

macroeconomía del desarrollo

Macroeconomic challenges of fiscal decentralization in Latin America in the aftermath of the global financial crisis

Teresa Ter-Minassian
Juan Pablo Jiménez



NACIONES UNIDAS

CEPAL



Federal Ministry
for Economic Cooperation
and Development

giz

macroeconomía del desarrollo

Macroeconomic challenges of fiscal decentralization in Latin America in the aftermath of the global financial crisis

Teresa Ter-Minassian
Juan Pablo Jiménez

Economic Development Division
Santiago, May 2011



UNITED NATIONS



Federal Ministry
for Economic Cooperation
and Development



This document was prepared by Teresa Ter-Minassian, a consultant with the Economic Development Division of the Economic Commission for Latin America and the Caribbean (ECLAC), and by Juan Pablo Jiménez, Economic Affairs Officer with the same Division, within the framework of the Project entitled "Decentralization and governance (GER/08/003)", executed by ECLAC jointly with the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and financed by the Federal Ministry of Economic Cooperation and Development of Germany (BMZ).

The opinions expressed in this document, which has not undergone formal editing, are those of the author and do not necessarily reflect those of the Organization.

Publicación de las Naciones Unidas

ISSN versión impresa 1680-8843

LC/L.3337

Copyright © Naciones Unidas, mayo de 2011. Todos los derechos reservados

Impreso en Naciones Unidas, Santiago de Chile

Los Estados miembros y sus instituciones gubernamentales pueden reproducir esta obra sin autorización previa. Sólo se les solicita que mencionen la fuente e informen a las Naciones Unidas de tal reproducción.

Table of contents

Abstract	5
I. Introduction	7
II. Macroeconomic challenges of fiscal decentralization: theoretical considerations	9
III. Decentralization and macroeconomic management in Latin America before the global financial crisis	15
A. A macroeconomic context of high volatility	15
B. Mostly pro-cyclical national fiscal policy responses.....	17
C. The role of SNGs in fiscal stabilization and sustainability.....	19
1. Main trends in fiscal decentralization.....	19
2. Trends in subnational stabilization and sustainability.....	24
IV. Impact of the global crisis on the sub-national finances in Latin America	29
A. Macroeconomic effects of the crisis and national fiscal responses	29
B. Impact on sub-national governments.....	31
V. Reform options to facilitate sustainable and less pro-cyclical sub-national fiscal policies in Latin America	35
A. Reforms in rules and borrowing controls	36
B. Reforms in sub-national revenue assignments	37
C. Reforms in inter-governmental transfer systems.....	39
D. Reforms in sub-national spending	40
Bibliography	41
Serie Macroeconomía del desarrollo: published numbers	43

Table index

TABLE 1	LATIN AMERICA (7 COUNTRIES): TRADE SHOCKS AND SUDDEN STOPS IN CAPITAL.....	16
TABLE 2	LATIN AMERICA: SUB-NATIONAL PUBLIC EXPENDITURE	19
TABLE 3	BASES OF SUB-NATIONAL GOVERNMENTS OWN REVENUES	22
TABLE 4	DISTRIBUTION OF INTERGOVERNMENTAL REVENUES FROM NON-RENEWABLE RESOURCES	23
TABLE 5	DISTRIBUTION OF CENTRAL GOVERNMENT TAXES	23
TABLE 6	LATIN AMERICA: FISCAL RULES CURRENTLY IN FORCE	25
TABLE 7	SELECTED FISCAL INDICATORS IN LAC, 2008-2010.....	30
TABLE 8	LATIN AMERICA: EVOLUTION OF THE PRIMARY BALANCES OF SUB-NATIONAL GOVERNMENTS	32

Figure index

FIGURE 1	VOLATILITY OF PER CAPITA GDP GROWTH.....	16
FIGURE 2	PROPORTION OF YEARS DURING THE PERIOD 1960 TO 2009 WITH GROWTH OF GDP PER CAPITA LOWER THAN THE AVERAGE WORLD GROWTH RATE BY AT LEAST ONE STANDARD DEVIATION.....	17
FIGURE 3	LATIN AMERICA: OVERALL BALANCE, TOTAL REVENUE AND TOTAL EXPENDITURE (1950-2010)	18
FIGURE 4	LATIN AMERICA: DEBT EVOLUTION	19
FIGURE 5	LATIN AMERICA: SUB-NATIONAL EXPENDITURE ON EDUCATION AND HEALTH (2002-2006)	20
FIGURE 6	STRUCTURE OF TAX REVENUES BY LEVEL OF GOVERNMENT-2009	21
FIGURE 7	LATIN AMERICA: COMPOSITION OF SUB-NATIONAL REVENUE	21
FIGURE 8	LATIN AMERICA (7 COUNTRIES): REVENUE VOLATILITY BY LEVEL OF GOVERNMENT	24
FIGURE 9	LATIN AMERICA (5 COUNTRIES): SUB-NATIONAL PUBLIC DEBT	26
FIGURE 10	LATIN AMERICA (8 COUNTRIES): REVENUES, EXPENDITURES AND PRIMARY BALANCE OF SUB-NATIONAL GOVERNMENTS.....	27
FIGURE 11	EVOLUTION OF CENTRAL GOVERNMENT TAX COLLECTION IN REAL TERMS	31
FIGURE 12	EVOLUTION OF INTERGOVERNMENTAL TRANSFERS IN REAL TERMS, 2008-2010	32

Box index

BOX 1	THE IMPACT OF THE CRISIS ON SNGS IN BRAZIL	33
-------	--	----

Abstract

In Latin America (LA), as well 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, sub-national 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, as concerns both ensuring medium-to long-term fiscal sustainability, and minimizing the impact of cyclical and commodity prices fluctuations on sub-national budgets. This is illustrated by the effects of the recent global financial crisis on sub-national finances in the region. This paper discusses how fiscal decentralization is affecting macro-economic management in the main LA countries; and which reforms in the existing inter-governmental 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.

I. Introduction

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, sub-national 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 macro-economic stabilization should be the exclusive purview of the CG is becoming increasingly unrealistic. This paper seeks to contribute to a reflection on how fiscal decentralization affects macro-economic management in the main LA countries; and on which reforms in the existing inter-governmental 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.

The LA region weathered the recent global financial crisis better than most others, 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. As a matter of fact, 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 or so years and 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 sub-national 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 the crisis largely depended 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 counter-cyclical response to a future downturn.

The paper is structured as follows. It begins (section II) with a theoretical discussion of the growing impact of SNGs' operations on short-term fiscal stabilization and medium-term fiscal sustainability; and of some policy and institutional reforms options in this area. Section III reviews trends in fiscal decentralization in the main LA countries in the decade or so preceding the global financial crisis; how different countries attempted (with varying degrees of success) to ensure sustainable fiscal positions at the sub-national government level; and how SNGs in the region were affected by, and reacted to a range of economic shocks (both favorable and unfavorable). Section IV examines how the recent global crisis and the subsequent recovery affected the sub-national finances in various LA 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, Section V discusses institutional and policy reforms that could enable SNGs in the main countries of the region better withstand the impact of future economic shocks.

II. Macroeconomic challenges of fiscal decentralization: theoretical considerations

As is well known, the traditional (normative) literature on fiscal decentralization (e.g. Musgrave, 1959; Tiebout, 1956; 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 (e.g. Qian and Weingast, 1997; Tanzi, 2001; 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 macro-economic 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 macro-economic 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 re-thinking of the appropriate role of SNGs in short-term macro-economic management, its linkages with fiscal sustainability, and the types of inter-governmental fiscal arrangements that can most effectively promote both.

The traditional view that fiscal stabilization is best performed by the CG (first put forward by R. 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 counter-cyclical 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 sub-national 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 counter-cyclical 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 counterarguments 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 counter-cyclical expenditure policies on their own is being progressively eroded
- Second, the impact of counter-cyclical policies of CGs can be significantly offset by pro-cyclical policies of SNGs. There is significant empirical evidence (including in Latin America, as discussed in section III below) 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

¹ Local governments, that 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 like the US, UK, and Spain among others, that suffered major losses in property values during the recent global financial crisis, have been substantially affected by the crisis in 2008-2009.

- 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, sub-national 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 counter-cyclical spending, a CG may be unduly influenced by factors such as the political alignment of individual sub-national 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 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 sub-national 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" counter-cyclical 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 level²) 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 sub-national investment projects; but efficiency costs of abrupt changes in funding levels can be also significant for current expenditure programs, e.g. in education and health, which are increasingly a responsibility of sub-national governments.
 - Finally, sharp retrenchments in socially sensitive sub-national 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 (Ter-Minassian and Fedelino, 2010).
- Second, there may be a case for "active" (discretionary) countercyclical sub-national 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 sub-national counter-cyclical policies, whether active or passive:
 - Are consistent with longer-term debt sustainability (see further below)
 - Are symmetric over the cycle (i.e. equally restrictive during booms as accommodative during downturns)
 - Do not conflict with the fiscal stance of the CG; and

² See e.g. Balassone and Kumar, 2007.

- Do not impose significant adverse externalities on other sub-national 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 not only affecting 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 bailout 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 inter-temporal budget constraints, so as to avoid unsustainable debt accumulation. These range from primary reliance on market discipline, to mechanisms for coordination of budgetary policies across government levels, to the enactment of fiscal rules for SNGs, and to administrative borrowing controls (and various combinations thereof) (Ter-Minassian and Craig, 1997).

The pre-conditions 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 sub-national 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,³ and sometimes belong to a different party than the one ruling at the CG level. In many countries, controls by the CG apply currently only to external borrowing.

