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Laws for Fiscal Responsibility for Subnational Discipline: International Experience

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Abstract

Fiscal responsibility laws are institutions with which multiple governments in the same economy—national and subnational—can commit to avoid irresponsible fiscal behavior that could have short-term advantages to one of them but that would be collectively damaging. Coordination failures with subnational governments in the 1980s and 90s contributed to macroeconomic instability and led several countries to adopt fiscal responsibility laws as part of the remedy. The paper analyzes the characteristics and effects of fiscal responsibility laws in seven countries—Argentina, Australia, Brazil, Canada, Colombia, India, and Peru. Fiscal responsibility laws are designed to address the short time horizons of policymakers, free riders among government units, and principal-agent problems between the national and subnational governments. The paper describes how the laws differ in the specificity of quantitative targets, the strength of sanctions, the methods for increasing transparency, and the level of government passing the law.

Evidence shows that fiscal responsibility laws can help coordinate and sustain commitments to fiscal prudence, but they are not a substitute for commitment and should not be viewed as ends in themselves. They can make a positive contribution by adding to the collection of other measures to shore up a coalition of states with the central government in support of fiscal prudence. The commitment of the central government to its own fiscal prudence was critical for success of fiscal responsibility laws for subnational governments.

Keywords: fiscal responsibility law, intergovernmental fiscal coordination, subnational debt

1. Introduction

As subnational governments (SNGs) in developing and developed countries have gained more fiscal autonomy-spending responsibilities, tax bases, revenue transfers from the center, and the capacity to incur debt—their fiscal behavior has become vital to the national interest. Subnational borrowing to finance social and economic infrastructure can generate positive net returns and spread the financing burden fairly across generations. When SNGs follow unsustainable fiscal policy, however, it can jeopardize the services they manage (but for which the central government may have ultimate political responsibility), the safety of the financial system, the country's international creditworthiness, and overall macroeconomic stability. Too often the central government then gets dragged in to provide bailouts, which can disrupt its own fiscal sustainability and reward the populist fiscal tactics of the recipient SNGs. The global financial crisis of 2008-2010 has tested the effectiveness of fiscal rules in maintaining fiscal discipline and has shown some downsides of rigidity in the face of macroeconomic shocks.

Since the 1990s many governments have looked for mechanisms to escape from fiscal populism that had been used as a strategy for winning elections and retaining public office. National governments have tried various ways to avert these problems. One way has been to pass a fiscal responsibility law (FRL) that prescribes proper fiscal behavior for SNGs, provides guidelines for parameters of SNG fiscal legislation, or sets incentives – rewards for success or sanctions for failure in following the rules. Argentina, Brazil, Colombia, India, and Peru have done so. Some SNGs, as in Argentina, Australia, Canada, and India have imposed legal constraints on their own fiscal behavior, to reduce the temptation of state administrations to leave fiscal messes and to improve their creditworthiness in the markets. Although having not formally adopted subnational fiscal responsibility legislation, other countries such as Mexico, Poland, and Turkey have established fiscal rules or debt limitations for SNGs.

The paper focuses on laws that are called fiscal responsibility laws or that perform the same function. They have frameworks for making the budget process transparent and may include quantitative fiscal targets and enforcement mechanisms. They aim to restrain SNG deficits by preventing them in advance and/or by imposing extra penalties that go into effect more quickly and in addition to the inherent consequences of fiscal imprudence. These include both institutions imposed by the national government on the SNGs and institutions imposed by the SNGs on themselves. FRLs often have the additional effect of restraining the federal or central government from running unsustainable deficits and of mitigating the consequences of subnational fiscal excesses. The paper does not focus on other public finance laws, such as budget laws and debt laws, which contain elements of FRLs, although it does consider such laws when discussing the broader context of fiscal prudence.

This paper analyzes the circumstances and character of FRLs that may contribute to better SNG fiscal behavior. As FRLs do not operate in isolation, the paper also considers the broader context of other laws and rules aimed at obtaining prudent fiscal behavior by SNGs. The paper includes Brazil, Colombia and Peru, where a unifying FRL applies to all levels of the government including the SNGs. In some other countries such as Argentina, Australia, and India, the FRL framework includes a national FRL, and SNGs may choose their own FRL framework. Provinces in Canada went ahead with their own FRLs within the overall national move toward fiscal consolidation. Although the paper mainly concerns FRLs that apply to SNGs, the paper will include the analysis of the national FRLs to the extent that they affect the parameters and incentives for SNGs. See Corbacho and Schwartz (2007) for a review of national level FRLs.

The next section of the paper explains the historical origins of FRLs in the context of political and fiscal decentralization. Section 3 examines the purposes, incentives, and authority behind FRLs – which level of the government passes FRL and to which level of government the FRL applies. Section 4 summarizes the content of FRLs, covering procedural and transparency rules, and fiscal targets as well as sanctions and escape clause associated with the rules. Section 5 analyzes FRLs in broader institutional context for fiscal prudence and channels for strengthening subnational fiscal discipline. Section VI explores preliminary assessments of the effects of FRLs. Section 6 concludes and points to areas for further research.

2. Historical Origins of FRLs

Fiscal rules and legislation for SNGs are less important when a country has centralized political and fiscal institutions, as these centralized institutions can set rules and use political power to enforce discipline of SNGs. Decentralization, often associated with rise of regional power, has reduced the central administrative control over subnational fiscal behavior. Since the 1980s, a number of countries, including Argentina, Brazil, Colombia, India, Mexico, Nigeria, and Russia, have decentralized varying degrees of fiscal authority and resources to their SNGs. Often, in the absence of adequate ex ante fiscal rules, this contributed to subnational fiscal or debt crises. In response, several of them passed fiscal responsibility laws.

