as in Australia and Canada; and (ii) using a distinct equalization system for natural resources, as in Colombia.

General Equalization Systems

These consist of a system of general grants financed from all revenue sources. In principle (and, in practice, if there are enough resources), general

equalization systems could entirely compensate for the vagaries of the geographical distribution of natural resources. However, when they are hugely concentrated: (i) full compensation may be no longer sustainable, because either it exerts an excessive strain on central government resources, or it has to bring in such a severe reversal of the pre-equalization agreed subnational shares as to render it politically unacceptable; and (ii) the implementation of the system has to solve a few difficult technical problems.

With open-ended systems, such as in Canada, where there is no upper limit to the total amount disbursed by the federal government, the finances of the latter may be submitted to severe strain when the system is called on to equalize huge disparities in revenues (Courchène, 1979 and 1998).

If, following a huge increase in the price of natural resources they exploit, the difference between the richest provinces and the poorest ones were to increase, the central government would have to expand the total amount paid for equalization. This is exactly what happened in Canada in the 1970s with the first oil shock. The huge increase in oil prices at that time bloated the amount of revenues in Alberta, where practically all oil production was concentrated. Since the federal government had access to only 10 percent of oil revenues, sticking to the formula would have implied financing equalization payments with its own tax revenues, thus having to face the choice of either incurring into deficit, or squeezing its own expenditure. Furthermore, the gap between Alberta and other provinces became so large that even the rich provinces, such as Ontario, became beneficiaries of equalization transfers, although in the end they were financed through the use, by the federal government, of the tax base located in their jurisdiction.

Over the years, the Canadian governments made basic corrections to the formula such as: (a) the exclusion of Alberta's tax base from the equalization standard; (b) the outright exclusion from equalization payments of those provinces, such as Ontario, that have a non-oil tax base above the national average; (c) the exclusion of a share of the oil tax base from the equalization system; and (d) the introduction of a ceiling to the total amount paid for equalization. Obviously, all these corrections implied a curtailment of the equalizing impact of the mechanism.¹⁰

Separate Equalization Systems

These systems are generally funded only by natural resource revenues and do not consider other sources of revenue. They amount to reserving a share of total national revenue from natural resources to the non-producing, or

little-producing, jurisdictions and to distribute them according to either the distance of their resource revenue from the national average, or other need- or revenue capacity-related indicators. In Colombia, for example, the *Fondo Nacional de Regalías* (National Royalties Fund) is allocated on the basis of development projects presented by subnational jurisdictions (see below). The idea behind its distribution in Colombia is to allow non-producing jurisdictions to share some of the growth opportunities created by the exploitation of natural resources.

The equalizing impact of separate mechanisms derives, as in the case of the general equalization systems, from the relative share of natural resource revenue granted to the producing and non-producing jurisdictions and their relative share of total population. The effectiveness of equalization is imperilled by the non-consideration of non-natural resource sources of revenue. Thus, a rich (with high non-natural resource tax revenue) department can receive the same amount of resources as a poor department, if the difference between natural resource revenue and the national average happens to be the same in both departments.

The main advantage of these systems is the fact that they are closed-ended; that is, the total amount of the pool to be redistributed is restricted to natural resource revenues and thus does not affect other government revenues.

Separate equalization systems are also used to equalize revenue among indigenous communities. For example, in Australia, the Federal government pays into the Aboriginal Benefit Account¹¹ an amount of money equal to the royalties paid to the Northern Territory and the Federal government from mining on Aboriginal land.

3 SHARING OF NATURAL RESOURCES IN LATIN AMERICA

Importance of Production and Public Revenue

An important point is that Latin America has traditionally been a key source of natural resources for the world and thus, commodities represent a significant share of total exports for the region.

The importance of natural resources in the economy is reflected in their contribution to the revenue side of the public sector, as shown in Table 10.2. In Venezuela (Bolivarian Republic of), revenues from oil account for more than 50 percent of total revenue. A large share is also found in Ecuador, Bolivia (Plurinational State of) and Trinidad and Tobago.

Table 10.2 Government revenue from hydrocarbons and minerals

	In percent of GDP	In percent of total revenue
<i>Hydrocarbons</i>		
Africa	16.0	52.4
Asia-Pacific	14.3	45.8
Europe	7.9	17.1
Middle East	20.0	57.2
Latin America	8.3	34.1
Ecuador	7.4	29.1
Mexico	6.8	32.3
Trinidad and Tobago	9.4	33.5
Venezuela (Bolivarian Republic of)	10.9	50.4
Bolivia (Plurinational State of)	6.8	25.4
<i>Minerals</i>		
Latin America	1.4	6.15
Chile	1.9	8.3
Peru	0.9	4.0

Note: ECLAC data for Latin America and IMF data for the other countries. IMF data refer to the 1992–2005 period and ECLAC data to 1992–2009.

Sources: Velásquez-Donaldson (2007), IMF (2007) and ECLAC.

Tax Instruments

In terms of actual revenue, the main tax instrument for assigning rent to subnational governments, at least in part, is specific taxes, such as royalties – which are used in all countries except Ecuador – and export taxes. The latter has been introduced since 2002 in Argentina. The administration of specific taxes is done by the central government in all but the federal countries (CEPAL, 2006; Carbajo Vasco and Porporatto, 2009).

The corporate profit tax is the second tax instrument for extracting rent. It is used exclusively by the central government. In Latin America the collections are lower than their potential, due to extended allowances and preferential treatments of oil and minerals extraction (see Otto et al., 2006). This is not exceptional compared with other regions of the world.

There is a prevalence of centralization of taxes, which is in line with the prevailing centralization of tax instruments in Latin America. In other words, since most tax instruments are centralized it makes sense that tax levies on natural resources are also centralized. Collections are then shared

and centralization of tax instruments does not hamper access to the rent by subnational governments. (Table 10.3.)

Sharing Systems

Latin American countries show a variety of solutions for sharing rents from natural resources that are in part associated with the different inter-governmental arrangements, ranging from classical federations, such as Argentina, to typical unitary states, such as Chile.

In contrast to old constitutions that were silent on the issue, recent constitutions frequently address the issue of rent sharing, although not always directly, because the sharing of rents from natural resources has become an inevitable component of the constitutional pact (Table 10.4). As stated in the previous section, only in Argentina does the constitution explicitly assign ownership to the provinces. In all the other countries ownership is assigned to the central government, or is left unsettled by assigning ownership to the people (Bolivia (Plurinational State of)), or to the nation (Peru). However, like international practice, rent sharing is determined not by the assignment of ownership, but rather by the sharing of tax bases, as in Argentina, and by the sharing of tax revenue.

With only two exceptions, Chile and Venezuela (Bolivarian Republic of), all countries recognize the sharing of the rent in favor of subnational governments. Note that although the former has always been a unitary and centralized country and the latter has always been a federation, rent centralization has always prevailed.

The Andean countries represent an interesting example regarding the sharing issue. Bolivia (Plurinational State of), Colombia, Ecuador and Peru are all unitary states that have embarked on a decentralization process leading to the creation of regional systems. These same countries allocate a substantial share of their resources from natural resources to their subnational governments. These countries provide evidence to the argument that the combination of decentralization processes and endowment of natural resources is a factor that renders centralization of natural resource rents politically impossible.

The degree of sharing is also increasing over time, due not only to the discovery of the resources, but also to the relative youth of most Latin American constitutions. Box 10.1 examines the case of Argentina.

Excluding Argentina – a classical federal system – and Ecuador, subnational governments situated in the non-producing areas have direct access to a portion of the rents. This is a notable feature of Latin America that clearly has merits, once the principle of sharing rents with subnational governments is accepted and put into practice. In classical federal systems

Table 10.3 Latin America (eight countries): characteristics of tax regimes for non-renewable resources

Country (commodity)	Royalties (rates)	Income tax (rates)	Profits tax (rates)	Other taxes
Argentina	Provincial 12.5–15%			
Bolivia (Plurinational State of) (hydrocarbons)	Departmental royalties: 11% Compensatory national royalties: 1% National royalties (National Treasury): 6%	Direct hydrocarbon tax (IDH): 32% on hydrocarbon production	Company profits tax (IUE) of 25% and 12.5% for remittances abroad Excess profits surtax of 25%	Special tax on hydrocarbons and derivatives (IEHD) Marketing tax Special tax (fixed margin)
Chile (copper)		Income tax, first category: 17%	Additional tax on profits remittances: 35% and 4% on interest remittances For public enterprises: special 40% profits tax	Special tax on operating income from mining activity Mining patents
Colombia (oil)	8–25%	33%	7%	Transport Pipelines
Ecuador (oil)	12.5–18.5%	25%	Profits distributed: 25% Profits reinvested in machinery and new equipment: 15%	Tax on extraordinary revenue of companies with contracts with the state: 70%

Mexico (oil)		Income tax: 28% Unique rate company tax: 17.5% Oil revenue tax of PEMEX: 30%	7.7%	Special tax on production and services (IEPS)
Peru	Royalties			Company profit tax (in practice amounts to a royalty of 25% of production)
Trinidad and Tobago (oil)	10% on onshore sales and 12.5% on offshore sales. Additional tax on sales of crude oil (rate varies with oil price)			Oil profits tax: 35–42% on profits from oil production Unemployment tax: 5% of profits from oil production
Venezuela (Bolivarian Republic of) (oil)	30%	Oil income tax (ISLR): 50%		No

Source: Own compilation based on Jiménez and Tromben (2006) and countries' legislation.

Table 10.4 Latin America (eight countries): natural resource intergovernmental sharing systems

Country	Institutional arrangements	Ownership of natural resources	Systems for sharing rents between levels of government				Equalization systems
			National taxes	Subnational taxes	Sharing system based on origin	Sharing system based on derivation	
Argentina	Federal	Provincial, by constitution	Export taxes Corporation income tax	Royalties and <i>Canon</i>	None	Coparticipations	None
Bolivia (Plurinational State of)	Unitary state	People	Royalties + IDH		% of IDH going to producing departments	% of IDH going to non-producing departments	None
Brazil	Federal system	Federal govt	Social contribution on profits		Royalties and excises are shared between the federal and the producing and bordering states and municipalities	Direct taxes and a very tiny share of royalties are shared between the federal and all states and municipalities	Specific: see the column to the left
Chile	Unitary state with regions		No sharing system has been introduced				None
Colombia	Unitary state with regions	State	Royalties and corporation income tax		Substantial part of royalties		Specific <i>Fondo Nacional de Regalias</i>

Ecuador	Unitary state with regions	State	Extraordinary profit tax
Peru	Unitary state with regions	The Nation	Royalties and corporation income tax
Venezuela (Bolivarian Republic of)	De facto unitary	State	Royalties and direct taxes

Source: Compilation by the authors.

One dollar per barrel of oil goes to the Amazonian Development Fund	None	None
50% of taxes on minerals and royalties on oil and gas and 25% of income tax on oil and gas go to the producing municipalities and regions	25% of income tax on oil and gas is distributed to all municipalities according to population, poverty, basic needs and environmental impact	None
Small part of royalties goes to states	Small part of royalties goes to states and municipalities	None

BOX 10.1 ARGENTINA: SHARING OF OIL RENTS BETWEEN GOVERNMENTS AND CONSUMERS

Argentina represents a very interesting case for analyzing the sharing of rents on natural resources among levels of government and consumers. Provincial governments have traditionally attained a substantial share of these rents through various forms of access to royalties on gas and oil. Specifically, direct levying on the rents by the provinces has alternated with federal government administration and transfer of collections to provinces. The federal government share has traditionally derived from its access to the corporation income tax.

Very recently, however, there have been substantial changes in the whole discipline, following the new constitution.

Management of oil and gas exploration and exploitation activities has been returned to the provinces that are responsible for establishing contracts with firms and collecting royalties. This has expanded their power to control prices and the measurement of production. At the same time, the federal government has expanded its access to the rent through the levying of export taxes on oil and gas, taking advantage of the increase in their international price. The share of rents going to domestic consumers has also been safeguarded because of the introduction of an export tax. Since oil and gas are sold on competitive domestic and international markets the export tax has put a ceiling on the domestic price of oil and gas, which is basically equal to the difference between the international price and the export tax.

Thus, everybody seems to take advantage of the present discipline, although the producing provinces have expressed vocal complaints about the federal taxation of exports and about its depressing impact on production. The stall in production has also somewhat contributed to reducing disparities among producing and non-producing provinces and has attenuated the fluctuations of royalty revenues. Clearly, oil- and gas-producing companies are the net losers, having had to relinquish all the increase of the (absolute) rent deriving from the increase in this decade of the international price of oil and gas.

The case of Argentina shows that the federal government can counteract rent concentration of rents on producing subnational governments by using fiscal instruments that are in its panoply, even in the presence of a constitutional mandate that assigns ownership of natural resources to subnational governments.

across the world only the subnational governments situated in the producing areas have direct access to the rents, while the inequalities deriving from the system of allocation are corrected by general equalization systems. In Latin American countries general equalization systems do not exist and the inequalities created by the allocations of rents from natural resources to the producing areas are, partially, corrected by expanding rent access to non-producing areas, through natural resource tax-sharing systems. This is the case of Bolivia (Plurinational State of), Brazil, and Peru.

Consequently, the impact produced by the use of the origin principle for allocation is compensated by the concomitant use of the derivation principle. In Colombia a specific equalization transfer system – where only royalties contribute to its pool – is used to provide non-producing areas access to the rent.

An attempt to expand the range of beneficiary subnational governments, and thus to alleviate disparities in rent allocation has been achieved by making the eligibility to rents dependent not only on production, but also on transport and transformation of primary products into final goods (such as fuel and gasoline).

In Argentina and Bolivia (Plurinational State of) the concomitant claims to the resources by the central government and the producing areas have been accommodated through a recent increase in the level of taxation, prompting fears from producers and sometimes from international organizations that excessive taxation could stop production, and more worryingly, investments. There is indeed evidence that oil production and exports has stalled in Argentina. However, this is not necessarily a calamity, because it spreads oil and gas exploitation over a longer time-frame, allowing future generations to also benefit from it. Of course a delicate balance has to be found between the level of taxation and the correct incentives for firms to proceed steadily towards exploration and production.

Obviously, while natural resource rent sharing expands the revenue sources of subnational governments, it also makes them subject to

the vagaries of price and production fluctuations, which they are not particularly well equipped to face. Box 10.2 examines the case of Colombia.

When shared only, or predominantly, with the producing areas, natural resources contribute to an increase in horizontal imbalances. This is clearly the case of Bolivian departments, although the government has recently taken a number of steps to spread the allocation to non-producing areas, by increasing the rent share going to all municipalities.

The huge interdepartmental inequalities of Bolivia (Plurinational State of), shown in Table 10.5, are to be attributed to the unique characteristics of the country, where royalties on natural resources are the only source of revenue for departments. As a consequence, non-producing departments are completely dependent on central government reallocation. Since no general equalization transfer system exists in Bolivia (Plurinational State of) and since the non-producing departments have access to only a share of the rent on oil and gas, the distribution of departmental revenues is highly unequal. While the big department of La Paz has a minimum per capita allocation of US\$24.1, Tarija, the richest department, has more than 20 times that amount; namely US\$462.7.

The case of Bolivia (Plurinational State of) shows the huge negative impact on equity deriving from making subnational government revenues only dependent on natural resource rents. Argentina provides evidence of a better practice. As mentioned before, in Argentina only the producing provinces have direct access to the rents through their royalties. However, provinces have access to their own taxes and to a share of a pool of national taxes. Consequently, while oil-producing provinces have extremely high per capita revenue, no province is left with an unbearably low revenue level (Table 10.6).

A similar system of distribution prevails in Colombia (Table 10.7). Producing departments have very high levels of revenue, but royalties introduce randomness in the distribution and do not determine it completely. This is also due to the fact that, in most cases, royalties are going to relatively small departments, where oil and mining sectors are the main determinant of GDP.

No mention has been made of the impact on equity deriving from giving municipalities access to the rent. There is no easily manageable information at this government level. However, there is some evidence showing, as expected, that the concentration and randomness of the allocation of royalties is much higher for municipalities. In some cases, royalties can reach quite understandably astronomically high per capita amounts.

BOX 10.2 COLOMBIA: INTERGOVERNMENTAL SHARING OF RENTS

Colombia uses three main instruments to promote intergovernmental rent sharing; namely: (a) the corporation income tax that is levied by the central government; (b) the royalties that are collected by the central government and allocated to local governments; and (c) the transport tax.

Part of the corporation tax is returned to local governments via the transfer system (*Sistema general de participaciones*).

Royalties are levied on the value of production. The tax rates vary according to the different resources. For instance, for oil they range from 8 to 25 percent, with a progressive schedule, whereby the tax rate increases according to the daily volume of the production.

Royalties are distributed between producing and transporting local government units, and the remaining ones through the National Royalties Fund (*Fondo Nacional de Regalías*), following sharing rates that decrease with the increase in daily production.

In addition to royalties, oil and mining companies have to pay compensations (*compensaciones*). These are payments agreed with companies aimed at compensating the additional costs for local government generated by the exploration and exploitation of natural resources, with specific reference to transport, environmental, and social and cultural impact.

Finally, non-producing municipalities, whose territory is crossed by oil and gas pipelines, receive the collections of the transport tax that has been ceded to them by the central government.

Indigenous communities are entitled to receive a share of the royalties levied on oil fields and mines situated no further than 5 km from their settlements. The share amounts to 5 percent of royalties accruing to departments and to 20 percent of royalties accruing to municipalities.

The National Royalty Fund (*Fondo Nacional de Regalías*) has been set up to attenuate rent concentration. The proceeds of this fund derive from specific sharing rates (ranging from 8 to 32 percent) and from the excess of royalties on established ceilings.

The allocation is made on the basis of specific projects by the National Planning Department. There is no formula but a complex web of governmental decrees, laws and court decisions.

Table 10.5 *Bolivia (Plurinational State of): basic economic and financial indicators for departments*

Prefectures	Population (2001)	Own revenues per capita (US\$)	Royalties per capita (US\$)	Transfers per capita (US\$)	Other revenue per capita (US\$)	Total revenue per capita (US\$)	Per capita GDP 2006 (US\$)	Share of gas production (2006) (%)
Chuquisaca	531,522	3.8	30.4	44.3	9.9	88.4	938.40	5.8
La Paz	2,349,885	1.2	2.7	18.8	4.1	24.1	1,142.37	0.0
Cochabamba	1,455,711	1.2	21	36.8	4.1	42.1	1,234.75	11.8
Oruro	392,451	1.9	33.3	50.2	3.6	89.0	1,362.25	0.0
Potosi	709,013	0.6	72	25.6	1.0	99.2	780.63	0.0
Tarija	391,226	4.1	402.7	54.5	1.4	462.7	3,683.50	60.1
Santacruz	2,029,471	0.9	19.3	33.9	6.5	41.3	1,593.00	22.3
Beni	362,521	0.3	46.4	92.8	9.8	102.9	938.63	0.0
Pando	52,525	0.0	121.5	378.4	4.3	382.7	1,822.00	0.0

Source: Bolivian Ministry of Finance.

Table 10.6 Argentina: structure of provincial revenue per capita, 2009

Province	Population 2010	Provincial tax revenues per capita (US\$) 2009	Transfer per capita (US\$) 2009	Royalties per capita (US\$) 2009	Other revenues per capita (US\$) 2009	Total revenue per capita (US\$) 2009
Ciudad de Buenos Aires	2,891,082	1,165	152	0	82	1,400
Buenos Aires	15,594,498	363	345	0	49	758
Catamarca	367,820	169	1,491	52	291	2,005
Córdoba	3,304,825	313	625	0	110	1,047
Corrientes	993,338	105	810	5	6	926
Chaco	1,053,466	134	1,124	0	220	1,478
Chubut	506,668	353	709	719	425	2,205
Entre Ríos	1,236,300	229	915	45	135	1,324
Formosa	527,895	89	1,423	8	245	1,765
Jujuy	672,260	115	1,127	1	185	1,428
La Pampa	316,940	388	1,270	68	333	2,059
La Rioja	331,847	105	1,626	0	359	2,090
Mendoza	1,741,610	245	539	115	124	1,023
Misiones	1,097,829	169	738	24	135	1,066
Neuquén	550,344	480	716	922	913	3,031
Río Negro	633,374	280	841	149	205	1,475
Salta	1,215,207	169	697	87	127	1,080
San Juan	680,427	177	1,013	24	224	1,438
San Luis	431,588	278	1,112	0	100	1,490
Santa Cruz	272,524	521	1,825	1,006	1,757	5,109
Santa Fe	3,200,736	284	624	0	64	972
Sgo Del Estero	896,461	108	980	1	241	1,330
Tucumán	1,448,200	246	713	0	177	1,137
Tierra del Fuego	126,190	657	2,308	533	661	4,159

Source: Compilation by authors from data from the Argentine Ministry of Finance.

Table 10.7 Colombia: basic characteristics of departments

	Population 2005	Per capita GDP 2008 (US\$)	Per capita royalties (US\$)	Per capital total revenues (US\$)
Antioquia	5,601,507	3789.08	0.06	210.74
Atlantico	2,112,001	2884.50	0.00	11.71
Bogota		0.00	0.00	0.00
Bolivar	1,836,640	2550.51	16.16	161.21
Boyaca	1,210,982	2479.10	47.01	291.00
Caldas	89,849	2740.29	0.17	206.21
Caqueta	337,932	1682.54	0.00	270.06
Cauca	1,182,022	1843.63	2.35	200.79
Cesar	878,437	2635.18	10.21	306.65
Cordoba	1,462,909	2551.46	13.00	168.79
Cundinamarca	2,228,682	3337.87	2.31	31.88
Choco	388,476	1299.71	1.40	266.14
Huila	1,001,476	2651.10	130.67	310.20
Guajira	655,943	3614.83	196.65	387.45
Magdalena	1,136,819	1539.10	0.00	154.62
Meta	713,772	3434.42	35.73	582.83
Nariño	1,498,234	1465.48	0.40	171.10
N De Santander	1,208,336	1644.51	9.50	181.55
Quindio	518,691	1992.75	0.00	15.83
Risaralda	859,666	2493.46	0.00	121.64
Santander	1,913,444	4417.12	48.80	259.49
Sucre	762,263	1315.74	7.54	189.46
Tolima	1,312,304	2501.48	52.24	237.66
Valle	4,052,535	3446.71	0.01	131.74
Arauca	153,028	1423.91	649.81	1181.28
Casanare	281,294	3534.50	982.76	1402.11
Putumayo	237,197	10916.63	131.62	529.40
San Andres	59,573	1153.69	0.67	870.21
Amazonas	4,695	1451.51	0.00	872.32
Guainia	18,797	1022.77	30.83	1638.21
Guaviare	56,758	4359.74	0.00	844.73
Vaupes	19,943	1984.54	0.00	1184.50
Vichada	44,592	1823.89	0.00	846.53

Source: Compilation by authors from data from the Colombian Ministry of Finance.

4 CONCLUSIONS

This chapter provides an exploration of the issues deriving from the sharing of rent from natural resources in Latin America. With decentralization

gaining strength, subnational governments have become more vocal in their demands for access to these rents and central governments have found it increasingly difficult to resist these demands.

There are no established constitutional, or equity principles that can provide a sure guidance on rent sharing. The idea suggested in this chapter is that in the allocation of the rent, governments should consider very carefully the costs associated with exploration and production of the resources and consequently the tasks performed by various levels of government. Hence, the allocation should take into primary consideration the responsibilities assigned to the different levels of government. For example, if the subnational governments of a given country have substantial expenditure responsibilities in the sectors affected by natural resource exploitation, then there is firm ground for their recognition, as a cost, of part of the value of the production. The amount of the rent will be reduced accordingly. This will ease the problems/conflicts generated by the sharing of the pure rent.

Section 3 shows that most Latin American countries endowed with natural resources share rents with their subnational governments. Countries share benefits not only with the producing areas, but also with the non-producing areas of the country. Efforts have recently been made to expand the share going to the non-producing areas.

To satisfy the concomitant claims to the rent coming from the national and the subnational governments, the level of taxation of the rent has been increased, particularly in Argentina and Bolivia (Plurinational State of). This policy has a clear impact on production, particularly in Argentina.

The main instrument for sharing the rent from natural resources is the allocation of revenue coming from central government taxes. In Latin America most taxes are centralized and taxation of natural resources is not an exception to this rule. While centralization of natural resource taxation is not a bad practice, overall centralization of taxes makes subnational governments completely dependent on transfers from the center. At the same time, the central governments provide only limited equalization of subnational government revenues. As a result, subnational sharing of rent increases the already huge disparities of revenue among local government units. In particular, the allocation of the rent to the producing areas makes the overall distribution of revenue quite random.

The allocation also to non-producing areas and the assignment to subnational governments of a variety of revenue instruments – ranging from own taxes to general equalization systems – would attenuate the existing inequalities. Latin American countries, particularly Bolivia (Plurinational State of), Colombia and Peru, have made substantial

progress in spreading the allocation to non-producing areas. Proceeding further on this path requires the implementation of general equalization systems.

NOTES

1. Most of the oil production in Colombia is located in only two departments. In Argentina a single province, Neuquén, produces more than one-third of the total. In Bolivia, a relatively small department, Tarija, produces 60% of total national gas. In Peru, production of oil is hugely concentrated in a couple of provinces.
2. See McKenzie (2006) for an excellent summary. See also the works of McLure (1983, 2003) and Ahmad and Mottu (2003).
3. More specifically, the welfare loss stemming from using energy resources to subsidize capital would amount to slightly under 9% of energy revenue, while the percentage loss deriving from entirely subsidizing labor would decrease to no more than 2%, because of the lower migration elasticity of labor.
4. In a recent study, Day and Winer (2001) provide evidence for Canada about the impact from public policies on migration flows. They conclude that: 'The average impact of the public policies considered here on the volume of migration . . . is small . . . Even the simultaneous elimination of regional variation in all the policy variables included in the analysis (unemployment insurance, personal income taxes, social assistance and provincial and federal spending on goods and services) is predicted to raise the volume of migration by at most 5%, or by less than half a percentage point' (p. 38). The main determinant of migration seems to be the moving costs.
5. The evaluation of these costs is extremely difficult, although in principle the criterion of the opportunity costs should inform the calculation. The use of a rocky and totally inhospitable desert has an environmental impact and thus a cost that is much lower than the use of densely populated agricultural land.
6. Clearly in the case of the Delta River area in Nigeria, compensating directly the citizens who are affected would seem to be the best solution, given the corruption and the sheer inefficiency of the government.
7. This is, possibly, the case of Bolivia, where the new constitution assigns to indigenous communities the evaluation of the environmental impact of natural resource projects. In a number of recent cases these communities have opposed exploration and exploitation projects, thus generating huge conflicts with the central government.
8. There are two categories of rent: absolute and differential. Absolute rent derives from fixity of production.
9. A World Bank study on Casanare, one of the two Colombian oil-producing departments, illustrates the risk of wasting fiscal funds when they reach huge levels in a short period. Casanare is one of the newest departments in Colombia, created in 1991. Oil royalties were negligible until 1994, then came to represent 73% of the department's total income by 1997. According to the law, local governments must invest 100% of royalties in high priority projects in the sectors of education, public health, sewage systems and water supply. However, in 1996 expenditure in these sectors financed out of oil royalty income amounted to less than 40% (Davy et al., 1999).
10. These measures can be and have been variously combined and they do not exhaust the range of instruments needed to dampen the impact of exceptional circumstances on the sustainability of equalization mechanisms.
11. The ABA is a trust account under the Financial Management and Accountability Act 1997. It is administered by an ABA secretariat with the advice of the ABA Advisory Committee. The Advisory Committee comprises 14 members selected by the Land Councils and a chairperson selected by the Federal Minister for Aboriginal Affairs.

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11. Macroeconomic challenges of fiscal decentralization

**Juan Pablo Jiménez and
Teresa Ter-Minassian**

1 OVERVIEW

In Latin America (LA), as in other parts of the world, decentralization has increased in recent decades, reflecting primarily political pressures, partly linked to the democratization process. As a result, subnational governments (SNGs) now account for substantial shares of public expenditures, in particular social and investment ones. This in turn has created growing challenges for macro-fiscal management. On the one hand, it has become more important, as well as more difficult, to ensure that SNGs do not accumulate unsustainable debts and/or contingent liabilities, ultimately requiring either bailouts from the central government (CG), or abrupt and socially disruptive adjustment programs. On the other hand, the traditional view that short-term macroeconomic stabilization should be the exclusive purview of the CG is becoming increasingly unrealistic. This chapter seeks to contribute to a reflection on how fiscal decentralization affects macroeconomic management in the main Latin American countries; and on which reforms in the existing intergovernmental fiscal systems of those countries could help strengthen their fiscal sustainability, minimize the risk of pro-cyclicality at all levels of government, and create 'fiscal space' for active countercyclical responses to economic shocks.

LA weathered the 2008 global financial crisis better than most other regions, and much better than had been the case in previous crisis episodes. For the first time in recent decades most countries in the region were able to avoid a pro-cyclical fiscal response to a major external shock. Indeed, they were able not only to accommodate the cyclical declines in revenue, but also to expand spending, including on the social safety-net and public investment. This was due in large part to the margins for maneuver accumulated in the preceding five years and was reflected in significant primary surpluses, reduced levels and improved structures

of public debt, and development of non-inflationary domestic financing sources. The crisis affected the subnational finances, but significantly less than in previous similar episodes. This, however, reflected mainly a more active role of the CGs in supporting their SNGs. Given the high dependence of SNGs on transfers from the CG, their ability to sustain spending during crises largely depends on the CG support, either through a temporary modification of the revenue-sharing arrangements or through discretionary transfers, frequently linked to public investment programs.

Looking ahead, the fact that many countries in the region are now experiencing rapid growth, and are expected to continue to do so in the near term, adds urgency to a debate of options for reforms in their inter-governmental fiscal arrangements that could help create fiscal space for a countercyclical response to a future downturn.

The chapter is structured as follows. It begins with a theoretical discussion in Section 2 of the growing impact of SNGs' operations on short-term fiscal stabilization and medium-term fiscal sustainability; and of some policy and institutional reform options in this area. Section 3 reviews how different countries in LA attempted to ensure sustainable fiscal positions at the SNG level, with varying degrees of success, and how SNGs in the region were affected by, and reacted to, favorable and unfavorable economic shocks. Section 4 examines how the recent global crisis and the subsequent recovery affected the subnational finances in a number of Latin American countries, and the respective roles of CGs and SNGs in responding to the crisis, attempting to identify the factors that contributed to differences in the impact of, and the policy responses to, the crisis. Based on this analysis, the last section discusses institutional and policy reforms that could enable SNGs in the main countries of the region better to withstand the impact of future economic shocks.