In contrast, cooperative inter-governmental arrangements are becoming more frequent around the world, as decentralization and democratization progress, 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 (e.g. 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 sub-national level has been growing around the world. These rules typically stipulate limits on sub-national deficits (e.g. in US states; and in a number of EU members, under the so-called Domestic Stability Pacts), or targets for the primary balance (e.g. in Brazil), in

³ According to Treisman (2002), Latin America has one of the highest levels of electoral decentralization. Most heads of sub-national governments are selected by popular vote.

relation to each jurisdiction's output, or to its revenues. Some rules envisage limits on the debt or the debt service of SNGs (e.g. in Brazil, Colombia, Hungary). In some cases (e.g. in some US states), sub-national fiscal rules also include expenditure or revenue limits.

As with fiscal rules at the CG level, a number of factors affect the effectiveness of sub-national rules in promoting fiscal sustainability:

- 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 sub-national governments. In others, especially federal ones, such rules can only be enacted by each sub-national 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.
- The soundness of the rule's design, specifically:
 - The comprehensiveness of its coverage⁴.
 - Its clarity and transparency, which facilitate the monitoring of its implementation; and
 - The appropriateness of the target to the initial conditions of the relevant sub-national 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 shocks⁵.
- 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, sub-national governments 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 sub-national 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 governments⁶.
- The existence of adequate enforcement mechanisms, which should have a solid legal basis; be non-discretionary in their application; and 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

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 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, e.g. in the form of withholding of CG transfers to non-complying jurisdictions, but occasionally also entail the personal responsibility of the relevant officials (e.g. in Brazil).

supported by explicit requirements to correct deviations from the rule within a reasonable pre-specified time period.

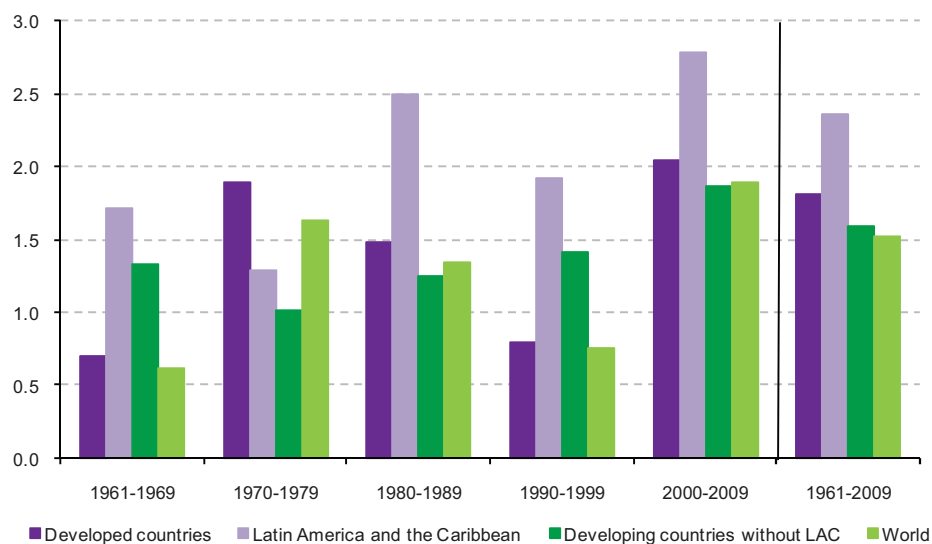
Existing sub-national fiscal rules typically privilege the objective of promoting fiscal discipline and sustainability. However, for the reasons indicated above, an increased focus on the stabilizing properties of sub-national fiscal rules would also be desirable. The question is how to design rules that avoid pro-cyclical fiscal behaviors by SNGs, while safeguarding sustainability, and that can be effectively implemented at the sub-national level; and how to support such rules with appropriate institutional mechanisms (such as counter-cyclical funds) and other reforms in inter-governmental fiscal arrangements. Section V below discusses some policy options in this respect, particularly relevant to the Latin American context.

III. Decentralization and macroeconomic management in Latin America before the global financial crisis

A. A macroeconomic context of high volatility

The LA region has been characterized for several decades by a high degree of macro-economic volatility. Figure 1 below shows that volatility (as measured by the variance over time of growth rates of per capita GDP) in LA has significantly exceeded volatility not only in developed countries, but also in other developing ones during most of the period 1961-2009. Volatility has been largely the result of external shocks, which have tended to affect not only GDP growth, but also fiscal and balance of payments sustainability, and the health of national financial systems over prolonged periods of time (CEPAL, 2008; Catao, 2007; Fanelli, 2008; and Heymann, 2007).

FIGURE 1
VOLATILITY OF PER CAPITA GDP GROWTH
(Percentages of GDP per capita)



Source: Kacef and Jimenez (2010), based on database of Economic Commission for Latin America (ECLAC).

As shown in table 1 below, external shocks have been trade- or capital flows-related, and have affected countries in the region either separately or simultaneously (in the latter case with more devastating effects).

TABLE 1
LATIN AMERICA (7 COUNTRIES): TRADE SHOCKS AND SUDDEN STOPS IN CAPITAL

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

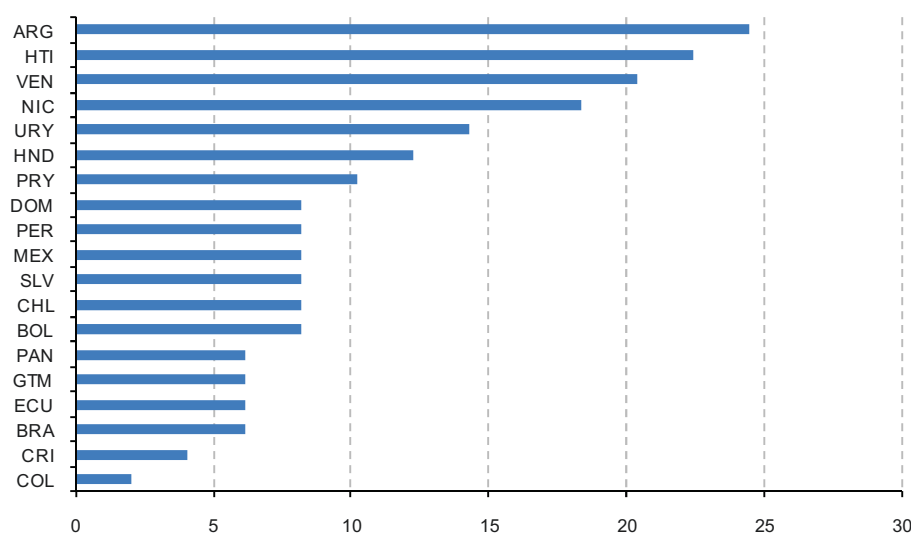
Source: Fanelli and Jimenez (2009), based on database of Economic Commission for Latin America (CEPAL).

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 the countries with: high degrees of export concentration; vulnerability to changes in the terms of trade; and dependence on tourism, emigrant remittances, and FDI. In contrast, sudden stops in capital flows have tended to impact more frequently and strongly the countries relatively more dependent on external financing (i.e. with

large current account or fiscal deficits; or large external debt refinancing needs); more dollarized; with inflexible exchange rate regimes; and with weaker financial systems (Fanelli and Jimenez, 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 positively countries like Argentina, Bolivia, Colombia, Ecuador and Venezuela that are net commodity exporters, but negatively the countries in Central America, that are net importers. Figure 2 shows that, reflecting varying degrees of vulnerability to shocks (as well as different policy responses to such shocks), different countries in the LA region have suffered markedly different durations of below-average growth during the last five or so decades.

FIGURE 2
PROPORTION OF YEARS DURING THE PERIOD 1960 TO 2009 WITH GROWTH OF GDP PER CAPITA LOWER THAN THE AVERAGE WORLD GROWTH RATE BY AT LEAST ONE STANDARD DEVIATION
(Percentages)



Source: Kacef and Jiménez (2010).

B. 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; etc). Specifically as regards fiscal policy responses, they have tended to be shaped primarily by short-term financing constraints and longer-term debt sustainability concerns during most of the last decades, 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:

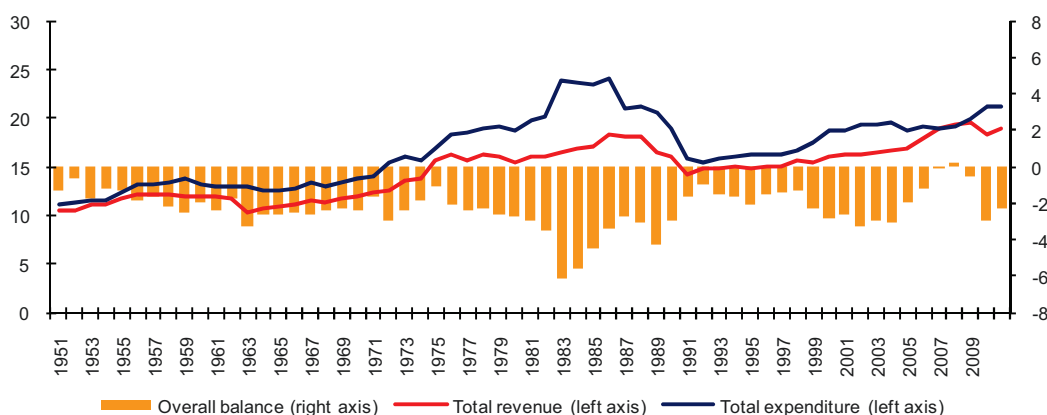
- The relative scarcity and high volatility of tax revenues. Most countries in the region (Brazil and, to a lesser extent, Argentina and Uruguay being exceptions) are characterized by relatively low tax burdens, frequently with high concentration on natural resource-related

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 (Gomez-Sabaini and Jimenez, 2009).