In each case, the features of the law, how it was passed, and its implementation reflected the particular political structure of the country and the nature of its fiscal crisis. This section summarizes those particularities, as prologue to the discussion of their FRLs—first the federal countries and then the unitary ones. The federal countries in our sample—Argentina, Australia, Brazil, Canada, and India—tend to be more fiscally decentralized; the key distinction, however, is that the constitutions of the federal countries give the states or provinces the right to make their own laws in many areas and restrict the range of areas for which the national government can legislate. Shifts in the allocation of taxing powers, for instance, have to be negotiated with the states; the national government cannot decide unilaterally. By contrast, in the unitary countries—here, Colombia and Peru—the constitution gives the national government power to legislate in all areas and to decide unilaterally what powers and fiscal resources it will delegate to the SNGs.

Federalism in ***Brazil*** in the 1980s revived with the return to democracy from military rule. From 1982 to 1989 there was a sequence of electing governors, then electing mayors, electing a new congress with constitution-making authority, completing the new constitution, and finally holding the first direct election of the president. Thanks to the strong representation of SNGs in the 1986 congress, the 1988 constitution gave states significant authority and resources, including a much broader revenue base for the state-level VAT, but did not specify their spending responsibilities or set rules for fiscal prudence.

From the beginning of Brazil's political opening through mid-1990s, there were two major subnational debt crises. Each initial agreement that tried to resolve a crisis actually made the next crisis more likely, because they reinforced the perception that the federal government would provide debt relief, they provided such relief in the form of rescheduling (allowing the stock of debt to keep growing), set ceilings on debt service and thus on the effective political cost, bought out (without penalty) the foreign and private creditors to the SNGs and left the federal government holding the debt. Thus the state politicians suffered minimal consequences for their imprudence and their creditors suffered almost none, and so until 1997 the ex-ante constraints written in the rescheduling agreements were usually quickly evaded (Dillinger 1997; Rodden 2003).

Then in the late 1990s, this vicious cycle of failure in discipline and cooperation came to a halt, as the deeper political

and economic incentives had changed after a national macroeconomic adjustment program ended hyperinflation and stabilized the economy. In 1997-98 the federal government made debt restructuring agreements with 25 states, which was finally effective in making them, cease unsustainable borrowing. Three of the four largest debtor states supported the reforms and formed the core of a critical mass of states ready to cooperate in fiscal restraint, making it worthwhile for additional states join at the margin of cooperation. Also, the large scale of the states' non-performing debt to the federal government strengthened the resolve of the federal Congress to enact the FRL. The federal government negotiated agreements with 25 states in 1997 and 1998.[1] These agreements were sanctioned by Law 9496 of September 1997 to reschedule the states' debt conditioned on states undertaking fiscal reforms and compliance with fiscal targets. The FRL in 2000 codified fiscal adjustment programs sanctioned by various resolutions (Alfonso 2002; Dillinger 2002). At the time, many observers doubted whether the federal government would successfully enforce the debt restructuring agreement and sustain the stabilization, and this is why the extraordinary measure of the FRL may have been necessary, to reinforce the expectations of stability.

Argentine provinces in the 1980s had no hard budget constraint, borrowed a lot, and effectively could monetize this debt, contributing to hyperinflation. The subsequent stabilization in 1991 centered on the Convertibility Plan, which fixed the Argentine exchange rate to the U.S. dollar. Through the 1990s the national government mainly followed a market-based strategy for coordinating fiscal discipline between levels of government: the central government would enforce hard budget constraints ex post and force the provinces to pay their debts (Dillinger and Webb 1999). By the end of the 1990s, the absence of the ex-ante fiscal controls had allowed a number of Argentine provinces to over-borrow, party fragmentation had narrowed the scope for fiscal compromises, and the national government had overcommitted itself by setting floors on transfers, even if national revenues fell (Gonzalez, Rosenblatt and Webb 2004).

At the national level, faced with a deteriorating budget balance and growing debt payments, in 1999 the Congress approved a Fiscal Solvency Law—its first try at FRL. It aimed to and did inspire a third of the provinces to pass their own FRLs. In 2001, however, the FRLs stopped working because of the extreme mismatch between the national government's fiscal and monetary policies and because the provincial FRLs lacked enforcement power and most of the economically important provinces had not passed them. Only 5 out of 11 provinces that imposed a hard budget constraint actually fulfilled their commitment (Braun and Tommasi 2004). In 2004, Argentina tried anew with a national FRL that applied to the provinces as well as the national government and capital federal district. It passed Congress hastily (Braun and Gadano 2007; Laudonia 2009), and it did not come out of a consensus building process with the provinces nor reflect a solid technical consideration of how the provinces might adjust their finances to meet the legal requirements. Although many provinces complied with some of the law's procedural requirements, almost none were meeting the quantitative targets even before the onset of the global crisis in 2009. After that the quantitative targets were put on hold, which further undermined the credibility of the FRL process in Argentina.

The ***Indian*** Constitution forbids states from borrowing abroad and requires them to obtain central permission for domestic borrowing. The central government places limits on states' borrowing through the annual discussions with states on financing state development plans. While limiting explosive growth of state debt, the system has not prevented deterioration of fiscal trends as indicated by high levels of debt over Gross State Domestic Product (GSDP) in many states in the late 1990s. Factors contributing to the deteriorating fiscal accounts across Indian states in the 1990s include: rapid increase in expenditures on salaries, retirement benefits, and pensions and subsidies, increased borrowing to support the growing revenue deficit, and growth in contingent liabilities associated with fiscal support to the public sector units, cooperatives, and the statutory boards.

Since the early 2000s, the fiscal reform has focused on moving towards a more flexible, market-linked borrowing regime within sustainable overall borrowing caps imposed by the central government and self-imposed state-level deficit caps. The federal government enacted Fiscal Responsibility and Budget Management Act in 2003 which applies to the national government only, but some states had also adopted their own FRLs before the enactment of the federal FRL (e.g., Karnataka and Punjab in 2002) and many states have since 2003 adopted FRLs in line with the national law. FRL has become mandatory after the Twelfth Finance Commission (2005) and the federal government has offered a sizeable incentive to states for passing FRL.