2 MACROECONOMIC CHALLENGES OF FISCAL DECENTRALIZATION: THEORETICAL CONSIDERATIONS

As is well known, the traditional (normative) literature on fiscal decentralization (for example, Tiebout, 1956; Musgrave, 1959; and Oates, 1972) emphasized economic efficiency arguments, in particular the potential welfare gains from 'bringing economic decision-making closer to the people', as the main rationale for decentralization. Subsequent (second-generation, positive) contributions to the literature (for example, Qian and Weingast, 1997; Tanzi, 2002; and Ahmad and Brosio, 2006) stressed that such gains do not automatically follow decentralization, and focused on

the political drivers of, and the institutional conditions for success in, the devolution of responsibilities to lower levels of government. In contrast, less attention has been devoted in the fiscal federalism literature, at least until recent years, to the challenges that decentralization can pose for macroeconomic management, despite the fact that such challenges have become quite evident in practice, particularly in large federations and during periods of fiscal stress.

These challenges relate to the distinct, but closely interrelated, roles of fiscal policy in short-term macroeconomic management and in ensuring public debt sustainability over the medium to long term. Historically, policy makers have focused more on ensuring that SNGs' policies and operations do not create significant risks for debt sustainability than on promoting their consistency with the CG's stabilization policies. This reflected a number of factors: (i) the received wisdom that the CG alone should be responsible for macroeconomic management; (ii) the relatively small shares of spending (and even more so of revenue-raising) responsibilities typically allocated to SNGs in the early stages of decentralization in many countries; and also (iii) the focus on fiscal consolidation, as opposed to fiscal activism, prevailing in most countries in recent decades. These factors are increasingly out of line with current realities, a fact that requires some rethinking of the appropriate role of SNGs in short-term macroeconomic management, its linkages with fiscal sustainability, and the types of intergovernmental fiscal arrangements that can most effectively promote both.

The traditional view that fiscal stabilization is best performed by the CG (first put forward by Musgrave in his seminal textbook of 1959, and subsequently echoed in many papers on intergovernmental fiscal relations) reflects a number of considerations:

- first, the need to coordinate fiscal stabilization with other macroeconomic policies, notably monetary and exchange rate ones, that are a prerogative of CGs;
- second, the risk that SNGs engage in countercyclical fiscal expansions even if they do not have adequate fiscal space for such policies, a risk heightened by the 'common pool' problem, and by any perceived likelihood of eventual bailouts by the CG;
- third, the likelihood of significant leakages in the effects of subnational countercyclical policies in an economic space (the nation) that is typically characterized by high mobility of goods and factors of production;
- fourth, the risks of adverse spillovers of individual SNGs' actions on other jurisdictions. For example, during a recession, some SNGs

could engage in predatory tax competition, to bid away dwindling investment and job creation opportunities from other SNGs. Also, excessive borrowing, especially by large SNGs, to finance countercyclical spending could put upward pressure on domestic interest rates, or lead to a generalized deterioration of spreads for the whole country;

- fifth, the fact that typically CGs have greater access to financing, and at better terms, than their SNGs, and therefore are better placed to finance countercyclical fiscal expansions during downturns; and
- finally, the fact that CGs can redistribute budgetary resources across their SNGs, to counteract asymmetries in exogenous shocks affecting lower-level governments.

While these considerations are very significant, there are also counter-arguments that are acquiring increasing importance as decentralization progresses around the world:

- first, with decentralization reducing the CGs' shares in total public spending, and concentrating them in the less-flexible expenditure categories, such as pensions and interest payments, CGs' scope for conducting countercyclical expenditure policies on their own is being progressively eroded;
- second, the impact of countercyclical policies of CGs can be significantly offset by pro-cyclical policies of SNGs. There is significant empirical evidence (including in LA, as discussed in Section 3) that SNGs' revenues (in particular at the regional/provincial level¹) are highly sensitive to changes in output (whether induced by the cycle or by other exogenous shocks). With borrowing possibilities frequently constrained by market conditions or by institutional factors, such as deficit or debt rules or other controls, SNGs are forced to react to cyclical downturns by cutting spending. At the same time, such rules or controls are not adequate to prevent pro-cyclical spending sprees during periods of boom;
- third, an approach that places the whole burden of economic stabilization on CGs' budgets undermines incentives for SNGs to build both fiscal space and institutional capacity to respond to cyclical developments and exogenous shocks; and
- finally, subnational fiscal responses to regionally asymmetric shocks (such as a decline in commodity prices) may be appropriate if the CG's response to the shocks does not properly take into account such asymmetries. Political economy considerations point to a risk that, in deciding the regional distribution of discretionary countercyclical

spending, a CG may be unduly influenced by factors such as the political alignment of individual subnational jurisdictions with the center. Even if the CG's countercyclical response takes the form of an increase in non-discretionary transfers, the allocation formula for such transfers across jurisdictions may not take adequately into account asymmetric effects of the shock.

Given the considerations above, we would argue that a more balanced view of the respective roles of CGs and SNGs in fiscal macro-management is called for, especially in federal countries and in those unitary countries that are characterized by relatively high degrees of fiscal decentralization. Such a view would center on the following main principles.

First, it is increasingly crucial to minimize pro-cyclicality in subnational budgetary policies. This would require SNGs to accommodate the operations of automatic revenue stabilizers, by saving the fiscal dividends of booms and sustaining expenditure levels in the face of cyclical revenue downturns. The case for such 'passive' countercyclical policies rests on economic, as well as social, reasons:

- Allowing automatic stabilizers to operate prevents fiscal policy from aggravating cyclical fluctuations.
- There is substantial empirical evidence (albeit mainly at the CG level; see, for example, Balassone and Kumar, 2007) that pro-cyclicality tends to be stronger during upswings than during downswings, with upward ratchet effects on deficits and the public debt. Thus, minimizing pro-cyclicality also helps promote more sustainable fiscal positions over the longer term.
- Moreover, sharp fluctuations in public expenditure programs have efficiency costs. This is evident in the losses generated by delays or cancellation of already initiated subnational investment projects; but efficiency costs of abrupt changes in funding levels can also be significant for current expenditure programs, for example, in education and health, which are increasingly a responsibility of SNGs.
- Finally, sharp retrenchments in socially sensitive subnational spending programs during cyclical downturns can carry substantial social and political costs, as demonstrated by experiences in countries strongly affected by the recent global financial crisis (Fedelino and Ter-Minassian, 2010).

Second, there may be a case for 'active' (discretionary) countercyclical subnational fiscal measures to respond to regionally differentiated

shocks across a national territory, especially if the CG response does not adequately take into account such asymmetries.

Third, it is essential to ensure that subnational countercyclical policies, whether active or passive:

- are consistent with longer-term debt sustainability (see further below);
- are symmetric over the cycle (that is, equally restrictive during booms as accommodative during downturns);
- do not conflict with the fiscal stance of the CG; and
- do not impose significant adverse externalities on other subnational jurisdictions.

Fourth, it is important that SNGs build up their capacity to design and implement active countercyclical measures, when appropriate, in a transparent, relatively rapid, and reasonably efficient manner, for instance by improving the targeting of their social safety-nets, as well as their systems to select and execute public investments. This is the case also for countercyclical measures executed by SNGs on behalf of, and funded by, the CG. SNGs' capacity weaknesses in this respect have often hindered the timeliness and effectiveness of CGs' countercyclical fiscal policies in many countries.

Decentralization is affecting not only short-term macro-fiscal management but also medium- to long-term fiscal sustainability, and the appropriate policies and institutions to promote such sustainability. SNGs can pose threats to fiscal sustainability in a number of ways:

- by running up explicit debt in excess of their ability to service it in a plausible range of economic environments;
- by accumulating arrears to suppliers; and
- by incurring large contingent liabilities with significant probabilities of realization.

If unchecked, such behaviors eventually lead to debt-servicing difficulties and to hard-to-resist pressures on CGs to bail out the SNGs facing such difficulties. These pressures become more powerful the greater is the devolution to SNGs of responsibility for essential public services and socially sensitive expenditure programs.

A number of institutional arrangements have been put in place around the world to ensure that SNGs conform to intertemporal budget constraints, so as to avoid unsustainable debt accumulation. These range from primary reliance on market discipline, to administrative borrowing

controls, and various combinations thereof, such as mechanisms for coordination of budgetary policies across government levels and the enactment of fiscal rules for SNGs (Ter-Minassian and Craig, 1997).

The preconditions for an effective operation of market discipline are quite demanding, including: a history of no significant bailouts of SNGs by the CG; well-developed financial markets; no privileged access of SNGs to financing; and the availability of timely, reliable and adequately transparent information on subnational finances. Since these requirements are rarely fully met in practice, virtually no country relies on market discipline alone to impose a 'hard budget constraint' on SNGs.

At the other end of the spectrum, reliance on administrative borrowing controls by the CG is also becoming infrequent, as SNGs, especially at the intermediate (regional) level, have acquired (or are acquiring) increasing, and in some countries constitutionally sanctioned, autonomy; and their officials are elected by popular vote,² and sometimes belong to a different party from the one ruling at the CG level. In many countries, controls by the CG apply currently only to external borrowing.

In contrast, cooperative intergovernmental arrangements are becoming more frequent around the world, as decentralization and democratization advance, but their effectiveness in securing well-functioning decision-making processes, and adherence by all participants to agreed fiscal targets, also varies significantly across countries. In general, such arrangements have proven most successful in countries where there is an established culture of fiscal responsibility, regional disparities are not too acute, and the CG has a recognized leadership role (for example, in Australia and in the Nordic countries).

Reflecting the limitations of the alternative approaches, the use of numerical fiscal rules to promote fiscal discipline at the subnational level has been growing around the world.³ These rules typically stipulate limits on subnational deficits (for example, in US states; and in a number of EU countries, under the so-called domestic stability pacts), or targets for the primary balance (for example, in Brazil), in relation to each jurisdiction's output, or to its revenues. Some rules envisage limits on the debt or the debt service of SNGs (for example, in Brazil, Colombia and Hungary). In some cases (for example, some US states, Mexico, and Brazil), subnational fiscal rules also include expenditure or revenue limits.

As with fiscal rules at the CG level, a number of factors affect the effectiveness of subnational rules in promoting fiscal sustainability.

One factor is the robustness of the legal foundation of the rule. Specifically, in some countries the CG is constitutionally empowered to enact legislation stipulating binding fiscal rules for its SNGs. In others, especially federal ones, such rules can only be enacted by each subnational

jurisdiction. In a number of these countries, SNGs have adopted fiscal rules (mostly balanced-budget ones), often by including them in state constitutions. In such countries, the CG, although unable to unilaterally legislate binding fiscal rules for its SNGs, can in many instances act as a role model for them, by adopting for itself a sound fiscal rule, exerting moral suasion, and, if appropriate, providing incentives to the SNGs to introduce similar ones. At least it should endeavor to ensure that the rules adopted by its SNGs are mutually consistent, minimizing the risk of free-riding behaviors.

A second factor is the soundness of the rule's design, specifically:

- the comprehensiveness of its coverage;⁴
- its clarity and transparency, which facilitate the monitoring of its implementation; and
- the appropriateness of the target to the initial conditions of the relevant subnational jurisdiction. The larger the initial imbalances of the latter, and the lower its access to sustainable financing, the tighter need to be the deficit or debt limits stipulated by the rule. Also important are the level and variability of an SNG's own and shared revenues, as they provide an indication of its ability to service additional debt, and its vulnerability to exogenous shocks.⁵

A third factor concerns the capacity of the SNGs to implement the rule, which in turn largely depends on the state of their public financial management systems. In this respect, SNGs typically (albeit not always) lag behind their respective CGs. The CG has an important role to play in many countries in promoting and supporting the strengthening and modernization of budgeting, budget execution, accounting and reporting systems at the subnational level. Whenever feasible in the light of possible constitutional constraints, the CG should ensure that common accounting and reporting standards are enacted for all levels of government (possibly with simplified regimes for small local governments), to facilitate adequate transparency of SNGs' operations, as well as a timely monitoring of the observance of any existing fiscal rule for these governments.⁶

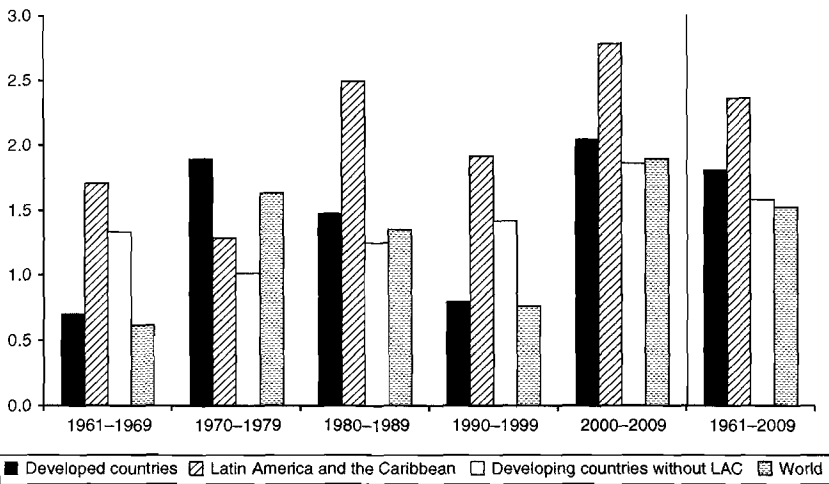
A fourth factor is the existence of adequate enforcement mechanisms, which should: (i) have a solid legal basis; (ii) be non-discretionary in their application; and (iii) stipulate penalties severe enough to act as deterrent to non-compliance, but not unrealistic (which could ultimately lead to their non-application⁷). The effectiveness of enforcement mechanisms is likely to be greatly enhanced if they are supported by explicit requirements to correct deviations from the rule within a reasonable pre-specified time period.

Existing subnational fiscal rules typically privilege the objective of promoting fiscal discipline and sustainability. However, for the reasons indicated above, an increased focus on the stabilizing properties of subnational fiscal rules would also be desirable. The question is how to design rules that avoid pro-cyclical fiscal behaviors by SNGs, while safeguarding sustainability, and that can be effectively implemented at the subnational level; and how to support such rules with appropriate institutional mechanisms (such as countercyclical funds) and other reforms in intergovernmental fiscal arrangements. The last section discusses some policy options in this respect, particularly relevant to the Latin American context.

3 DECENTRALIZATION AND MACROECONOMIC MANAGEMENT IN LATIN AMERICA

A Macroeconomic Context of High Volatility

The region has been characterized for several decades by a high degree of macroeconomic volatility. Figure 11.1 shows that volatility (as measured by the variance over time of growth rates of per capita GDP) in LA has



Source: Jiménez and Kacef (2011).

Figure 11.1 Volatility of per capita gdp growth (1961–2009) (percent change)

Table 11.1 Trade shocks and sudden stops in capital in selected countries (1980–2004)

Countries	Trade shocks	Sudden stops
Argentina	1986–1987; 1993; 2002–2003	1980–1984; 1994–1996; 1998–2004
Brazil	1986; 1999–2003	1981–1985; 1998
Chile	1985–1986; 2002–2003	1981–1986; 1998–2000
Mexico	1986; 1992–1994; 2003	1982–1985; 1994–1997
Colombia	1983; 1985; 2002–2004	1998–2002
Peru	2001–2004	1981–1986; 1997–1999
Venezuela (Bolivarian Republic of)	1986–1988; 1998; 2002–2003	1980–1986

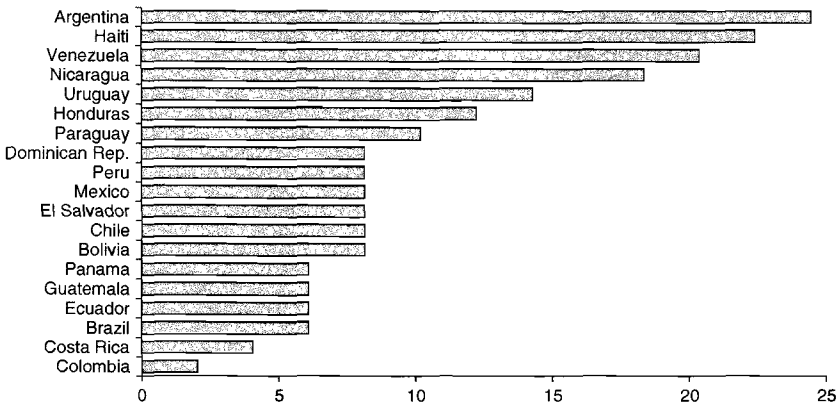
Source: Fanelli and Jiménez (2009).

significantly exceeded volatility not only in developed countries, but also in other developing ones during most of the 1961–2009 period. Volatility has been largely the result of external shocks, which have affected not only GDP growth, but also fiscal and balance of payments sustainability, and the health of national financial systems over prolonged periods (Heymann, 2007; Fanelli, 2008; and ECLAC, 2009).

As shown in Table 11.1, external shocks have been related to trade or capital flows, and have affected countries in the region either separately or simultaneously (in the latter case with added devastating effects).

Depending on their economic and financial structures, as well as various institutional characteristics, different countries have been more or less vulnerable to, and impacted by, either type of shock. Specifically, trade-related shocks have affected comparatively more countries with: high degrees of export concentration; vulnerability to changes in the terms of trade; and dependence on tourism, emigrant remittances, and foreign direct investment (FDI). In contrast, sudden stops in capital flows have tended to impact more frequently and strongly countries relatively more dependent on external financing (that is, with large current account or fiscal deficits; or large external debt refinancing needs) that are more dollarized, with inflexible exchange rate regimes, and with weaker financial systems (Fanelli and Jiménez, 2009).

On average, the effects of trade-related shocks on GDP growth have tended to be less disruptive, but more lasting than those of sudden capital stops. It should also be noted that some terms-of-trade-related shocks have affected countries in the region asymmetrically. For instance, the substantial rise in commodity prices in 2006 to mid-2008 affected



Source: Jiménez and Kacef (2011).

Figure 11.2 Proportion of years with growth of GDP per capita lower than the average world growth rate by at least one standard deviation (1960–2009) in selected countries (%)

positively countries such as Argentina, Bolivia (Plurinational State of), Colombia, Ecuador and Venezuela that are net commodity exporters, but negatively the countries in Central America that are net importers. Figure 11.2 shows that, reflecting varying degrees of vulnerability to shocks (as well as different policy responses to them), different countries in the region have suffered markedly different durations of below-average growth during the last five decades.

Mostly Pro-cyclical National Fiscal Policy Responses

The scope for, and effectiveness of, national policy responses to macroeconomic shocks have also varied across countries and over time in the region, reflecting both the nature of the shock, and a range of economic and institutional factors (level of development; political conditions; distributional and social tensions; exchange rate regime; monetary policy framework; among others). Specifically, during most of the last decades, fiscal policy responses have tended to be shaped primarily by short-term financing constraints and longer-term debt sustainability concerns, albeit with an improving trend in the years preceding the 2008–09 global financial crisis.

The traditionally pro-cyclical nature of fiscal policy in most Latin American countries reflects a number of factors:

- the relative scarcity and high volatility of tax revenues. Most countries in the region (Brazil and, to a lesser extent, Argentina and Uruguay being exceptions) are characterized by relatively low tax ratios, frequently with high concentration on natural resource-related revenues. Moreover and partly reflecting such concentration, tax revenues tend to be highly sensitive to fluctuations in output and in the prices of key commodities (Gómez Sabaini and Jiménez, 2009);
- the pervasive rigidities in public expenditures (Cetrángolo et al., 2010), which have led to a concentration of fiscal adjustments on public investments, with adverse effects on the longer-term growth potential; and most importantly,
- the fact that the public sector's access to domestic and especially external financing has tended to be also highly pro-cyclical, particularly during sudden stops, but also in conjunction with trade-related shocks.

As a result, during the last decades, most countries in the region were forced to tighten fiscal policy during episodes of sudden stops or adverse trade shocks, and took advantage of commodity price booms, or of other factors inducing a relaxation of financing constraints, to boost public spending, particularly on politically or socially sensitive programs, frequently of a recurrent nature.

To be sure, there were exceptions to these trends, in particular Chile, which from the beginning of the last decade adopted a structural balance-based rule, aimed at avoiding fiscal pro-cyclicality. Moreover, most countries of the region conducted a less pro-cyclical (in some cases, a broadly cyclically neutral) fiscal policy during the years preceding the recent global financial crisis, utilizing part or most of the commodity-induced revenue boom to improve their overall fiscal balances; reduce their public debt, and improve its structure and composition;⁸ and accumulate external assets (Kacef and Jiménez, 2009; Daude et al., 2010; and IMF, 2010). As a result, they were in a distinctly better position to face the 2008–09 crisis shock than had been the case for lesser shocks in previous decades.

Trends in Subnational Fiscal Stabilization and Sustainability

Trends in subnational finances in LA during the last few decades were characterized by a rapid devolution of spending responsibilities, but continued revenue centralization. As documented in the relevant literature (summarized in Fedelino and Ter-Minassian, 2010), this asymmetric

trend in decentralization is quite common around the world, and reflects a number of factors:

- First, political economy incentives for both the CG and most SNGs tend to work in favor of revenue centralization. To increase their leverage over lower levels of government, as well as to facilitate macro-fiscal management, CGs prefer to maintain control of most revenue bases, and to provide resources to SNGs through transfers, especially discretionary ones. For their part, SNGs tend to prefer avoiding the political costs of raising resources from their own constituents, and blaming the CG for any shortfall of such resources *vis-à-vis* spending demands. This is especially the case for the economically weaker SNGs, whose own revenues would most clearly fall short of needs.
- Second, the scope for decentralization of taxing powers is also constrained by economic factors, most notably the higher mobility of goods and factors of production within and outside a national territory (Ter-Minassian, 1997). This tends to limit subnational tax handles mainly to property taxes, retail sales taxes, and personal income taxes (PITs) (typically in the form of surcharges on the national PITs). In LA, with national PIT bases being eroded by overly generous thresholds and deductions, SNGs typically raise little or no money from this potential tax base.
- Third, with taxing capacities typically being unequally distributed across the national territory (especially so in resource-rich countries), significant vertical imbalances need to be maintained between levels of government, to facilitate horizontal redistribution through equalization-type transfers.
- Finally, subnational tax administrations generally (albeit not always) are less effective than national ones. This is especially evident in LA in the administration of local property taxes, with outdated *cadastres* (property registers) and infrequent reassessments of property values. As a result, the ratios of property taxes to GDP in LA are equivalent to 10–20 percent of corresponding ratios in OECD countries.

Table 11.2 presents the distribution of subnational tax bases in the major countries in LA. It shows that all of them include real estate and other types of real property (in particular, automotive vehicles); a few (mainly Brazil, Argentina, and Colombia) include sales, or the consumption of specific (generally non-merit) goods or services; and even fewer include incomes or wages (Mexico). With the exception of Chile, most countries that are

Table 11.2 Current bases of subnational own revenues in selected countries

Countries	Tax base of own revenue			Revenue from natural resources
	Property	Sales or consumption	Other	
Argentina	X	X	X	X
Bolivia (Plurinational State of)	X			X
Brazil	X	X		
Chile	X		X	
Colombia	X	X		X
Ecuador	X			X
Mexico	X	X	X	X
Peru	X			X

Source: Jiménez and Podestá (2009).

natural resource producers allow some form of participation by the originating regions or localities in the revenues (royalties or taxes) generated by such resources (Table 11.3). Albeit understandable on political economy grounds, and as a compensation for possible local environmental costs of the resource exploitation, this assignment tends to exacerbate regional disparities, and to increase the volatility of subnational own revenues.⁹

The vertical gaps created by the asymmetry in decentralization of expenditures and revenues are filled by a variety of intergovernmental transfers. These have shown a rising trend in recent years, especially in Argentina, Bolivia (Plurinational State of) and Mexico. They also vary widely in magnitude across the region, ranging from over 8 percent of GDP in Argentina to under 1 percent in more centralized countries such as Chile, Costa Rica, and Ecuador. The most important type of intergovernmental transfers is revenue sharing, which is generally formula based, as a percentage of total national revenues, or of a subset of such revenues. Table 11.4 shows the basis of sharing of national revenues across levels of government in major countries in the region.

The recurrent macroeconomic shocks impacting the region have affected subnational finances through a number of channels:

- significant fluctuations in own and shared revenues, given the above-mentioned cyclical sensitivity of such revenues (Figure 11.3);
- sharp and abrupt changes in the availability of market financing; and

Table 11.3 Current intergovernmental distribution of revenues from non-renewable resources in selected countries

Countries	Distribution of non-renewable resource revenues
Argentina	Royalties: to producer provinces
Bolivia	Patents: to producer departments and municipalities
(Plurinational State of)	Royalties (18%): 11% to producer department, 1% to Beni and Pando departments, and 6% to the General Treasury of the Nation. Direct Tax on Hydrocarbons (IDH): 24.36% to prefectures, 66.99% to municipalities and 8.65% to universities Special Tax on Hydrocarbons and Derivatives (IEHD): 25% to departments, and the remainder to General Treasury of the Nation (GTN)
Colombia	Royalties are distributed to non-producer and producer state and local governments. In the latter case, allocation is done following the quantities of hydrocarbon production. Amounts range between 47.5 and 52% to producer departments; 12.5 and 32% to producer municipalities; 8 to ports; and 8 and 32% to the National Royalties Fund
Ecuador	Oil revenues are pooled with other central government revenues for sharing with provincial and municipal councils. Royalties: the provinces Esmeraldas, Napo and Sucumbios receive US\$0.005 per barrel of oil
Mexico	The transfers from the federal government to state and local authorities regarding oil extraction and mining are: <ul style="list-style-type: none"> i) included in the <i>Fondo General de Participaciones</i>, which is financed by 20% of most federal revenues, including the rights on oil and mining extraction ii) 9/11 of the sales tax of petrol and diesel are transferred to state and local governments in relation to their consumption and 2/11 finance a Compensation Fund that assigns transfers to the 10 state governments with the lowest GDP excluding oil and mining iii) 0.6% of the oil exploration and production rights paid by PEMEX are transferred to the <i>Fondo de Extracción de Hidrocarburos</i>, (FEXHI), to be transferred among producer states. (Fiscal Coordination Law latest reform dated 06-24-2009)
Peru	The mining <i>canon</i> distributes revenues from non-renewable resources only among the subnational levels of government that participate in their extraction: <ul style="list-style-type: none"> 10% for municipal local governments 25% for district and provincial local governments 40% for state local governments 25% for the regional governments. (<i>Canon</i> Law No. 28322 of 2004)

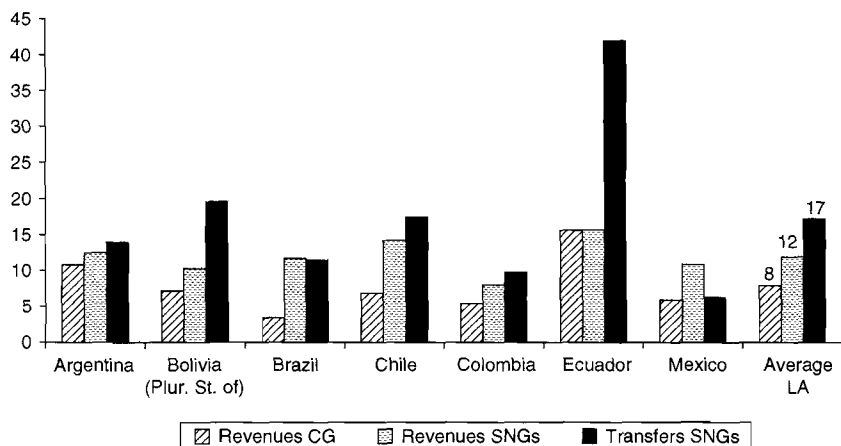
Note: In Colombia a recent constitutional reform includes changes in the distribution of royalties aimed at increasing equity, and at reducing the pro-cyclicality of such revenues through the creation of a Stabilization and Savings Fund.

Source: Jiménez and Podestá (2009).

Table 11.4 Distribution of central government taxes

Country	As percentage of total collection	As percentage of individual tax	Fixed amount
Argentina		VAT (89%), earnings (64%), credit and debit on current account (30%), internal taxes (100%), minimum presumed income (100%), interest payments and other taxes (100%)	
Bolivia (Plurinational State of)	25% (20% for municipalities and 5% for public universities)		
Brazil		States: 21.5% of IR (tax on income and earnings) and IPI (tax on industrialized products). Municipalities: 22.5% of the IPI and IR, 70% of the IOF (tax on credit, exchange and insurance operations or on operations related to securities or real estate) and 50% of the ITR (rural land tax)	
Colombia			Real growth of transfers until 2016
Ecuador	15% (of which 70% goes to municipalities and 30% for provincial councils)		
Mexico	States: 20% of the General Participation Fund (GFP) (from which 4% must be transferred to municipal level of government) Municipalities: 1% of the GFP		
Peru		Municipalities: 2% of operations affected by the VAT, the gasoline-powered vehicles tax and the tax on recreational boats	

Source: Jiménez and Podestá (2009).



Source: ECLAC.

Figure 11.3 Revenue volatility by level of government in selected countries (1995–2008) (standard deviation, in constant price terms)

- modifications in the systems of intergovernmental fiscal arrangements (changes in revenue-sharing formulas and/or in subnational fiscal rules (Table 11.5) or other borrowing controls). These changes often reflected the distributive intergovernmental tensions and conflicts generated by the shocks, with CGs trying to ensure that SNGs share in the burden of adjustment to the shocks through a reduction of their spending. As a result, subnational fiscal policies were largely pro-cyclical during most of the last decades.

Borrowing controls or rules enacted by the CG succeeded in keeping subnational debts relatively low (well under 5 percent of GDP) in most countries, with the exception of Argentina and Brazil, where SNGs' debt peaked at 22 and 20 percent of GDP, respectively, in 2002 (Figure 11.4).