- The pervasive rigidities in public expenditures (Cetrangolo, Jimenez, and Ruiz del Castillo, 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.

FIGURE 3
LATIN AMERICA: OVERALL BALANCE, TOTAL REVENUE AND TOTAL EXPENDITURE (1950-2010)

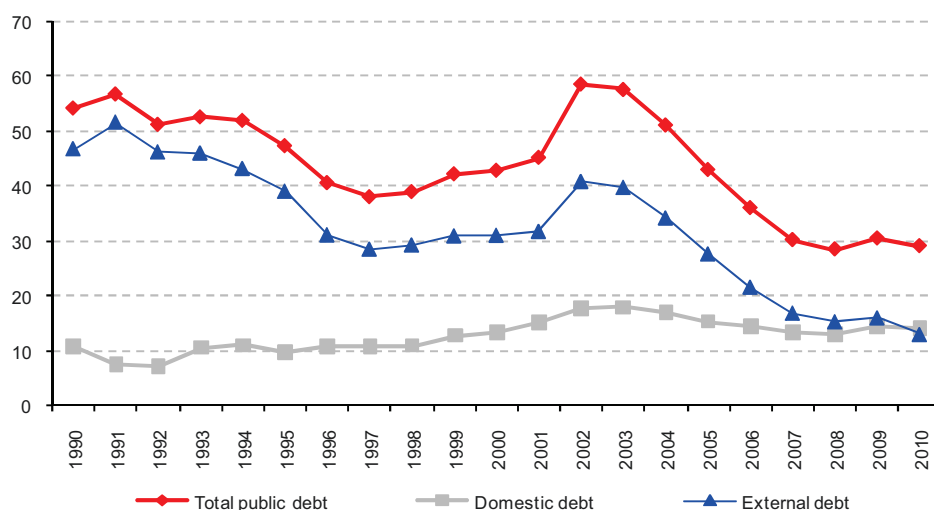


Source: CEPAL, based on Jimenez and Tromben (2007).

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 composition⁸; and accumulate external assets (Jimenez and Kacef, 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 (see further section IV below).

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”)

FIGURE 4
LATIN AMERICA: DEBT EVOLUTION



Source: Own elaboration utilizing ECLAC database. Data for 2010 is up to second quarter.

C. The role of SNGs in fiscal stabilization and sustainability

1. Main trends in fiscal decentralization

Not dissimilarly from the rest of the world, most countries in LA have experienced a clear trend towards increasing decentralization of spending responsibilities in recent decades. As a result, sub-national spending rose sharply between 1985 and 2008, both as a ratio to GDP and as a share of overall public sector spending, in most countries of the region (especially Argentina, Bolivia, Colombia, Ecuador and Mexico⁹) (table 2).

TABLE 2
LATIN AMERICA: SUB-NATIONAL PUBLIC EXPENDITURE
(Percentages of GDP and total expenditure of the General Government)

	1985-1990	1991-1995	1996-2000	2001-2005	2006-2008	2009	2010	1991-1995	1996-2000	2001-2005	2006-2008
	As % of GDP							As % of total expenditure of NFPS or GG			
Argentina	8.7	11.0	11.9	12.0	14.0	15.6	15.9	44.7	44.8	45.1	45.3
Bolivia, (Plurinational State of)	2.8	5.6	6.9	7.8	10.7	11.6	10.9	15.4	19.9	22.1	26.5
Brazil	...	...	12.2	12.3	12.6	14.2	14.7	...	33.0	31.4	31.5
Chile	2.3	2.3	3.0	3.0	2.6	2.6	2.8	7.3	9.5	9.0	7.9
Colombia ^a	5.2	5.0	7.3	7.7	8.2	8.8	9.2	23.3	23.5	24.4	26.6
Costa Rica	0.8	0.6	0.7	0.8	0.9	1.1	...	2.6	2.9	2.9	3.6
Ecuador	...	1.8	2.2	3.7	4.3	4.1	4.2	7.5	9.1	15.6	14.2

(continued)

⁹ Although the lack of comparable data does not allow a quantification of the change for Brazil, there is little doubt that the Constitution of 1988 gave a strong impulse to fiscal decentralization (not only of expenditures, but also of revenues) in the country.

Table 2 (conclusion)

	1985-1990	1991-1995	1996-2000	2001-2005	2006-2008	2009	2010	1991-1995	1996-2000	2001-2005	2006-2008	
	As % of GDP							As % of total expenditure of NFPS or GG				
Mexico	3.8	4.6	6.2	7.9	8.4	10.1	9.7	21.9	30.0	37.1	37.3	
Paraguay	0.4	0.3	0.3	0.4	0.4	...	...	1.0	0.9	1.1	1.3
Peru	...	1.8	2.0	2.1	3.0	4.0	4.1	9.2	9.8	10.9	16.3	
LA average	...	...	5.3	5.8	6.5	...	...	...	18.4	20.0	21.1

Sources: ECLAC, and national data.

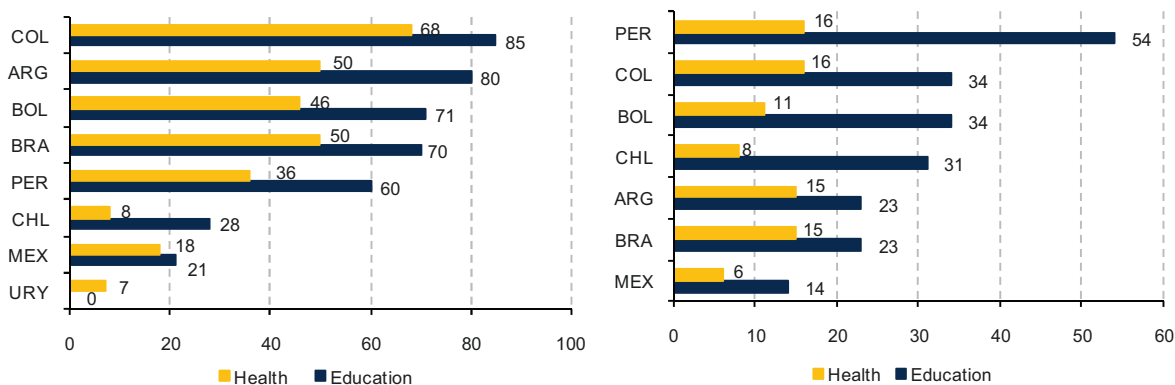
Note: Sub-national databases include provinces, prefectures and municipalities in Argentina; prefectures and municipalities in Bolivia; states in Brazil; municipalities in Chile; departments and municipalities in Colombia; local governments in Costa Rica; provincial councils and municipalities in Ecuador; state governments and the DF in Mexico; departmental governments in Paraguay; and local governments in Peru. Data for year 2010 is preliminary.

NFPS: Non-Financial Public Sector; GG: General Government

^a Average 1986-1990.

Decentralization was especially pronounced in spending on health and education. These two sectors now account on average for around 40 percent of total sub-national spending in the region. In countries like Argentina, Bolivia, Brazil, and Colombia, SNGs are responsible for over 70 percent of total public spending on education, and for 50 percent or more of spending on health (figure 5). This fact highlights the social sensitivity of a substantial portion of sub-national spending in many LA countries.

FIGURE 5
LATIN AMERICA: SUB-NATIONAL EXPENDITURE ON EDUCATION AND HEALTH (2002-2006)
(As a percentage of total government expenditure for this purpose) *(As a percentage of total subnational expenditure)*

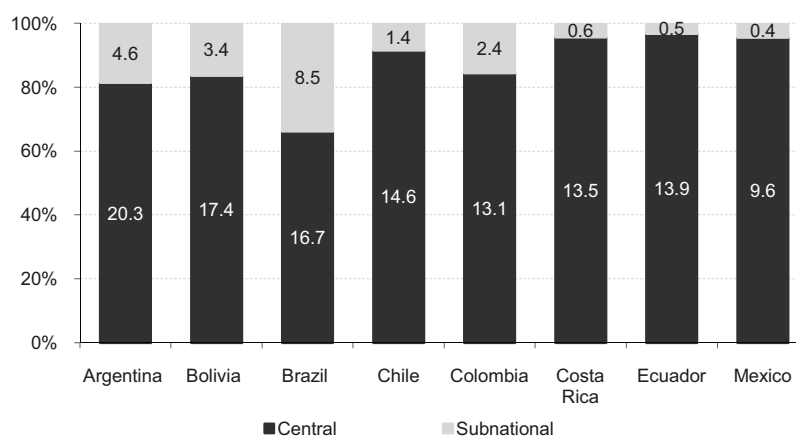


Sources: ECLAC and national data

Note: Data refer to: provinces and municipalities in Argentina; prefectures and municipalities in Bolivia; states and municipalities in Brazil; municipalities and regional governments in Chile; departments and municipalities in Colombia, states and the DF in Mexico, regional governments and municipalities in Peru; and municipalities in Uruguay

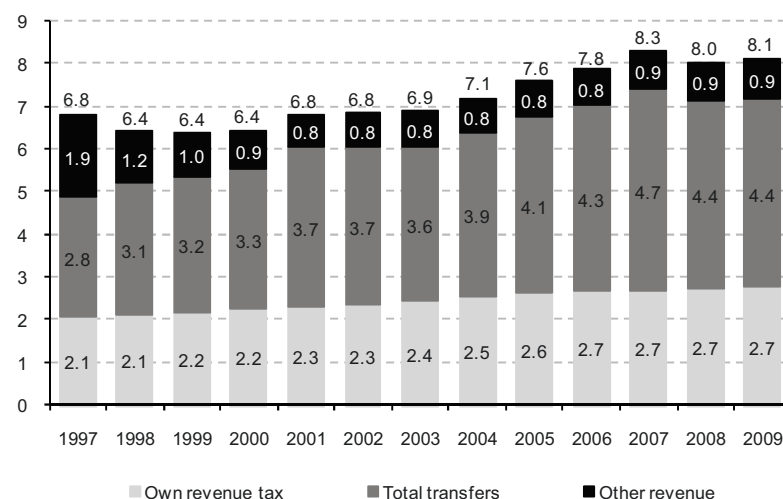
The rapid devolution of spending responsibilities was not mirrored, however, on the revenue side. Figures 6 and 7 show that (with the exception of Brazil and, to a much lesser extent, Argentina, Bolivia and Colombia) sub-national own revenues in LA account for small, and broadly constant over time, shares of total tax revenues, and for less than 2 percent of GDP, giving rise to large vertical imbalances.