The idea of legislating for fiscal responsibility gained considerable attention in the 1990s in **Australia**. At the federal level, the Business Council of Australia called for legislation requiring a surplus budget on average over the business cycle. It reiterated this theme during the 1996 federal election campaign. The adoption of the Charter of Budget Honesty Act in 1998 at the federal level followed years of improvement in fiscal outcomes. In fact, in the mid-1980s, Australia adopted its first set of explicit fiscal rules limiting the growth of expenditure, taxation and budget deficit. Although the recession in the 1990s saw the net debt of the country increased, never went beyond 20 percent of GDP. The combined

[1]Only two states (Tocantins and Amapá) did not have any bonded debt, and hence did not participate in the refinancing agreements.

state and Commonwealth general government net debt had not exceeded 30 percent of GDP in the 1990s (Simes, 2003).

Some states had adopted fiscal responsibility legislation prior to the federal government's adoption. New South Wales passed legislation in 1995 to commit itself and future governments to medium- and long-term fiscal responsible targets including the elimination of the net debt. Victoria passed the Financial Management Act in 1994, which was amended in 2000 through the Financial Management (Financial Responsibility) Act, which outlines principles of sound financial management, reporting standards and pre-election budget update. Minister must produce a pre-election budget update 10 days after the issue of a writ for an election. The Act broadly states what the update must contain and the principles upon which it must be based.

In ***Canada***, in the 1990s both the federal and provincial governments needed serious fiscal corrections to reverse chronic fiscal deficits and growing debt burden after years of lax fiscal policy.[2] The drive for restoring fiscal health was viewed as means to help accelerate economic growth. The deteriorating sovereign ratings[3] increased the cost of borrowing, and private saving was not sufficient to finance both private investments and chronic fiscal deficits (Traclet 2004). The federal government undertook legislative reforms during the 1999s: enacting the Federal Spending Control Act (1991) setting limits on spending, and adopting a new framework to meet the medium-term fiscal balance and decrease debt ratio with rolling short-term deficit targets. Such measures succeeded in significantly reducing the national debt (IMF, 2002).

In this context, many provinces in the 1990s also adopted legislation to promote balanced-budgets and debt reduction (Millar 1997)[4], which may have helped increase the provincial finance ministers' bargaining power to promote unpopular fiscal measures (Kennedy and Robbins, 2003). These legislation set specific fiscal targets such as annual balanced budget and target year for debt elimination (Alberta), prohibited budget deficits in any year (Manitoba), set deadlines for achieving a balanced operating account (New Brunswick), and required net expenditures to decline by a certain percentage over a four-year period (Nova Scotia). Three more provinces enacted similar acts in 2000-2004.[5] For example, New Brunswick adopted Fiscal Responsibility and Balanced Budget Act in 2006 to cover the entire provincial budget, following the Balanced Budget Act in 1995. The province also enacted the Fiscal Stabilization Act in 2001 to stabilize the fiscal position from year to year and improve long-term fiscal planning and stability.

Colombia has traditionally been centralist, to offset the natural geographic fragmentation and to try to contain the centrifugal forces of strong special interest groups. Overlying the natural geographic fragmentation, strong non-regional interests dominate the political dialogue—some operate within the legitimate political system, like teachers and producers of coffee, cattle and sugar, while others are outside and challenging it, namely two guerilla movements, the paramilitaries, and drug producers. Decentralization started in Colombia with the 1968 deconcentration of national revenues to subnational administrative units, with revenue sharing set by formula and mostly earmarked for specific sectors (Bird 1984). The 1991 constitution (which also made the office of governor an elected post) and Law 60 of 1993 expanded the amount of revenues assigned to departments by broadening the base of the existing revenue-sharing system (the *situado fiscal*). The Constitution and Law 60 committed the national government each year to expand revenue sharing with SNGs until it would reach nearly half of all current revenues by 2002.

In the late 1980s and 1990s the trend toward political decentralization was accompanied by more freedom for subnational domestic borrowing, and hence a rise in their debt. To increase the central government's control over subnational debt, the so-called Traffic Light Law of 1997 introduced a rating system for territorial governments, based on the ratios of interest to operational savings and of debt to current revenues. Highly indebted local governments (red light) were prohibited from borrowing, and intermediate cases (yellow light) were required to obtain permission from the Ministry of Finance. The law often did not have the desired effect, however, as some governments with a red-light rating obtained new financing without permission of the Ministry of Finance, and departments often changed from yellow to red, rather than moving from yellow to green, as expected. In a new attempt to implement fiscal rules to stabilize subnational finances, Colombia passed Law 617 in 2000, which functioned in many ways as a Subnational FRL; despite the fiscal crisis at the national level in 2001-02, Law 617 had some success at the subnational level and laid the foundations for subsequent steps. In June 2003 the government passed the Fiscal Responsibility Law, which applied to the national as well as the subnational governments.

Peru is a unitary state, with even more of a centralized tradition than Colombia. Decentralization came relatively late to Peru, as part of a democratic reaction after Fujimori's exit in 2001. The 2002 decentralization law foresaw having half

[2] The fiscal correction was concurrent with monetary policy of inflation targeting. The attainment of announced targets has improved market and public confidence in the central bank's commitment to low and stable inflation (Traclet, 2004).

[3] Rating agencies downgraded the sovereign debt: in foreign currency in 1994 and in local currency in 1995 by Moody's and in foreign currency in 1993.

[4] Alberta, Saskatchewan, Manitoba, Quebec, New Brunswick, Nova Scotia, Northwest Territories, the Yukon from 1993-1996.

[5] British Colombia, Ontario, and Newfoundland.

or more of public sector spending managed and to some extent allocated by subnational governments—districts, and municipalities—compared to the previous situation where SNGs managed less than 10 percent of public spending. In contrast to the experiences of the other Latin American countries discussed here, the behavior of subnational public finances in Peru never deteriorated to the point where it adversely affected the country's financial sector or macroeconomic stability. As they contemplated fiscal decentralization and saw the macroeconomic problems that decentralized countries had had in the 1990s, the authorities passed the FRL and other measures to assure that fiscal decentralization did not lead to fiscal imbalances. As discussed below, the restraint measures in Peru succeeded perhaps too well, preventing effective fiscal devolution.