Subnational finances improved significantly in the major countries of the region during the last decade largely reflecting a rapid growth in revenues (mainly shared revenues and other transfers from the CG, since, as mentioned above, own revenues were broadly stable in relation to GDP in most countries). While the main factors behind this growth in revenues were the sustained acceleration in economic growth and the commodity price boom experienced by the region in the early to mid-2000s, a role was also played by changes in the transfer system introduced by countries such as Argentina,¹⁰ Bolivia (Plurinational State of),¹¹ and Colombia¹²

Table 11.5 *Current fiscal rules in selected countries*

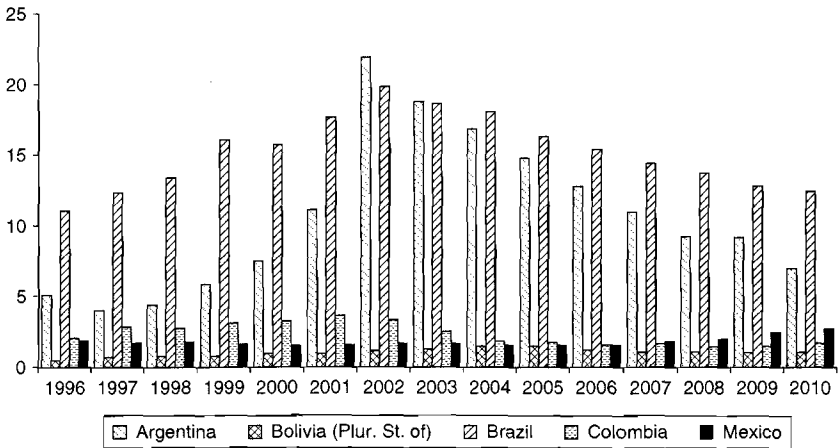
Country	Year of enactment	Content of rule	Coverage	Legal basis
Income or Expenditure Rules				
Argentina	2004	Nominal growth of primary expenditure must not exceed nominal GDP growth	Federal and subnational	Law
Brazil	2000	Limits are set by law on the ratios of payroll expenditures to net revenues of individual governments	Federal and subnational	Law
Ecuador	2003	Real growth of CG's current expenditure must not exceed 3.5%	Central	Law
Ecuador	2003	Real growth of current operational expenditures of the non-financial public sector must not exceed 2.5%	Federal and subnational	Law
Mexico	2006	Revenue excesses over budgeted amounts are used first to compensate for expenditure overruns. Any remainder is allocated to four different funds in percentages established by law	Federal and subnational	Law
Peru	2000	Real growth of current expenditure must not exceed 3%	Federal and subnational	Law
Balance Rules				
Argentina	2004	Budgets of individual governments must be presented and executed in equilibrium	Federal and subnational	Law
Brazil	2000	Budget balance target established by the government	Federal and subnational	Law
Colombia	2011	The CG must limit its structural deficit to 1.5% of GDP, effective as from 2015	Central	Law
Colombia	2001	Operational expenditures of SNGs must be financed by their current revenues	Subnational	Law

Chile	2006	Each new administration must announce, and adhere to, a structural balance target	Central	Law
Ecuador	2003	The deficit – excluding oil activities – must be reduced yearly by 0.2% of GDP (until reaching zero)	Federal and subnational	Law
Mexico	2006	Budgets must be presented in balance, and subsequent new spending proposals must include corresponding revenue increases or cuts in budgeted spending	Federal and subnational	Law
Panama	2002	Non-financial public sector (NFPS) deficit must not exceed 2.5% of GDP	Federal and subnational	Law
Peru	2000	NFPS deficit must not exceed 1% of GDP	Federal and subnational	Law
Venezuela (Bolivarian Republic of)	2000	The current balance must be in equilibrium	Federal and subnational	Law

Debt Rules

Argentina	2004	Annual borrowing limits to ensure that debt servicing does not exceed 15% of shared revenues FRL	Subnational	Law
Brazil	2001	Debt limits set by the FRL, and annual borrowing limits set by the CG	Federal and subnational	Law
Panama	2002	Reduction of public debt to below 40% of GDP by 2017	Federal and subnational	Law

Sources: Countries' fiscal responsibility laws, and Budget Department for Chile.



Sources: ECLAC and official information.

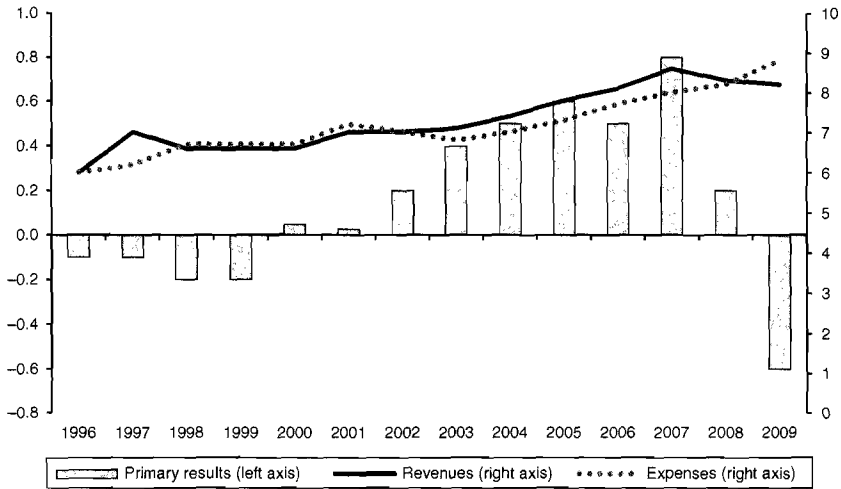
Figure 11.4 Evolution of subnational public debt in selected countries (1996–2010) (% of GDP)

with a view to facilitating an orderly adjustment in their subnational finances.

As shown in Figure 11.5, subnational expenditures also rose in relation to GDP during the boom period, but at a slower pace than revenues, resulting in the achievement of significant primary surpluses on average in the region throughout 2000–08. The improvement in the primary surpluses, as well as a moderation in borrowing costs, led to a steady decline in subnational debt levels, most pronounced in Argentina and Brazil. In these two countries, bilateral debt restructuring agreements by the CG with individual SNGs, together with a tightening of control on new borrowing, were instrumental in ensuring that a significant portion of the fiscal dividends of the boom was saved by the SNGs.

4 IMPACT OF THE GLOBAL CRISIS ON THE SUBNATIONAL FINANCES IN LATIN AMERICA

The 2008–09 global crisis propagated quickly to emerging and developing countries through both trade and financial channels. For LA as a whole, the trough of the crisis was reached in the first quarter of 2009, with activity beginning to pick up in most countries in the second quarter of the year. LA's GDP (PPP weighted) declined on average by about 1.7 percent



Note: The countries are: Argentina, Bolivia (Plurinational State of), Brazil, Chile, Colombia, Ecuador, Mexico and Peru.

Sources: ECLAC until 2008 and own estimates for 2009.

Figure 11.5 Subnational revenues, expenditures and primary balances in selected countries (1996–2009) (simple average in % of GDP)

in 2009, albeit with significant differences across countries. The decline in commodity prices and the emergence of significant output gaps helped, however, moderate inflationary pressures, which had built up steadily in the preceding years.

The crisis took a significant toll on the public finances of the region. The overall (PPP–GDP weighted) public sector deficit increased by the equivalent of more than three percentage points of GDP in 2009, reaching 4 percent of GDP.

The crisis affected significantly the subnational finances. Table 11.6 shows that the unweighted average of the primary balances of SNGs in eight major countries of the region deteriorated from a surplus equivalent to about 0.8 percent of GDP in 2007 to one of 0.2 percent in 2008, and further to an estimated deficit of 0.3 percent in 2009, reflecting both a decline in overall revenues and an increase in primary spending, relative to GDP. The deterioration was most pronounced in some resource-rich countries (Ecuador, Bolivia (Plurinational State of), Argentina and Peru). Despite a partial reversal in 2010, fiscal balances have not returned to pre-crisis levels.

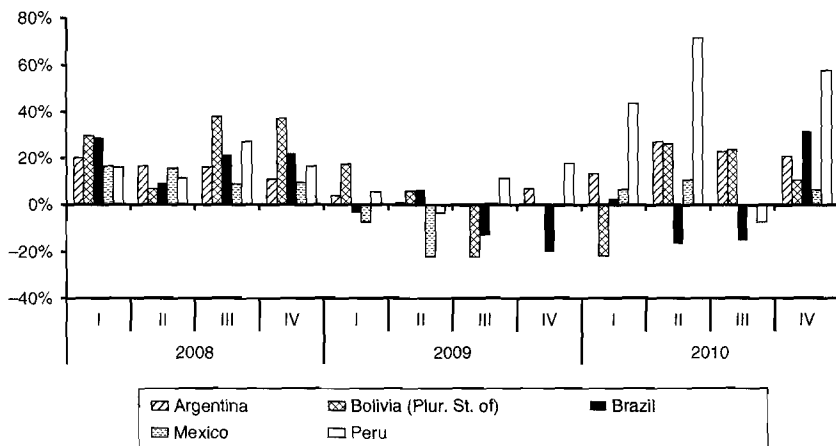
Table 11.6 *Evolution of subnational primary balances in selected countries (2007–2010) (% of GDP)*

	2007	2008	2009	2010	Change 2008– 2007	Change 2009– 2008	Change 2010– 2009
Argentina	0.22	-0.28	-0.70	0.10	-0.50	-0.42	1.20
Bolivia (Plurinational State of)	1.30	0.66	-0.62	-0.39	-0.64	-1.27	0.23
Brazil	0.92	0.91	0.22	0.11	-0.01	-0.69	-0.11
Chile	0.14	0.04	0.11	0.23	-0.10	0.07	0.12
Colombia	-0.35	0.50	0.36	0.20	0.85	-0.14	-0.16
Ecuador	2.57	-0.66	-1.62	-1.43	-3.23	-0.97	0.20
Mexico	0.23	0.57	0.07	0.41	0.34	-0.50	0.35
Peru	1.08	0.01	-0.36	-0.25	-1.07	-0.37	0.11
Latin America – 8	0.76	0.22	-0.32	-0.13	-0.54	-0.54	0.24

Source: ECLAC.

The evolution of SNG revenues was shaped primarily by developments in CG transfers to them (including revenue sharing), given the weight of such transfers, especially in countries such as Argentina, Bolivia (Plurinational State of), Chile, Ecuador and Mexico. The absence of smoothing or countercyclical mechanisms in the existing revenue-sharing arrangements resulted in a rapid propagation of the crisis-induced decline in CGs' revenues to the subnational budgets. Figure 11.6 shows that, in four countries¹³ for which the relevant data are available through the fourth quarter of 2010, CG transfers broadly mirrored the development of CG revenues with a one-quarter lag, beginning to decline in the second quarter of 2009, and only recovering (except in Bolivia (Plurinational State of)¹⁴) in the first quarter of 2010. The figure also shows the impact of a one-off transfer to SNGs enacted by Peru in the third quarter of 2009, to (more than) offset the decline in the ordinary transfers. It also suggests that a measure taken by Argentina in 2009 (devolution to the provinces of 30 percent of the tax on export of soybeans) helped avoid a significant decline in overall CG transfers to the provinces in that country.

CGs in a number of the countries in the region took steps to mitigate the impact of the downturn in revenues on subnational spending. In addition to the above-mentioned measures taken by Argentina and Peru, Chile, Mexico, and Paraguay announced significant additional spending



Note: Bolivia (Plurinational State of): Includes *Renta Dignidad* (the Universal Old Age Income provision is a non-contributory payment for life program that the Bolivian state grants to all its beneficiaries). Peru: Does not include the *Canon*, royalties, and transfers that began in 2009, and does not include the one-off grant in 2010.

Sources: ECLAC and national databases.

Figure 11.6 Evolution of intergovernmental transfers in real terms in selected countries (2008–2010) (change t/t-4)

on public works, to be executed by SNGs with CG funding. In some cases (for example, in Argentina and Brazil) subnational budgetary targets for 2009 set by existing fiscal rules were eased, and/or additional financing was arranged for SNGs through public banks.

In Argentina, provinces that did not have sufficient financial means to meet the maturities of their debts received loans from the national government during 2009, through the implementation of the Financial Assistance Program, which benefited 13 jurisdictions for a total amount equivalent to 69 percent of their capital repayments. In April of that year, the government set up the Federal Solidarity Fund, stipulating that 30 percent of effective revenue from the soybean export tax would go to a fund to be shared with SNGs. During 2010 the *Programa Federal de Desendeudamiento* was enacted which made it possible to reduce the provincial debt stock through the application of the Contributions' Fund of the National Treasury (ATN), totaling over Arg\$9.6 billion. The amounts to be allocated to each province were determined based on the respective share in the debt stock.

In Brazil, the subnational finances were affected on average relatively

lightly by the short-lived crisis. The consolidated primary surplus of the states declined by about 0.3 percent of GDP, to 0.6 percent, and that of the municipalities was nearly unchanged from the previous year, at around 0.1 percent of GDP, in 2009. Moreover, for the first time in many years, SNGs recorded a small (about 0.1 percent of GDP) overall surplus. Also, and in contrast to the federal debt, the SNGs' net debt continued its declining trend in 2009, to just below 13 percent of GDP by year-end. The stronger fiscal performance of the SNGs, compared with the federal government, mainly reflected the tight limits on subnational indebtedness imposed by the FRL and by the existing SNGs' debt restructuring agreements with the federal government. However, the primary surplus of the SNGs deteriorated slightly in relation to GDP in 2010, despite the pronounced recovery in activity. This suggests that subnational fiscal policies remained largely pro-cyclical in Brazil during the current cycle.

In Peru, the CG authorized SNGs (through an emergency decree) to adopt measures to reduce current expenditures. In Colombia, taxes on cigarettes and alcoholic beverages, which in Colombia are assigned to SNGs, were raised to create fiscal space to sustain expenditures. Also, a new law was proposed to increase the subnational share of royalty revenues, introduce new horizontal sharing coefficients, and create a savings and stabilization fund to reduce the volatility of subnational spending. In Mexico, transfers increased further in 2010, reflecting the impact of tax measures (increases in the VAT, PIT and other taxes) that strengthened the base of the revenue-sharing arrangement (*Recaudación Federal Participable: RFP*).

5 REFORM OPTIONS TO FACILITATE SUSTAINABLE AND LESS PRO-CYCLICAL SUBNATIONAL FISCAL POLICIES IN LATIN AMERICA

The analysis of subnational fiscal performances in the preceding two sections suggests that the links between fiscal decentralization and macroeconomic management vary significantly across the region.

First, in a number of unitary countries (for example, Chile, Uruguay, and the Central American countries) decentralization is still limited, and does not pose significant macroeconomic risks.

Second, in others (for example, Bolivia (Plurinational State of), Mexico, Peru), growing decentralization has not significantly affected fiscal sustainability so far, due to relatively tight limits on subnational borrowing, and, in some cases, past bailouts by the CG.

Third, in other countries (Brazil, Colombia) substantial progress has

been made since the mid-1990s in tightening controls on subnational debt and reducing it.

Fourth, progress has also been made in reducing subnational debt in Argentina, mainly reflecting support operations by the CG, as well as the buoyancy of the provinces' own and shared revenues.

Fifth, in most countries, however, subnational fiscal responses to shocks have tended to be pro-cyclical, albeit less so in the more recent years.

Sixth, pro-cyclicality has reflected (to different degrees in the various countries) a mix of factors:

- fiscal rules or other borrowing controls with targets unrelated to the cycle; and even in the absence of such rules, pro-cyclical fluctuations in the availability of financing for most SNGs throughout the region;
- the lack of significant subnational revenue-raising autonomy in most countries (with the notable exception of Brazil, and to a lesser extent, Argentina) especially at the state/regional level, which has severely constrained the scope to sustain subnational spending during recessions;
- the (full or partial) assignment to SNGs of some highly cyclical revenues, especially from non-renewable resources, in some countries (for example, Bolivia (Plurinational State of), Ecuador, Peru);
- intergovernmental transfer systems based on revenue-sharing formulas invariant over the cycle, which propagate quickly to the subnational finances cyclical fluctuations in the CG's revenues (Colombia being an exception in this respect); and finally
- pervasive rigidities (including earmarking of revenues and/or transfers to certain categories of expenditure) which reduce the scope for reassignment of subnational resources to changing expenditure needs/priorities over the cycle.

These considerations point to a number of possible options for reforms in the intergovernmental systems of the region that could facilitate fewer pro-cyclical subnational fiscal policies, while safeguarding debt sustainability, in the future.

Reforms in Rules and Borrowing Controls

Specifying subnational rules in terms of cyclically adjusted budget balances should, in principle, help avoid pro-cyclicality in subnational fiscal policies, while safeguarding fiscal sustainability (provided of course

that the rules' targets are chosen on the basis of appropriately cautious debt dynamics scenarios). There are, however, practical considerations that would limit the effectiveness of such an approach, especially in less advanced countries, including in the Latin American region.

First, the difficulties of estimating cyclically adjusted fiscal aggregates are even more significant at the subnational than at the national level. Most countries do not have reliable and timely estimates of regional or local output, even less of output gaps. Using national indicators of the cycle as a proxy can be appropriate when the cyclical shocks are evenly distributed across the national territory, but, as evidenced by the recent global financial crisis, this is not always the case.

An alternative approach might be to use changes in labor market indicators (such as the unemployment rate, for which timely subnational-level measures are generally available) as triggers for allowing deviations from the fiscal rule's target up to a pre-specified limit. However, this approach is clearly more suitable for advanced countries, characterized by high degrees of labor market formality, than for emerging or developing ones, as is the case in Latin American countries, where labor market adjustments to cyclical shocks mostly occur in the informal sector and therefore are inadequately captured by changes in the official unemployment statistics. Moreover, such an approach would be more effective in avoiding a pro-cyclical fiscal tightening during a large negative output shock, than in avoiding a pro-cyclical fiscal expansion by resource-rich regions during a commodity price boom. For the latter, an alternative approach would be to require adjustments of the target balance for deviations in commodity prices from their medium-term trend (as is done in Chile¹⁵). However, given the above-mentioned difficulties of obtaining reliable estimates of the medium-term trend of commodity (especially oil) prices, it may be preferable to utilize subnational rules that target the budget balance excluding resource revenues.

Second, since financing constraints tend to be tighter at the subnational than at the national level, the use of a subnational fiscal rule allowing cycle-related deviations from a balanced-budget (or other sustainable balance) target should be accompanied by a requirement that SNGs use their budget surpluses during booms to accumulate liquid assets to be drawn down during downturns.¹⁶ To avoid that the use of such funds is affected by political expediency considerations, it is important that arrangements for their governance be very transparent, and that their utilization be guided by clear criteria, specified in advance of the crisis, leaving little room for discretion, for example in the decision to start drawing on the fund, and the speed of its drawdown.

In the light of the difficulties of using subnational structural balance-

based rules, consideration should be given to an increased use of expenditure rules. Such rules, while not necessarily avoiding pro-cyclicality during downturns (since they set ceilings, not floors, for public expenditures) help moderate it during upswings and, by promoting subnational savings and asset accumulation during such periods, can help cushion the impact of subsequent recessions on spending. It would be important to ensure that such rules are comprehensive (at least with regard to primary expenditures) to minimize the scope for creative accounting, and that they include adequate flexibility mechanisms (such as escape clauses for unforeseeable large exogenous shocks).¹⁷ Examples of subnational expenditure rules can be found in Argentina, Brazil and Peru, but typically such rules only cover a portion of subnational spending, a fact that limits their effectiveness as a countercyclical mechanism.

More generally, the objectives of reducing to a minimum fiscal pro-cyclicality and preferably creating fiscal space for active countercyclical policies at all levels of government, while safeguarding fiscal sustainability, require a significant strengthening of existing mechanisms of fiscal coordination between the CG and the SNGs. Most countries in the region lack formal forums for policy dialogue across government levels (even when such forums are envisaged by existing legislation, such as the FRL in Brazil); the formulation of subnational budgets is often carried out without timely inputs by the CG (for example, as concerns the level of intergovernmental transfers); and reporting by the SNGs on their budget execution is subject to long delays and based on different accounting rules. As a result, not only are *ex ante* policy stances not coordinated, but also often *ex post* they counteract each other (as in some instances during the recent crisis, when pro-cyclical fiscal behaviors at the subnational level partly offset countercyclical fiscal expansions at the CG level). Intergovernmental coordination forums in Australia and in some European countries could provide useful examples in this respect.

Reforms in Subnational Revenue Assignments

Strengthening subnational own revenues in the region would not only have efficiency benefits (by promoting a greater correspondence between local spending and revenues, and increasing political accountability in the use of public resources), but also help create additional fiscal space to attend to expenditure needs, including during cyclical downturns.

Reform priorities and instruments in this area vary significantly across the region, reflecting different initial economic, institutional and sociopolitical conditions, in particular:

- the current level of the subnational and overall tax ratios which, as indicated in Section 3 above, show a substantial dispersion across LA;
- the current composition of subnational taxes, which is often the result of piecemeal past reform efforts, is shaped by political realities, rather than by sound economic considerations;
- the extent and dynamics of regional disparities in income, wealth and natural resources, which condition individual SNGs' ability to raise own revenues, and which tend to be relatively pronounced in most countries of the region; and
- the capacity of subnational tax administrations, frequently albeit not always linked to the SNG's size and economic base, which also varies widely both across and within countries in the region.

Thus, appropriate reform strategies for subnational taxation in LA need to be carefully tailored to individual countries' circumstances. In most countries, the objective of additional revenue mobilization is likely to have a major weight. However, in a country such as Brazil where state and especially municipalities are already assigned major sources of revenue, such as the ICMS and the ISS,¹⁸ respectively, and the overall tax burden is already relatively high, the focus of tax reform efforts would need to be mainly on the rationalization of existing taxes, elimination of distortions, simplification and harmonization of the tax bases, as well as continued improvement of subnational tax administrations' capacity.¹⁹ These objectives would also need to play significant roles in the other countries, since subnational taxes in LA are frequently riddled with distortions (for example, cascading features as in the transaction tax in Argentina; pervasive exemptions and special treatments in most countries) and suffer from well-known weaknesses in tax administration (for example, outdated *cadastres* for local property taxes; high compliance costs for taxpayers; limited or non-existent cooperation between national and subnational tax administrations).

Possible reform options would include:

- the introduction of subnational surcharges on national income taxes, preferably within a narrow rate band to avoid excessive vertical and horizontal competition. The revenue potential of such surcharges in the Latin American context is limited, however, by the high thresholds and large deductions that typically characterize national income taxes in the region;
- the replacement of cascading transaction taxes with regional subtraction-based VATs of the type utilized, for example, in Italy (IRAP) and Germany (*gewerbesteuer*), or with retail sales taxes;

- the introduction (or increase in existing) regional or local excises (in particular on energy products or selected services);
- improvements in the design and especially the administration of taxes on movable (vehicles) or immovable (real estate) items;
- increased levying of user fees for local services; and
- strengthened efforts to modernize subnational tax administrations, increase cooperation within and across government levels, including by some pooling of resources in neighboring local administrations.

In the various countries that are characterized by a concentration of non-renewable resources in a few subnational jurisdictions (for example, Argentina, Bolivia (Plurinational State of), Colombia, Ecuador and Peru), economic (in particular reduction of volatility) as well as equity considerations argue for the assignment of the bulk of resource revenues to the CG. Reforms in this direction, which inevitably run into strong opposition from the often politically powerful resource-rich regions, may be facilitated by concurrent reforms of the intergovernmental transfer systems that would ensure to such regions a steadier flow of transfers commensurate with their spending needs.

More generally, appropriate reforms in existing transfer systems (for example, to equalize revenue-raising capacities, rather than revenue performances, so as not to discourage subnational tax efforts) may be required to overcome the political economy obstacles to own-revenue mobilization.

Reforms in Intergovernmental Transfer Systems

As indicated above, by their very nature, existing revenue-sharing mechanisms in Latin American countries tend to transmit to SNGs the considerable volatility experienced by national revenues. From this standpoint, it would be desirable to isolate the evolution of intergovernmental transfers from the evolution of CG revenues. This is not easy because the intergovernmental transfers are mostly revenue sharing. One way is to exclude especially volatile sources of national revenues (in particular resource revenues) from the sharing base. However, it must be recognized that the exclusion of certain national revenues (for example, the so-called 'social contributions' in Brazil, or the export and financial transaction taxes in Argentina), or even their inclusion with lower sharing coefficients, can create incentives for the central government to privilege those forms of taxation, even when they are relatively distortive.

A more promising approach may therefore be to build explicitly some countercyclical features or smoothing mechanisms in the vertical sharing formula, but using as a base the totality of national revenues. Possible options in this respect include:

- using moving averages of national revenues as a base for the sharing. This would provide a longer period to SNGs to adjust their spending to fluctuations in national revenues. Some countries (for example, Argentina) have utilized such mechanisms in the past;
- basing transfers on estimates of structural (cyclically adjusted and corrected for commodity price fluctuations) national revenues. This would require reliable estimates of such revenues, a non-trivial requirement given the above-mentioned technical difficulties of estimating output gaps, revenue elasticities, and trend commodity prices, even at the national level.²⁰ The creation of independent fiscal councils responsible for such calculation or at least for vetting them, if prepared by the CG, would likely increase their reliability and acceptability by SNGs;
- changing symmetrically the vertical sharing coefficients over the cycle (that is, increasing the CG's share during expansion periods and symmetrically reducing it during recessions). This method is more likely than the previous one to raise concerns of manipulations regarding the forecast of the length of the cycle (especially if left to the CG), and would require guarantees to the SNGs of *ex post* adjustments in the event of deviations of outturns from the forecast. In both this and the previous option, acceptability to the SNGs might be enhanced by a stipulation that reductions in transfers (compared with those based on an unadjusted formula) during boom periods would be saved by the CG in a special account (with individual sub-accounts for each SNG) and automatically distributed to the SNGs during downturns; and
- requiring symmetric adjustments in the revenue shares of SNGs for countercyclical tax measures by the CG.²¹

In addition, CGs could in principle vary the level of discretionary transfers in a countercyclical fashion. There may be, however, significant institutional and political economy limitation to this approach, especially if such transfers finance socially sensitive programs or if economic cycles do not coincide with electoral ones.

All the above options would have the effect of safeguarding (to a greater or lesser extent) SNGs from the budgetary impact of cyclical fluctuations, concentrating such impact on the CG. This would increase the onus on

the latter to create its own fiscal space to conduct adequate countercyclical policies.

Reforms in Subnational Spending

Subnational spending in Latin American countries is fraught with substantial and pervasive weaknesses which not only undermine the efficiency gains expected from decentralization, but also sometimes aggravate vertical and horizontal inequalities. They also contribute to making more difficult the adjustment of subnational budgets to exogenous shocks and cyclical fluctuations, and in some cases can threaten longer-term fiscal sustainability. These weaknesses include:

- lack of clarity in the assignment of expenditure responsibilities to different levels of government, which frequently leads to duplication of functions and bloated civil services, and reduces political accountability for the quality and efficiency of provision of public goods and services;
- rigidities in public employment and wage and benefits policies;
- excessive generosity in certain entitlement programs (for example, in health), coupled with unequal access to the same;
- untargeted subsidization of public services;
- extensive earmarking of revenues;
- weak procurement and other expenditure management systems; and
- poor selection, preparation, and monitoring of implementation of public investments.

Reform efforts in the above areas are proceeding at different speeds among the countries of the region, and also within countries, reflecting dissimilar capacities at the subnational level, different degrees of support by the CG, varying types of legal and even constitutional constraints, among others. Some regional governments and some large (Bogota, Lima, Mexico City, São Paulo, Santiago, to cite just a few) and medium-sized cities have made substantial progress in recent years in improving the quality of their public services and infrastructure, better targeting their social programs, moderating their personnel spending, and increasing the transparency and strengthening the management of their budgets.²² Much more limited progress has been made, however, in clarifying spending responsibilities and reducing earmarking. In many countries, the subnational spending reform agenda remains a daunting one.

NOTES

1. Local governments, which typically rely on (less cyclically sensitive) property taxes, tend to be less vulnerable to cyclical developments and other exogenous shocks than regional governments, whose main sources of own revenues tend to be sales (and in some cases income) taxes. Nevertheless, the budgets of local governments in countries such as the US, the UK, and Spain among others, which suffered major losses in property values during the recent global financial crisis, have been substantially affected by the crisis in 2008–09.
2. According to Treisman (2002), LA has one of the highest levels of electoral decentralization. Most heads of SNGs are selected by popular vote.
3. The following discussion of subnational fiscal rules draws extensively on a paper prepared by Ter-Minassian for a forthcoming book by the Inter-American Development Bank on structural fiscal rules for LA (Ter-Minassian, 2010).
4. Deficit or spending limits can prove ineffective if SNGs are allowed to maintain extra-budgetary accounts, or to inappropriately classify transfers to their enterprises as ‘below the line’ operations. Debt limits might be circumvented through resort to purchasing power parities (PPPs) not justifiable on grounds of economic efficiency.
5. Accordingly, deficit or debt limits are best specified in relation to revenues; and the target should be lower the larger the historical variance of such revenues, or the more discretionary are the transfers received from the CG.
6. Brazil provides an excellent example in this respect, as its Fiscal Responsibility Law (FRL) requires all state and local governments to maintain and report standardized accounts of their operations, with a four-monthly frequency. The FRL, enacted in 2000, envisaged a relatively short transition period for its implementation, during which the federal government provided significant technical and financial assistance to state and local governments that needed it, to enable them to meet the requirements of the law by the time it came into full effect.
7. Penalties are typically of a financial nature, for example, in the form of withholding of CG transfers to non-complying jurisdictions, but occasionally also entail the personal responsibility of the relevant officials (for example, in Brazil).
8. Many countries in the region increased the average duration of their debt, and/or the share of the debt denominated in local currency (redemption from the ‘original sin’).
9. For more details about the assignment of natural resources between levels of government in countries in LA, see Brosio and Jiménez (ch. 10 in this volume).
10. Following the exit from convertibility, the Federal Agreement of February 2002 stipulated a series of changes in the intergovernmental arrangements: a return to automaticity of transfers; the renegotiation of provincial debts, converted into pesos; the establishment of a ceiling (equivalent to 15% of shared revenues) on the service of the restructured debts; and limits on overall borrowing by the provinces. In addition, the Federal government concluded bilateral agreements with several provinces (*Programas de Financiamiento Ordenado*) providing for additional financing to those provinces, in exchange for measures by the latter to increase their revenues and contain spending.
11. Introduction of the *Impuesto Directo sobre Hidrocarburos y Derivados* in 2008, distributed by two-thirds to the municipalities, 24.4% to the prefectures and the remainder to universities.
12. Colombian regional governments restructured their debt in the early part of the last decade, utilizing CG guarantees and resources derived from transfers and royalties.
13. Argentina, Bolivia (Plurinational State of), Brazil, and Peru.
14. The 2010 budget in Bolivia (Plurinational State of) included a 16% cut in shared revenues from petroleum royalties and taxes (IDH: direct tax on hydrocarbons and derivatives).
15. See Marcel (2010) for a detailed analysis of the Chilean structural fiscal rule.
16. This is, for example, the case in the US where a number of state constitutions require the accumulation of so-called ‘rainy day funds’ (see Balassone et al., 2007, for details).