FIGURE 6
STRUCTURE OF TAX REVENUES BY LEVEL OF GOVERNMENT-2009
(Percentages of total and percentage of GDP)



Source: ECLAC and official information

FIGURE 7
LATIN AMERICA: COMPOSITION OF SUB-NATIONAL REVENUE
(Percentages of GDP)



Source: ECLAC and official information

Note: Data refer to: provinces in Argentina; prefectures and municipalities in Bolivia; states in Brazil; municipalities in Chile; departments and municipalities in Colombia, local governments in Costa Rica, provincial councils in Ecuador and states and the DF in Mexico.

As well documented in the relevant literature (summarized in Fedelino and Ter-Minassian (bis), 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 than outside a national territory (Ter-Minassian, 1997). This tends to limit sub-national tax handles mainly to property taxes, 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, sub-national 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 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 3 presents the distribution of sub-national tax bases in the major LA countries. 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 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 4). 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 sub-national own revenues¹⁰.

TABLE 3
BASES OF SUB-NATIONAL GOVERNMENTS' OWN REVENUES

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).

¹⁰ For more details about the assignment of natural resources between levels of government in LA countries, see Brosio and Jiménez (2010).

TABLE 4
DISTRIBUTION OF INTERGOVERNMENTAL REVENUES FROM NON-RENEWABLE RESOURCES

Countries	Distribution of non-renewable resource revenues
Argentina	Royalties: to producer provinces Patents: to producer departments and municipalities
Bolivia (Plurinational State of)	Royalties (18%): 11% to producer department, 1% to Beni and Pando departments, and 6% to General Treasury of the Nation (GTN) IDH: 24.36% to prefectures, 66.99% to municipalities and 8.65% to universities IEDH: 25% to departments, and the remainder to GTN
Colombia	Royalties: 47.5% - 52% to producer departments; 12.5%- 32% to producer municipalities; 8% to ports; and 8%-32% to RNF.
Ecuador	Oil revenues are part of the resources allocated to provincial and municipal councils established by Special Law of Distribution of 15% of Central Government budget. Royalties: the provinces Esmeraldas, Napo and Sucumbios receive USD 0.005 per barrel of oil.
Mexico	The rights to oil extraction and mining is included in the FGP (General Fund Holdings)
Peru	Canon Minero: 10% for local government district or districts where the resource is exploited natural, 25 is distributed between the district and provincial local government area which exploits the natural resource, 40 it is up to local governments and provincial district department or departments where the natural resource is exploited and 25% to regional government.

Source: Jiménez and Podestá (2009)

Note: In Colombia a proposed 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.

GTN: General Treasury of the Nation; RNF: Regional national fund; FGP: General fund holdings; IDH: Direct tax on hydrocarbons; and IEDH: Special Tax on Hydrocarbons and Derivatives

The vertical gaps created by the asymmetry in decentralization of expenditures and revenues are filled by variety of inter-governmental transfers. These have shown a rising trend in LA in recent years, especially in Argentina, Bolivia and Mexico (figure 7 above), at least through 2007. 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 like Chile, Costa Rica, and Ecuador. The most important type of inter-governmental transfers is revenue-sharing, which is generally formula-based, as a percent of total national revenues, or of a subset of such revenues. Table 5 below shows the basis of sharing of national revenues across levels of government in major LA countries.

TABLE 5
DISTRIBUTION OF CENTRAL GOVERNMENT TAXES

Country	Distribution of national taxes		
	Percentage of total collection	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 and IPI. Municipalities: 22.5% of the IPI and IR, 70% of the IOF and 50% of the ITR	

(continued)

Table 5 (conclusion)

Country	Distribution of national taxes		
	Percentage of total collection	Percentage of individual tax	Fixed amount
Colombia			Real growth of transfers until 2016
Ecuador	15% (of which 70% goes to municipalities and 30% for provincial councils)		
Mexico	States: 20% of General Fund of Participations (GFP) Municipalities: 1%		
Peru		Municipalities: 2% of operations affected by the IGV, the gasoline-powered vehicles tax and the tax on recreational boats	

Source: Jiménez and Podestá (2009).

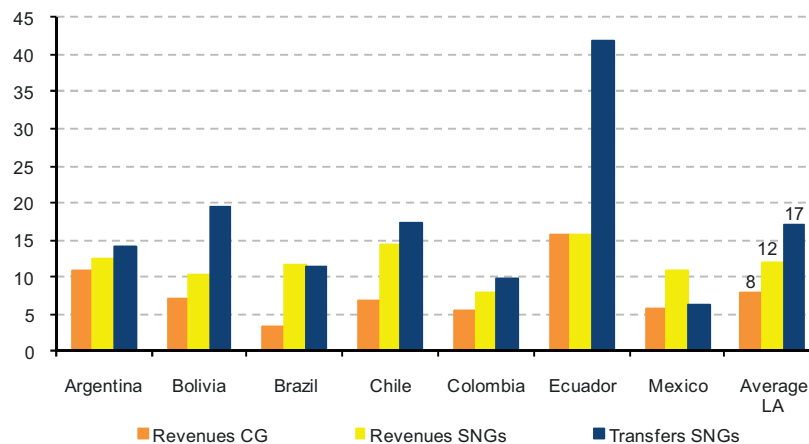
2. Trends in sub-national stabilization and sustainability

The recurrent macro-economic shocks impacting the LA region in recent decades have affected sub-national finances through a number of channels:

- Significant fluctuations in own and shared revenues, given the above-mentioned cyclical sensitivity of such revenues (see figure 8 below)
- Sharp and abrupt changes in the availability of market financing; and
- Modifications in the systems of inter-governmental fiscal arrangements (changes in revenue sharing formulas and/or in sub-national fiscal rules or other borrowing controls). These changes have 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. Table 6 below shows the range of balance and/or debt rules currently in force in a number of LA countries at the sub-national and/or central level, their legal basis, and their date of enactment, or last modification.

FIGURE 8
LATIN AMERICA (7 COUNTRIES): REVENUE VOLATILITY BY LEVEL OF GOVERNMENT

(Standard deviation in constant terms)



Source: Own elaboration, based on database of ECLAC.

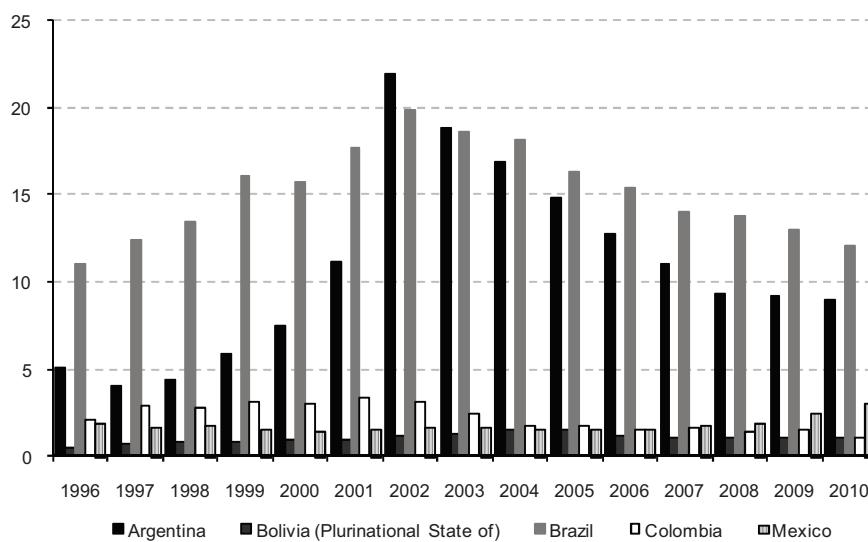
TABLE 6
LATIN AMERICA: FISCAL RULES CURRENTLY IN FORCE

	Country	Implementation date	Coverage	Type	Additional rules	Legal status
Balance of expenditure rules	Argentina	2004	Federal and sub-national	Nominal growth of primary expenditure must not exceed nominal GDP growth		Law
	Brazil	2001	Federal and sub-national	Current equilibrium (sub-national); primary surplus (federal)	Limits on wage expenditure (percentage of total)	Higher-level law
	Chile	2006	Central	Overall structural surplus (1% of GDP)	Pension Reserve Fund (FRP) Economic and Social Stabilization Fund (FEES)	Law
	Colombia	2001	Sub-national governments	Current equilibrium	National Coffee Fund (FNC) Petroleum Saving and Stabilization Fund (FAEP)	Law
	Ecuador	2005	Federal and sub-national	Real growth of current expenditure must not exceed 3.5%	Oil Stabilization Fund (FEP) Saving and Contingency Fund (FAC)	Law
	Mexico	2006	Federal and sub-national	Current equilibrium	Oil Revenues Stabilization Fund (FEIP)	Law
	Peru	2003	National	Deficit below 1% of GDP; real growth of primary expenditure no more than 3% per year	Fiscal Stabilization Fund	Law
	Venezuela (Bolivarian Republic of)	2000	National	Current equilibrium	Macroeconomic Stabilization Fund (FEM)	Law
	Argentina	2004	Sub-national governments	Annual borrowing limits to ensure that debt servicing does not exceed 15% of current resources		Law
	Debt rules	Brazil	2001	Sub-national governments	Annual borrowing limits		Higher level law
Colombia		1997	Sub-national governments	Borrowing limits determined by solvency and liquidity indicators		Law
Ecuador		2005	Federal and sub-national	Timetable for reducing debt to 40% of GDP	Borrowing limits for sub-national governments (outstanding debt, flow and guarantees)	Law

Source: Jiménez y Tromben (2007).