3. FRLs – Purpose, Incentives, and Authority

Before delving into the content of FRLs (section IV), we need to understand why governments might pass such laws, how they fit in the political context, how they address the timing of borrowing-lending decisions, which level of government passes them, and to which governments the FRL applies.

3.1 Aligning fiscal incentives

In a normative theory of good government, voters want to avoid the effects of a fiscal crisis—inflationary finance, sudden increase of taxes, disruption of service, and increased borrowing costs—so their government would equally want to avoid the crises. In practice, governments may fail to follow sustainable fiscal policies for a variety of reasons discussed in this section (see Alesina 1994 for a survey and Saeigh and Tommasi 2000 for applications to federations). Multiple levels of government multiply the possible reasons for failure of fiscal responsibility. To deal with these problems, governments have adopted various institutions to try to restrain themselves, including balanced-budget rules, autonomous central banks, and congressional oversight committees. Since the late 1990s, governments have added FRLs to the potential and actual toolkit.

Governments are interested in FRLs to deal with four problems: i) short time horizons of policymakers; ii) free riders among SGNs; iii) principal agent and moral hazards problems between the national and SN governments; and iv) demonstrating commitments to be creditworthy. The first and fourth problems apply to governments at any level, whereas the second and third are relevant mainly in countries with multilevel government.

Short time-horizons of policymakers. A government may wish to institutionalize its commitment to control its impulses to run excessive deficits, in order to resist temptation in more pressing times that may come in the future. Policymakers often have shorter time-horizons than citizens, because they have shorter terms of office than citizens' life spans and policymakers face the risk of being voted out of office if results are painful in the short-term. Also the mobility of citizens and businesses between local jurisdictions means that excess borrowing could drive residents away and leave those remaining with more debt per person than they had anticipated. So legislators can gain voter support by passing a law (e.g., FRL) that provides extra motivation for longer term fiscal sustainability.

Free riders. A group of governments in the same country may wish to make and enforce a mutual agreement that each of them would avoid running excessive deficits. To see the free-rider problem in this context, suppose that multiple governments share the same currency, central bank, domestic credit market, and (at least to some extent) international credit reputation. Then they will share a common interest in sustainable fiscal balances for the country in the aggregate, to maintain stable prices, a healthy financial system, and good access to international credit. Individual governments' interests would diverge from the common interest, however, in that factors such as electoral pressures would motivate them to follow fiscal behavior that is risky or unsustainable. An individual government would bear only part of the cost of its misbehavior, but would still receive all of whatever perceived benefit accrued. They could benefit from this, however, only if (most of) the other governments continued to follow good fiscal behavior. So, there might be prisoners' dilemma—a situation where the equilibrium of isolated individual choices leads to suboptimal outcomes for all.[6] All the governments would, therefore, benefit from having a system of rules—an FRL—to discourage such defection and free-riding.

In a country with multiple governments, the national government already exists for the purpose (among others) of protecting the common interests, has much greater fiscal weight than the others, and typically has special powers, like running the central bank and regulating the financial sector. The national government also provides transfers to the SNGs, which often are the main source of subnational revenue and give the national government additional leverage over them. But this may not be enough. Rules of revenue sharing and other rules of the system (like the constitution)

[6] Inman (2003) develops the prisoners' dilemma model formally for this situation and shows how restrictive are the conditions under which the market successfully establishes SN fiscal discipline if the central government takes a hands-off no-bailout approach. The conditions include competitive suppliers of local public services, a stable central government, clear and enforceable accounting standards, a well-managed aggregate economy, and an informed and sophisticated local government bond market.

may restrain the national government's power over the SNGs. Political considerations may bias the decisions of the national government away from the optimal; these could be the national political cycle or subnational ones (Braun and Tommasi 2004). For instance when a state government of the same political party as the national government faces a close election, the national government might be inclined to condone the state's fiscal misbehavior by offering a debt bailout or rescheduling guarantee. Also, under some configurations of political institutions, the national executive might need to purchase blocks of legislative votes through provincial fiscal favors, in ways that also break the inter-temporal Wicksellian connection, by which voters demand fiscal discipline to protect their interest as taxpayers. Thus, the agreement to protect the common interest would not only need to restrain the fiscal behavior of the individual SNGs but also restrain the behavior of the federal government.

Principal-agent and moral hazard problems. When citizens or a higher level of government (the principal) entrusts a subnational government (agent) with resources and the responsibility to carry out a task, then there is the principal-agent problem in assuring that the agent government will maintain the requisite fiscal stability to carry out the task, without default or bailout. Sub-national borrowers as agents have an incentive not to repay their lenders as principals because they perceive that they will be bailed-out by the central government in case of default, resulting in moral hazard. This hazard may increase when the central government is also the creditor, since rollover of the debt is often the easy way out when an SNG does not pay what it owes to the central government. The incidence of these agency problems varies considerably depending on the structure of the subnational debt market in each country. For instance, the credibility and prudence of a no-bailout commitment by the national government in the event of subnational default depends partly on whether the creditors to the defaulting SNG are foreign or domestic.

Demonstrating commitment to be creditworthy. Borrowers, including SNGs, have an incentive not to reveal negative characteristics about themselves to lenders, which results in adverse selection— lenders will therefore charge a risk premium above what is directly justified by the revealed information, even for a borrower who is not risky. So the asymmetrical information can lead to mispricing of risks. To improve its terms of borrowing, a government needs to show creditors that it is not like those other government units of lesser credit or that it has given up the fiscally irresponsible ways of its past. It can demonstrate this commitment by constraining itself with a FRL, its own or from the national level. Once one government demonstrates its commitment by passing an FRL, the pressure increases on other governments in the country to follow suit, in order not to stand out as the government that is not committed to fiscal responsibility. If the entire country has an FRL framework, then it will be the adherence to the fiscal targets that will become more important.