17. See Ljungman (2008) and Ter-Minassian (2010) for more detailed discussions of various issues in the design of expenditure rules.
18. ICMS is the abbreviation for *Imposto sobre Operações Relativas à Circulação de Mercadorias e sobre Serviços de Transporte Interestadual e Intermunicipal e de Comunicação, ainda que as Operações se Iniciem no Exterior*: Tax on the circulation of goods, interstate and intercity transportation and communication services, even when the operation is initiated abroad). The ISS (*Imposto Sobre Serviços*) is a tax on services that must be paid to the local authority (*Prefeitura*) of residence, or in some cases (in the construction sector) to the local authority where the service took place, by the self-employed.
19. The federal government in Brazil has provided significant support, over the last decade or so, to the modernization of subnational tax administrations, notably through a series of programs financed by the Inter-American Development Bank (IDB), which have already resulted in a number of important innovations, such as the introduction of nationwide electronic invoices for the state VAT credits, and harmonized taxpayer registries across the nation.
20. See Ter-Minassian (2010) for a detailed discussion of these issues.
21. This was not always done (or was done only partially) during the recent crisis in countries (such as Brazil) that enacted countercyclical tax cuts.
22. See IDB (2010) for an up-to-date overview of performances in this area.

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12. Fiscal rules for subnational governments? Evidence from Latin America*

Veronica Grembi and Alvaro Manoel

1 INTRODUCTION

Recently, decentralization has characterized the policy decisions of many countries both developed and developing.

In this framework many countries perceived the implementation of fiscal rules for subnational governments (SNGs) as the solution for sometimes weakly defined institutional arrangements. In this context, the analysis of prerequisites for SNG fiscal rules is an essential component in order to evaluate the potential outcomes and their realistic effectiveness.

This chapter will examine the institutional prerequisites of subnational fiscal rules and evaluate their effects with regard to a sample of Latin American countries: Argentina, Brazil, Colombia, and Mexico. We select this set of developing countries because they have experienced decentralizing issues in terms of both weakly defined competences and responsibilities, and lack of credibility of the central government's commitment to fiscal discipline. For instance, several of them experienced systematic bailouts, particularly in the 1990s. Their central governments attempted to tighten the budget constraints especially via a contractual approach, that is, through a special agreement between the highest debt subnational entities and the central government.

The chapter proceeds as follows. Section 2 presents the evidence on the institutional framework addressing two issues: (a) the characteristics of decentralization in both unitary-but-decentralized and federal countries; and (b) the main elements of the fiscal rules for SNGs. With regard to the latter we grouped the characteristics into three categories: (i) institutional (top down versus bottom up, one or more fiscal rules); (ii) main targets (budget balances, borrowing constraints, limits on tax rates or relief, and expenditure increase limits); and (iii) process rules and rule implementation (transparency obligations, monitoring activities, sanctions,

juridical constraints). For the countries adopting a bottom-up approach (Corbacho and Schwartz, 2007), we collected information at the state level on the degree of adherence to the national legislation as well as on their independent legislations.

Section 3 presents the empirical evidence on the selected countries. For each of them we collected data on the main fiscal measures at the state level, plus additional information on some economic and demographic characteristics (for example, population age range and GDP at the local level).

Section 4 presents the main conclusions. Although our analysis is not able to address the causal link between the application of fiscal rules and the main fiscal outcomes, some simple tests on the descriptive statistics show important differences which deserve attention.

2 FISCAL RULES AND EMPIRICAL EVIDENCE IN A DECENTRALIZED CONTEXT

Main Empirical Evidence on Fiscal Rule Effectiveness

How fiscal (policy) rules are defined is important. Most of the literature defines them as an incentive scheme or mechanism that introduces for a certain period (medium to long term) constraints on the main fiscal variables (revenues, expenditures, new indebtedness) using quantitative limits. Therefore a fiscal policy rule to be considered as such must fulfill at least three conditions:

1. a quantitative (numerical) target or ceiling which is translated into a fiscal indicator, for example, 'a maximum debt-to-GDP rate of X';
2. a clear procedure to monitor or enforce the implementation of the rule; and
3. an explicit cost to be incurred by the policy maker if the target is not achieved.

Why are fiscal policy rules (and fiscal institutions) needed? In reality there is a strong risk that a 'no fiscal rules world' (unconstrained fiscal policy) would systematically deviate from desirable policies. Reasons for this can be found in several models, among them, coordination failures in fiscal federalism, the common pool problem, time inconsistency, and myopia in politics. This chapter does not intend to discuss how fiscal rules should be designed; Kopits and Symanski (1998) indicated that a fiscal rule should be simple, transparent, coherent with the objective, but also

mindful of other public policy goals such as not discouraging structural reforms, allowing for cyclical adjustment and avoiding 'bad' adjustments, for example, undue tax hikes and large cuts in quality spending.

On the subnational level, the literature on fiscal rules is richer on the prerequisite and incentive side than on that of empirical evidence. Furthermore, in a decentralized context fiscal rules need a clear definition of intergovernmental relationships (Kopits, 2001; Sutherland et al. 2005; Ter-Minassian, 2007) and are supposed to be needed more when higher vertical imbalances are in place (Eichengreen and von Hagen, 1996).

Soft-budget constraint, moral hazard and vertical imbalance

The need for a sound decentralization process is linked to the more general problem of the soft-budget constraint and, consequently, to the central government's credibility to commit (higher-level, government broadly speaking). The moral hazard problem in intergovernmental relations is rooted in the expectation that the higher levels of government would intervene to address local deficits by using special transfers or taking over their liabilities (for example, last resort insurer) (Dafflon, 2002; Rodden, 2002; Breuillé et al., 2007). However, if the central government is not able to harden the budget it seems unlikely that adoption of fiscal rules for SNGs will be effective. Most of the recent bailouts of SNG finances by the central government have come with strong conditionalities such as 'no more bailouts' encrypted in the law or prohibition of new borrowing by SNGs until certain conditions are met.¹

Other literature has stressed the importance of fiscal rules not as a credibility issue but in terms of the dependency of the local administration from the center. Therefore it has been shown that the greater the vertical imbalance of SNGs, that is, the greater their dependence on central government transfers, the higher is the need for fiscal rules. Eichengreen and von Hagen (1996) examined data for a cross-section of federal states and found an association between fiscal restraints and the share of the tax base under the control of subnational authorities. Restraints are prevalent where sub-central governments finance a relatively small share of spending with their own taxes; furthermore, because SNGs lack control of the tax base (or they are too small), they do not resort to increased taxation to deal with debt crises. In a vertical imbalance arrangement, the argument for fiscal rules is straightforward: when there is risk of default and the central government cannot refuse a bailout, there may be a need for fiscal restraints on SNGs.

SNG bailouts and moral hazard are closely related. The negative impact on fiscal sustainability is even higher when there is a lack of effective control on borrowing. This seems to be the case of the Brazilian experience

in the 1990s: Bevilaqua (2002) shows that reputational effects originating from the repeated bailout operations reduced fiscal discipline and created an explosive accumulation of debt at the state level.² He also concludes that 'as successive bailouts were extended without being followed by institutional changes that would reduce the states' incentives to misbehave, a perverse fiscal regime was introduced' (p. 46). Institutional arrangements also play an important role: in the Brazilian environment in the 1990s, prospects of federal government bailouts induced private institutions to overextend credit to state governments in anticipation of higher returns.

Types of fiscal rules

Subnational fiscal rules can be listed as follows: rules on budget balances, expenditure caps, ceilings on the own revenue of subnational entities, limits on the stock of debt or on the issuance of new debt, restrictions on the type of expenditure that can be financed with debt, and limits on the debt linked to the cost of debt service or indicators of the ability to service the debt (see, among others, Giuriato and Gastaldi, 2009). All these measures are usually introduced in different combinations in order to more effectively limit both the common pool (Weingast et al., 1981) and moral hazard issues faced by the local authorities.

Several countries, however, pursued the implementation of fiscal rules for SNGs as the solution for sometimes weakly defined institutional arrangements with SNGs. As a consequence, as noted by Milesi-Ferretti (2004), an 'ugly outcome' can be generated, as the use of 'creative accounting' and window dressing rather than fiscal adjustment can reduce the degree of transparency in the government budget and the desirability and effectiveness of rules. More stringent fiscal rules can generate worse outcomes.³

Neither the impact of different rules nor the number of ugly outcomes (if any) has been deeply investigated in the literature. Empirical evidence at the subnational level is scant. The papers on the effectiveness of the rules in US states (Poterba, 1995, 1996, and 1997; Bohn and Inman, 1996) link the introduction of rules (mainly constitutional limitations) to the states' fiscal performances. The endogeneity problem is circumvented by the fact that constitutions are more than 100 years old and so they can be assumed as exogenous to the 1990s data. These works use the differences in stringency among the rules to assess their different impact.

One important conclusion is that states under deficit limitations tend to save more, and any budget balance rule is able to affect deficit behavior compared to a situation with no rule. Debrun et al. (2008), do not control for the endogeneity problem, and have commented on the ineffectiveness of fiscal rules at the subnational level. A very recent work, using a

diff-in-discontinuities design, and therefore robust to endogeneity issues, finds exactly the reverse: it is generally better to have subnational fiscal rules than not to have any, because they can help to curb subnational fiscal outcomes even in an institutional context with soft rule enforcement (Grembi et al., 2011).

Evidence and synthetic indices

One way to solve the problem of scarcity of information is to construct synthetic (composite) indices, which summarize information on all the numerical rules in force. Methodological problems, however, remain: results obtained using synthetic indices (von Hagen, 1991) would not be able to cope with omitted variable problems such as more stringent rules adopted by more fiscal conservative countries.

While budgetary stringency indices could be extremely useful to compare international fiscal performance, they have their own limitations (Poterba, 1995). For example, many of them are constructed by adding together a set of categorical variables, which assumes that various indicators (fiscal rules) are perfect substitutes, but this does not hold true in most cases. Another shortcoming is that if the analysis shows that the indices are relevant in explaining fiscal performance, it is later impossible to identify which particular indicator of budgetary rules or fiscal institutions really matters. Therefore, fiscal indices cannot be translated into policy actions.

One issue addressed in the literature is how the institutional framework can make one rule preferable to another. Using composite indicators, Sutherland et al. (2005) rank different rules to targets, which are typical targets in a decentralized context (for example, promoting allocative efficiency, restraining the size of the public sector, ensuring debt sustainability, and so on). The index that tries to measure whether debt sustainability is assured, comprises three subindices: deficit control, debt control, and deficit and debt monitoring. The conclusion is that indices may be analytically useful because they can help to identify both sets of fiscal rules that generally have favorable characteristics and types of trade-offs and side-effects that they engender (for instance, how to cope with cyclical developments).⁴

A recent study uses measures of the stringency of fiscal rules to test whether more stringent rules are more effective than weaker ones in producing desired outcomes (Broyles et al., 2009). Based on 17 OECD countries, the study analyzed three fiscal rule performances: expenditure limits, tax autonomy, and debt control. The results indicate that there is no empirical support for the assumption about the impacts of more-stringent fiscal rules on fiscal outcomes. The authors recognize, however,

that the data limitations, lack of detailed information about when the rules were implemented and endogeneity issues may explain the unexpected results.

One application of composite indices in Latin America found that the nature of budget procedures strongly influences fiscal outcomes (Alesina et al., 1999). This study aimed to explain cross-country differences in fiscal positions and concluded that budget procedures which include constraints on the deficits and are (a) more hierarchical (procedures that limit the role of legislature in expanding the size of the budget) and (b) transparent (stringent fiscal legislation can be circumvented if non-transparent procedures make budget documents unintelligible), lead to lower primary deficits. The main results are consistent with evidence drawn from US states which shows that the stringency of balanced budget laws determines fiscal outcomes (Poterba, 1994). In the case of Latin America, although there are still no balanced budget laws, nevertheless there are some fiscal rules: some countries require that the budget result be consistent with predefined fiscal targets; debt ceilings established pre-budget will impede the budget balance. Tommasi and Braun (2004) note that this study does not deal with the endogeneity issues, and conclude that countries with better budget institutions and fiscal outcomes may be countries in which voters prefer fiscal prudence or where the structure of political conflict surrounding the budget process is more flexible.

3 INSTITUTIONAL FRAMEWORK AND FISCAL RULES FOR SUBNATIONAL GOVERNMENTS

Decentralization and Subnational Government Public Finances

The fiscal decentralization process in Latin America is a fact: more and more revenues and expenditures are collected and spent at the local level.⁵ Public finances at the subnational level have become a hot issue because of recurrent fiscal imbalances, which has had a negative impact at the macroeconomic level. As a consequence, the amount and complexity of public debt, which has to be managed, registered, accounted for, paid and reported at a subnational level, has increased in recent years.

In order to analyze the effectiveness of fiscal rules in Latin America, this study examines a sample of countries (Colombia, Mexico, Brazil, and Argentina) where (a) the importance and level of independence of SNGs have been relevant when compared with other countries; and (b) data at the subnational level are publicly available and basically reliable.

Fiscal Rules Applied to Subnational Governments in Selected Countries

There are a vast number of fiscal rules currently in place in Latin America. We selected the most significant, classifying them into three categories: limits on expenses, limits on public debt, and limits on fiscal balance and/or primary results. Table 12A.1 in Appendix 12A details the main characteristics of fiscal rules in the countries in our sample such as types of restrictions, enforcement procedures, and sanctions.

Limits of operating expenses

In Argentina, Law 25.917 (August 2004) established that nominal increases in primary expenditures of central and provincial governments approved in the annual budgets could not be higher than the nominal increase of GDP projected in the medium-term macro framework. In Brazil, since 2000, a Fiscal Responsibility Law (FRL) has included certain spending item limits. The law sets out a number of numerical fiscal indicators and the government sets numerical multiyear targets for expenditures, including the wage bill (as a percentage of total expenditures). In the event of non-compliance, corrective measures are taken and can result in sanctions. Escape clauses exist for shocks. In Colombia, Law 617 (2000) established a limit to the operating expenses of subnational entities to a certain percentage of their freely disposable revenue, that is, excluding earmarked transfers.⁶ Based on several indicators of population and fiscal performance, the law classified departments (states) into five categories and municipalities into six.

Public debt limits

In Argentina, the 2002 'Agreements' between the central government and provinces imposed the requirement that new public debt incurred by the provinces should be authorized by the central government. In addition, Law 25.917 (2004) established annual limits to public debt – the debt service must not be greater than the current revenues. In Brazil, the FRL determines that all levels of government establish annual limits for public debt. In Colombia, Law 358 (1997) tried to curb excessive debt levels of SNGs by linking their ability to contract debt to liquidity and solvency indicators. Penalties for not adhering to the indicators would include the need to implement a fiscal adjustment and to submit to central government oversight. These arrangements did not achieve the objectives since the subnational debt grew more than expected and fiscal adjustment plans did not address underlying and medium-term fiscal imbalances.

Limits of fiscal balance (and/or primary results)

In Argentina, Law 25.453 (July 2001) tried to impose a zero fiscal deficit target. The law established that budgetary expenditure commitments could not be higher than tax collected. In this case, the fiscal adjustment would be 'automatic' because when the revenues were not enough the government (central and provincial) must reduce expenditures to balance the fiscal accounts. The political and economic crisis which involved Argentina in late 2001 created an institutional environment where it was infeasible to implement the fiscal rule.⁷ In 2002 the central government started implementing the Agreements with most of the provinces, with quantitative targets for fiscal deficits: to reduce the fiscal deficit in 2002 by 60 percent compared with 2001, and achieve balance in 2003. In Colombia, Law 819 (2003) requires both the central government and SNGs to present each year a consistent 10-year macroeconomic framework. One additional rule was established: the primary surplus has to be equal to or higher than the debt service. In Brazil, the FRL sets out a number of numerical fiscal indicators and the government sets numerical multiyear targets for the budget balance and debt. In the event of non-compliance, corrective measures are taken and can result in sanctions. Escape clauses exist for shocks.

Dealing with Subnational Public Finance Crises: The 'Contractual Approach'

In several countries, political and legal difficulties in implementing fiscal rules that apply to all levels of government and the need to reestablish macroeconomic stability have given birth to what we call the 'contractual approach'. Argentina, Brazil and Mexico are good examples. The script is the same in all situations and Box 12.1 summarizes the five most common steps involved.

The contractual approach⁸ seems to be very effective in terms of achievement of fiscal adjustment or compliance with the fiscal rules (and targets). Table 12A.2 in Appendix 12A summarizes three relevant cases in Latin America: Argentina, Brazil, and Mexico.

Historical cases have shown that the contractual approach is useful when the goal is to establish collective credibility for overall macroeconomic policy creating conditions for a sound fiscal policy at the subnational level (Guardia and Messenberg, 2002). For example, the Brazilian bailout scheme of 1997–98 enabled the states and municipalities to reverse their fiscal deficits. As indicated in Table 12A.2, the consolidated fiscal primary result of states in Brazil decreased from 1995 to 1998 and then began improving substantially until 2000 when for the first time the states started generating a primary surplus which lasted until 2010.

BOX 12.1 SUBNATIONAL GOVERNMENT CRISIS AND THE CONTRACTUAL APPROACH

Step 1: Debt Crisis

Usually the initial situation is a serious debt crisis at subnational level. The trigger for the crisis can be a lack of fiscal control at subnational level, low level of intergovernmental transfers, high interest rates, and so on. The debt crisis at subnational level jeopardizes debt sustainability, macroeconomic stability (given the high level of public deficit) and/or provision of basic services which are allocated to subnational level in the fiscal federalism arrangement.

Step 2: Pressure Mounts for a Fiscal Adjustment and Bailout

The macroeconomic impact of subnational public finance distress and the pressing need for a fiscal adjustment drives the central government to set up a bailout scheme.

Step 3: Debt Rescheduling Becomes an Option

In the bailout scheme, the SNGs are allowed and/or encouraged to benefit from a debt rescheduling. This process is achieved through a formal contract or approving a local law in which the SNG agrees with the terms and conditions of the federal law.

Step 4: Conditionality Implies a Fiscal Adjustment Program

The adherence to the rescheduling is (in most cases) conditional on a medium- to long-term fiscal adjustment program, which always has a combination of (a) reduction of expenditures; (b) increase of tax revenues and efficiency in tax collection; (c) selling of financial and physical government assets (privatization); and (d) establishment of formal fiscal rules such as limits to future indebtedness and for certain items of expenditures (debt service, wage bill, and so on).

Step 5: Agreement (Contract) is Signed

Finally, an agreement or contract is signed between the central government and the SNG, in which several conditions are imposed such as: no more central government guarantees; reduce or stop intergovernmental transfers if the fiscal adjustment program is not implemented; prohibition of new borrowing for a certain period of time; and so on. Therefore, the implementation of the fiscal adjustment or achieving of the fiscal targets becomes 'contractual'.

Colombia also achieved good fiscal results at the subnational level with the contractual approach (IMF, 2009).

Melamud (2010) reviews the main agreements and coordination process between central government and provinces in Argentina after 2001 and showed by the fiscal results achieved that the contractual approach generated positive results. In the case of Argentina it was evident that the Agreements signed between the central government and the provinces in 2002⁹ aimed mainly to send favorable signals to external creditors, and did not address main structural issues especially related to the fiscal vertical imbalance, which still remains critical in the country.

The contractual approach seems to be able to provide more-flexible tools at the local level, taking into account the specificities of the SNGs as well as their weaknesses. As such it could be considered as an alternative to the introduction of fiscal rules in the process of enhancing the reputation of the central government where the economic conditions of the SNG and its dimension would jeopardize the use of fiscal rules and trigger soft-budget constraint problems.

If the preconditions for the effectiveness of fiscal rules are not met, the use of a contractual approach is a way of coping with the rules' shortcomings. In reviewing several cases of contractual approach we also conclude that enforcement of the rules became more stringent and perhaps in such cases the fiscal rules at subnational level work better.

Subnational Government Fiscal Rules

In this study particular attention is given to four countries: Argentina, Brazil, Colombia, and Mexico (see Table 12A.3 in Appendix 12A). These countries (a) account for a significant amount of subnational public finance in Latin America; (b) they represent both bottom-up and top-down approaches; and (c) data at subnational level are available.

Both Argentina and Mexico adopted a bottom-up approach, that is, their states could decide whether to adhere to the national fiscal rule framework. We shall review these decisions. Colombia is of interest because it adopted a system that classifies the states according to parameters established in the national law. Each state category is assigned a set of main fiscal targets. Both the framework and the results for the 2002–09 period are presented. Finally Brazil is an example of a national top-down approach, imposing on its states fiscal rules that are decided at the central level.

We constructed a set of indices to describe both the fiscal framework and the intergovernmental relationships. The objective was to take into account the intergovernmental relationship controlling for the following:

Table 12.1 *Subnational public finances: index definition*

Index	Name
Current expenditure/GDP	<i>out_1</i>
Public debt/GDP	<i>out_2</i>
Current tax revenue/GDP	<i>out_3</i>
Capital expenditure investment/GDP	<i>out_4</i>
Financial loans/GDP	<i>out_5</i>
Privatization revenues/GDP	<i>out_6</i>
Current transfers/current total revenues	<i>dependency</i>
Payroll/current total revenues	<i>budget rigidity</i>
Current taxes revenues/current expenditures	<i>vertical imbalance</i>

- *Dependency* Provides a measure of the reliance of the SNG on the central government transfers. The higher this indicator, the lower is the SNG fiscal responsibility expected on the expenditures side;
- *Budget rigidity* Tries to investigate the SNG's margin of adjustment, that is, the higher the part of the current expenditures absorbed by the payrolls the lower is the ability of the SNG to reduce its expenditures, except by firing its staff, which is recognized to be infeasible; and
- *Vertical imbalance* Provides a measure of which portion of the current expenditures is covered by the SNG's own revenues. A higher proportion of current expenditures covered by central government transfers would indicate a situation of vertical imbalance.

Finally, we used several indices as measures of the main fiscal indicators as a share of the SNG's GDP: current expenditures; current tax revenue; current own-tax revenue, capital expenditure; and so on (variables *out_1* to *out_5* in Table 12.1). Table 12.1 shows the indices, that are used in this analysis. Unfortunately, we could not build every index for each country because of problems with data availability. Therefore, the indices are compiled according to the availability of the data (see Table 12A.4 data description for further information).

The purpose of the set of indices defined in Table 12.1 is to assess some main correlations due to the introduction of fiscal rules.¹⁰ We start by focusing specifically on those countries that show some differentiation among their SNGs, such as Mexico and Argentina. We present the data in four steps:

- first, the descriptive statistics for the available indices;
- second, the descriptive statistics concerning the rules;
- third, the correlations among the fiscal outcomes and the decentralization characteristics; and
- fourth, the results of a test for the difference of means of the available indices between states that apply the rules and those with no rule.

Colombia and Brazil need a different approach given their top-down framework. In addition to the descriptive statistics, we can produce further differentiations only for Colombia.

Country cases: Argentina

From 1999, Argentine states took initiatives to adopt fiscal rules following the enactment of the national Fiscal Solvency Law. By 2000, 14 out of 23 states had adopted some kind of fiscal rule (Tommasi and Braun, 2004). Among the 14 states: (a) all adopted deficits limits; (b) only seven adopted public debt and current expenditure limitations; (c) only two adopted public debt limits but not a cap on current expenditures; and (d) only two adopted current expenditure limits. In addition, only six out of the 14 'active' states initiated measures of fiscal transparency (*ibid.*).

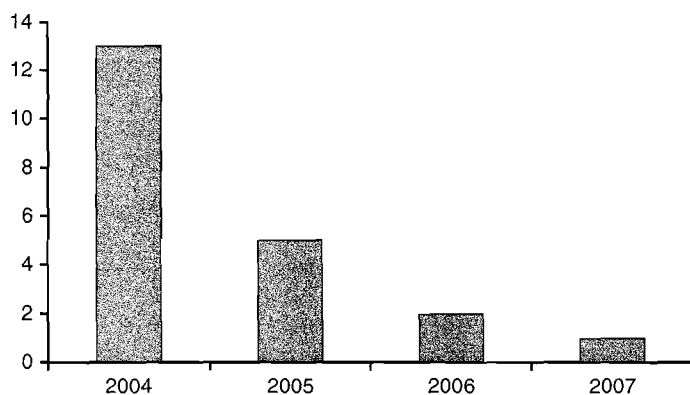
As a consequence of the first national fiscal ruling, a remarkable number of states seem to have ignored the national guidelines and even when the guidelines were considered, the national rule was generally modified. A different scenario followed the adoption of the national 2004 FRL 25.917: 21 of the 24 states had adhered fully (19) or with modification (2) to the national legislation (see Figure 12.1 and Table 12A.5).

The indices' descriptive statistics draw a picture of states with a large part of their current expenditures absorbed by the payroll (budget rigidity equal to 0.59), with a huge vertical imbalance and a high level of dependency (Table 12.2).

Analysis of the Spearman correlation coefficients¹¹ shows that in the states, wherever budget rigidity is higher dependency is lower, given that the correlation coefficient is negative and statistically significant (Table 12.3). Higher levels of current expenditure to GDP ratio (*out_1*) are then associated with a higher level of public debt (*out_2*).

We construct dummy variables to capture the adoption of different fiscal rules by the states. Following the history of implementation of fiscal rules in the subnational context:

- *reg_1* equals 1 if the states adopted the Fiscal Solvency Law and 0 otherwise;



Source: Elaboration by authors based on data from Consejo Federal de Responsabilidad Fiscal (2010).

Figure 12.1 Argentina: states adhering to the 2004 FRL

Table 12.2 Argentina: descriptive statistics

Variable	Mean	Std dev.	Min	Max
<i>out_1</i>	0.19	0.09	0.04	0.49
<i>out_2</i>	0.01	0.04	0.00	0.30
<i>out_3</i>	0.17	0.08	0.04	0.49
<i>out_4</i>	0.03	0.02	0.00	0.12
<i>budget rigidity</i>	0.59	0.06	0.40	0.79
<i>vertical imbalance</i>	0.92	0.21	0.46	1.75
<i>dependency</i>	0.68	0.20	0.07	0.97

- *reg_2* equals 1 if the states adopted the Fiscal Responsibility Law and 0 otherwise; and
- *both rules* equals 1 when both *reg_1* and *reg_2* are equal to 1.

Additional dummies were used to control for further characteristics of the Fiscal Solvency Law (*deficit_reg_1*, *pubdebt_reg_1*, and *curexp_reg_1*) and the Fiscal Transparency Law. Finally, we also construct dummies for the transparency requirements of the first fiscal rule (*transp_reg_1*) and the second fiscal rule (*transp_reg_2*). Table 12.4 shows the main results. Only 9 percent of the states adopted both rules, and among the 22 percent adopting the first rule, only 20 percent adopted a limit on the deficit and

Table 12.3 Argentina: Spearman correlation coefficients

Variables	<i>out_1</i>	<i>out_2</i>	<i>out_3</i>	<i>out_4</i>	<i>vertical imbalance</i>	<i>dependency</i>	<i>budget rigidity</i>
<i>out_1</i>	1						
<i>out_2</i>	0.3496*	1					
<i>out_3</i>	0.8810*	0.2470*	1				
<i>out_4</i>	0.6046*	0.0022	0.6044*	1			
<i>vertical imbalance</i>	-0.1786*	-0.2147*	0.2520*	0.0387	1		
<i>dependency</i>	0.7991*	0.2694*	0.9212*	0.5113*	0.3025*	1	
<i>budget rigidity</i>	0.1447*	0.0985	0.1960*	0.1734*	0.0419	-0.2087*	1

Note: * Significant at 5%.

Table 12.4 Argentina: fiscal rules adopted by the states

Rules	Mean	Std dev.	Min	Max
<i>reg_1</i>	0.22	0.41	0	1
<i>reg_2</i>	0.19	0.39	0	1
<i>both_rules</i>	0.09	0.29	0	1
<i>deficit_reg_1</i>	0.20	0.40	0	1
<i>pubdebt_reg_1</i>	0.16	0.37	0	1
<i>curexp_reg_1</i>	0.14	0.35	0	1
<i>transp_reg_1</i>	0.10	0.30	0	1
<i>transp_reg_2</i>	0.06	0.23	0	1

14 percent included a cap on the current expenditures. The rates of adoption of transparency legislation are very low with only 6 percent of the states opting for a transparency law associated with the national Fiscal Transparency Law.

Data availability problems especially after 2005 precluded a further analysis of the 2004 legislation and a proper comparison between the two rules. Hence, we present evidence mainly for the first rule, although references to the second are also included.

Moving from the characteristics of *reg_1*: the difference in means when the *deficit_reg_1* is statistically significant for *out_1* to 3. Only for *out_2* (public debt) did we find that the mean of states with the rules is lower than that of states with no rules. The same result was found for *pubdebt_reg_1* or *curexp_reg_1*. The link with the other indices is the opposite: states with no rule have lower values than those that adopted the rule. As indicated

Table 12.5 Argentina: differences in mean according to the adopted fiscal rule

Rule	Variable	Rule yes		Rule no		Mean diff (rule no- rule yes)	t-test
		Obs	Mean	Obs	Mean		
<i>deficit_reg_1</i>	<i>out_1</i>	63	0.215	262	0.186	-0.029	-2.39
	<i>out_2</i>	63	0.004	187	0.017	0.012	2.30
	<i>out_3</i>	63	0.206	262	0.162	-0.043	-3.88
	<i>out_4</i>	63	0.027	262	0.027	0.000	0.11
<i>pubdebt_reg_1</i>	<i>out_1</i>	51	0.223	274	0.186	-0.037	-2.75
	<i>out_2</i>	51	0.003	199	0.016	0.013	2.30
	<i>out_3</i>	51	0.220	274	0.162	-0.058	-4.84
	<i>out_4</i>	51	0.034	274	0.026	-0.009	-3.04
<i>curexp_reg_1</i>	<i>out_1</i>	46	0.217	279	0.188	-0.029	-2.11
	<i>out_2</i>	46	0.005	204	0.016	0.011	1.76
	<i>out_3</i>	46	0.220	279	0.163	-0.057	-4.53
	<i>out_4</i>	46	0.034	279	0.026	-0.008	-2.79
<i>reg_1</i>	<i>out_1</i>	70	0.207	255	0.188	-0.020	-1.65
	<i>out_2</i>	70	0.004	180	0.017	0.014	2.60
	<i>out_3</i>	70	0.203	255	0.162	-0.041	-3.80
	<i>out_4</i>	70	0.030	255	0.026	-0.004	-1.43
<i>reg_2</i>	<i>out_1</i>	29	0.217	296	0.189	-0.028	-1.63
	<i>out_2</i>	29	0.015	221	0.013	-0.002	-0.24
	<i>out_3</i>	29	0.229	296	0.165	-0.064	-4.16
	<i>out_4</i>	29	0.044	296	0.025	-0.018	-5.11
<i>both_rules</i>	<i>out_1</i>	13	0.225	312	0.190	-0.035	-1.41
	<i>out_2</i>	13	0.003	237	0.014	0.011	1.04
	<i>out_3</i>	13	0.256	312	0.167	-0.089	-3.92
	<i>out_4</i>	13	0.047	312	0.026	-0.021	-3.92
<i>transparency_ reg_1</i>	<i>out_1</i>	32	0.229	293	0.188	-0.041	-2.51
	<i>out_2</i>	32	0.003	218	0.015	0.013	1.81
	<i>out_3</i>	32	0.228	293	0.165	-0.063	-4.28
	<i>out_4</i>	32	0.040	293	0.026	-0.014	-4.11
<i>transparency_ reg_2</i>	<i>out_1</i>	9	0.172	316	0.192	0.021	0.69
	<i>out_2</i>	9	0.011	241	0.014	0.003	0.24
	<i>out_3</i>	9	0.177	316	0.171	-0.007	-0.24
	<i>out_4</i>	9	0.024	316	0.027	0.003	0.52

by Table 12.5, the same pattern is true for transparency rules. Thus states adopting fiscal rules were probably those most in need of some sort of regulation. However, their outcomes seem to address a problem of rule ineffectiveness at least until 2005.