As a result, sub-national fiscal policies were largely pro-cyclical in the region during most of the last decades. Borrowing controls or rules enacted by the CG succeeded in keeping sub-national debts relatively low (well under 5 percent of GDP) in most countries, with exception of Argentina and Brazil, where SNGs' debt peaked at 22 percent and 20 percent of GDP, respectively, in 2002 (figure 9).

FIGURE 9
LATIN AMERICA (5 COUNTRIES): SUB-NATIONAL PUBLIC DEBT
(Percentages of GDP)



Source: ECLAC and official information.

Sub-national finances improved significantly in the major countries of the region after the crises of the late 1990s, until the onset of the global financial crisis of 2008-09. The improvement was largely a reflection of 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, significant changes were introduced in the inter-governmental transfer system by some countries, notably Argentina¹¹, Bolivia¹², and Colombia¹³, with a view to facilitating an orderly adjustment in their sub-national finances, that boosted substantially such transfers.

As shown in figure 10 below, sub-national 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 2000-2008. The improvement in the primary surplus, as well as a moderation in borrowing costs, led to a steady decline in sub-national debt levels, most pronounced in Argentina and Brazil. In these two countries, bilateral debt restructuring agreements by

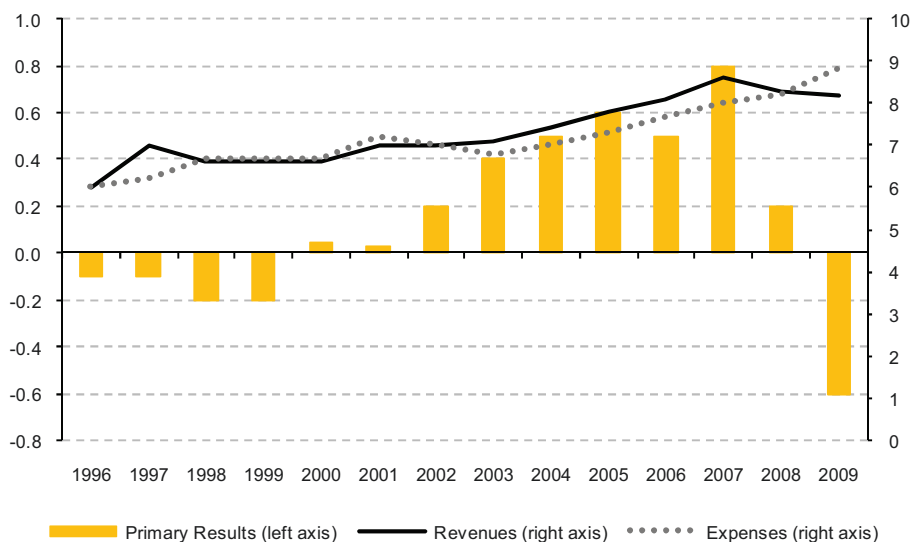
¹¹ Following the exit from convertibility, the Federal Agreement of February 2002 stipulated a series changes in the intergovernmental arrangements: a return to automaticity of transfers; the renegotiation of provincial debts, converted into pesos; the establishment of a ceiling (equivalent to 15 percent 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.

¹² Introduction of the *Impuesto Directo sobre Hidrocarburos y Derivados* in 2008, distributed by two thirds to the municipalities, 24.4 percent to the prefectures and the remainder to universities.

¹³ Colombian regional governments restructured their debt in the early part of the last decade, utilizing CG guarantees and resources derived from transfers and royalties.

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.

FIGURE 10
LATIN AMERICA (8 COUNTRIES): REVENUES, EXPENDITURES AND PRIMARY
BALANCE OF SUB-NATIONAL GOVERNMENTS
(Simple average in percentages of GDP)



Source: ECLAC on the official database until 2008 and own estimates for 2009.

Note: The eight countries are: Argentina, Plurinational State of Bolivia, Brazil, Chile, Colombia, Ecuador, Mexico and Peru.

IV. Impact of the global crisis on the sub-national finances in Latin America

A. Macro-economic effects of the crisis and national fiscal responses

The 2008-09 global crisis that originated in the housing and financial sectors of major advanced countries propagated quickly to emerging and developing countries through both trade and financial channels, and the LA region constituted no exception in this respect. Activity was first impacted by a drying up of capital inflows from the fourth quarter of 2008 through the first quarter of 2009 that led to a near-freezing of domestic credit markets, and by a sharp weakening of households and business confidence. These shocks were followed in short order by declines in commodity prices, export demand, tourism activity, emigrants' remittances, and foreign direct investment (FDI). For the region 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 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 LA region. Following the above-mentioned steady improvement in the previous years, the overall (PPP-GDP weighted) public sector deficit increased by the equivalent in more than three percentage points of GDP in 2009, reaching 4 percent of GDP.

About two thirds of the deterioration was accounted for by a weakening of the primary balance, which on average moved from a surplus of 2.6 percent of GDP in 2008 to a deficit of 0.5 % of GDP in 2009 (table 8) . The rest reflected increased interest payments on the public debt, as spreads rose noticeably and maturities shortened for sovereign borrowing, and the declining trend of the public debt was reversed. The deterioration in the primary balance varied significantly across the countries of the region, reflecting differences in macro-economic developments, the endogenous responses of fiscal aggregates to such developments, and policy reactions.

TABLE 7
SELECTED FISCAL INDICATORS IN LAC, 2008-2010
(Percentages of GDP)

	Revenues			Primary Expenditure			Overall Balance			Primary Balance		
	2008	2009	2010	2008	2009	2010	2008	2009	2010	2008	2009	2010
LAC	29.5	28.4	29.2	26.9	29.0	28.8	-0.8	-4.0	-2.7	2.6	-0.5	0.5
Argentina	33.4	33.9	34.6	30.6	33.8	34.7	-0.3	-3.7	-3.5	2.7	0.2	-0.1
Bolivia (Plurinational State of)	38.9	36.0	34.3	32.6	33.8	33.5	4.3	0.6	-0.8	6.3	2.2	0.7
Brazil	36.6	36.1	36.3	32.5	33.9	33.0	-1.3	-3.2	-1.7	4.1	2.1	3.3
Chile	27.2	21.7	24.0	22.3	25.5	25.2	4.3	-4.3	-1.6	4.8	-3.8	-1.2
Colombia	26.6	26.7	24.8	23.0	26.0	25.0	0.1	-2.5	-3.5	3.6	0.7	-0.2
Ecuador	33.7	28.1	30.4	33.1	31.7	31.9	-0.8	-4.2	-2.2	0.5	-3.6	-1.4
Mexico	22.9	22.2	22.0	21.5	24.5	23.7	-1.4	-4.9	-3.6	1.3	-2.3	-1.7
Peru	21.0	18.9	19.9	17.3	19.8	19.6	2.2	-2.1	-0.8	3.7	-0.8	0.3
Venezuela (Bolivarian Republic of)	31.6	24.9	35.2	32.8	31.5	37.2	-2.7	-8.2	-3.8	-1.2	-6.7	-2.0

Source: IMF, REO, October 2010.

Revenues were negatively affected by the decline in output, and by the sharp fall in commodity prices from Q4, 2008 through Q1, 2009, only partially reversed in the rest of the year. Countries where revenues from non-renewable resources represent 30 percent or more of total public sector revenues (such as Bolivia, Ecuador and Venezuela) were especially hit, recording declines in such revenues in excess of 4 percent of GDP. Some countries (notably Argentina, Brazil, Chile and Peru) also enacted discretionary tax measures (selective rate cuts or increases in tax incentives) to support demand in especially affected sectors, such as automobiles and other consumer durables (ECLAC, 2009). Only a few countries experienced (modest) increases in their revenue ratios to GDP, mostly as a result of revenue-raising measures.¹⁴

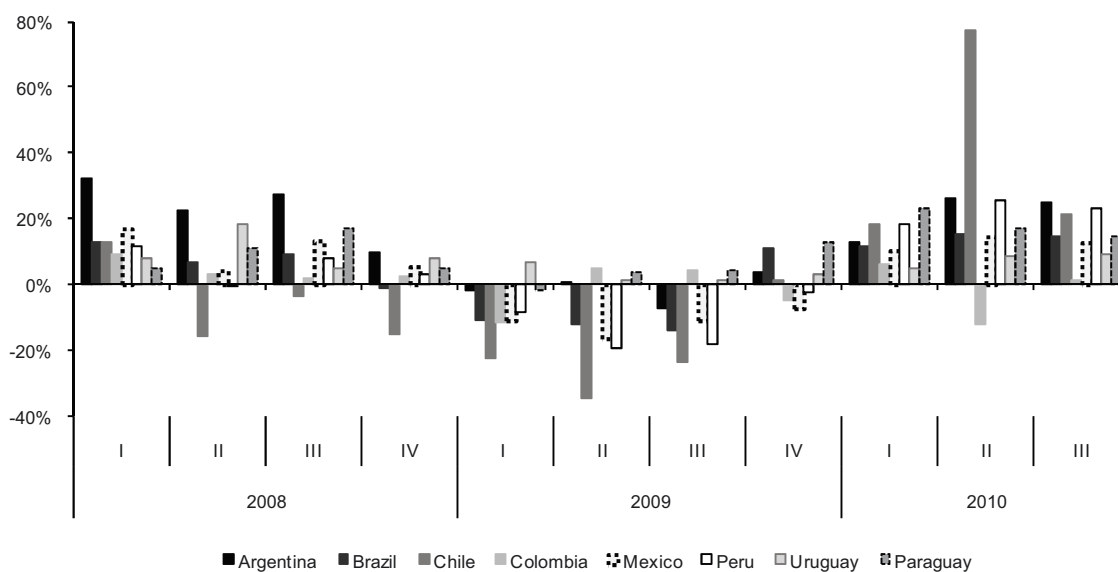
Revenues rebounded in 2010, reflecting the upturn in activity and recovery in commodity prices. However, fiscal stimulus policies remained partly in place in some of the countries. Nevertheless, budgetary balances either improved or remained largely unchanged in all the countries, with the exception of Colombia and Bolivia (CEPAL 2010).