Fiscal responsibility laws have some downsides as well. Most importantly they tend to make aggregate fiscal policy more pro-cyclical. Although most FRLs have some escape clause for the eventuality of a recession and some call for stabilization funds, it has been difficult to set these up in a way that are adequately countercyclical, while still demanding rigorous fiscal responsibility (Melamud 2010).

3.2 Incentives in the political system for fiscal prudence

The political characteristics of the countries affect both the need for subnational fiscal-control institutions and their effectiveness. Indeed, to some extent the political factors that increase the need for an FRL also make it more difficult to pass one and to enforce it successfully. Several dimensions of political system are relevant: i) a majority party of the executive in legislature versus coalition (parliamentary) or divided government (presidential); ii) strong party identities and unity, including closed-list nominations for legislature, versus weak parties and open lists; iii) autonomy of SNGs constitutionally versus national government power to intervene and otherwise control; and iv) a strong role for the national legislature and strong influence of governors over legislators, versus strong national executive authority (Dillinger and Webb 1999). To the extent that the constitution and party system lead to more centralized power, the country will have less need for special institutions to coordinate fiscal discipline across governments over time and between states. In some countries in our sample, however, the fiscal decentralization was part of a more general decentralization of power, which was linked with the restoration or establishment of democratic rule (Garman et al 2001). The party with centralist tendencies and strong public sector dominance may be more interested in pushing a certain development path through state control, central planning and a strong public sector than fiscal management. Subsequent decentralization and market decontrol have led to increasing need for central coordination of policies.

The national and SNGs are not always autonomous agents, as the previous section presumed. For instance they can be manifestations of the same political party. Such arrangements can reduce the free-rider and principal-agent problems described above, because the party aligns the incentives of the national and subnational politicians. The Argentine Justicialista (Peronist) Party in the mid-1990s and the Indian Congress Party in its years of dominance performed similar functions of harmonizing the incentives of policymakers at national and subnational levels. When the single-party dominance in these countries ended or diminished substantially, with the increase of democracy, the absence of the extra-constitutional (but legal) channels for inter-governmental coordination created the need for FRLs

or other formal mechanisms for coordination.

Even without a strong party system, a powerful president can enforce subnational fiscal discipline.[7] President Cardoso in Brazil became a strong president in the late 1990s even in a context of weak party loyalties and used his office (and reputation as an inflation fighter, from when he was Minister of Finance) to press successfully for fiscal discipline at the national and subnational levels. The institutionalization of this discipline included the FRL but had already started with some previous measures. President Uribe in Colombia also used his political popularity, without a strong party base, to pass the FRL in 2003. This was in the context since the late 1990s of much weaker loyalties to the two traditionally strong parties, which had fought over many things but had agreed on maintaining macroeconomic stability.

These examples show the importance of the particular political situation in each country—with effects both on whether the country needs an FRL and whether it can gather the consensus to pass one. An FRL seems most likely when there is an intermediate degree of political cohesion—with a high degree of cohesion an FRL may not be needed, and with a low degree one cannot pass or enforce the FRL.

3.3 Authority: Which government passes the FRL? To which government does it apply?

The FRLs differ in terms of which government passes it and to which government(s) it applies but the content of the two types is similar. Some FRLs are national laws that apply to all levels of government, or at least to the national and intermediate (state, provincial) levels, as in Argentina (2004), Brazil (2000), Colombia (2003), and Peru (2003). From the SNG point of view, these are top-down systems.[8] In other cases, such as Argentina (1999), Australia, and India, the federal government passes an FRL only for itself, and this sets the framework, incentive, or example for the SNGs to pass their own FRLs voluntarily. In some cases, a SNG would enact its own FRL (e.g., the Indian states of Karnataka and Tamil Nadu and some Australian states) before the enactment of the federal FRL. A few Canadian provinces have passed their own FRLs to sustain fiscal discipline and to improve their credit ratings.[9]

Table 1 summarizes how various countries have handled the issues of which government passes the law and which it applies to. With either type of law, enforcement is an issue. There is difference, however, between a government trying to discipline itself with a law that it has the power to change and a higher-level government disciplines a lower-level government that has some political independence. In the latter type of arrangement, it remains uncertain whether the national government will have the tools and political determination to enforce the law. When the national government passes an FRL law that does not directly prescribe what the SNGs must do, a key question is whether the SNGs follow the federal example and pass and obey their own laws. Given the complex variety of intergovernmental systems, there is no single optimal recipe for which level of the government can or should pass the FRL and to which level of government it should apply.

In the US and Canada the political tradition of state and provincial autonomy and independence, along with consistent no-bail policy by the center, has existed from the 19th century and has generally instilled subnational fiscal discipline through ex post consequences. The explicit institutional responses have been at the state and provincial level, with their own laws or constitutional amendments to set ex ante constraints to keep the subnational governments out of trouble (Inman 2003; Wallis, Sylla, and Grinath 2004). Neither federal government has an FRL pertaining to the SNGs. No US state has an FRL, although most have more or less strict limits on state borrowing and deficits, with origins back to the 19th century. The federal government does not have enough sway to force an FRL upon them.

Table 1. Which Government Passed FRL and To Which Levels Does It Apply?

	National FRL applies to all levels, usually more strictly to SNGs	National FRL applies only to national level	SNGs with own FRLs
Federal constitution			
Brazil	X		
India		X	X
Argentina	X 2004	X 1999	X (some in 1999)
Canada			X
Australia		X	X
Unitary constitution			
Colombia	X		
Peru	X		

[7] Although a strong president usually creates a party of his followers, if the main unifying factor is the personality of the president, one cannot accurately call this a strong party system.

[8] Ter-Minassian and Craig (1997) argue that such top-down control is necessary for SN fiscal discipline in developing countries. Rodden and Eskeland (2003), with more evidence to consider, see prospects for combining hierarchical control with market discipline, and gradually letting the latter take more weight.

[9] West Bengal and Sikkim are the only two states out of 28 that have not enacted an FRL.