Table 12.6 Brazil: descriptive statistics

Variable	Mean	Std dev.	Min	Max
<i>out_1</i>	0.16	0.06	0.03	0.38
<i>out_2</i>	13.72	53.08	0.00	338.44
<i>out_3</i>	0.08	0.03	0.01	0.25
<i>out_4</i>	0.02	0.03	0.00	0.35
<i>out_5</i>	0.01	0.02	0.00	0.33
<i>out_6</i>	0.00	0.01	0.00	0.17
<i>dependency</i>	0.39	0.21	0.06	0.90
<i>budget rigidity</i>	0.54	0.09	0.21	0.86
<i>vertical imbalance</i>	0.57	0.19	0.09	1.04

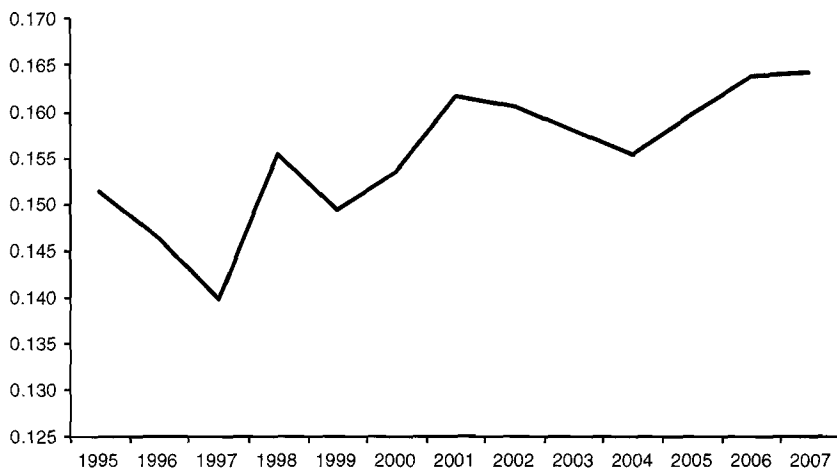
Country cases: Brazil

In the case of Brazil we have a series of data before and after the rule introduction and we use the same indices defined in Table 12.1. The descriptive statistics are reported in Table 12.6. For the Brazilian states we could construct two more indices: credit-to-GDP and privatization revenue-to-GDP ratios, identified in Table 12.6 as variables *out_5* and *out_6*, respectively.

Some initial conclusions based on the descriptive statistics of Table 12.6 indicate that for the Brazilian states:

- Budget rigidity, that is, the proportion of current expenditures absorbed by the payroll in the Brazilian states, tends to be high with an average value of 54 percent for the entire period, which is lower than Argentina (59 percent) but higher than Colombia (48 percent) and Mexico (23 percent) as presented below. Although we are aware of the risks implied in these comparisons because the definitions and coverage of payroll may differ in several countries, one conclusion is straightforward: when a significant part of spending is committed by payroll, any fiscal adjustment that implies expenditure cuts will be more difficult.
- Dependency of states on central government transfers seems to be smaller in Brazil (39 percent) than other countries in the region such as Colombia (67 percent), Argentina (68 percent), and Mexico (81 percent) as presented below. Therefore, we could expect a stronger engagement of the states in terms of fiscal responsibility.

One important trend is shown by the positive slope of current expenditure as a proportion of GDP during 1995–2010 (Figure 12.2). The indicator increases during the period of observation even though the pattern is



Source: Elaboration by authors based on data from National Treasury of Brazil.

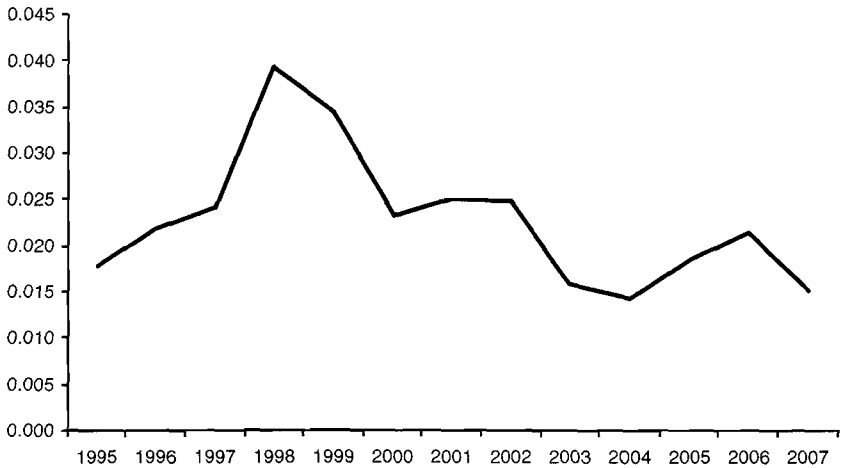
Figure 12.2 Brazil: current expenditures – states average (as % of state GDP, 1995–2010)

not smooth. The low level of current expenditures in the years immediately before 1999 captures the serious fiscal crisis that the country (and the states) experienced.

The fiscal crisis of 1997–98 and the contractual agreements signed with the central government implied a strong fiscal adjustment, which reduced investment at state level.¹² Figure 12.3 shows the trend of the average value of the capital expenditures index (*out_4*), which indicates a positive trend from 1995 until 1999 (first year in which the agreements were implemented) and a clear turning point after that period.

As with Argentina, we derive the Spearman correlation coefficients (Table 12.7) at the 5 percent significance level. One of the highest correlations is between the current expenditures-to-GDP ratio (*out_1*) and the indicator, which proved the reliance of Brazilian states on central government transfers (*dependency*). For Brazil we also have the level of privatization revenues (*out_6*), which is positively correlated with the amount of current tax revenues as well as that of financial loans.

In Brazil, states with a higher dependency level tend to have a higher current expenditure-to-GDP ratio (*out_1*) (Figure 12.4). One explanation for this result could be that a higher level of current expenditures is related to a higher level of central government transfers, due to common pool problems. SNGs are more accountable when they spend revenues collected at the local level.



Source: Elaboration by authors based on data from National Treasury of Brazil.

Figure 12.3 Brazil: capital expenditures – states average (as % of state GDP, 1995–2010)

As stated before, we cannot run specifications according to the adopted rule; therefore, we ran a *t*-test on the mean differences on three periods:

- first period (1995–97): the years before the states–central government agreements;
- the second period (1998–2000): when the agreements started but before the enforcement of the FRL; and
- third period (2001–2003): after the introduction of the fiscal rule.

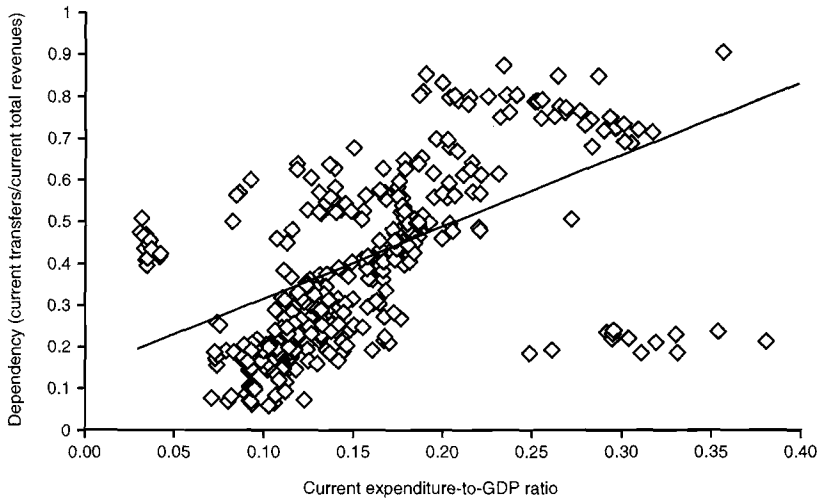
In Tables 12.8 and 12.9 we report the test on credit to GDP (*out_5*) and privatization revenues to GDP (*out_6*). The results from both tables indicate that while the average values of the indices before and after the adoption of the central government–states agreement are not statistically different (Table 12.9), the difference is statistically significant after the adoption of the FRL (Table 12.8). Therefore, one conclusion is that after the introduction of the FRL limits, the average incidence of both the loans outcome and privatization revenues decreased.

The first result is consistent with the overall fiscal performance of the states after signing the fiscal adjustment agreement with the central government in 1997/98 – which implied borrowing less. The second result on privatization may be due to the fact that in the fiscal adjustment programs

Table 12.7 Brazil: Spearman correlation coefficients

Variable	<i>out_1</i>	<i>out_2</i>	<i>out_3</i>	<i>out_4</i>	<i>out_5</i>	<i>out_6</i>	<i>dependency</i>	<i>budget rigidity</i>	<i>vertical imbalance</i>
<i>out_1</i>	1.0								
<i>out_2</i>	0.0098	1.0							
<i>out_3</i>	0.2080*	0.0	1.0						
<i>out_4</i>	0.6475*	-0.1	0.1556*	1.0					
<i>out_5</i>	0.0542	0.1844*	-0.001	0.2659*	1				
<i>out_6</i>	-0.1520*	0.0697	0.2115*	0.0287	0.2049*	1			
<i>dependency</i>	0.6456*	-0.0503	-0.3800*	0.4700*	-0.0118	-0.2925*	1		
<i>budget rigidity</i>	0.1746*	0.0745	-0.2667*	-0.0212	0.0979	-0.1106*	0.3130*	1	
<i>vertical imbalance</i>	-0.6617*	-0.011	0.4811*	-0.4199*	-0.055	0.2571*	-0.9000*	-0.4104*	1

Note: *Significant at 5%.



Source: Elaboration by authors based on data from National Treasury of Brazil.

Figure 12.4 Brazil: dependency and current expenditures relationship

Table 12.8 Brazil: differences in means; credit to GDP and privatization revenues to GDP before and after the FRL adoption

Variable	2001–2003		1998–2000		Mean diff (2001/03–1998/00)	<i>t</i> -test
	Obs	Mean	Obs	Mean		
<i>out_5</i> (credit)	81	0.003	81	0.017	–0.013	–5.10
<i>out_6</i> (privatizations)	81	0.001	81	0.008	–0.007	–4.13

Table 12.9 Brazil: differences in means; credit to GDP and privatization revenues to GDP before and after the states–central government agreement adoption

Variable	1998–2000		1995–1997		Mean diff (1995/97–1998/00)	<i>t</i> -test
	Obs	Mean	Obs	Mean		
<i>out_5</i> (credit)	81	0.017	81	0.015	–0.002	–0.70
<i>out_6</i> (privatizations)	81	0.008	81	0.006	–0.002	–0.98

Table 12.10 Colombia: fiscal indicators, Traffic Light Law 358/1997

Indicator	Autonomous indebtedness Green light	Intermediate indebtedness Yellow light	Critical indebtedness Red light
Liquidity indicator	<40%	40% < 60%	>60%
Solvency indicator	<80%	<80%	>80%
Effect	SNG is allowed to contract new credit autonomously	(a) SNG can contract autonomously; (b) requires indebtedness authorization from the Ministry of Finance or the department, which will be conditioned on the signing of a Performance Agreement with the financial entities	Authorization is required to perform credit operations, thus a Performance Agreement with the financial entities should be signed

Source: Echavarría et al. (2000).

signed in the late 1990s, the states (especially the larger ones) committed to privatize some of the states' own enterprises, which occurred in the first years after the programs were implemented. After a first round of privatization, the revenue generated by selling state assets naturally decreased.

Country cases: Colombia

In 1997 Colombia adopted the Traffic Light Law, which classifies the fiscal behavior of the SNGs according to two main indicators: (a) a *liquidity* indicator, given by the ratio between the debt interest and the 'operational' savings (for example, current revenue minus current expenditure excluding interest payments), and (b) a *solvency* indicator, which represents the ratio between the debt balance and the current revenue (Echavarría et al., 2000). The thresholds defined by the law are shown in Table 12.10.

Table 12.11 indicates that during the period from 2002 to 2009, most states (more than 85 percent),¹³ were in the green light category and therefore they can contract new debt autonomously. If the Traffic Light Law was intended to be a means to control the indebtedness level of SNG, its inconclusive outcome is probably due to a low level of stringency of the green category constraints.

Colombian states went through another classification with Law 617/2000, which defined five categories based on a combination of resident

Table 12.11 Colombia: states classified according to the Traffic Light Law

Traffic light	2002	2003	2004	2005	2006	2007	2008	2009	Total
Green	21	19	21	21	20	21	24	20	167
Red	11	13	11	11	12	11	8	12	89
Total	32	32	32	32	32	32	32	32	256

Source: Authors' calculations based on MHCP (2002–2009) data.

Table 12.12 Colombia: state categories classified by population and revenue

Category	Population	Revenues
Special	> 2,000,000	Own revenues are higher than 600,000 minimum legal monthly wage
1	700,001 < population < 2,000,000	170,001 < own revenue < 600,000 minimum legal monthly wage
2	390,001 < population < 700,000	122,001 < own revenue < 170,000 minimum legal monthly wage
3	100,001 < population < 390,000	60,000 < own revenue < 122,000 minimum legal monthly wage
4	population < 100,000	Own revenue < 60,000 minimum legal monthly wage

Source: Law 617/2000.

population and state revenue threshold. As shown in Table 12.12, moving from the fourth to the special category, the number of residents increases as does the ratio between state revenues and the minimum legal monthly payroll expenditure.

From 2001 to 2009, most states were included in categories 2 to 4 (Table 12.13). Note that categories 3 and 4 are subject to the same limits on the ratio between administrative expenditures and own current revenues.¹⁴

The expenditure limits are more stringent from the bottom to the top of the rank, as shown in Table 12.14. The basic intuition behind the classification constraint is that a higher margin of discretion needs to be allowed to smaller states, since they are expected to have a lower level of own-generated revenues, although such equivalence might not be true in the case of small richer states (that is, states that have natural resources have a higher GDP even if the population is smaller).

Table 12.13 Colombia: states classified according to Law 617/2000

Category	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
0	3	3	3	3	3	3	3	3	3	27
1	4	4	4	5	5	4	4	3	3	36
2	8	9	7	7	6	6	6	7	7	63
3	8	6	8	6	7	8	8	8	8	67
4	9	10	10	11	11	11	11	11	11	95
Total	32	32	32	32	32	32	32	32	32	288

Note: The series started from the first year for which information is available.

Source: Authors' calculations based on MHCP (2002–2009) data.

Table 12.14 Colombia: limits on current expenditures ratio (as % of own current revenues)

Category	Limit
Special	50
1	55
2	60
3 and 4	70

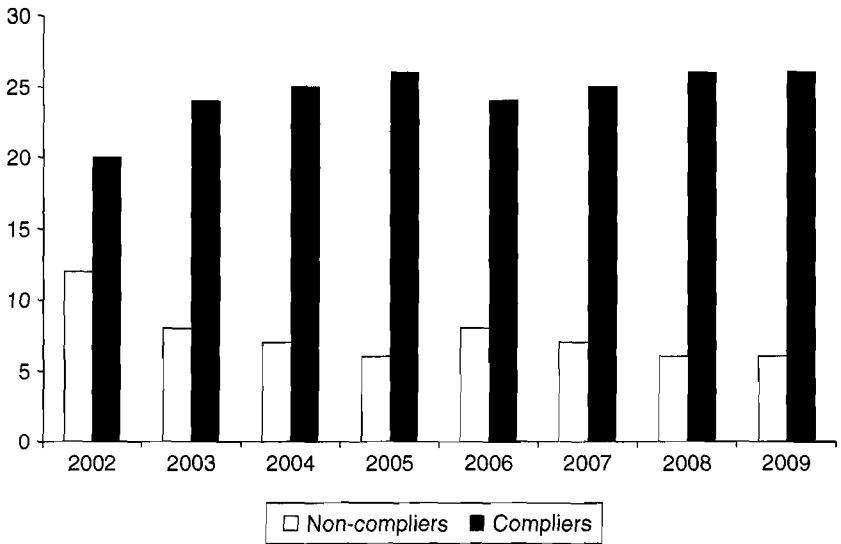
Source: Article 4, Law 617/2000.

Table 12.15 Colombia: limits on current expenditures ratio, 2001–2004 (as % of own current revenues)

Category	2001	2002	2003	2004
Special	65	60	55	50
1	70	65	60	55
2	75	70	65	60
3 and 4	85	80	75	70

Source: Article 5, Law 617/2000.

During the 2001–04 period, Law 617 provided transitional rules as far as the expenditure limit was concerned. For example, the three states in the Special Category (Antioquia, Cundinamarca, and Valle) were expected to reduce the targeted ratio from 65 to 50 percent in 3 years (Table 12.15). Even though such limits as defined in the table seem quite



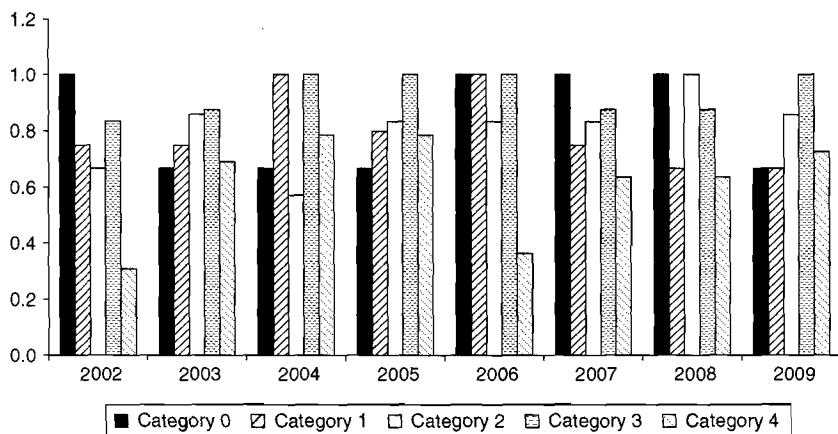
Source: Elaboration by authors based on data from Viabilidad Fiscal Department, 2002–2009.

Figure 12.5 Colombia: compliers versus non-compliers (Law 617/2000 requisites) (number of states)

ambitious, only a few states were found to be not complying with the rule's requirements (Figure 12.5). This appears to be a paradox: if the limits were really ambitious one would expect that a large number of states would not be complying. One conclusion could be that either the rule was quite effective or the thresholds previously defined were not sufficiently demanding considering the starting point of the majority of the states.

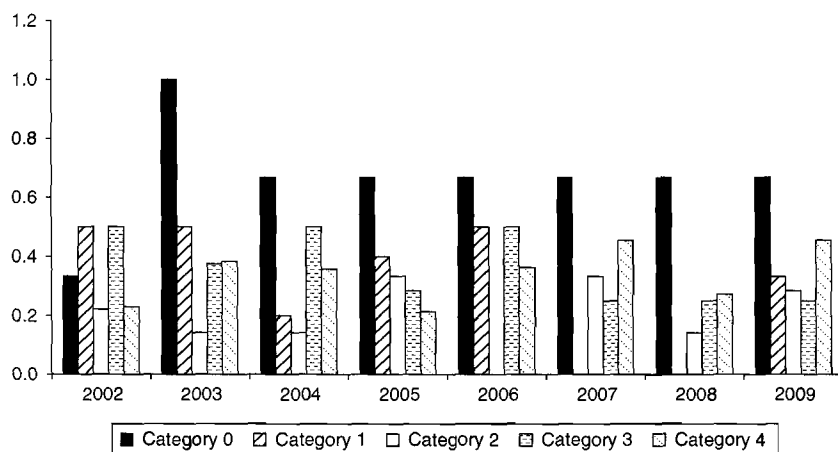
When a more accurate investigation is carried out, it is apparent that the best compliers belong to the special and third categories, while most non-achievers belong to the fourth category (Figure 12.6).

It is apparent that states do not have any incentive to be non-achievers according to the Traffic Light Law classification, because red lighters¹⁵ need authorization to perform credit operations and they have to agree to and implement an ad hoc fiscal program. In other words their bargaining power is neutralized once they have to deal with the private sector and it can be used only with the central government. The special category states (category 0) came under the red light classification most of the time during 2002 to 2009 (Figure 12.7). The bigger states are more under the control of



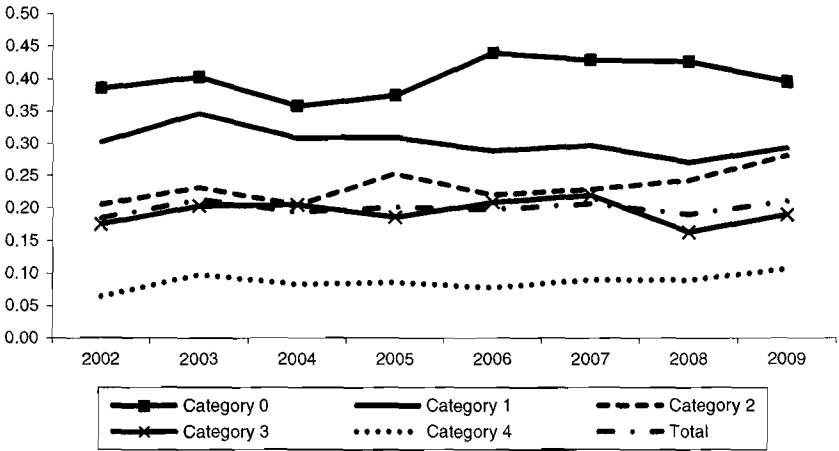
Source: Elaboration by authors based on data from Viabilidad Fiscal Department, 2002–2009.

Figure 12.6 Colombia: limits compliance per year and category (Law 617/2000)



Source: Elaboration by authors based on data from Viabilidad Fiscal Department, 2002–2009.

Figure 12.7 Colombia: red lights per year and category



Source: Elaboration by authors based on data from Viabilidad Fiscal Department, 2002–2009.

Figure 12.8 Colombia: own-tax shares by category, 2002–2009

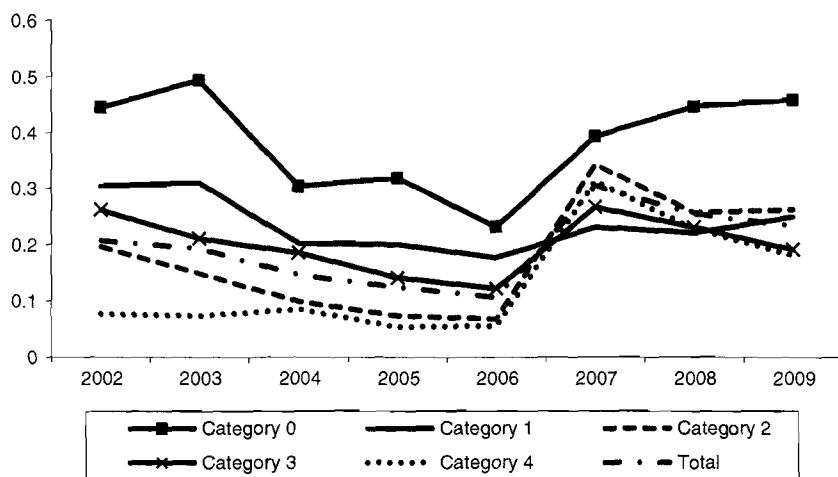
the central government, consistently with the fact that they are those most likely to generate fiscal imbalances.

Some of the characteristics of the intergovernmental relationships based on the available data are as follows:

- first, in terms of own-tax shares, there are apparent differences among categories (see Figure 12.8);
- second, in spite of these differences, the index is stable during the 2002–09 period; and
- third, consistently with the rationale of the categories, the own-tax share is highest for the special category states, and lowest for the fourth category states.

The debt ratio¹⁶ shows a downward trend until 2006 and an unusual increase from 2007 to 2009 especially for categories 4 and 2, and partially for category 3 (Figure 12.9). The constraints for the categories vary, which reflects the position of the categories according to the debt ratio.

Finally, we produce descriptive statistics for the main reference indices defined in Table 12.1, using Colombian data from 2002 to 2009. Table 12.16 summarizes the descriptive statistics. On average we verified a low level of current tax revenues. Additionally the intergovernmental



Source: Elaboration by authors based on data from Viabilidad Fiscal Department, 2002–2009.

Figure 12.9 Colombia: debt to total revenue by category, 2002–2009

Table 12.16 Colombia: main descriptive statistics

Variable	Mean	Std dev.	Min	Max
<i>out_1</i>	0.03	0.03	0.003	0.20
<i>out_2</i>	0.02	0.03	0	0.13
<i>out_3</i>	0.01	0.01	0.002	0.06
<i>out_4</i>	0.05	0.06	0	0.29
<i>dependency</i>	0.67	0.20	0.15	0.96
<i>budget rigidity</i>	0.48	0.21	0.06	0.96
<i>vertical imbalance</i>	0.58	0.27	0.07	1.00

relationship can be better understood when we control by some indices indicating dependency, budget rigidity and vertical imbalance:

- in terms of dependency from central government, states rely heavily on transfers (of about 67 percent);
- in terms of rigidity of the budget it is about 48 percent that is, the payroll bill is a large component of the current expenditures; and
- in terms of vertical imbalance, the local current revenues cover about 58 percent of the current expenditures.

Table 12.17 Colombia: Spearman correlation coefficients

Variable	<i>out_1</i>	<i>out_2</i>	<i>out_3</i>	<i>out_4</i>	<i>depend- ency</i>	<i>budget rigidity</i>	<i>debt_ ratio</i>	<i>catego- ries</i>
<i>out_1</i>	1.0							
<i>out_2</i>	-0.2	1.0						
<i>out_3</i>	0.5991*	0.1174	1					
<i>out_4</i>	0.2636*	-0.5915*	0.0935	1				
<i>dependency</i>	0.2038	-0.3408*	0.2606	0.0636	1			
<i>budget rigidity</i>	0.2275	0.0495	0.1448	-0.0935	0.1114	1		
<i>debt_ratio</i>	-0.2842*	0.6999*	0.0229	-0.4176*	-0.3397*	-0.1096	1	
<i>categories</i>	0.2626*	-0.3006*	0.0004	0.4216*	0.4180*	0.1365	-0.2855*	1

Note: *Significant at 5%.

Once the main fiscal outcomes are correlated with the decentralization characteristics of the Colombian states, as shown in Table 12.17, some expected results are confirmed. For instance higher levels of dependency are associated with a lower level of public debt as a percentage of GDP, the coefficient being negative and statistically significant. Budget rigidity does not have any significant correlation with the fiscal outcomes, with regard to the data and the correlation coefficient. In terms of the relationship between current expenditures and public debt, there is a negative correlation coefficient (-0.2) and the same sign characterizes the correlation between public debt and capital expenditures, which is also significant (-0.59).

Since the introduction of fiscal rules in Colombia concerned all the states simultaneously and data are not available for the entire period, sophisticated econometrics is infeasible. Therefore we present results of a statistical test to check the mean differences between different categories of states, such as compliers and non-compliers. Through this analysis, which does not resolve the endogeneity problem addressed by the literature on fiscal rules, we can at least draw some preliminary conclusions.¹⁷

For Colombia, we address the differences between red and green light states and between compliers and non-compliers of the limit imposed by Law 617/2000. The results as shown in Tables 12.18 and 12.19 can be summarized as follows:

- The difference between red and green light indices is in some cases statistically different. For instance, on average green states present debt ratio as well as percentage of public debt to GDP significantly lower than those of red states. However, the mean current

Table 12.18 Colombia: differences in mean: red light versus green light states

Variable	Red light states		Green light states		Mean diff (green-red)	t-test
	Obs	Mean	Obs	Mean		
<i>debt</i>	91	0.321	177	0.121	-0.200	-9.12
<i>out_1</i>	68	0.018	154	0.014	-0.004	-1.46
<i>out_2</i>	70	0.019	162	0.010	-0.010	-3.92
<i>out_4</i>	68	0.017	139	0.023	0.007	1.25

Table 12.19 Colombia: differences in mean: compliers versus non-compliers

Variable	Non-compliers		Compliers		Mean diff (Compliers- Non-compliers)	t-test
	Obs	Mean	Obs	Mean		
<i>debt</i>	62	0.205	206	0.184	0.021	0.75
<i>out_1</i>	48	0.020	142	0.014	0.006	1.61
<i>out_2</i>	50	0.014	148	0.010	0.004	1.47
<i>out_4</i>	47	0.027	131	0.023	0.004	0.60

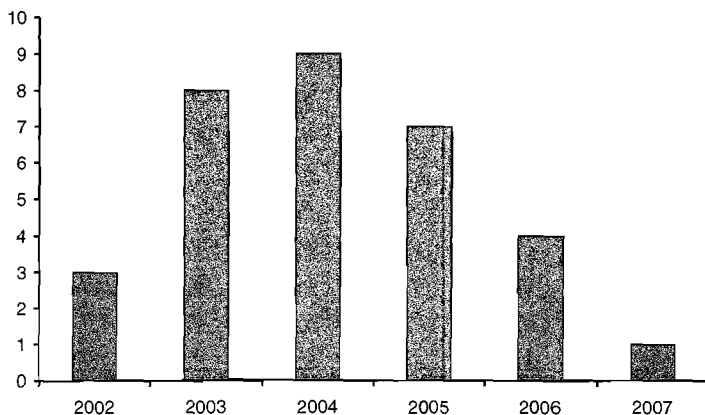
expenditure-to-GDP index is no different between red and green light states. This is quite consistent with the traffic light index definition, where the level of current expenditures is never targeted alone.