Figure 11, which shows the time profile of the evolution of real tax revenues of the CG (excluding oil revenues) for selected LA countries, suggests that the decline in revenues was concentrated in the first three quarters of 2009, following developments in output with a lag of about one quarter. Revenues are on a clear recovering trend since the fourth quarter of 2009.

¹⁴ Some of these measures (e.g. the increase in the VAT in Mexico) were taken to create fiscal space for counter-cyclical increases in spending. Others were necessitated by financing constraints.

FIGURE 11
EVOLUTION OF CENTRAL GOVERNMENT TAX COLLECTION IN REAL TERMS

(Change *t/t-4*)



Source: ECLAC based on official database.

Note: Data for Mexico considers non-oil tax revenues.

In contrast to revenues, developments in primary expenditures were largely shaped by policy decisions, a not surprising fact given the limited extent of cyclically sensitive spending programs, like unemployment compensation, in the region¹⁵. The improvement in the deficit and debt positions recorded in the years preceding the crisis enabled most countries in LA to take measures to: cushion the impact of the crisis on vulnerable groups, by strengthening existing social safety net programs; provide selective support to sectors in difficulty; and boost public investments (ECLAC, 2009). In addition, some countries (e.g. Brazil) took steps, such as increases in public sector wages and employment, that while not specifically countercyclical also boosted current spending. Only Bolivia, the Dominican Republic, and Honduras experienced significant reductions in primary expenditures relative to GDP in 2009.

B. Impact on sub-national governments

The crisis affected significantly the sub-national finances in LA. Table 9 below shows that the un-weighted average of the primary balances of SNGs in eight major countries of the region¹⁶ 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, Argentina and Peru). Despite a partial reversal in 2010, fiscal balances have not returned to pre-crisis levels.

¹⁵ However, expenditures on subsidies were moderated by the decline in fuel and food prices.

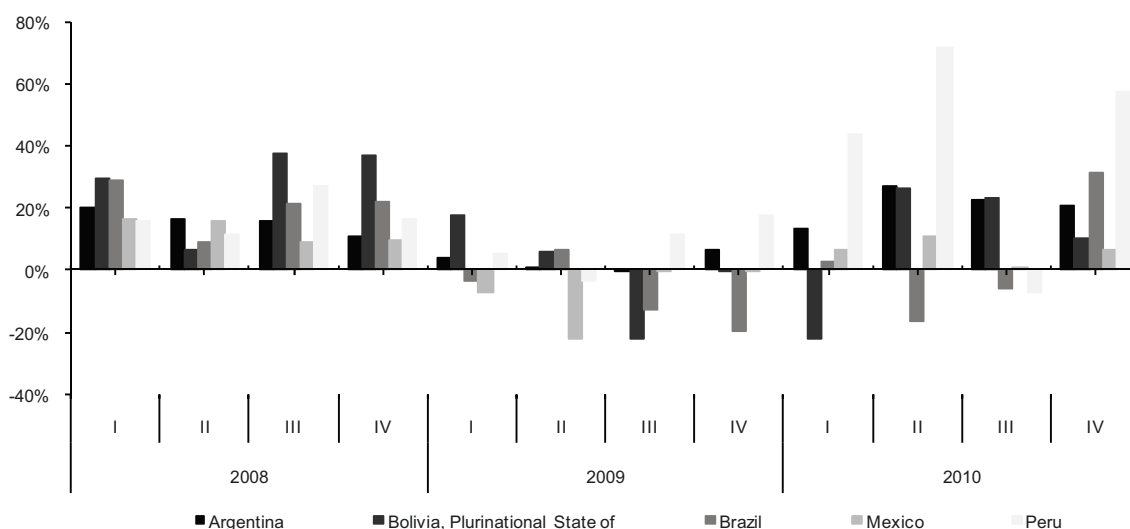
¹⁶ Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Mexico, and Peru.

TABLE 8
LATIN AMERICA: EVOLUTION OF THE PRIMARY BALANCES OF SUB-NATIONAL GOVERNMENTS
(Percentages of GDP)

	2007	2008	2009	2010	Change 2008- 2007	Change 2009- 2008	Change 2010- 2009
Argentina	0.22	-0.28	-0.70	0.50	-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	-0.08	-0.54	-0.54	0.24

Source: Own estimates based on ECLAC data.

FIGURE 12
EVOLUTION OF INTERGOVERNMENTAL TRANSFERS IN REAL TERMS, 2008-2010
(Variation t/t-4)



Source: Own elaboration based ECLAC and national databases.

^a Plurinational State of Bolivia: 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)

^b Peru: Does not include Canon, royalties and regular resources for the transfer of items that began in 2009 and does not include donation and budget support in 2010.

The evolution of SNG's revenues was shaped primarily by developments in CG transfers to them (including revenue sharing), given the weight of such transfers, especially in countries like Argentina, Bolivia, Chile, Ecuador and Mexico. The absence of smoothing or counter-cyclical mechanisms in the existing revenue-sharing arrangements resulted in a rapid propagation of the crisis-induced decline in

CGs' revenues to the sub-national budgets. Figure 12 shows that, in four countries¹⁷ for which the relevant data are available through 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 Bolivia¹⁸) in the first quarter of 2010. The graph shows also the impact of an extra-ordinary 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 sub-national spending. In addition to the above mentioned measures by Argentina and Peru, Chile, Mexico, and Paraguay announced significant additional spending on public works, to be executed by SNGs with CG funding. In some cases (e.g. in Argentina and Brazil) sub-national 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 thirteen jurisdictions for a total amount equivalent to 69% of their capital repayments. In April of that year, the CG set up the Federal Solidarity Fund stipulating that 30% of effective revenue from the soybean export tax would go to a fund to be shared with SNGs. During 2010 a "Programa Federal de Desendeudamiento" was enacted that 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 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 sub-national share of royalty revenues, introduce new horizontal sharing coefficients, and create a savings and stabilization fund to reduce the volatility of sub-national 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)".

Box 1 provides a more detailed analysis of the impact of the crisis on the sub-national finances in Brazil.

BOX 1 THE IMPACT OF THE CRISIS ON SNGs IN BRAZIL

Information on the sub-national finances in Brazil is substantially more developed and timely than in most advanced and developing countries. This is the result of the requirement in the 2000 Fiscal Responsibility Law (FRL) that all levels of government compile and publish standardized summary budgetary accounts on a bi-monthly basis, and more detailed ones on a four-monthly basis. These accounts complement the monthly cash accounts for the federal government, published by the National Treasury, and the monthly below-the-line accounts of the public sector (disaggregated by level of government) published by the Central Bank of Brazil (BCB). Although the accounting and reporting requirements of the FRL are not always fully observed in practice, the information available to date on developments in the Brazilian SNGs' finances allows a more detailed analysis of the impact of the global crisis on those finances than is the case for the rest of Latin America.

The impact of the global financial crisis on Brazil's economy was intense but relatively short, with a strong recovery starting already in the second quarter of 2009. As a result, GDP fell only modestly (by 0.2 percent) on average in 2009, and is projected to grow by 7.5 percent in 2010.

¹⁷ Argentina, Bolivia (Plurinational State of), Brazil, and Peru.

¹⁸ The 2010 budget in Bolivia included a 16 percent cut in shared revenues from petroleum royalties and taxes (IDH)

The consolidated public sector's finances deteriorated significantly as a result of the crisis, with the primary surplus falling from a record 3.4 percent of GDP in 2008 to 2 percent of GDP in 2009, the lowest in last ten years, and the overall deficit rising by the equivalent of about 2 percent of GDP, to 3.3 percent. The net public debt partly reversed the steady decline of recent years, rising to 42.8 percent of GDP at the end of 2009^a, from 38.5 percent in 2008 (BCB, 2010).

The worsening of the consolidated fiscal position reflected primarily developments in the federal finances. The primary surplus of the federal government fell by the equivalent of 1 percent of GDP, more as a result of discretionary measures than of the operation of automatic stabilizers. Federal revenues net of intergovernmental transfers fell by 2.7 percent in real terms^b, mirroring the economic downturn in the early part of 2009, and also as a result of selective tax cuts and concession of incentives. But, the bulk of the federal finances deterioration was accounted for by increases in current (especially on personnel^c) and, to a lesser extent capital, spending. In addition, the federal government undertook substantial below the line operations (in particular lending to, or recapitalization of public banks) to support activity.