Brazil's FRL was passed by the national government for all levels of government; it uses both ex ante rules and legal penalties to contribute to the consolidation of a critical mass of consensus for fiscal prudence among powerful governors who had few party loyalties but strong influence over national legislators. Colombia, a unitary country of "autonomous" departments, already had various laws constraining subnational borrowing, and to get more institutional backing for fiscal balance at the national level they passed an explicit FRL in 2003. It adds to the ex ante constraints on SNGs and sets up transparency and accountability procedures for encouraging fiscal prudence at the national level.

Peru has had a national-level FRL since 2000, and then in 2002-2003 municipal and regional governments got elections and obtained substantial de jure fiscal autonomy, including the right to borrow. Therefore, the government revised the FRL in 2003, with provisions for the SNGs as well as tighter constraints on national fiscal behavior. Argentina has gone through several FRL arrangements without success. The 1999 national government's FRL was only directly for the national government and called for provinces to pass their own FRLs, which some did but some others did not, including the largest province. In the fiscal crisis of 2000-01 and beyond, both the federal and SNGs missed the FRL targets and the laws seemed irrelevant. In 2004, the national government passed an FRL that applied to all levels. The federal government and SNGs were missing the targets even before the 2008-2009 world financial crisis, however, and in 2009 the essential provisions of the law were suspended.

4. Content of FRLs

This section analyzes the content of FRLs relating to SNGs in Argentina, Australia, Brazil, Canada, Colombia, India, and Peru. The analysis is organized along three dimensions: procedural rules for transparency and accountability, fiscal targets – quantitative or qualitative, and enforcement and escape clauses. For Brazil, Colombia and Peru, the analysis focuses on the unified FRL that applies to the SNGs. In Argentina, Australia, Canada, and India, the subnational governments have passed their own FRLs, in addition to the national law in Argentina and India. (See Liu and Webb 2011 for details.)

In general, there is greater convergence among countries on the procedural rules and fiscal targets, and more variability on the escape clause and enforcement. All FRLs call for the processes of budget formulation and execution that increase transparency and rationality. Many FRLs require medium-term fiscal frameworks. Almost all FRLs have explicit fiscal targets – fiscal deficit, debt, or both, or other variables such as operating budget balance. In some FRLs, additional variables are targeted, such as expenditure growth and composition.

4.1 Procedural rules for transparency and accountability

All FRLs in the countries discussed call for processes that increase the transparency and rationality of formulating and executing the budget. Typically the FRL requires annual publication and legislative discussion of a fiscal plan and budget, and often this is for multiple years on a rolling basis. The presentation may have to include full costing of any new spending programs or tax changes. Fiscal transparency includes having an audit of subnational financial accounts, making periodic public disclosures of key fiscal data, or exposing hidden liabilities. The FRLs also vary in the extent to which they control arrears and the deficits of off-budget entities, like companies owned wholly or largely by SNGs.

The requirements for a medium-term fiscal framework and a transparent budgetary process aim to ensure that fiscal accounts move within a sustainable debt path and that fiscal adjustment takes a medium-term approach to better respond to shocks and differing trajectories for key macroeconomic variables that affect subnational finance. The transparent budgetary process affords debates by executive and legislative branches on spending priorities, funding sources, and required fiscal adjustments.

To a large degree the effectiveness of these requirements depends on how diligently the legislature and the press monitor these publications and compliance with them. The discipline and sanctions from the political pressures and the access to information about commitments and subsequent compliance can help enforce FRLs. Credit markets can also help with discipline by imposing risk premiums and raising the cost of borrowing if there is fiscal misbehavior. The countries with FRLs under discussion are all democracies, but they vary in how well their institutions function to achieve accountability.

Brazil's FRL sets minimum standards for state budgeting, personnel management, and debt management. The annual budget prepared by each SNG has to be consistent with its multiyear budget plan and with the federal fiscal and monetary program. The FRL systematizes and reinforces the restrictions on personnel spending, deficits and debt that were in the state debt rescheduling agreements and other earlier measures (Law 9496 and the Senate resolutions). The accrual accounting method for all levels of the government eliminates an important source of hidden liabilities: arrears. It also contains specific limits on spending commitments by governments in their final year in office.

In Brazil, moreover, article 48 of Brazil's Fiscal Responsibility Law (2000) enshrines fiscal transparency as a key component of the new framework. Proposals, laws, and accounts are to be widely distributed, including through the use of electronic media (all reports are on the government website). Article 54 requires that all levels of governments publish a

quarterly fiscal management report that contains the major fiscal variables and indicates compliance with fiscal targets. Pursuant to article 57, this report is to be certified by the audit courts.

In *Colombia*, the FRL specifies the process for setting budget targets and linking them to target ranges for debts and deficits. Regulations for the law institutionalized the practice at the national level and in some SNGs of publishing quarterly fiscal results, defining deficits on the basis of cash revenue and accrual of spending obligations, and defining debt to include floating debt. The FRL set a target to eliminate reservas presupuestales (pre-committed expenditures) in two years, which was done. The other part of floating debt, accounts payable, were counted as regular debt and thus controlled by the fiscal/financial plan. To help with fiscal discipline at all levels, the FRL prohibits the national government from lending to an SNG or guaranteeing its debt if it is in violation of Law 617 of 2000 or Law 357 of 1997, or if it is in arrears on any debt service to the national government. Indeed, a subnational government with those fiscal violations may not legally borrow from anyone. To discourage electoral cycles in fiscal policy, the FRL prohibits any government from committing spending in future years or increasing personnel spending in an election year. Departmental and municipal central administrations are not allowed to make transfers to their public entities. Strict limits apply to creation of new municipalities, and municipalities proven non-viable have to merge.