- On the contrary, there is a lack of statistical significance between average measures of the fiscal indicators of compliers and non-compliers of the 617/2000 targets: debt ratio, current expenditures to GDP, public debt to GDP and capital expenditures to GDP. This might in part confirm the feeling of ineffectiveness of these provisions, as addressed in the first place by the high incidence of compliance.

In summary, we could conclude that for Colombia while the Traffic Light Law provision¹⁸ seems to be linked to some effective implications in economic terms, those of Law 617/2000 are not related to any significant differences.

Country cases: Mexico

Mexican intergovernmental relationships have been judged as highly inefficient (Joumard, 2005). States have no revenue autonomy, but they are



Source: Secretaría de Hacienda y Crédito Público (2007).

Figure 12.10 Mexico: states adopting transparency laws, 2002–07

in charge of expenditures.¹⁹ The Mexican states have been slow to move towards an institutional liability framework.

Notwithstanding the constitutional prescription of Article 117, it has been only as a consequence of the 1994–95 *Tequila* crises that some states took the initiative to adopt some formal limit of indebtedness: 14 out of 32 states in 2003 (Secretaría de Hacienda y Crédito Público, 2003). By 2007, the number of those adopting a limit to the debt rises to 16, 13 of which have only a law concerning debt limitation without quantitative limits or targets (see Table 12A.6).

Starting in 2002, the introduction of transparency laws by the states was seen to be the tool to make information on public finance data available. Furthermore, the laws should provide more and better information to monitor the efforts and decisions of each state in terms of fiscal policy implementation. During the 2002–07 period, all Mexican states adopted a fiscal transparency law (Figure 12.10). In addition, following the 2006 Budget and Fiscal Responsibility Law, states adopted most of the budgetary execution procedures stemming from the national legislation as a consequence of agreements with the central government.

A distinctive trait of the Mexican case is the structure of the transfers. The states' balance sheets distinguish the earmarked grants (*aportaciones*) from the revenue-sharing grants (*participaciones*). Until 1998 the distribution of the earmarked grants was totally based upon discretion, but in that year a formula was introduced. Looking at the earmarked grants-to-revenue-sharing ratio it is apparent that until 1998, transfers

Table 12.20 Mexico: descriptive variables

Variables	Mean	Std dev.	Min	Max
<i>out_mx</i>	0.21	0.14	0.04	0.87
<i>out_2</i>	0.01	0.01	0.00	0.15
<i>out_3</i>	0.00	0.00	0.00	0.03
<i>out_4</i>	0.00	0.01	0.00	0.06
<i>dependency</i>	0.81	0.16	0.20	0.98
<i>bud_rigidity</i>	0.23	0.14	0.01	0.68
<i>vert_imb</i>	0.03	0.03	0.00	0.21

from the central government to the states were mainly represented by the revenue-sharing component, while after that year the ratio was inverted. The central government seems to be attempting to reduce the SNGs' discretionary powers.

Even if this attempt undermines a balanced intergovernmental relationship, it is needed to impose a limit on SNG expenditure choices (that is, borrowing). Mexico, therefore, represents a special case of partial decentralization (Devarajan et al., 2007): states can freely manage politically sensitive expenditures that the central government will provide. The pitfalls of the decentralization design are also significant according to the accountability standard of local politicians, given that the no re-election rule for local governors is in place (Joumard, 2005). Such a rule can decrease the accountability of expenditure choices of local politicians.

Because we do not have data that distinguish between current and capital expenditures in the case of Mexico, we use the aggregate measure of expenditures to GDP (*out_mx*).²⁰ Table 12.20 presents the descriptive statistics of the main indices. *Out_mx* has a mean value of 21 percent, but the most striking result is given by *out_3*, which represents the GDP ratio of current tax revenue, which has extremely low values. Overall data confirm the high dependency of Mexican states on the central government.

As for the Argentine case study, we constructed dummy variables for the rules adopted by the states; therefore each variable can assume either the value of 0, if the rule was not adopted, or 1, if the rule was adopted. In Table 12.21 we report the descriptive statistics for these rules. In particular three dummies need further explanation:

- *lim_debt_1* takes value 1 if the state had some formal limit on debt by 2002 and 0 otherwise;

Table 12.21 Mexico: fiscal rules adopted by the states

Variables	Mean	Std dev.	Min	Max
<i>transparency</i>	0.20	0.40	0	1
<i>amount ex ante</i>	0.12	0.33	0	1
<i>state_approv</i>	0.03	0.17	0	1
<i>golden rule</i>	0.12	0.33	0	1
<i>lim_debt_1</i>	0.43	0.50	0	1
<i>lim_debt_2</i>	0.15	0.36	0	1
<i>both_lim_debt</i>	0.06	0.24	0	1

Table 12.22 Mexico: Spearman correlation coefficients

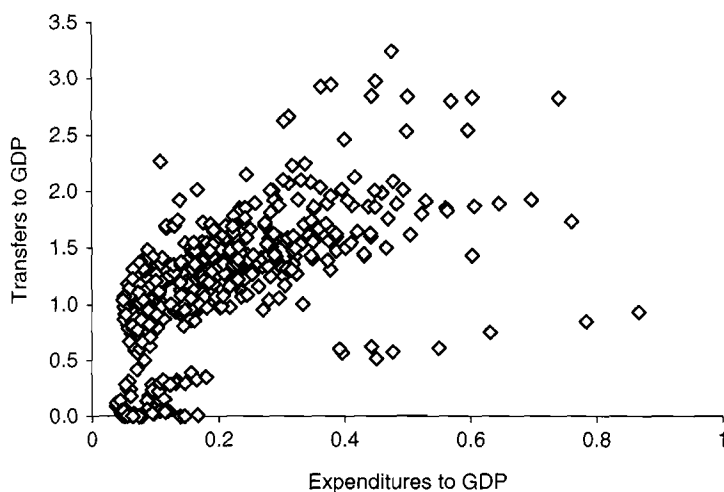
Variables	<i>out_mx</i>	<i>out_2</i>	<i>out_3</i>	<i>out_4</i>	<i>dependency</i>	<i>transfers ratio</i>	<i>budget rigidity</i>
<i>out_mx</i>	1						
<i>out_2</i>	0.1592*	1					
<i>out_3</i>	0.5026*	0.2338*	1				
<i>out_4</i>	0.1058	0.1429*	0.0614	1			
<i>dependency</i>	0.4177*	-0.1517*	-0.1873*	-0.0739	1		
<i>transfers ratio</i>	0.7102*	0.0428	0.2852*	-0.0798	0.5832*	1	
<i>budget rigidity</i>	-0.2868*	-0.1028*	-0.0237	0.0756	-0.1742*	-0.3597*	1

Note: *Significant at 5%.

- *lim_debt_2* takes value 1 if there are limits on debt by 2007 and 0 otherwise; and
- *both_limdebt* takes value 1 when both *lim_debt_1* and *lim_debt_2* equal 1 and 0 otherwise. This means that *both_limdebt* equals 1 for those states that have had a longer experience with the adoption of rules.

The Spearman correlation coefficients (Table 12.22), show a positive significant correlation between dependency and expenditures, while dependency is related negatively to the incidence of public debt.

When the proportion of earmarked to revenue-sharing grants increases (*transf_ratio*) we have a significant increase in the expenditure index, as plotted also in Figure 12.11. This could be positive in the measure to which more expenditures stand for more services for the resident population, given the nature of the earmarked grants (*aportaciones*).



Source: Elaboration by authors based on data from Centro de Estudios de las Finanzas Públicas de la Cámara de Diputados.

Figure 12.11 Mexico: transfers to GDP and expenditures to GDP

The next step was to consider the link between rules adoption and the average value of the main available indices,²¹ with a focus on the impact of debt limits, the presence of both constraints (*lim_1* and *lim_2*), the adoption of a transparency law, and the enforcement of a golden rule. Different results are associated with the different rules. Table 12.23 presents the usual *t*-statistics tests results, which can be summarized as follows:

- A significant difference is associated with limits on debt on the outcome of interest as we would expect or, better, we would like. For instance, the value of *out_mx* seems to be systematically higher for states that did not adopt a limit on debt, and the same is true for *out_2* (public debt) and *out_4* (investments).
- When the same state adopted both limits on debt, again we have a positive effect on the indices but here the difference is no longer statistically significant except for the effect on *out_mx*.
- Surprisingly, the adoption of a transparency law in the Mexican case seems to have had a reverse effect: it appears that the average value of *out_mx* and *out_2* is lower in states that did not adopt the rule compared with those that did adopt the law.²² A better understanding of such a counterintuitive result would require a further decomposition of the phenomenon.

Table 12.23 Mexico: differences in mean of the main indices according to the rules

Rule	Variable	Rule yes		Rule no		Mean diff (Rule no- Rule Yes)	t-test
		Obs	Mean	Obs	Mean		
<i>Lim_debt_1</i>	<i>out_mx</i>	70	0.167	387	0.217	0.051	2.78
	<i>out_2</i>	70	0.003	383	0.007	0.004	2.33
	<i>out_4</i>	48	0.000	284	0.003	0.003	2.44
<i>Both Debt</i>	<i>out_mx</i>	28	0.161	429	0.213	0.052	1.87
	<i>out_2</i>	28	0.003	425	0.007	0.004	1.48
	<i>out_4</i>	20	0.000	312	0.002	0.002	1.56
<i>Transparency</i>	<i>out_mx</i>	96	0.316	361	0.181	-0.135	-8.98
	<i>out_2</i>	96	0.008	357	0.006	-0.003	-1.80
	<i>out_4</i>	96	0.002	236	0.003	0.001	1.35
<i>G_rule</i>	<i>out_mx</i>	56	0.210	401	0.210	-0.001	-0.04
	<i>out_2</i>	55	0.003	398	0.007	0.004	2.21
	<i>out_4</i>	40	0.004	292	0.002	-0.002	-1.84

- The results related to the golden rule are consistent with what we would expect, as far as *out_4* is concerned (more investment expenditures once the rule is in place), and it appears that higher public debt levels characterize the lack of such a rule.

Overall, the unexpected results associated with the introduction of the transparency laws might be due to the lack of a disclosure culture which has characterized the Mexican states' public finance quality level.

4 MAIN CONCLUSIONS

Our work presents a critical review of fiscal rules implemented at the subnational level in four Latin American countries: Argentina, Brazil, Colombia, and Mexico. We have stressed two aspects: on the one hand the importance of intergovernmental relations within a decentralized context in order to design 'feasible' and successful fiscal rules imposed on (top down) or chosen by (bottom up) the SNGs; on the other, collecting data at the subnational level, we provide descriptive empirical evidence of the main trends which have characterized local finances before and/or after

the introduction of fiscal rules. We performed this task by building fiscal outcome indicators with the available data.

A more sophisticated empirical analysis would require a comparison before and after the introduction of the subnational fiscal rules, since the goal would be to identify and assess the change in the local administration's behavior triggered by the rules themselves. Unfortunately complete data are not always available and their drawbacks include lack of time consistency and narrow coverage.

Although it is not possible to evaluate the causal impact of the introduction of fiscal rules at a subnational level in the countries in our sample, the analysis of descriptive statistics shows that a unique indicator of compliance might be a misleading indicator of fiscal rules at the subnational level.

We expected that the targets of the rules, including the golden rule and expenditure caps would be affected by the rule imposition. However, a first review of the empirical evidence of the SNGs in our sample does not always confirm this expectation *a priori*. This might be due to the fact that the rules are not effective even when the compliance level, such as in Colombia, is quite high. Additionally we were expecting that rules which target the budget balance would respect the SNG autonomy more than rules targeting the expenditure decisions. Such legitimate expectation also relies on a clear definition of the decentralized institutional context within which the central government has several options to deal with the SNGs.

We recognize that our analysis is not sufficient to affirm that the subnational rules adopted by the states in our sample are ineffective, because we were not able to cope with the endogeneity problem. Therefore, our methodology had to be confined to correlations and first significant difference in means. According to these rough measures there is not always a difference in adopting fiscal rules.

Looking at the experiences of several Latin American countries we realized that in general the fiscal crises at subnational level are followed by a kind of bailout by the federal government which has been implemented through a debt rescheduling agreement with conditionalities aiming to achieve fiscal consolidation: the 'contractual approach'. This approach can provide more-flexible tools at the local level, taking into account the specificities of the SNGs as well as their weakness. As such it could be considered as an alternative to the introduction of fiscal rules in enhancing the reputation of the central government where the economic conditions of the SNG and its dimension would jeopardize the use of fiscal rules and trigger soft-budget constraint problems. Where the preconditions for the effectiveness of fiscal rules are not met, the use of a contractual approach is a means of coping with the rules' shortcomings. In reviewing several cases using a contractual approach we also conclude that under this scheme,

enforcement of the rules became more stringent and perhaps this is where the fiscal rules at subnational level work better.

NOTES

- * This chapter benefited from the stimulating environment of the Economic Policy and Debt Department (PRMED), World Bank, Washington, DC, where Dr Grembi worked as a consultant during July–September 2010. The views expressed herein are those of the authors and do not necessarily reflect the views of the World Bank Group.
1. The Brazilian experience is a good example: the 1997/98 bailout of subnational finance implied a legal agreement that states and municipalities would not borrow. In 2000, the Fiscal Responsibility Law prohibited new bailouts.
 2. Brazilian states were bailed out by the federal government in 1989, 1993 and 1997/98. The 1990s was a decade of a clear deterioration in the state's fiscal performance.
 3. Yet it might be difficult to assess the measure of ugly outcomes. An attempt to link the introduction of fiscal rules at the subnational level and window-dressing behavior can be found in Balduzzi and Grembi (2011).
 4. The study also indicates that a more general composite indicator measuring the preferred properties of a set of fiscal rules in all dimensions of fiscal policy may be difficult to interpret given the random weighting schemes used.
 5. This trend has been noted in several studies, including Jiménez and Ter-Minassian (ch. 11 in this volume).
 6. For earmarked transfers in Colombia, see Law 715 (2001): broadly 96% of total transfers are earmarked for education, health and 'general-purpose' categories; 4% is earmarked for 'specific purposes'.
 7. In 2002 the Supreme Court declared Law 25.543 unconstitutional.
 8. The contractual approach could also be characterized as a 'coordinated approach'. See Kopits (2001) and Guardia and Messenberg (2002).
 9. Law 25.570 enacted on April 10, 2002 ratified the 'Central Government–Provinces Agreement on Financial Relations and Basic Terms of a System of Federal Coparticipation Provisions'.
 10. It is well known in the literature that higher levels of public expenditure are associated with higher levels of GDP. Therefore, the GDP normalization used in the indices of Table 12.1 can provide a balanced measure for the countries.
 11. We use Spearman correlation coefficients because they correlate variable ranks. Hereafter tables with Spearman coefficients report the significance level at 5%.
 12. The control of subnational borrowing in the form of debt renegotiation agreements imposed strict rules on financial and fiscal management and ensured its adherence to the guidelines set by the federal government for the conduct of macroeconomic policy. See Manoel et al. (2011).
 13. From the available data, no state was classified as yellow.
 14. *Ingresos Corrientes de Libre Destinación* (ICLD) as defined by Law 617/2000.
 15. Those states that declare the liquidity indicator to be higher than 60% and the solvency indicator to be higher than 80%.
 16. We also use this index (debt/total revenues) since it is often used in official Colombian documents.
 17. OLS coefficients would be biased given the endogeneity of the category (as well as the fiscal rule implementation), which is why we calculate the difference in means. The reader should be aware that such a difference, when significant, could be due to systematic differences among the various states.
 18. Note that Law 358/1997 was a constitutional law, which was reaffirmed in 2003.

19. The main shortcoming of the Mexican case is often the poor quality of the data and the scarce availability of information.
20. *Out_4* is based on expenditures for investments, which are otherwise specified.
21. We ran the same statistical test on all the rules, but in the table we report only the most significant. Results for the excluded rules are available upon request.
22. Since all the states ultimately adopted a transparency law the difference can also be interpreted in terms of before and after the adoption.

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APPENDIX 12A

Table 12A.1 Fiscal rules grouped characteristics

Country	Fiscal rules											
	Institutional characteristics			Targets				Process rules and rule implementation				
	Bottom-up approach (FRLs are approved for national government and SNG can decide to follow up)	Top-down approach (FRLs are national laws which also apply to SNG)	One fiscal rule (X) or more than one (XX)	Budget balance requirements	Borrowing constraints	Limits on tax rates or relief	Expenditure increase limits	Obligation to produce financial accounts (transparency)	Monitoring (<i>ex antef</i> / <i>ex post</i>)	Sanctions	Constitutional binding	Escape clause
Argentina	X		XX		X		X	X		X		
Brazil		X	XX	X	X		X	X		X	X	X
Colombia		X	XX	X	X		X	X		X	X	X
Mexico	X		XX	X				X	X	X		

Table 12A.2 Contractual approach of SNG bailouts: Argentina, Brazil, and Mexico

Country, coverage	Main conditions	Main results
<p>Argentina</p> <p>2002 and 2004</p> <p>Law 25.570 enacted April 10, 2002 ratified the central government–provinces ‘Agreements’ on ‘Financial Relations and Basic Terms of a System of Federal Co-participation Provisions’</p> <p>Law 25.917 (August 2004), emphasized the coordination approach</p>	<p>Subnational public finances deteriorated in 2001 –02 because of economic recession which started in 1998. Restructuring of subnational public debt became imperative</p> <p>February 2002: provinces signed an agreement with central government which allowed restructuring of subnational debt (Agreement ratified by Law 25.570 enacted April 10, 2002). Through the Financial Assistance Program (PAF), and the <i>Programa de Financiamiento Ordenado</i> (PFO), provinces had access to subsidized funding for long-term debt</p> <p>In order to have access to the long-term funding the provinces committed to</p> <ul style="list-style-type: none"> ✓ (a) achieve fiscal targets in order to reduce the fiscal deficit and the total debt ✓ (b) stop issuing bonds and ✓ (c) publish timely and detailed fiscal reports <p>The main objectives were to fill the financial gap of SNG and implement a control/monitor mechanism to improve public finances at subnational level (reduce public deficit and debt)</p> <p>Subnational debt was converted into central government bonds; total central government transfers to provinces were increased by 30% of financial transaction tax collection</p>	<p>Fiscal imbalances at provincial level, 1996–2002. On average, 33% of total fiscal deficit was explained by the provinces’ deficit during this period. Main determinants of these deficits were (a) increase of central governed revenues on total tax collection, (b) expanding of social expenditures at provincial level due to the increase in the decentralization process (more social spending shifted to provinces). Public debt at provincial level increased at 19% per year during 1996–2001. Between 2001 and 2002 the debt increased by 130% due to the devaluation of the peso on the credits denominated in dollars (see Melamud, 2010)</p> <p>The fiscal results of provinces which presented a deficit each year during 1996–2001 started showing a surplus in 2002 until 2006. However, the increase in the stock of the debt was still positive during the same period because of the impact of the CER index (CER – <i>coeficiente de estabilizacion de referencia</i> – was an index utilized to adjust ‘pesified’ debts according to inflation in the prices of goods and services). (See data, especially Table 5 in Melamud, 2010)</p> <p>As a result of the Agreement, the provincial public debt suffered a colossal change from 1996 to 2006: participation of debt against the central government in the total composition increased from 18 to 68%</p> <p>The economic crisis with the fall in GDP starting in 1999 engendered a reduction in tax revenues while spending was kept almost constant. The total deficit of provinces reached a peak</p>

Table 12A.2 (continued)

Country, coverage	Main conditions
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">396</p> <p>Brazil 1997–98: 25 out of 27 states. State of São Paulo, the first, signed in Dec. 1997. The last state signed in May 2000 2000: similar agreement benefited 180 municipalities, representing more than</p>	<p>The program continued towards the end of the decade. Provinces should comply with quarterly fiscal targets aiming to reducing the deficit in 2002 and achieving balance in 2003–07 with progressive reduction in public debt</p> <p>In August 2004, Law 25.917 (FRL) aimed to reform the coparticipation system between central government and provinces and emphasized the coordination in terms of fiscal policy in the country SNG debt refinanced for 30 years at 6% interest rate. Federal government issued securities to redeem the existing state’s debt and became its creditor. The bailout was conditional on an explicit obligation for the states to commit to a consented fiscal adjustment General rule: stabilize the debt to net revenue at one</p> <p>Fiscal adjustment agreed established targets for expenditures, revenues (including payroll limits and investments), and the debt consistent with this general rule. Utilization of privatization revenues to pay debt was also a condition and included the privatization of the state-owned banks, eliminating them as a source of debt financing</p> <p>Effective guarantees: to receive the benefits of the debt restructuring agreement, the states offered their own revenue and the constitutional transfer from the</p>

Main results

in 2001: 2.4% of GDP (representing 41% of total consolidated deficit of the public sector)

The fiscal adjustment implemented through the Agreement implied a reduction in the deficit to near zero by 2002. In 2003–04, helped by the economic recovery, the provinces generated fiscal surplus for the first time since 1996

On Dec. 2001 the total restructured debt amounted to US\$100 billion

Introduced major structural change in the state's financing, imposing an expressive fiscal adjustment effort at the state level

Explained the observed change in the SNG's fiscal performance since 1998. Consolidated fiscal primary result of states decreased from 1995 to 1998 and improved substantially until 2000 when the states started to generate a primary surplus

It also had an impact on reducing payroll payments at state level

The guarantee given proved to be very effective

The measures were very comprehensive and covered the main channels for fiscal discipline

In 2000, the government approved the FRL: more fiscal transparency, more limits and additional reinforcement to previous agreements. New bailouts were prohibited

95% of municipalities' debt	<p>central government as guarantee (in case of defaults, the contracts authorized the central government to retain the legal transfers)</p> <p>States failing to comply can be denied federal guarantee on new borrowing; violations would incur interest penalties on the rescheduled debt and increase on debt ceilings</p> <p>Expenditure rule: each state had the obligation of a minimum debt payment to the federal government of 13% of the state net revenue</p>	
Mexico 1995	<p>The Federal Senate approved each contract</p> <p>General economic and debt crisis of 1995 also affected the states</p> <p>Central government rescheduled states' debt into long-term inflation-indexed debt at positive but subsidized interest rates and 4 years of assistance payments</p> <p>Banks were forced to accept indexed debt</p> <p>Funding came primarily from the president's discretionary fund and regular transfers</p> <p>To avoid recurrence, each state had to agree to a fiscal adjustment program designed by the Secretariat of Finance (SHCP)</p> <p>SHCP monitored compliance prior to disbursement of the annual tranches of assistance</p> <p>The government ended its policy of guaranteeing subnational debt, although as a transition it agreed to accept and execute contractual mandates by which the borrowers pledged their revenue-sharing transfers as collateral for the debt service</p>	<p>The arrangement set a precedent of fiscal consequences and brought most states to a good financial situation by the end of the 1990s</p> <p>However, politically favored states had to adjust less</p> <p>The indexed debt that banks were forced to accept helped them to avert total ruin and collapse of the system, but illiquidity of the assets and low return inflicted some penalty on the borrowers as well</p> <p>By 1999 the government could no longer get the president's discretionary fund through the opposition-dominated congress. Without such incentives, could not dictate fiscal prudence to the states in return for assistance with debt rescheduling</p> <p>In 2000, a whole new system was implemented (a) eliminating discretionary transfers for the federal government; (b) ending SHCP's role as <i>fideicomiso</i> for collateralizing debt with <i>participaciones</i>, (c) giving banks <i>ex ante</i> signals about riskiness of state debt; and (d) giving strong incentives for borrowers to publish their fiscal and financial information</p>

Table 12A.3 Fiscal rules: characteristics by country

Country	Year	Law	Implementation year	Level of government
Argentina	1999	Fiscal Solvency Law		National government and later SNG
	2004	Law 25.917 Fiscal Responsibility Law	2005	
Brazil	1998	Agreements between the federal government and the states		SNGs
	2000	Fiscal Responsibility Law*	2002	All levels of government

Kind of restriction	Enforcement	Sanctions
Deficit target and fiscal balance convergence path; pluriannual budget formulation; limits on current expenditure growth; transparency	Judicial	Institutional
Limits on the public expenditures rate of growth (not more than the expected nominal GDP rate of growth); and on the debt service (rate debt to current revenues net of transfers to municipalities not higher than 15%). The same limit is applied to the possibility of getting new credit		Institutional but the federal government has discretion in the application of sanctions
<i>Ex ante</i> control over subnational debt. Senate approval is required for all subnational government borrowing operations, prohibiting the issue of bonds and borrowing from state-owned banks	Judicial	
Annual limit to the debt (ratio net public debt to net revenues not higher than 2%); current balance budget; expenditure cap (ratio payroll expenditures to net revenues not higher than 60%); 15 years to comply with target	Legislative – own state legislature	Institutional and personal (criminal law)

Colombia	1997	Law 358: Traffic Light Law	SNGs
	2000	Law 617: Fiscal Respon- sibility Law	SNGs
	2003	Law 819	Public sector
Mexico	1917		SNGs

<p>Borrowing constraints and supply-side regulation (fully provisioned for red light territories). Indicators of liquidity (interest payment/operational savings) and solvency (debt/current revenue)</p>	<p>Judicial</p>	<p>Institutional and personal</p>
<p>Limits and restrictions on: current expenditures (ceilings in terms of a percentage of their disposable revenues); municipalities' creation; transparency (current balance budget)</p>	<p>Judicial</p>	<p>Institutional and personal</p>
<p>Primary balance: budgets are required to be balanced over a 10-year period. An extra medium-term target is established. It sets the obligation for each department with population greater than 100,000 inhabitants to get a credit risk rating by a rating agency. Limits on expenditures hold as well as the indicators previously introduced</p>		<p>Institutional and personal</p>
<p>Art. 117, item VIII: States may not in any case: Issue bonds of public debt payable in foreign currency or outside the national territory; contract loans directly or indirectly with the governments of other nations, or contract obligations in favor of foreign companies or individuals, when the bonds or securities are payable to bearer or are transmissible by endorsement</p>	<p>Judicial</p>	

Table 12A.3 (continued)

Country	Year	Law	Implementation year	Level of government	Kind of restriction	Enforcement	Sanctions
	2000			SNGs	States and municipalities may not negotiate loans except for the construction of works intended to produce directly an increase in their revenues Current balance budget Market discipline for subnational borrowing (no discretionary transfers to states; no securing debt with payments from the revenue-sharing agreement; subnational debt subjected to normal credit exposure ceilings; bank's capital risk weighting linked to the international rating of the SNG)	Market	
	2006	Budget and Fiscal Responsibility Law		National government	Current budget balance	Judicial	Personal

Note: * Electoral Year Constraints. No consequences are established in case of non-compliance—low level of compliance.

Sources: Tommasi and Braun (2004); IMF (2005, 2009); Ahmad and García-Escribano (2006); Corbacho and Schwartz (2007); Melamud (2010); Gómez Sabaini and Jiménez (2011).

Table 12A.4 Data description

Country	Tiers of government	Type of government	Number of states	Fiscal data	Population	GDP
Argentina	3	Federal	23	1990–2008	1990–2008	1993–2005
Brazil	3	Federal	27	1995–2009	1995–2009	
Colombia	3	Unitary	32	2002–2007	1985–2009	1990–2007
Mexico	3	Federal	32	1989–2007	1980 and 1990 census. 1995 and 2000–2009	1993–2006

Table 12A.5 Argentinean states fiscal rules

Province	Law	Year	Quantitative rules	Enforcement institution	Additional rules
CBA	N				
Buenos Aires	Y	2005	Modifications to national law 25.917	State Ministry of Economy	
Catamarca	Y	2005	Adhere to National law 25.917		
Cordoba	Y	2005	Adhere to National law 25.917		
Corrientes	Y	2004	Adhere to National law 25.917		
Chaco	Y	2004	Adhere to National law 25.917		
Chubut	Y	2004	Adhere to National law 25.917	Provincial Council of Fiscal Responsibility	
Entre Rios	Y	2004	Adhere to National law 25.917		
Formosa	Y	2004	Adhere to National law 25.917		
Jujuy	Y	2004	Modifications to National law 25.917	Ministry of Finance of the Province	Payroll: limit of 65% of current revenues
La Pampa	N				
La Rioja	Y	2004	Adhere to National law 25.917		
Mendoza	Y	2005	Adhere to National law 25.917	Court of Accounts of the Province	Debt stock equal or lower at the end of each administration
Misiones	Y	2004	Adhere to National law 25.917		

Procedural rules	Coordinator institution	Fiscal transparency	Restrictions on electoral year	Personal sanction	Other	Previous rule* (1999/2000)
						N
Financial Management Regime of the Province	Provincial Coordinating Council	Y		N		N
						Y
						Y
						N
						Y
	Provincial Council of Fiscal Responsibility	Y		N	Tax harmonization	Y
						N
						Y
Financial Management Regime of the Province		Y	Y	Y	Clearing of municipal debt	N
						N
						N
		Y	Y	Y	Municipal countercyclical funds	Y
						Y

Table 12A.5 (continued)

Province	Law	Year	Quantitative rules	Enforcement institution	Additional rules
Neuquén	Y	2006	Adhere to National law 25.917		
Rio Negro	Y	2004	Adhere to National law 25.917	Ministry of Finance of the Province	
Salta	Y	2007	Adhere to National law 25.917		
San Juan	Y	2004	Adhere to National law 25.917	Ministry of Treasury and Finance of the Province	Freezing of political and non-political vacancies. Limitation of personnel expenditure
San Luis	N				
Santa Cruz	Y	2004	Adhere to National law 25.917		
Santa Fe	Y	2005	Adhere to National law 25.917	Ministry of Treasury and Finance of the Province	
Santiago del Estero	Y	2004	Adhere to National law 25.917		
Tierra del Fuego	Y	2006	Adhere to National law 25.917		
Tucuman	Y	2004	Adhere to National law 25.917		

Note: *Consejo Federal de Responsabilidad Fiscal (2010).