In contrast, the consolidated primary surplus of the states declined by only 0.3 percent of GDP, to 0.6 percent, and the consolidated primary surplus of the municipalities was nearly unchanged from the previous year, at around 0.1 percent of GDP. Moreover, for the first time in many years, SNGs recorded a small (about 0.1 percent of GDP) overall surplus in 2009. This reflected, in addition to the improvement in the primary balance, a substantial decline in interest payments, largely due to the basis of calculation of SNGs' interest payments to the federal government on their restructured debt^d. In contrast to the federal debt, the SNGs' net debt, which had peaked at over 18 percent of GDP in 2003, continued its declining trend in 2009, to just under 13 percent of GDP by year-end. The stronger fiscal performance of the SNGs, compared with the federal government, mainly reflected the combined impact of the debt-service requirements enshrined in the existing debt restructuring agreements of states and municipalities with the federal government, restrictions on new borrowing, and the ceilings on sub-national indebtedness and personnel spending mandated by the FRL.

Developments in state and municipal finances in 2009 showed, however, a substantial variance within each level of government (Afonso, Carvalho, and Castro (2010)). While overall state revenues fell by nearly 3 percent, some states (e.g. Sao Paulo, Para' and Pernambuco) actually managed to slightly increase their net revenues. In others, in particular Rio de Janeiro, revenues declined sharply^e. Given that, as shown in figure 12 above, federal transfers to SNGs declined significantly in 2009, the different revenue performance across states is likely have reflected a combination of different economic developments and tax enforcement efforts in each state. On the expenditure side, available data suggest substantially greater moderation than at the federal level, especially as regards public wages and employment (that rose on average by less than 4 percent in real terms in 2009, compared with 10.5 percent at the federal level)^f. Investment efforts also varied substantially across states^g. Some of the states also intensified their programs of concessions, to complement increased budgetary spending on infrastructure.

Available data on major municipalities suggest that their revenues were in general less affected by the crisis, rising on average slightly in real terms. This likely mainly reflected the smaller cyclical sensitivity of their revenue bases (services and real estate). Their personnel spending declined modestly in real terms on average in 2009 (albeit with significant differences across municipalities). Investment fell more sharply (about 20 percent on average, but again with considerable variance). This mainly reflected the fact that 2009 represented the first year of most mayors' term, which provided a political incentive to save, with a view to building a financial cushion for the latter part of the mandate.

Available below-the-line data for 2010 indicate that the primary surplus of the SNGs deteriorated slightly in relation to GDP, and the overall balance shifted to a deficit of over 1.3 percent of GDP, despite the pronounced recovery in activity. This suggests that unfortunately fiscal policy at all levels of government has returned to a pro-cyclical stance during the upturn phase of the current cycle.

^a The gross debt of the general government was substantially higher, at nearly 63 percent of GDP, at end 2009.

^b The decline would have been significantly steeper in the absence of certain one-off measures, like shifting to the Treasury, and accounting as revenues, judicial deposits for pending tax appeals.

^c Personnel expenditures rose from the equivalent of 30.5 percent of federal net revenues in 2008 to 34.7 percent of the same in 2009.

^d These interest payments are indexed to a price index (the IGP-DI) that declined in 2009. They are subject to a limit that is a percentage of net revenues of each SNG. Therefore, the decline in net revenues also contributed to reducing interest payments in 2009.

^e The decline in Rio de Janeiro is partly explained by the exclusion of a state-owned enterprise (CEDAE) from the fiscal accounts starting in 2009.

^f Increases in personnel expenditure were especially moderate in the two large states of Sao Paulo (1.4 percent) and Minas Gerais (2.1 percent). In most other states they ranged between 5 and 7 percent (all in real terms).

^g The National Development Bank (BNDES) provided an additional credit line of over R1.7 billion to the states to finance infrastructure investment.

V. Reform options to facilitate sustainable and less pro-cyclical sub-national fiscal policies in Latin America

The analysis of sub-national fiscal performances in the preceding two sections suggests that the links between fiscal decentralization and macro-economic management vary significantly across the LA region. Specifically,

- In a number of unitary countries (e.g. Chile, Uruguay, and the central American countries) decentralization is still limited, and does not pose significant macro-economic risks
- In others (e.g. Bolivia, Mexico, Peru), growing decentralization has not significantly affected fiscal sustainability so far, due to relatively tight limits on sub-national borrowing, and, in some cases, past bailouts by the CG
- In other countries (Brazil, Colombia) substantial progress has been made since the mid-1990s in tightening controls on sub-national debt and reducing it
- Progress has also been made in reducing sub-national debt in Argentina, mainly reflecting support operations by the CG, as well as the buoyancy of the provinces' own and shared revenues
- In most countries, however, sub-national fiscal responses to shocks have tended to be pro-cyclical, albeit less so in the more recent years.

- Pro-cyclicality has reflected (to different degrees in different 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 sub-national 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 sub-national spending during recessions
 - The (full or partial) assignment to SNGs of some highly cyclical revenues, especially from non-renewable resources, in some countries (e.g. Bolivia, Ecuador, Peru)
 - Inter-governmental transfer systems based on revenue-sharing formulas invariant over the cycle, which propagate quickly to the sub-national 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 sub-national resources to changing expenditure needs/priorities over the cycle.

These considerations point to a number of possible options for reforms in the inter-governmental systems of the region that could facilitate less pro-cyclical sub-national fiscal policies, while safeguarding debt sustainability, in the future.

A. Reforms in rules and borrowing controls

Specifying sub-national rules in terms of cyclically adjusted budget balances should in principle help avoid pro-cyclicality in sub-national 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 LA region:

- First, the difficulties of estimating cyclically adjusted fiscal aggregates are even more significant at the sub-national 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 sub-national-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, 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. This is typically the case in LA countries.

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 Chile¹⁹). Given, however, the

¹⁹ See Marcel (2010) for a detailed analysis of the Chilean structural fiscal rule.

above-mentioned difficulties of obtaining reliable estimates of the medium term trend of commodity (especially oil) prices; it may be preferable to utilize sub-national rules that target the budget balance excluding resource revenues.

- Second, since financing constraints tend to be tighter at the sub-national than at the national level, the use of a sub-national 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 downturns²⁰. 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 sub-national 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 sub-national 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 as regards 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)²¹. Examples of sub-national expenditure rules can be found in Argentina, Brazil and Peru, but typically such rules only cover a portion of sub-national spending, a fact that limits their effectiveness as a counter-cyclical mechanism.

More generally, the objectives of at a minimum reducing fiscal pro-cyclicality and preferably creating fiscal space for active counter-cyclical 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 in LA. 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 sub-national budgets is often carried out without timely inputs by the CG (e.g. 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 ex ante policy stances are 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 sub-national level partly offset counter-cyclical fiscal expansions at the CG level). Inter-governmental coordination forums in Australia and in some European countries could provide useful examples in this respect.

B. Reforms in sub-national revenue assignments

Strengthening sub-national own revenues in the LA 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 socio-political conditions, in particular:

- The current level of the sub-national and overall tax ratios which, as indicated in section III above, show a substantial dispersion across LA;

²⁰ 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).

²¹ See Ljungmann (2008) and Ter-Minassian (2010) for more detailed discussions of various issues in the design of expenditure rules.

- The current composition of sub-national taxes, which is often the result of piecemeal past reform efforts, 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 sub-national 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 sub-national 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 like Brazil where state and especially municipalities are already assigned major sources of revenue, such as the ICMs and the ISS, 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 sub-national tax administrations' capacity²². These objectives would also need to play significant roles in the other countries, since sub-national taxes in LA are frequently ridden with distortions (e.g. 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 (e.g. outdated cadastres for local property taxes; high compliance costs for taxpayers; limited or non-existent cooperation between national and sub-national tax administrations).

Possible reform options would include:

- The introduction of sub-national 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 LA 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 e.g. 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) properties;
- Increased levying of user fees for local services; and
- Strengthened efforts to modernize sub-national tax administrations, increase cooperation within and across government levels, including by some pooling of resources in neighboring local administrations.

In the various countries of the region that are characterized by a concentration of non-renewable resources in few sub-national jurisdictions (e.g. Argentina, Bolivia, 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 to their spending needs.

²² The federal government in Brazil has provided significant support, over the last decade or so, to the modernization of sub-national 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.

More generally, appropriate reforms in existing transfer systems (e.g. to equalize revenue-raising capacities, rather than revenue performances, so as not to discourage sub-national tax efforts) may be required to overcome the political economy obstacles to own-revenue mobilization mentioned in section VI above.

C. Reforms in inter-governmental transfer systems

As indicated above, by their very nature, existing revenue sharing mechanisms in LA 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 (e.g. 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 LA countries (e.g. 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 level²³. 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 (i.e. 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 CG²⁴.

In addition, CGs could in principle vary the level of discretionary transfers in a counter-cyclical 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

²³ See Ter-Minassian (2010) for a detailed discussion of these issues

²⁴ This was not always done (or was done only partially) during the recent crisis in countries (like Brazil) that enacted countercyclical tax cuts

increase the onus on the latter to create its own fiscal space to conduct adequate counter-cyclical policies. As noted in section III and IV, significant progress has been made in most LA countries in this direction over the last decade or so, but much remains to be done. A discussion of this reform agenda is beyond the scope of this paper.

D. Reforms in sub-national spending

Sub-national spending in LA countries is fraught with substantial and pervasive weaknesses which not only undermine the efficiency gains expected from decentralization, and sometime aggravate, rather than helping to correct, vertical and horizontal inequalities, but also contribute to making more difficult the adjustment of sub-national 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 (e.g. 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
- Poor selection, preparation, and monitoring of implementation of public investments.