In *Peru* the 2003 FRL built upon the 2000 FRL (Fiscal Prudence Law), extending it to SNGs. It required that the annual fiscal deficit of the non-financial public sector not exceed the limit in the multi-annual fiscal framework and in any case would not exceed specific targets (discussed below). Each regional government must prepare and publish an annual development plan that is consistent with the national fiscal framework (including the size of total public sector deficit). Quarterly monitoring of the fiscal performance is required and, in case of revenue shortfall, adequate remedies to revenues and/or expenditures must start in the next quarter. Although the subnational fiscal frameworks have to fit within the national one—whereas in some other countries the SNGs fiscal frameworks merely have to be internally consistent and are not directly subordinated to the national government’s fiscal framework—this has not usually been a binding constraint in Peru, as the national government and the overall general government have not hit the limit and ran surpluses in 2006, 2007 and 2008.

Argentina’s Fiscal Solvency Law in September 1999 called for limits in the growth of expenditures, the adoption of multi-year budgeting, creation of a Countercyclical Fiscal Fund, and various transparency measures regarding public finances-the features favored by the recent literature on fiscal rules. The new FRL in 2004 applies to the provincial as well as national levels and has similar procedural requirements—rolling 3-year budget plan with projection of revenue and spending by destination, functional and economic categories. An intergovernmental commission coordinates the definitions of budget categories and evaluates budget proposals. The multiannual fiscal plans and results need to be published on the governments’ web pages (Melamud 2010). The law does not spell out coordination on some key items, like the national government’s specification of salary increases for teachers, which provinces have to pay and which set the standard of pay demands by the rest of provincial workers. These unfunded mandates effectively derailed provincial spending plans, leaving provincial governments largely unable to control their fiscal situations. Discretionary transfers from the national government have allowed them to meet their payment obligations and kept made them more politically dependent.

In *India*, FRLs passed by states typically require the state government present its medium-term fiscal plan with annual budget to the state legislature. The fiscal plan should set forth multi-year rolling targets for key fiscal indicators. Some FRLs require that the state at the time of budget presentation disclose contingent liabilities created by guarantees provided to public sector undertakings, and some FRLs require the disclosure of borrowing from the Reserve Bank of India and liabilities on the state government for any separate legal entities. Most FRLs require disclosure of significant changes in the accounting policies.

In *Australia*, the procedural rules and transparency are expressed in varied terms across FRLs of states; this is in contrast to India where FRLs enacted by states have strikingly similar content. But the over-archiving content of the FRLs across states in Australia centers on sound fiscal management, transparency in disclosing fiscal policy and accounts, and tabling of fiscal budgets to state legislature for oversight. For example, the Fiscal Responsibility Act (2005) of New South Wales lays out the fiscal principles and targets for the state. In application of fiscal principles, the government should report in annual budget papers: an assessment of past and prospective long-term average revenue growth; an assessment of the impact of budget measures in respect of expenses and revenue on long-term fiscal gaps; measures taken to reflect the fiscal principles; and the estimated impact of proposed tax policy changes. These principles are supported by the Public Finance and Audit Act 1983 that requires the treasurer to: release publicly monthly statement and half year review setting out projections and year-to-date balances for the budget; table the annual budget in the Legislative Assembly; and present audited financial statements to the Legislative Assembly.

FRLs of provincial governments in Canada place responsibility and accountability with the provincial finance minister. The finance minister must present a budget plan and annual report to the legislature of the provincial government and

make these available to the public, within prescribed deadlines. Variations exist about the exact nature of disclosure, for example, the public disclosure in Ontario includes mid-year review of fiscal plan, updated information about revenues and expenses, long-range assessment of fiscal environment two years after provincial election, and pre-election reports under certain regulation. In New Brunswick, each year the minister shall provide details as to how the public may participate in pre-budget consultations and shall make public a pre-budget consultation document that sets out the key fiscal issues for consideration.

4.2 Fiscal targets

In addition to procedural rules and transparency, most FRLs reviewed here spell out fiscal targets for SNGs with the most common target being the deficit, and there are differences in the degree of specificity about other targets such as debt stock, spending and guarantees.

Table 2 below summarizes fiscal targets in the FRLs for SNGs in Argentina, Brazil, Colombia, India, and Peru. As can be seen, fiscal targets are uniform for SNGs in Brazil, Colombia and Peru; this is not surprising as these countries each has a unified FRL applied to all levels of government.

Table 1. Fiscal Responsibility Laws – Fiscal Targets for SNGs

	Fiscal Targets
Federal Constitution	
Argentina (2004)	• Primary spending growth at or below the growth rate of national GDP. • Budget balances of provinces sufficient to bring debt service below 15% of current revenue, net of municipal transfers.
Brazil	• Personnel spending 60 percent or less of net fiscal revenue for states and municipalities, with ceilings for each branch of government • Compliance with targets in mandatory limits set by the Senate
India (states)	• Annual reduction of revenue deficit • Elimination of revenue deficit by certain date • Annual reduction of fiscal deficit • Fiscal deficit/GSDP <= 3 percent of GSDP • Limits on guarantees • Total liabilities <= 25-28 percent of GSDP
Unitary Constitution	
Colombia	• Interest payment/operational savings • Debt/current revenue
Peru	• Fiscal deficit of total non-financial public sector including SNGs no more than 1 percent of GDP. • Real growth of public sector spending including SNGs no more than 3 percent per year • Stock of debt for each SNG may not exceed 100 percent of the current revenue, and the debt service (interest and amortization) may not exceed 25 percent of the current revenue • The average primary balance of each SNG for the last 3 years may not be negative

Note: Revenue deficit in India is the difference between total revenue and current expenditure.

Sources: see Liu and Webb 2011, Annex 1.

Table 2 shows that fiscal targets differ across countries, and across SNGs in some countries. In the absence of market discipline, letting national governments or SNGs to do this for themselves—passing a law stating what budget they have to pass—has the inherent weakness that the same legislative body that would pass an unbalanced budget (in violation of the law) could also vote to change the law. If the national FRL specifies fiscal ratios for the SNGs, however, this has more inherent strength, since it provides a legal basis for the higher level of government (and typically a source for fiscal transfers) to impose limits on the SNGs. These limits are typically stated in terms of the ratio of deficits, borrowing, debt stock, and debt service to fiscal revenue or gross domestic product. Revenue is likely to be a more effective basis, since it is known sooner and with more precision than gross domestic product.