Procedural rules	Coordinator institution	Fiscal transparency	Restrictions on electoral year	Personal sanction	Other	Previous rule* (1999/2000)
						Y
		Municipal reconciled financing program	N	N	Municipal reconciled financing program	Y
						Y
		Y	N	N		Y
						Y
						N
Uniform System of Financial Administration and Control		Y	N	N	Homogeneous budget classifications	N
						N
						Y
						Y

Table 12A.6 Mexican states fiscal rules

State	By 2002 formal limit to indebt- edness	Limits to public debt	A law but not specific limits to public debt	Golden rule	Approval from the state congress
Aguascalientes	N		Y		
Baja California	N	Y			
Baja California Sur	N				Y
Campeche	Y	Y			
Coahuila	N	Y	Y		
Colima	N	Y	Y		
Chiapas	Y				
Chihuahua	N				
Distrito Federal	N		Y		

Ex ante indication of the amount of new debt for the fiscal year	Transparency law and access to public finances information	Transparency law year	Other limits on debt
	Y	2002	
	Y	2005	New debt limited to 10% of revenue approved in the budget (2002)
Y	Y	2005	
	Y	2005	New debt limited to 10% of revenue approved in the budget (2005)
Y	Y	2003	
	Y	2003	
	Y	2006	New debt at the end of fiscal year must be lower than 15% of the sum of 'participaciones' and own-revenue (2002)
Y	Y	2005	
	Y	2003	

Durango	N		
Guanajuato	Y		
Guerrero	N		
Hidalgo	Y		
Jalisco	Y	Y	
México	Y		Y
Michoacán	Y		Y
Morelos	Y		Y

Y	Y	2003	
	Y	2003	New debt limited to 10% of revenue approved in the budget (2002)
Y	Y	2005	
	Y	2006	New debt limited to 10% of revenue approved in the budget (2005)
	Y	2002	New debt limited to 10% of revenue approved in the budget (2002)
	Y	2004	Limit to 30% of annual revenue from 'participaciones' from 'Fiscal Coordination' (Coordinacion Fiscal), 2005
	Y	2002	Total debt service can not be higher than 2.5% of budgeted revenues (2005)
	Y	2003	

Table 12A.6 (continued)

State	By 2002 formal limit to indebtedness	Limits to public debt	A law but not specific limits to public debt	Golden rule	Approval from the state congress
Nayarit	Y				
408	Nuevo León	N		Y	
	Oaxaca	N			
	Puebla	N	can borrow only for investments	Y	
	Querétaro	N		Y	
	Quintana Roo	N			Y
	San Luis Potosí	Y			
Sinaloa	Y				

Ex ante indication of the amount of new debt for the fiscal year	Transparency law and access to public finances information	Transparency law year	Other limits on debt
	Y	2004	New debt limited to 15% of revenue approved in the budget (2002)
	Y	2003	
	Y	2006	
	Y	2004	
Y	Y	2002	
	Y	2004	
	Y	2003	New debt limited to 20% of revenue approved in the budget (2002)
	Y	2002	Maturity no superior to 30 years (2002)

Sonora	N	Y
Tabasco	N	Y
Tamaulipas	N	Y
Tlaxcala	Y	
Veracruz	N	Y
Yucatán	Y	
Zacatecas	Y	Y
MEXICO	Art. 117, item VIII of the Consti- tution (1917)	

Source: Secretaría de Hacienda y Crédito Público (2003 to 2007).

Y	2005	
Y	2007	
Y	2004	
Y	2004	New debt limits 3% of total revenue approved in the budget and must be paid in the following fiscal year (2002)
	2004	No limits for new debt but the maturity should be lower or equal to 5 years (2002)
Y	2004	
Y	2004	New debt at the end of fiscal year must be lower than 15% of total revenue (transfers and own- revenue), 2002

13. Intergovernmental reforms in Latin America, 'Asian transplants' and the role of international agencies

Ehtisham Ahmad*

1 INTRODUCTION

In a number of countries in Latin America, and other parts of the developing world, there is pressure from a wide spectrum of political parties that see the issue of social spending, especially for education and health care and social protection, as part of subnational responsibility, influenced to a large extent by the North American model. But will such major reform work effectively and ensure higher living standards for all the people in all subnational jurisdictions? Are there other preconditions that must also be met? In this regard, international experience plays a valuable role in pointing out pitfalls and options for consideration.

Bilateral and multilateral agencies have been quite active in advising on decentralization processes. The multilateral banks have done so partly because of the belief that decentralized service provision can provide better for the poorer sections of society by utilizing the information that may be available at the local level in tailoring the services to match the preferences of the population, and making access easier. Their views have evolved, as the difficulties with a decentralized approach have been better understood. Bilateral agencies have more explicit geo-political objectives, and sometimes these translate into trying to create societies and political structures that resemble their own in the expectation that this will lead to a congruence of interests. But quite often, the support has been given to those governments that tend to agree with the donor countries, especially in times of crisis, and under these circumstances the support can often go to centralizers, as was seen in Pinochet's Chile, Suharto's Indonesia, and Zia's and Musharraf's Pakistan.

In this section we examine developments in theoretical understanding

in addressing the steps that might be needed to ensure that the objectives of the decentralization reforms are met in an efficient manner. Sections 2 and 3 focus on some recent examples from Latin America and Asia, for both unitary and federal states. Section 4 assesses the role of international agencies with regard to decentralization, and Section 5 concludes.

Developments in Theory

The post-Second World War normative literature on fiscal decentralization has been much influenced by the experience of the United States, and the work *inter alia* of Musgrave (1959) and Mancur Olson (1969). This was based on the presumption that governments are benevolent, it reflected the views of Montesquieu, and of Alexander Hamilton and James Madison in *The Federalist Papers*, that government should be small, and the functions should be separated with the center responsible for issues that affect all lower levels of government, such as defense and monetary policy. The presumption has been, particularly on the part of some bilateral and multilateral agencies, that decentralization will lead to more efficient service delivery, higher growth and poverty reduction.

Experiences outside the United States, particularly in the European Union, and especially in developing countries, have led to a questioning of the normative approach, spawning a surge in the 'political economy', literature (see surveys in Ahmad and Brosio, 2006; Oates, 2008; Lockwood, 2009). This reflects an earlier debate, associated with De Tocqueville and John Stuart Mill, which focused on the actual workings of government and an evaluation of the pros and cons of 'decentralized' operations. The main difference is that the assumption of 'benevolent' government is dropped, and incentives facing politicians and bureaucrats become important, as do the role of institutions and information flows. Bardhan and Mookherjee (2000),¹ write about the possibility of 'capture' by vested interests. Besley and Case (1995) introduce the concept of 'yardstick competition', in which voters evaluate the performance of their local governments in relation to the results achieved in neighboring jurisdictions. Given increasing mobility and information flow, the yardstick competition idea has recently been extended to relate to countries, as citizens in one country examine what results are achieved in other countries with which they are quite familiar (Salmon, 2011).

The building blocks of both normative and political economy traditions are similar – spending and taxation assignments, design of transfers, debt management and information flows and instruments for implementation. However, the sequencing and mix of the instruments might vary, as we discuss below. The situation becomes a little more complex when

it comes to examination of the spending assignments. The US federalist tradition recommended a separation of powers, and this is indeed needed for increased accountability. The critique of the normative approaches, however, comes from the European collaborative tradition that also lends itself to centralization or assumption of powers by the center.

Decentralization Trends

The impetus to decentralize has differed in many cases. In Latin America the shift from one party or military rule has led to a resurgence of interest in decentralization as a means of consolidating political gains, whereas a large, one-party, unitary state such as China has actually been quite decentralized. And in Pakistan, the Musharraf government tried to 'decentralize' using the normative precepts with strong support from the development agencies, but in political economy terms the actions were calculated to bypass the provinces and the power of the political parties that tended to have a provincial focus. International agencies tended to support the normative approach to decentralization on the grounds that this would lead to better service delivery and poverty reduction – but the evidence on this is at best mixed.² Table 13.1 lists the main traits of recent intergovernmental reforms in selected countries.

Most Latin American countries have experienced some movement towards decentralization that has been more marked on the spending than on the revenue side. With respect to the latter, the trend has been in the opposite direction, as countries have set up more or less centralized VAT systems, sometimes with the help of the international agencies, and particularly the IMF, often replacing a myriad of subnational taxes at the state and local levels.

On the spending side, despite the rhetoric, the approach particularly in the Latin American countries has been one where there are mixed and overlapping responsibilities. These partly reflect the centralized tendencies of the past, together with a paternalistic approach (including by donors) which do not trust the subnational governments to make the right choices for their citizens in their area of competence (including education and social policy in general), or feel that the lower levels lack the capabilities to manage their affairs effectively. In many cases, these concerns are probably quite valid, and we shall discuss the experiences of some federal and unitary countries, and the approaches taken by some of the donors in this regard.

It is hard to ascribe the trends relating to decentralization to international agencies, particularly in the federal countries of Latin America, Mexico, Brazil and Argentina, and in the unitary states, particularly

Table 13.1 Main traits of recent intergovernmental reforms in selected countries

Country	Main characteristics of intergovernmental relations	Recent reform initiatives
Australia	Federal system	VAT administration by center on behalf of the states, reforms introduced in early 2000s
Belgium	Federalization based on linguistic divisions	Transformed from unitary to federal state
Bolivia (Plurinational State of)	Three-layered unitary system	Powers of municipalities have been considerably increased. Election of governors of departments, some demanding substantial but asymmetrical powers – associated with natural resources
Brazil	Federal system based on three layers of government	National reform and coordination of VAT is an urgent priority, although proposals for reform since the late 1990s have not been acted on
Canada	Federal system	Asymmetric federation (special treatment for Quebec)
China	Highly decentralized system, within a unitary constitution. Operating like a quasi-federation	Recentralization of taxing power (1994)
Colombia	Three-layered unitary system	Extensive devolution of resources to provinces (departments) movement towards a quasi-federation
Denmark	Unitary system with strong municipal governments	Recentralization of higher education and health since 2006
France	Regional system	Regulatory, fiscal and political decentralization initiated
Germany	Federal system with extended concurrent responsibilities	Reforms to the federal structure initiated in a wide-ranging set of issues, but little change was effected as a result of two commissions
Indonesia	Unitary state	Extensive decentralization of spending powers to district-level administrations after the fall of the Suharto administration, accompanied by a new revenue-sharing arrangement

Table 13.1 (continued)

Country	Main characteristics of intergovernmental relations	Recent reform initiatives
Italy	Unitary system, with asymmetric arrangements	Fiscal, regulatory and political decentralization initiated with a new constitution
Mexico	Federal system with high political and low fiscal decentralization	Fiscal and regulatory decentralization since late 1980s, with devolution to states of basic education (1992) and health care (1996), although revenues have remained centralized since the early 1980s
Pakistan	Federal constitution, with interludes of military rule	Deconcentration to districts in the early 2000s by Musharraf Overlapping responsibilities on the spending side unwound in 2010 with the 18th Amendment to the Constitution – most spending powers fully assigned to province. Relatively little subnational reliance on own-source revenues
Peru	Unitary state – moving towards a quasi-federation?	Election of governors of regions – sharing of natural resource revenues. Overlapping responsibilities with relatively limited spending or revenue devolution
Poland	Unitary state	Political and fiscal decentralization with emphasis on the local level
South Africa	The post-Apartheid constitution introduced a quasi-federal system	Devolution of extensive responsibilities for education and health to provinces
Spain	Regional, quasi-federal system	Transition toward a federal system
Switzerland	Federal system	Equalization transfers from federation to cantons
United Kingdom	Regional system	Introduction of regional government in Scotland and Wales

Source: Adapted from Ahmad and Brosio (2009).

Colombia, in which fairly pathbreaking work in the 1980s led to what can only be described as 'inter-country' yardstick competition (see Besley and Case, 1995; Salmon, 2011). There was a rush by individual countries to copy this experience, in many cases egged on by the bilateral and multilateral agencies, which may or may not have had great influence in particular cases.

In most cases, the advice given has been consistent with the 'traditional' or normative approaches to decentralization – which provides advice on specific components and has a particular sequencing in mind: decide first on the spending assignments, and the financing follows; the mix between the taxes and transfers depends on administrative ease; attention needs to be paid to macroeconomic concerns; and debt management can cause problems and must be addressed through subnational fiscal rules or administrative means.

Over the past two decades, the literature on federalism and decentralization has made considerable strides, with the greater emphasis on the positive or political economy aspects of intergovernmental relations (see Ahmad and Brosio, 2006), as opposed to the standard literature that permeated the subject as well as the policy advice from some of the international and bilateral donors. Indeed, the differences between the approaches lie rather in sequencing and design of implementation strategies, than in the instruments that are common to all approaches. In this chapter, we refer to the interactions by IMF staff in the early 1990s with China, which was influential in appreciating the relevance of the positive or political economy approaches well before these became standard.³

With the unclear responsibilities for spending, poor information flows, and absence of own-source revenues, there is often little incentive for the lower levels of government to provide services effectively (Ahmad et al., 2008). Indeed, the more recent work done in the World Bank points to the pitfalls of 'partial or incomplete decentralization' (see Devarajan et al., 2009). The access to credit markets by subnational entities under these 'weak political economy conditions' and poor incentive structures has led to difficulties for local governments as well as full-blown macroeconomic crises in several cases, leading to countervailing pressures for fiscal rules, subnational debt limits, and generation of standardized information flows, as dictated by the normative theory. Unfortunately, the presence of all the instruments does not provide sufficient conditions that these will be used, as has become quite clear with the deliberate obfuscation in the European Union, and the repeated subnational debt crises in countries such as Bolivia (Plurinational State of) (described below), despite the presence of subnational debt limits or other constraints.

We try to identify the main trends regarding decentralization in the recent past in federal and unitary states in Latin America, while focusing on the strategies, and specific policy tools, and the interrelationships with the international agencies. We shall argue that this has been an interactive process, with both countries and international agencies learning from experiences and developments in method. This process may help the international agencies to better support what is in effect a complex and difficult process of improved governance not only in Latin America, but also in other parts of the world.

2 LATIN AMERICA – RETURN TO DEMOCRATIC RULE AND DECENTRALIZATION

There was an intensification of the democratic process in the 1990s in Latin America. In some cases, this involved the end of military or one-party rule (for example, in the unitary states such as Colombia, and Bolivia (Plurinational State of) and Peru, as well as in the federal countries of the region – Argentina, Brazil and Mexico). While a distinction could usefully be made between the group of federal countries, and those with unitary constitutions, there has been a movement towards quasi-federal status with the establishment of elected intermediate tiers in most cases. This has led to a convergence of policy and approach in unitary and federal countries. We retain the distinction for the purpose of this chapter – as larger federal countries are less open to influence or ‘diktat’ from the international agencies or donors.

Among the unitary states, we focus on Colombia and Bolivia (Plurinational State of) – and touch on Peru – as these have all followed a similar route towards decentralization albeit at a different pace. Chile has not taken the fiscal decentralization route, in the manner of its fellow Andean unitary states, but has focused on the efficiency of the spending process, with greater accountability of the actors involved in the spending chain. To some extent this could be seen as an extrapolation of the ‘Chicago doctrine’ of the Chilean economists. However, the international agencies have not been major players in this process, which may be described as introducing performance budgeting in a deconcentrated and unitary environment, and not ‘decentralization’ as in the other countries. Perhaps in a country with a relatively small and homogeneous population, this approach may be more effective and make more sense than the rush to decentralize that has gripped many parts of the world.

Chile’s neighbor Peru, on the other hand, has oscillated between decentralization in the 1980s, to the centralization under Alberto Fujimori.

It is a large country with marked topological differences, and considerable inequality. As the technical assistance evaluation during that period showed, lack of information available to the center on local preferences and priorities made centrally administered social stabilization difficult, and exacerbated labor market fragmentation. Further, weaknesses in budget processes and oversight mechanisms, permitted members of the administration to use public investment funds as a means to reelect Fujimori, or divert resources into their own pockets. Hence, the return to a phased-decentralized strategy during the last decade made a lot of sense in the Peruvian context.

The federal states of Latin America, Argentina, Brazil and Mexico, are large and important countries with distinguished economists of their own. They tend to be relatively impervious to advice from the international agencies, although this has not stopped the latter from proffering technical assistance.

Unitary States

Colombia

Colombia was the one of the first Latin American countries to explicitly move towards decentralization – much influenced by North American examples. The restructuring of the intergovernmental fiscal system began in the early 1980s, with a commission headed by Richard Bird, and subsequent proposals for implementation by the Wiesner Commission (see Bird, 1984; Wiesner-Duran, 1992). The new constitution of 1991 locked in the process and took it further.

As to be expected at the time, the emphasis was very much on the 'normative approach'. Spending responsibilities were devolved on the basis of the benefit principle, in order to achieve outcomes responsive to local needs and achieve better targeting and efficiency. Given that Colombia had also implemented a VAT, the constitution put a floor on transfers from the center to the subnational governments in order to meet social spending needs. The *Situado Fiscal*, introduced in 1968 for financing departmental spending on health and education was further circumscribed by the 1991 Constitution, ensuring greater spending for health and education. The process of further specification of the use of the transfers was stipulated in Law 60, which required at least 60 percent of the *Situado* to be spent on education, 20 percent on health care, and the remaining 20 percent on health care and/or education depending on the priorities of the entities in charge of these services. For the municipalities, a general-purpose transfer to municipalities (Law 33 of 1968) was effectively replaced by earmarked transfers in 1991.

While the process in Colombia was clearly 'home grown', international agencies were brought in on a selective basis – with work on spending assignments coordinated with ECLAC/GIZ (the Economic Commission for Latin America and the Caribbean and the German Gesellschaft für Internationale Zusammenarbeit), and municipal capacity building with the assistance of the World Bank. Consultations were held with the IMF on revenue assignments, transfer design and subnational debt management.

As pointed out in a 'political economy perspective' by the 1994 IMF assessment (Ahmad et al., 1995b), the functional 'earmarking' is a characteristic of centralized states, and runs counter to the basic precepts of decentralized accountability. Thus, key decisions continue to be made at the central level by the competent authorities, and implemented by local agencies, almost as 'agents' of the center. The resort to earmarking is often defended on the grounds of accountability problems, as the central government (or donors, see below) is not sure that public monies will be used for 'appropriate' purposes. However, the earmarking does not ensure that resources will actually be spent according to the centrally determined objective, especially in cases where implementation is decentralized and there is an absence of proper information flows and budgetary procedures are inadequate to ensure effective monitoring of outcomes or judging policy priorities correctly. Ahmad et al. (*ibid.*) insisted that decentralized accountability could not be ensured without voters' scrutiny of spending, with incentives generated by own taxes of the local governments and the 'untied' transfers. (For a generalization see Ambrosiano and Bordignon, 2006). Without the effective scrutiny of the local electorate, arbitrariness and corruption are possible – termed 'capture' by Bardhan and Mookherjee (2000), as is clientelism.

Indeed, in Colombia, even the normative approach ran into difficulties as the devolution of spending was meant to accompany the increasing transfers to municipalities and departments on account of decentralized education and health care. However, the 'responsibility for hiring and firing teachers and health-care workers remained with the center – attempts to move these functions to municipalities were thwarted by powerful unions' (Fedelino and Ter-Minassian, 2010, p. 12). This led to increasing budgetary pressures on the central government, and increased resources for the local governments, which were leveraged to increase borrowing for all sorts of spending (Sánchez and Gutiérrez, 1995). The spiral of local debt was not intended, and the government then introduced a local debt management and borrowing law (in the mid-1990s), as a precursor to fiscal responsibility legislation – the latter also became very fashionable across Latin America, especially following the Brazilian experience. But

the question remains whether these normative prescriptions work without a firmer underpinning of the political economy and incentives facing decision makers at all levels of government. The experiences of Latin America, and now the EU, suggest that caution might be appropriate in expecting fiscal responsibility laws to function.

The issue of sharing natural resources is intrinsically a political economy problem. On the one hand, the national government is better able to 'hedge' against unfavorable price movements, and to engage in macroeconomic stabilization and redistribution – the typical normative functions of the central government. On the other hand, natural resource-producing regions (especially those with petroleum and gas resources) tend to have sparsely populated areas that are poorer than the more progressive urban areas. This leads to demands for autonomy or more effective allocation of the revenues to develop these areas.⁴ Regardless of normative and macroeconomic considerations, the political economy considerations dominate. The Colombian arrangements allowed for the producing regions to take a large share of the natural resources, although the more recent reforms give a larger share to non-producing regions – to lessen the 'resource' gaps, and also create a national consensus. As these non-producing regions may also be quite poor, the center can certainly play a role in the 'redistribution' process.

Colombia is interesting, as it initiated a process of what can only be termed 'international yardstick-competition' (Salmon, 2011), as a number of other unitary states began to copy the design and implementation strategy, including the drawbacks – but this is not surprising as the advisors remained the same in most cases, and with perhaps greater influence as we shall see. This was particularly marked in the Andean countries, especially Ecuador and Bolivia (Plurinational State of), and in Peru after the fall of the Fujimori administration, again with the support of the same international and bilateral agencies, the GIZ on spending design, together with the World Bank, the Inter-American Development Bank (IDB) and ECLAC.

Bolivia (Plurinational State of)

In Bolivia (Plurinational State of) in the 1990s, decentralization was held as an integral part of enhancing service delivery for the poor as part of the process of recovering from an economic crisis. The decentralization was strongly supported by bilateral donors, as well as the international agencies (IDB, GIZ, the World Bank as well as the IMF). The influence of donors and international agencies in the Bolivian case has been quite marked.

The GIZ and USAID were deeply involved with the decentralization

process, including the political aspects, and the overlapping spending responsibilities resembled those in Germany (that recent commissions have tried unsuccessfully to reform). The IDB and the World Bank supported the unbundling of these responsibilities, and the development of the government financial management information system (GFMIS), or SIGMA. The broad assignments situation as of 2004 is described in Table 13.2.

In 1997, the onset of subnational indebtedness prompted action by the IMF, and debt limits were imposed on municipalities,⁵ reflecting the precedent from Colombia, and IMF technical assistance. However, the measures failed to get to grips with the underlying political economy difficulties, which generate the imbalances in the first place, and the games played between different levels of government. Another IMF mission in 1998 was launched to stem the debt difficulties of subnational governments (Pérez et al., 1998). This infrastructure did not prevent the recurrence of subnational debt difficulties following the period of economic and political crisis (1999–2002).

Debt problems continued, given the difficulty in tracking subnational operations, and agreements had to be reached between the central and concerned local governments to ensure an orderly adjustment – including changing the debt composition (supported by CAF (Development Bank of Latin America) and the World Bank). Another IMF mission in 2001 focused on debt management issues (Manoel et al., 2001). The mission recommended that there should be a no-bailout provision and that there should be acceleration of the government financial information system to track spending, SIGMA, being rolled out by the IDB and the World Bank.

By 2001, under the enhanced HIPC (heavily indebted poor countries) arrangement, donors decided that the decentralization process was proceeding sufficiently well for the debt relief to be directed to municipal governments for health-care, education and infrastructure spending, based on selective evidence (Faguet, 2004). There was also sufficient reliance on the efficacy of the SIGMA being developed to be able to effectively track the subnational spending, or so it was believed.

By 2004, yet another IMF mission (Ahmad et al., 1994c) this time taking a political economy perspective, found that there were significant deficiencies in the design of the decentralization process – particularly governing the allocation of HIPC-II funds to municipalities. While this pattern was very much in the tradition of the overlapping responsibilities and ‘earmarked’ transfers, it provided funds in areas where the local governments had little or no responsibility – particularly education and health care, as the departments hired the staff that were paid for directly from the central budget – again reminiscent of Colombia. The local governments were not particularly inclined to use funds for these purposes, and with limited

Table 13.2 Bolivian spending assignments circa 2004

Sectors	Central government	Departments	Municipal governments
Macroeconomic policy, defense, foreign affairs, foreign trade, monetary and bank policy, justice, public order, immigration	Full responsibility		
Education, university	Norms, curricula and funding	Funding	
Education, primary and secondary	Norms, curricula, payment of salaries	Delivery of certificates, management of teaching personnel, control of norms	Construction and maintenance of school premises and provision of didactic material
Nurseries and pre-school education	Norms, curricula, payment of salaries		Construction and maintenance of premises and provision of personnel
Health care	Preventive care, policy orientations, norms, payment of salaries	Management of health personnel, control of norms	Construction and maintenance of primary, secondary health centers and general hospitals and provision of machinery and medical supplies
Social protection (maternity, childhood, disabled, poverty relief)	National programs, policy guidelines, funding		Implementation of national programs
Environmental protection	National programs, norms and technical assistance	Projects of regional interest	Projects of local interest

Table 13.2 (continued)

Sectors	Central government	Departments	Municipal governments
Tourism	National programs, norms and technical assistance	Projects of regional interest	Projects of local interest
Sports and culture	National programs, norms and technical assistance	Projects of regional interest	Projects of local interest
Protection of cultural heritage	National programs, norms	Projects of regional interest	Projects of local interest

Source: IMF, Technical assistance reports 2004.

own-source revenues, there were no incentives to do so efficiently. Plus, the transfer system was not particularly 'equalizing', and the attempt to pacify the natural resource-producing regions through hydrocarbon revenue sharing was not especially effective. Moreover, the SIGMA information system had been poorly designed. Even if it had been properly designed, it had little chance of providing the discipline that was missing in the existing institutional framework.

A careful empirical analysis by a Bolivian economist found, using successive household-level surveys, that the use of the HIPC funds by local governments had virtually no correlation with improvements in living standards (Inchauste, 2009). Even when considering infrastructure, which is where much of the spending took place, there was no strong evidence that access to infrastructure improved significantly.

The issue with natural resources in Bolivia (Plurinational State of) is that the petroleum resources are generated in regions that are ethnically distinct from the majority indigenous population of the *altiplano*, which tend to be among the poorest. This tends to fan separatist tendencies in the producing regions (as was the case in Biafra in Nigeria, and Aceh in Indonesia). There is a trade-off between macroeconomic management or the redistributive functions of the central government, and the political economy consideration of keeping the country together. It is natural that the latter will dominate, and the macroeconomic and redistributive functions will need to be adapted effectively in order to accommodate it – to

some extent this has been true of Indonesia as well as Iraq. In Bolivia (Plurinational State of), in late 2007, hydrocarbon tax transfers to regions were cut by 60 percent, in a recentralization move designed to facilitate 'redistribution' transfers to poorer municipalities. It was also an attempt to 'reassert' control over the regions with separatist tendencies (Fedelino and Ter-Minassian, 2010). Such a move would be inconceivable in modern-day Iraq or Indonesia, and would certainly fan rather than reduce secessionist tendencies in these countries – showing that there may not be a unique solution to the sharing of natural resource revenues, and much depends on the specific context, which may change over time.

Overall, despite the limited success to date with the decentralization in Bolivia (Plurinational State of), an attempt has been made to seek a way to make it work better in a heterogeneous country, giving voice to the disadvantaged people who saw little benefit during extended periods of centralized rule. As shown by Faguet (2004), clearly the possibility of improvements in living standards has been demonstrated, even if this cannot be generalized. Thus, going back to centralized rule is not a political economy option, and the focus, for instance of the 2004 IMF mission, was to examine the missing elements to make the process work better, particularly the own-source revenues at lower levels to enhance incentives for better accountability, and information flows that bolster the process.

Peru

As argued in Ahmad and García-Escribano (2011), Peru provides a laboratory for examining the effectiveness of decentralization and centralized rule, as successive administrations have oscillated between the extremes. Mayors were popularly elected prior to the period of military rule between 1968 and 1979. The subsequent period of extreme centralization was characterized by increasing disparities between the coast (particularly Lima) and the poorer regions of the *sierra* and the *selva*. The 1979 constitutional reforms reinstated municipalities. However, the attempts to decentralize functions during the first García period in the 1980s were hampered by weak administrative and economic management, and plagued by extensive rent-seeking and diversion of resources at all levels of government. Combined with the chaos associated with the macroeconomic crisis and hyperinflation, there was little evidence of a reduction in regional disparities or poverty. In contrast, the stabilization of Fujimori came with considerable centralization, buttressed by the introduction of a VAT, with a central tax administration. As an adjunct to the economic stabilization, the early Fujimori period was characterized by an attempt to also provide for social stabilization, seen as an essential element in the fight against the Shining Path (*Sendero*) guerrillas.

IMF technical assistance at this time, other than for the establishment of SUNAT (Superintendencia Nacional de Aduanas y de Administración Tributaria) and the design of the VAT, focused on the social program implementation. A mission in 1992 highlighted the weaknesses of trying to provide social assistance in a top-down manner without the means of identifying local preferences, and in a situation where deconcentrated local governments were relatively weak, and lacked own-source revenues, or clearly defined functions. Centrally determined and financed programs, such as FONCODES,⁶ were often the major source of activities for local governments. While these were, in principle, designed to reflect local priorities, there were few mechanisms to coordinate at the local or central levels, assess trade-offs and establish priority spending. The center lacked the full information to make allocations, and there often was a lack of clarity between the spending by specialized agencies such as FONCODES and the operations of line ministries and local administrations.

The war on the Shining Path terrorists had a negative impact on activity levels, particularly in the *sierra* and the *selva*, exacerbating the labor-market distortions, and the accelerated migration of the male working-age population towards the coast and Lima. This had significant implications for the types of interventions needed for the vulnerable in the *sierra* and the *selva* (largely female-headed households, the elderly and children), and the sort of investment-based income support that was on offer. Indeed, there were several examples of 'bridges in the middle of nowhere without connecting roads at either end, built by contractors from Lima with relatively few linkages with the local labour market'.⁷ The 1994 missions warned that the criteria for the allocation of funds, together with weak monitoring mechanisms, meant that the really poor would likely not benefit, and that the local governments would have an incentive to maintain their rankings in the poverty map (*mapa de pobreza*) in order to continue to receive investment funds.⁸ The strong recommendation made by the 1994 missions to establish a transparent system to monitor spending, involving a Treasury Single Account (TSA), and a government financial information management system. The Fujimori administration paid lip-service but despite the significant technical assistance launched by the IDB and the IMF (using the Brazilian model and Brazilian consultants) as part of the follow-up, the measures were effectively abandoned within a few years with no results. With hindsight, it is clear that greater transparency was not high on the preference function of the administration – but this is not always apparent to agencies keen to deliver technical assistance.

Regrettably, given the weak monitoring mechanisms, these investment-based transfers were misappropriated in the latter half of the Fujimori

regime towards his reelection campaign, and in outright fraud. This was subsequently illustrated in the trials of Fujimori's advisor, Montesinos.

The Toledo administration in 2002 revived the decentralization process. The second García administration in 2006 also decided to move forward this decentralization process. There was a political economy recognition that a dispersal of power among regional and local governments provides insurance against a centralized abuse of power and resources, as experienced during the Fujimori years. Ahmad and García-Escribano (2011), based on insights from an IMF mission in 2005 (Ahmad et al., 2005) using the political economy perspective, suggested that considerable work is needed to develop a coordinated approach to spending and revenue assignments to ensure better governance and accountability at all levels – given the political economy constraints in Peru. This also entails an improvement in information flows, and a redesign of transfer mechanisms that 'equalize capabilities' without creating disincentives.