Reform efforts in the above areas are proceeding at different speeds in the different countries of the region, and also within countries, reflecting different capacities at the sub-national level, different degrees of support by the CG, varying types of legal and even constitutional constraints, etc. Some regional governments and some large (Bogota, Lima, Mexico City, Sao Paulo, Santiago, to cite just a few) and medium-size 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 budgets²⁵. Much more limited progress has been made, however, in clarifying spending responsibilities and reducing earmarking. In many countries, the sub-national spending reform agenda remains a daunting one.

²⁵ See IDB (2010) for an up-to-date overview of performances in this area.

Bibliography

- Afonso J. R. and Castro K., 2009: "Resultado Primário Para a LRF: Nos Relatórios da LRF até Terceiro Bimestre de 2009" Nota Técnica, 18 September 2009.
- Alt and Lowry, 1994: Divided government, fiscal institutions, and budget deficits: evidence from the states. *American Political Science Review*.
- Balassone, Fabrizio, Franco, Daniele and Zotteri, Stefania, 2007, "Rainy Day Funds: Can They Make a Difference? Bank of Italy Occasional Paper N.11.
- Bohn, Henning & Inman, Robert P., 1996: "Balanced-budget rules and public deficits: evidence from the U.S. states," *Carnegie-Rochester Conference Series on Public Policy*, Elsevier, vol. 45(1), pages 13-76, December.
- Catão, Luis A.V., 2007: "Latin America Retrospective", *Finance and development*, vol. 44, N° 4, Washington, D.C., International Monetary Fund (IMF), December.
- Daude, C., Melguizo, A. and Neut, A. (2010): "Fiscal Policy in Latin America: Counter-cyclical and Sustainable at Last?", *OECD Development Center Working Paper no. 291*, Paris, France.
- Economic Commission for Latin America and the Caribbean (ECLAC), 2009: "Economic Survey of Latin America and the Caribbean 2008-2009", United Nations Publications.
- Fanelli, José María (ed.) (2008): *Macroeconomic Volatility, Institutions, and Financial Architectures. The Developing World Experience*, Nueva York, Palgrave Macmillan.
- _____ (ed.) (2007), *Understanding Market Reform in Latin America: Similar Reforms, Diverse Constituencies, Varied Results*, Palgrave Macmillan, New York.
- Fanelli, José María and Jiménez, Juan Pablo (2009): *Crisis, volatility, cycle and fiscal policy in Latin America (LC/L.3038)*, Santiago de Chile, Economic Commission for Latin America and the Caribbean (ECLAC).

- Fatas, Antonio & Mihov, Ilian, 2006: "The macroeconomic effects of fiscal rules in the US states" *Journal of Public Economics*, Elsevier, vol. 90 (1-2), pages 101-117, January.
- Heymann, Daniel (ed.) (2007): "Developments and Alternatives: Some Perspectives from the macroeconomic analysis progress in macroeconomics," D. Heymann (ed.), Buenos Aires, Temas Publishing Group.
- International Monetary Fund, Nov. 2010: "Fiscal Monitor "Fiscal Exit: From Strategy to Implementation"", International Monetary Fund.
- IDB (2010): "The Local Alternative: Decentralization and Economic Development", Palgrave, New York,
- Jiménez, J.P. and Podestá, A. (2009): "Intergovernmental fiscal relations and the sub-national finance in the face of the crisis," LC/R.2155, CEPAL, Santiago de Chile, September.
- Jiménez, J.P. and Tromben, V. (2006): "Fiscal policy in countries specialized in non-renewables in Latin America," *Development Macroeconomics Series No. 46, (LC/L.2521-P)*, Santiago de Chile, April.
- Jiménez, J. and Tromben, V. (2006): "Fiscal policy and prosperity: the impact of rising prices for non-renewables in Latin America and the Caribbean", Economic Commission for Latin America and the Caribbean - ECLAC, Santiago de Chile, December.
- Kacef, Osvaldo and Juan Pablo Jiménez (2009): "Macroeconomic policies in times of crisis: options and prospects ", Project Document LC/W.275, Santiago de Chile, Economic Commission for Latin America and the Caribbean (ECLAC), August.
- Ljungman, G. (2008): "Expenditure Ceilings - A Survey", IMF Working Paper WP/08/282.
- Marcel M. (2010): "Structural Balance Rule in Chile: Ten Years, Ten Lessons ", Inter-American Development Bank, Preliminary draft.
- Musgrave, R. (1967): "The theory of public finance". New York.
- Oates, W. (1972): "Fiscal federalism". Harcourt Brace Javanovich, New York.
- Rodden J., On the Migration of Fiscal Sovereignty: *Political Science & Politics*, 37, 2004.
- Rodden J. and Wibbels E., (2010): *Fiscal Decentralization and the Business Cycle: an Empirical Study of Seven Federations*, *Economics and Politics*, Vol. 22, March 2010.
- Rodden, J., Eskeland, G. and Litvak, J., (2003): *Fiscal Decentralization and the Challenge of Hard Budget Constraints*. The MIT Press, Cambridge, Massachusetts.
- Sturzenegger, F. and Werneck, R.L.F., (2008) *Fiscal federalism and procyclical spending: the cases of Argentina e Brazil*. In G. Perry; L. Servén; R. Suescun. (eds.): *Fiscal policy, stabilization and growth: prudence or abstinence*. Washington: The World Bank.
- Ter-Minassian, T., (2010): "Preconditions for a Successful Introduction of Structural Fiscal Balance-based Rules in Latin America and the Caribbean: a Framework Paper", Inter-American Development Bank, Preliminary draft.
- Ter-Minassian, T. and Craig, J., (1997): "Control of Sub-national Government Borrowing", in Ter-Minassian, T., (ed.): "Fiscal Federalism in Theory and Practice", International Monetary Fund (IMF), Washington
- Ter-Minassian, T. (1997): "Intergovernmental fiscal relations in a macroeconomic perspective", in Ter-Minassian, T., (ed.): *Fiscal federalism in Theory and Practice*, International Monetary Fund (IMF), Washington, D.C.



NACIONES UNIDAS

Serie

C E P A L

Macroeconomía del desarrollo

Números publicados

Un listado completo así como los archivos pdf están disponibles en

www.cepal.org/publicaciones

112. Macroeconomic challenges of fiscal decentralization in Latin America in the aftermath of the global financial crisis, Teresa Ter-Minassian y Juan Pablo Jiménez (LC/L.3337), 2011.
111. El financiamiento de los gobiernos subnacionales en América Latina: un análisis de casos, Juan Carlos Gómez Sabaini y Juan Pablo Jiménez (LC/L.3336), 2011.
110. La calidad del empleo en América Latina, Jürgen Weller y Claudia Roethlisberger (LC/L.3320 -P), N° de venta: S.11.II.G.39 (US\$10.00), 2011.
109. Trayectorias laborales de los jóvenes en Argentina: ¿Dificultades en el mercado de trabajo o carrera laboral ascendente?, Roxana Maurizio (LC/L.3302 -P), N° de venta: S.11.II.G.24 (US\$10.00), 2011.
108. Latin-STINGS: indicadores de crecimiento a corto plazo de los países de América Latina, Máximo Camacho y Gabriel Perez Quirós (LC/L.3292-P), N° de venta: S.11.II.G.14 (US\$10.00), 2011.
107. Los mercados financieros en América Latina y el financiamiento de la inversión: hechos estilizados y propuestas para una estrategia de desarrollo, Sandra Manuelito y Luis Felipe Jiménez (LC/L.3270-P), N° de venta: S.10.II.G.76 (US\$10.00), 2010.
106. Estimación del crecimiento potencial de América Latina, Claudio Aravena (LC/L.3269-P), N° de venta: S.10.II.G.75 (US\$10.00), 2010.
105. La variabilidad y la persistencia de los precios reales de los principales productos básicos de exportación de los países latinoamericanos, Omar D. Bello, Fernando Cantú, Rodrigo Heresi (LC/L.3258-P), N° de venta: S.10.II.G.63, (US\$10.00), 2010.
104. Enfoque de género en las instituciones laborales y las políticas del mercado de trabajo en América Latina, Roxana Maurizio (LC/L.3230-P), N° de venta: S.10.II.G.34 (US\$10.00), 2010.
103. Papel de los sindicatos y la negociación colectiva y su impacto en la eficiencia y la equidad del mercado de trabajo, Patricio Frías Fernández (LC/L.3210-P), N° de venta: S.10.II.G.24 (US\$10.00), 2010.
102. Sobre la evolución del gasto público social en América Latina y su papel para la estabilización económica, Ramiro Ruiz del Castillo (LC/L.3208-P), N° de venta: S.10.II.G.22 (US\$10.00), 2010.
101. Indicadores adelantados para América Latina, Fernando Cantú, Alejandra Acevedo y Omar Bello (LC/L.3195-P), N° de venta: S.10.II.G.70, (US\$10.00), 2010.
100. El empleo en la crisis: efectos y políticas, Víctor E. Tokman (LC/L.3153-P), N° de venta: S.09.II.G.126, (US\$10.00), 2009.

- El lector interesado en adquirir números anteriores de esta serie puede solicitarlos dirigiendo su correspondencia a la Unidad de Distribución, CEPAL, Casilla 179-D, Santiago, Chile, Fax (562) 210 2069, correo electrónico: publications@cepal.org.

Nombre:

Actividad:

Dirección:

Código postal, ciudad, país:

Tel.:.....Fax:.....E.mail:.....