As in the Colombian (and Indonesian) context, decisions on sharing with regard to natural resource *canons* in Peru preceded the devolution of spending or other own-source revenue-raising powers, *pari passu* creating issues relating to both macroeconomic stabilization and interregional redistribution. But perhaps this is the price to be paid in terms of decentralizing powers and functions in a multi-ethnic and diverse country.

Federal Countries

The return to democratic and multiparty rule in the federal countries was complicated by the multilevel government structures, especially in Brazil. Despite many difficulties and challenges (faced in common with Argentina and Mexico, including the international economic crises, as well as the periodic difficulties with subnational debt) the Brazilians implemented essential institutional reforms, including robust information management systems, that have stood them in good stead over the years, including with the implementation of the fiscal stabilization pacts. These have been harder to replicate in Argentina, Mexico or Peru, or Russia for that matter, with the consequence that these countries remain much weaker than Brazil in managing crises involving subnational governments.

As in the unitary states, the centralizing effects of implementing a VAT (the Brazilian VAT is an exception⁹) have been accompanied by the suppression of subnational own taxes. This goes against the spirit of the democratization reforms, and has been partially offset by an effort to establish greater spending autonomy by lower levels of government. But without major own-source revenues at the margin, this has tended to be accompanied by rather less than ideal accountability, laying the seeds

for future subnational crises. This process is complicated with the legacy systems of extensive earmarking, and overriding of local preferences, especially though not exclusively in Brazil.

Ironically, the centralizing effect of the conditional cash transfers to households or individuals, especially the Mexican *Oportunidades* and the Brazilian *Bolsa Familia*, has gone in the opposite direction. The conditional cash transfers have been strongly supported by the World Bank (Fiszbein and Schady, 2009), which also has been one of the agencies most in favor of decentralization – especially in terms of the effectiveness of service delivery as well as claims that it might reduce corruption (see Gurgur and Shah, 2002). It appears that the overlapping system of responsibilities has helped in facilitating the greater central role in social protection, and a case could be made to justify centralization of this function. But, as the actions relating to conditional cash transfers involve both primary health care and education, the case becomes quite complex. That said, the role of the international agencies in influencing policy in the large federal countries in Latin America, or India, must be open to question.¹⁰

We shall now examine the contrasting cases of federal countries, Brazil and Mexico.

Brazil

As in Peru, Brazil has oscillated between centralization and decentralization over time. However, the 1988 Constitution moved the country firmly towards greater decentralization, with states and municipalities getting effective controls over major revenue bases and an increasing share of centrally collected revenues, as well as greater controls over expenditure management and access to credit, including through banks owned by the subnational governments. All this occurred within the typical Latin American context of overlapping spending responsibilities (Afonso and de Mello, 2002). These contributed to an inevitable financial and macroeconomic crisis that had to be dealt with in a coordinated manner. In this subsection we describe some of the key elements that have ‘rescued’ and strengthened Brazilian federalism, although deep-seated problems remain and need to be addressed within a ‘positive’ or ‘political economy’ context.

The 1988 Constitution introduced a multilevel VAT, with states having access to control over rates and base (including setting of exemptions) of a broad-based high-yield VAT (*Imposto sobre a Circulação de Mercadorias e Prestação de Serviços de Transporte Interestadual e Intermunicipal e de Comunicação: ICMS*), the federal VAT base was limited to industrial goods, and municipalities were assigned a sales tax on municipal transport and property. This disjointed VAT assignment has been criticized for creating distortions, impeding interstate trade (see Tanzi, 2010), and opening

up evasion (also known as 'invoice tourism'). Proposals to move towards a Canadian-style dual VAT, among others, have been on the agenda for at least 10 years, but it has proved quite difficult to introduce a change that involves states that are controlled by different parties, making coordinated reforms difficult. However, the strength of the current arrangement is that subnational governments have control over a major tax base at the margin – this makes it feasible to impose hard-budget constraints on the subnational governments, as no-bailout provisions then become credible.

Although a larger share of federal revenues was to be transferred to the subnational governments, this was largely earmarked, accentuating the overlapping rigidities in the Brazilian assignments. It also reduced the scope for the federal government to make macro adjustments – as the revenue effort needed for a specified level of adjustment increases proportionately (as it is not evident that the lower levels of government would agree to make the same level of adjustment as needed by the federation). Because of the sharing arrangements, the federal government has resorted to raising revenues that are not shared with lower levels – such as payroll and turnover taxes that encourage the development of informal labor markets and negatively affect competitiveness (Afonso and de Mello, 2002). This pattern effectively replicates the Mexican pattern of financing sources for an increasingly important federal conditional cash transfer program (the *Bolsa Família*, which is modeled on the *Oportunidades* program – see below).

In addition to the control over own-revenues at the state level, the second major structural advantage that Brazil has over other Latin American federations is that it has an effective mechanism to monitor spending at federal and subnational levels. This is through the GFMIS (SIAFI) that was introduced soon after the constitutional change, along with an effective TSA. This tracking of spending, together with credible sanctions that are facilitated by own-source subnational revenues, has made it possible to address subnational debt problems in a coordinated manner.

Despite the increasing share in federal revenues following the new constitution, imbalances at the subnational level appeared quickly, and no doubt by the unclear spending responsibilities. Captive lending by banks owned by state governments added to the problems, as many subnational governments financed their deficits by borrowing from their state banks, in a period of high inflation, in anticipation of federal bailouts. Although the states and municipal governments had a small operational surplus at the start of the decentralization process (0.7 percent of GDP in 1991) consistently high deficits in the following years led to a tripling of the stock of subnational debt through the decade (to over 21 percent of GDP by the late 1990s). Federal assumption of the subnational debt was accompanied

by the agreement leading to the Fiscal Responsibility Law (FRL), and restoration of hard-budget constraints at the subnational level. This also involved elimination of borrowing from and privatization of state-owned banks, and strictly enforced restrictions on additional borrowing, including imposition of ceilings for borrowing for investment (the 'golden rule').¹¹

The success of the FRL in Brazil has led to a response by international agencies to replicate this in other countries, including in Latin America, as well as in countries such as Pakistan and Nigeria. In the absence of the basic preconditions, including subnational own-source revenues, and full information flows on subnational operations, the success of Brazil has not been so easily replicated, as seen in the Bolivia (Plurinational State of) and Pakistan contexts.

International agencies have tried to replicate some Brazilian (and Mexican, see below) success stories in the area of social protection – particularly conditional cash transfers. In the post-decentralized world, prosperous states blocked federal spending in poorer states for fear of losing federal funds. This shifted the focus to poor areas within states, so that poor areas in rich states would benefit from greater financing than poorer areas in poor states, accentuating overall inequalities. However, given the overlapping responsibilities on the spending side, the federal government was able to enter into joint ventures in the social area, including preventive health care, primary and secondary education and income support. Since 2003, during the period of the Lula administration, the federal and subnational initiatives have been rolled into the *Bolsa Família*.¹² In effect, overlapping and ineffective social benefit programs at the subnational level have been rolled into a federal program. While this addresses the issue of uniformity of treatment across the country – a deficiency pointed out by Afonso and de Mello (*ibid.*) it comes at the cost of a recentralization effort in areas of basic subnational competence and responsibility, as it effectively supplanted state- or local-level programs.

While Brazil appropriately learnt from the Mexican example with *Oportunidades*, it is not clear that this was specifically recommended by the international agencies (although both the World Bank and the IMF are now instrumental in spreading the gospel concerning *Oportunidades*-type conditional cash transfers).¹³ The critique of the effective financing arrangements for the *Oportunidades* program (see below) will also apply to the *Bolsa Família*. A reform of the financing arrangement remains contingent on political economy constraints, will involve the VAT and revenue-sharing arrangements, and also the redesign of equalization and earmarked transfers.

Mexico

In the Mexican context, the underpinnings of the decentralization reforms were not as strong as in Brazil. This involved centralization on the revenue side in the early 1980s involving VAT, and inadequate information systems to monitor and evaluate spending at the federal and subnational levels. The subnational debt crises in Mexico also affected macroeconomic stability, as in Brazil, but did not lead to the same level of institutional reforms as in the Brazilian case.

The Mexican introduction in the early 1980s of VAT led to the removal of 30 federal excises and turnover taxes as well as 300+ state and local taxes (Gil-Diaz, 1987). As in Argentina and Brazil, the tax reforms were accompanied by the introduction of fairly complicated and non-transparent revenue-sharing mechanisms. The loss of effective controls over revenues at the margin from the states was not appreciated in terms of policy or theory, and remains problematic in terms of the accountability of subnational governments. Gil-Diaz noted early on that the formula for sharing should be revised so that it 'does not pit states against each other, the formula must be one that does not generate a pie that must be divided so that somebody's gain is someone else's loss' (p. 348). However, the greater reliance on shared revenues had the effect of 'sharing up a pie' and the ensuing interstate conflict began to be reflected almost immediately in a tussle over relative shares. Gil-Diaz also noted the reduced incentives for state governments to maintain efficient tax administrations. In a sense, although the political economy literature of fiscal federalism had not gained much currency, policy makers were often quite aware of the political economy consequences of their actions.

The Mexican VAT was also problematic in its inadequate revenue-raising aspect, as it tried to meet distributional objectives through a series of exemptions and zero ratings, as well as lower rates for border regions (some which occurred several hundred miles away from any border). This impacted on its efficiency, resulting in one of the worst VATs in Latin America. However, when Gil-Diaz became Secretary of Hacienda in the late 1990s (in the Fox administration), he was unable to reform the VAT, given the interlocking set of vested interests in the exemptions and zero ratings, as well as those resulting from the design of the revenue-sharing system. At this stage, it became clear that the VAT reform is effectively an exercise in intergovernmental political economy, especially as one-party PRI-dominated rule was replaced by a multiparty arrangement with PRI (Partido Revolucionario Institucional) in opposition and different parties controlling different states.

In the Mexican context, overlapping responsibilities further obfuscated responsibilities, and this was exacerbated by the economic crisis

in the mid-1990s, where borrowing by state investment projects, without federal guarantees, led to a worsening of a banking crisis, precipitating the need for a federal bailout. Subnational debt limits were imposed, but the absence of a standardized budgeting and reporting framework at all levels of government remains a major constraint.

Institutional arrangements remain weak. In 1996, Mexico tried to introduce a Brazilian-style GFMIS (government financial management information system) – SIAF – for which Brazilian experts were engaged through the IMF. The design also called for a TSA. By 2001, the system had failed, and even to this day after considerable additional support from the IMF and the World Bank, a proper GFMIS has not been implemented at the federal level. A joint IMF–*Secretaría de Hacienda y Crédito Público* (SHCP) report (with World Bank participation) in 2007 (Ahmad et al., 2007b) called for standardized reporting and information flows (as well as a clarification of spending responsibilities and greater own-source revenues). This was predicated on a completion of the reforms within SHCP and the Treasury, including a common budget classification to be used by all agencies of the SHCP (Ministry of Finance and Public Credit: MOF) and the federal government, before attempting to persuade states and local governments to adopt the same standards. Despite yet another technical assistance mission later in 2007 (Ahmad et al., 2007a), attempts to complete the 1996 reforms appear to have been abandoned and along with this the likelihood of achieving the standardization of information flows and controls needed for effective management (in the Brazilian mode). It is clear that there is significant opposition to the greater clarity that comes about with the Brazilian expenditure management model, and successive Mexican finance ministers since 1996 have tried but failed to implement this basic reform.

Ahmad et al. (2007b) had stressed the importance of political economy considerations in suggesting greater clarity on the spending assignments, as well as tangible own-source revenue handle for the states. Following the Chinese example, they stressed that any tax reform that impacted on state transfers would have to indemnify the states from losses, and provide them with a share in the benefits to ensure political support for the reforms. A proposal for a dual VAT, or an IRAP style (*Imposta Regionale sulle Attività Produttive*: Regional tax on Productive Activities) state tax handle, was to have been accompanied by a reform of the revenue sharing and simplification of the transfer system. However, the government was more interested in bolstering federal revenues, and used the principle of joint tax and transfer reforms to introduce a federal *Impuesto Empresarial a Tasa Unica* (IETU), at the same time simplifying and adjusting federal revenue shares to ensure that no state lost revenues from the reform.

This subnational stop-loss provision was critical in the Chinese 1994 tax reforms, and was effectively copied by Mexico in 2007. However, the subnational tax handles and intergovernmental reforms agenda remain substantially unaddressed.

An effective cash transfer system, *Oportunidades* (initially called *Progresá*) was introduced to replace tortilla and gas subsidies. It is a federal program linked to nutritional, educational and health-care outcomes, has been reportedly very successful (Coady and Parker, 2002), and has been the basis for the World Bank's strong advocacy of such programs in Latin America and elsewhere (Fiszbein and Schady, 2009). However, the financing of this program by a distorting payroll tax in an economy rife with evasion and avoidance, and the presence of informal labor markets have led to significant disincentive effects that might hamper growth potential (see Levy, 2008). The magnitude of the benefit has risen over time, as successive ministers have sought to put compensatory measures for all sorts of interventions on the shoulders of this scheme, increasing the disincentives associated with the 'kink' as the benefit is withdrawn. Finally, state governments are aggrieved as they see this program as cutting across their areas of responsibility in education and health care – further obfuscating the overlapping and murky spending responsibilities. Thus, there are a number of contradictions that need to be addressed in order to ensure that the program continues to provide effective social assistance in a sustainable manner that does not distort incentives and limit growth potential. The strength of the *Oportunidades* approach is the categorical targeting that is based on use of clinics or schools.

Replication of this type of conditional cash transfer in other institutional contexts, particularly based on asset tests (as in Pakistan), opens up political economy difficulties that could be addressed with a more judicious design and linkage with financing instruments that enhance accountability.

3 SOME ASIAN CONTRASTS

Attempts to 'transplant' the normative Latin American models to the Asian context have had limited success. In the Pakistan case, described below, the form of transplant of decentralization, during the early years of the Musharraf administration was successful, but manipulated by the administration to bypass the political process and 'manage the process' centrally. The Chinese administration, on the other hand, devised a unique solution that clearly reflected their political economy considerations. We consider both cases here.

Pakistan

In the 1960s, the Pakistan administration of Field Marshal Ayub Khan had experimented with a system of basic democracies – setting up an electoral college at the local level that also formed the basis of development activities in their regions. This effort at political ‘deconcentration’, or managed democracy was abandoned after country-wide protests forced the resignation of Khan as President. The system was formally abolished under the 1973 Constitution which restored the rights and functions of the provinces, which had been the main subnational unit of governance under the 1935 Government of India Act, and had formed the basis for the constitutions in both India and Pakistan after independence.

The Musharraf administration also promoted a form of so-called ‘decentralization’ in the post-9/11 period. While this was ostensibly a mechanism to get services closer to the people, and elected local officials, overlapping responsibilities were not addressed. While the process was clearly an attempt to bypass the established political parties and the power centers in the provinces, the bilateral donors and multilateral banks rushed to support the process, along with the institutional reforms of the Federal Bureau of Revenue, and the government financial information systems (GFMISs) at all levels of government. Each of these reforms had failed, or was in significant difficulty, by the time that Musharraf was ousted from power in 2008. The president captured the ‘decentralization’ process, facilitated by the unclear responsibilities, lack of own-source financing and opaque information on government operations.

The post-Musharraf parliament pushed through a reform of the constitution, with the 18th Amendment during 2010. This eliminated the concurrent lists of the constitution, giving provinces sole powers in a number of areas, including health and education. This reform was preceded by the award of the National Finance Commission which increased the provincial share in federally collected revenues, predicated on an increase in the tax/GDP ratio given a proposed reform of the GST (goods and services tax) and other taxes. The 18th Amendment reiterated the right of the provinces to administer the GST on services, if they so desired – the revenues belong to the provinces in any case. An inadequate financing framework for the devolved spending remains a problem in the Pakistan context. Newly empowered provinces consider ‘administration of revenues’ as the hallmark of autonomy – whereas the mechanisms at hand (particularly the split operations of the GST on services) are almost impossible to administer at the subnational level and could lead to interprovincial tax wars.

Another Mexican transplant in Pakistan is the local variant of the conditional cash transfer, *Oportunidades*. Again, this is a centrally operated

program, with support from the multilateral banks and some bilateral donors, but based on a complex asset test rather than the simpler categorical criteria that are also possible. This complexity again opens up the arena for 'capture' and manipulation.

Transplanting models, without adequate attention to institutional and political differences may lead to unforeseen consequences.

China

In the early 1990s Chinese context of murky spending responsibilities (a lot of social spending was performed by state-owned enterprises (SOEs) belonging to different levels of government) in a legal unitary state, with no central tax collection other than customs, the center had no ability to administer taxation. The Chinese economic reforms of the 1980s had moved from a system of 100 percent profits taxation of largely SOEs (collected by local governments on behalf of the center) to a more moderate level. However, this had the consequence that the tax-to-GDP ratio fell from more than 22 percent to about 12 percent by 1993, and more alarmingly, the central government share of collections fell from just under 60 percent in the early 1980s, to less than 30 percent by 1993. This severely constrained the center in pursuing macroeconomic and redistributive policy goals.

The debate at the time was whether the normative model of federal reforms should be followed: clarify spending responsibilities, and then adjust tax assignments accordingly was the 'big bang' model recommended by the Bank (as in Russia). IMF technical assistance (Ahmad et al., 1995a) at the time supported a view from the Chinese administration that it would be preferable to bolster central finances with the establishment of a state administration of taxation (for the first time in Chinese history), responsible for the collection of modern taxes, particularly VAT. This view was accepted by the leadership, which was keen to avoid the difficulties that were apparent by then in Russia following the collapse of the Soviet Union – another example of international yardstick competition.

The new tax system was implemented in 1994, and the spending assignments were unraveled over time as the SOEs were reformed gradually (see Ahmad et al., 1994d, 1994e and a joint report with the Ministry of Finance, Ahmad et al., 1995a; see also Ahmad et al., 1993, 2002, 2003; Ahmad, 1997; Jiwei, 1997). The interests of the local governments were protected by a 'stop-loss' provision that ensured that all local governments would get the amounts that they received in 1993, and the new system would be phased in.

A new equalization transfer system was established similar to the most

advanced in the world (Ahmad et al., 1994e and Ahmad, 1997), but its operations were phased in over time, and a declining ‘revenue transfers’ system was constituted in order to protect the employment and growth potential of the coastal regions (Jiwei, 1997). Reforms of the budget, treasury and reporting systems were also set in motion in the late 1990s, in a sequence of measures to prepare for the operation of a modern economy. A second phase of the reforms is now needed, to clarify the spending responsibilities of the lower levels of government, and also examine own-source revenues and debt in a way to optimize land and local resource use.

The Chinese reforms during 1993–94 were an excellent example of the positive approach to intergovernmental issues in action, and provided a lot of the insight used subsequently by IMF staff, often in conjunction with World Bank staff (some of the joint work was in Indonesia, 1999, Nigeria, 2000, China 2003, and Mexico, 2006).

4 ASSESSMENTS

What is the Evidence on Decentralization?

The evidence on the effects of decentralization regarding improvements in service delivery in the OECD countries is mixed at best, as reviewed by Ahmad et al. (2008). Furthermore, the evidence for developing countries is not much more conclusive, as reviewed in Ahmad and Brosio (2009). The links between decentralization and preference matching and with growth are often examined together. The studies confirm that any relationship, if it can be established, is at best weak and tenuous. Interested readers are referred to the above reviews for the relevant references, to form their own opinion.

Perhaps the greatest lacuna in the decentralization processes of developing countries, especially in Latin America (with the exception of Brazil), is the lack of sufficient action on adequate own-source revenues at the subnational level. This may have been due to the normative approaches that suggest focusing first on the spending side, especially at the intermediate tier of government/states/provinces/departments. The same pattern is observed from Indonesia to Pakistan. But sometimes the ‘building blocks’ fail to work – for example, coordinated information through the GFMISs, even at the central level, as in Mexico, and Bolivia (Plurinational State of). The political economy approaches sometimes help to understand why not, and thus help to improve policy advice and effectiveness of technical assistance in the future or in other countries. The effectiveness of the

advice given and that of the decentralization process itself are entirely different matters.

Role of the International Advisors

It is easy to exaggerate the role played by the multilateral agencies and donors in influencing policy, particularly in the larger countries. Several, like the Chinese and Brazilians, listened politely to different points of view and then did their own thing, often making use of the 'conflicting' messages from the international agencies. The situation is somewhat different in the smaller countries using sectoral loans, or operating under adjustment programs supported by the IMF and the World Bank, where the leverage applied is generally stronger.

Bilateral donors

Bilateral donors tend to replicate the context of their home country – USAID-funded advice tends to reflect the US-centric view of the world, where local governments work effectively, and the task for public policy is to ensure the efficient magnitude of cooperation across local governments in providing widespread services and minimizing externalities and spillover effects (for example, through *mancomunidades*, in the Latin American context).¹⁴ Moreover, local government elections tend to create stable democracies as well as bulwarks against 'undesirable' forms of government. However, these are issues of secondary importance, as the support to Pinochet in Chile and Musharraf in Pakistan have illustrated over the years. An additional difficulty has been that the local governments are not really responsible for basic health care or primary education as they would be under a US-centric view of things. This may be partially due to a different set of institutional and historical circumstances, but also advice from other bilateral and multilateral agencies.

The GIZ has been instrumental in disseminating the complicated and overlapping systems of assignments that have been used in Germany, despite the fact that recent commissions in Germany have been trying to unravel these with rather limited success. Examples of the mind-boggling complexity are to be seen in several GIZ documents (see, for instance, CONAM GIZ, 2001; and also Aghon and Krause-Junk, 1996). The result, for example in Bolivia (Plurinational State of), was that the HIPC scheme channeled funds to municipalities for functions in which they had only marginal competence – particularly, basic education or primary health care.

A greater difficulty is that with the use of the HIPC funds, or those from the World Bank or the IDB, or GIZ or USAID, there are generally different

reporting and accounting requirements. It is, thus, not surprising that local governments have difficulty in conforming with these rather disparate and incompatible norms. This gives rise to what is then known as ‘institutional and capacity constraints’ in the decentralization process – although the local governments may be perfectly capable of following a simple and standardized tracking and reporting function, if only there were one standard.

The development banks

It is also not surprising that the development banks should initially take the normative perspective – reflecting the US-centric view of the world (Burki and Perry, 2000). This focuses on the clarity in spending assignments, appropriate revenue assignments, appropriate transfer design and efficient public financial and debt management, emphasizing no-bailout conditions. While these ‘building blocks’ are relevant in any system of intergovernmental fiscal relations, whether US-centric or not, without the positive approach it is difficult to see whether or not sensible advice on any of the blocks might be followed, and if so, whether it is compatible with conflicting advice in the same or other blocks. By the mid-to-late 1990s, the role of institutional variables and interactions with the building blocks was much better appreciated (Litvack et al., 1998).

After continuing World Bank work on service delivery, the positive and political economy aspects came to the fore after the 2004 World Development Report, as Devarajan and his colleagues began to pursue these aspects more systematically (World Bank, 2004; Ahmad et al., 2006; Devarajan et al; 2009). But at the same time, other parts of the Bank were continuing with the ‘normative’ tradition, as advice on Mexico and Pakistan showed in the mid 2000s.

The greatest lack of consistency in the Bank is the joint advocacy of the centralized conditional cash transfers as well as decentralized operations, following either normative or positive approaches. But then the Bank staff are fairly autonomous, and it is hard to get a ‘Bank view’ on particular issues.

The IDB, while also initially following a ‘normative’ approach, relied more heavily on senior academics with policy-making experience from the region. Hence, their focus was much more closely grounded on experiences of the countries concerned, and first-hand knowledge of the shortcomings and difficulties (for example, Lopez-Murphy, 1995). By placing the ‘building blocks’ of fiscal federalism within the context of what might be feasible and what generally works, the IDB showed greater flexibility at an earlier stage than its Washington neighbors – this possibly also reflects a greater responsiveness of the management and staff of the IDB to the preferences of the member countries.

The IMF

The position of the IMF is much more complex. In the early 1990s, FAD (Fiscal Affairs Department) senior staff took the position that the subject of intergovernmental fiscal relations was off-limits to its staff, largely because the subject is 'essentially political',¹⁵ and the IMF does not interfere with political issues, and that these are best left to the Bank. However, requests for technical assistance on the 'building blocks' of federalism gathered pace as the transition economies of Eastern Europe, Central and East Asia began their economic reforms, with which the IMF was closely involved. There was also a realization that the operations at the subnational level might affect overall macroeconomic stability. Consequently, a number of missions were launched, including in China (1993), as well as Peru (1994) and Colombia (1994, 1995). As described above, these were largely of a 'political economy' nature, focusing on the art of the possible and practicable, as opposed to what might be recommended by the normative theories (see the discussion above on China, where the Bank's advice was more in line with the normative theory).

At the same time, a three-year staff assessment was launched that examined the 'building blocks' as well as summaries of country experiences – this was published under the name of Teresa Ter-Minassian,¹⁶ who was responsible for initiating the work on fiscal federalism due to the clear influence that subnational operations in Latin America had had on macroeconomic stability. While the country-specific IMF technical advice had been based on an appreciation of political economy considerations, the Ter-Minassian volume (1997) was essentially normative. Perhaps this was designed to deflect the criticism that the work was becoming too political – but it also reflected the rather rigid delineations between divisions in the FAD that happen to correspond to the fiscal federalism 'building blocks' of macro: tax policy and administration, expenditure policy and public financial management. It was often difficult to see the interrelationships between these areas. Yet, the technical assistance that followed Ter-Minassian's publication continued in the political economy tradition. This included missions on Indonesia, Nigeria, China and Mexico – all of which also had participation from the World Bank.

At the request of the Executive Board, and in honor of the retirement of Vito Tanzi in 2000, another retrospective was held (see Ahmad and Tanzi, 2002). This was essentially based on political economy approaches in tone and analysis, particularly a forceful paper by Tanzi himself (Tanzi, 2002) that focused on the effects of the decentralization process, and the incentives to misappropriate resources rather than simply focus on the building blocks.

Finally, a paper was presented to the IMF Board on an assessment of

where the institution stands on fiscal federalism, mindful of the fact that the Board was not keen on an expansion of the mandate of the IMF, and was published in Fedelino and Ter-Minassian (2010). This paper, however, clearly recognizes the role of political economy in an assessment of the decentralization process and the advice given by IMF staff.

5 CONCLUDING REMARKS

The influence of the international agencies on fiscal federal outcomes is probably exaggerated, as in reality countries do what is in the interest of the ruling parties, politicians and bureaucrats. This may also explain why so often 'sound' advice given to countries that are capable of implementation often falls on deaf ears. Probably, 'yardstick competition' is the most effective incentive for countries to improve public policy making and effectiveness of service delivery, as electorates are now more aware of options and living standards in neighboring countries in an increasingly interconnected world.

It is clear that the international institutions learn from experience, and this has become more apparent as their boards have become more demanding in terms of the evaluation of the design and effectiveness of the advice given. This could reflect an 'international yardstick competition' driven by the results in specific cases. Yet the tendency to transplant 'fads' or successful country experiences remains strong.

Institutional arrangements, providing arm's-length services, such as the tax administration, or institutional underpinnings for the provision of information on the operations of governments at all levels of administration, are probably as essential as 'depoliticized' central banks. The dichotomy between this type of administration, which could facilitate transparent governance, and control over policy (particularly on the revenue side at the margin) is critical and needs to be explored further in research and policy work in Latin America as well as in other parts of the world. International agencies and academic advisors have a role to play in distilling the experiences and presenting these to countries, while keeping in mind the specific institutional and historical context of the countries concerned, and understanding why countries undertake reforms.

NOTES

* Helpful comments from Giorgio Brosio and Pierre Salmon are acknowledged. The author has been associated with several of the cases mentioned, as a representative of

the IMF, or leading joint IMF–World Bank missions. The chapter reflects a blend of international policy advice with the academic literature – both normative and political economy. The usual caveat applies.

1. See also Ahmad and Brosio (2011), for a selection of papers on this subject.
2. See Ahmad et al. (2008) for a discussion of the evidence in OECD countries.
3. In the 1990s, work by the World Bank on countries such as Russia: Wallich (1994); and Indonesia: Shah and Qureshi (1994) took the standard normative approach to fiscal federalism issues, followed by advice to Mexico: Guiguale and Webb (2000) and Pakistan: Martinez-Vazquez and Richter (2008).
4. This issue has been central in the discussions in post-Suharto Indonesia, post-Saddam Iraq, post-Biafra Nigeria, and under the new constitutions in Colombia and Bolivia (Plurinational State of).
5. Under the 1997 budget law, debt service was limited to 25% of revenues, and debt stock had to be lower than 250% of revenues. This reflected the Colombian municipal debt law.
6. This was a fund for social stabilization that provided financing for education, health and infrastructure needs at the municipal level. See Ahmad et al. (1994a, 1994b).
7. Including one in the middle of the Urubamba valley – the local mayor justified this as a means of getting funds from Lima.
8. This situation is reminiscent of the current debate relating to the use of EU Structural Funds (under Law 488), with weak monitoring, audit and controls (EU–OLAF), and with the relevant politicians having no 'accountability' for the effective use of these funds.
9. The Brazilian VAT, which is composed of federal and lower government-level VATs, is no role model, leading to production distortions and evasion possibilities, and successive administrations have been trying to reform it without success over the past 10 years.
10. Large federal countries such as Pakistan, which have been recipients of significant World Bank assistance over the years, have also tended to do what they want to, and have selectively used or distorted Bank advice to further parochial goals.
11. For details of the FRL, see Afonso and de Mello (2002).
12. This includes the *Bolsa Escola*, which supplanted several municipal programs, *Bolsa Alimentação*, *Auxílio Gás*, *Cartão Alimentação* and the cash transfer component of *Programa de Eridação do Trabalho Infantil* (see <http://www.mds.gov.br/bolsafamilia>).
13. The World Bank case for conditional cash transfers is nicely put in Fiszbein and Schady (2009), and that of the IMF in Fedelino and Ter-Minassian (2010), who claim this to be an example of international best practice.
14. There have been major USAID-funded programs on decentralization, for instance both in Bolivia (Plurinational State of) and Peru. Similarly, GIZ has been very active in the Andean countries, often in collaboration with ECLAC.
15. Quote ascribed to Milka Casanegra-Jantscher, Head of the Tax Administration Division.
16. As Deputy Director of the FAD.

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