Since FRLs aim to prevent the fiscal slippage from deterioration to insolvency, focusing on ratios where the subnational government has more control over the denominator as well as the numerator (e.g., wage bill as a share of total spending) is more likely to have the desired effect than relying only on ratios, like debt service or debt stock to gross product. These ratios are substantially influenced by exogenous factors (interest and exchange rates) and often go over the limit

only after problems have gotten out of hand.

In *Brazil*, the debt restructuring agreements between the federal government and the states in 1997 established a comprehensive list of fiscal targets—debt-to-revenue ratio, primary balance, personnel spending as share of total spending, own-source revenue growth, and investment ceilings—as well as a list of state-owned enterprises or banks to be privatized or concessioned. The annual budget of each SNG has to be consistent with its multiyear budget plan and with the federal fiscal and monetary program. The FRL mandates Senate resolutions to set the specific targets for SNG debt and fiscal balances. The FRL systematizes and reinforces the restrictions on fiscal variables such as personnel spending as a share of SNG net revenue and on borrowing. It also contains specific provisions for authorities in their final year in office. These restrictions on the borrowers' side were complemented by restrictions on the supply of credit from banks and international lenders.

In *Colombia*, the Fiscal Transparency and Responsibility Law (2003) in combination with a modified version of the Traffic-Light Law (Law 358 of 1997) rates SNGs according to the ratios of debt to payment capacity, and SNGs rated in the red-light zone are prohibited from borrowing, and those in the green-light zone are permitted to borrow up to limits based on debt sustainability calculations. Departments and large municipalities must get satisfactory credit ratings from international rating agencies before they borrow (following the idea from a regulation in Mexico since 2000).

In *Peru*, the FRL limits the deficit of the total public sector 1 percent of GDP (or the amount in the national fiscal framework, whichever is less), except in congressionally authorized cases of national emergency or international crisis, when the deficit could go to 2.5 percent.10 In addition, each SNG has to keep a non-negative primary balance on average for the last 3 years, and they may not have debt service over 25 percent of current revenue or debt stock over 100 percent. In election years, the governments may not spend more than 60 percent of the annual spending allocation in the first 7 months and may not use more than 40 percent of the annual limit on the deficit in the first half of fiscal year. 11 The FRL sets some ex ante procedural constraints for subnational borrowing, and SNGs can only borrow internationally with the guarantee of the national government. The guarantee for any loan requires compliance with the Annual Debt Law and demonstration of the capacity to pay, which provisions give the national government the authority to veto SNG borrowing.[12]

Fiscal targets adopted by *Indian* states are remarkably similar to each other with respect to fiscal and revenue deficits. Some states FRLs also place limits on guarantees. Basically, in the early 2000s, some states went ahead of the federal government in enacting Fiscal Responsibility and Financial Management Act (e.g. Karnataka in 2002). The federal act in 2003 has similar fiscal targets as those in these early reforming states. Subsequently, the 12th Finance Commission mandated fiscal responsibility legislation for all states, with revenue deficit (total revenue minus current expenditures) to be eliminated and the fiscal deficit to be reduced to 3 percent of GSDP by fiscal year 2009. Some states issued additional legislation on fiscal targets, for example the Kerala Ceiling on Government Guarantee Act (2003) that was enacted the same year as its FRL. According to the guarantee act, the guarantee outstanding for any fiscal year shall not exceed rupees fourteen thousand crores (about US$3 billion); no government guarantee shall be given to private entity; and the state shall established a Guarantee Redemption Fund.

In contrast to India, where fiscal targets with respect to revenue and fiscal deficits are similar across states, states in *Australia* do not have similar fiscal targets. The fiscal targets in New South Wales differ from those in Queensland. The Fiscal Responsibility Act of 2005 in New South Wales sets forth the following targets: Reduce general government net financial liabilities to <= 7.5 percent of GSDP by June 30, 2010; and to <= 6 percent by June 30, 2015; maintain general government net debt <= 0.8 percent of GSDP, and eliminate total state sector unfunded superannuation liabilities by June 30, 2020. The Charter of Fiscal Responsibility of 2009 in Queensland sets forth a quite different set of fiscal targets: the General Government sector meets all operating expenses from operating revenue; growth in own-purpose expenses in the General Government sector to not exceed real per capital growth; achieve a General Government net operating surplus no later than 2015-2016; stabilize net financial liabilities as a proportion of revenue in the Non-financial Public Sector; and target full funding of long-term liabilities such as superannuation in accordance with actuarial advice.

FRLs in the Australian states of Western Australia and Northern Territory have only one fiscal target stipulating that

[10]The 2000 (pre-decentralization) version of the FRL had such a restriction on general government fiscal balances, implicitly including SNGs; the 2003 FRL made the application to SNGs explicit.

[11]Subsequent legislation has made minor modifications to these limits, but not undermined their intent. For instance, in 2007 and 2008 (Law Nos. 29035 and 29144) the restriction on the growth of the non-financial expenditure was changed to "annual real growth of the consumption expenditure of the central government", which may not exceed 4%, using the inflationary target from the central bank.

[12]SNGs are not prohibited from getting domestic credit without the guarantee, but this must come within the overall public sector deficit constraint. Thus, the national government could use the requirements for getting credit with the guarantee and other means to force SNGs to report their non-guaranteed borrowing and to keep it within the total deficit constraint. With multiple channels of control at their disposal, the national Ministry of Economics and Finance has keep SNG borrowing under tight control.

funding for current services to be provided by the current revenue generation. The states of Victoria and Tasmania do not have fiscal targets, but their FRLs have established financial management principles including: prudent management of financial risks; spending and taxing policies to be formulated to maintain a reasonable degree of stability and predictability; and ensuring that policy decisions have regard to their financial effects on future generations. These principles are also established by the states of Western Australia and Northern Territory.

Fiscal targets vary across *Canadian* provinces, (Liu and Webb 2011, Annex 2). Most provinces require a balanced budget. British Colombia requires only the balance budget rule while Quebec allows fiscal deficit but no more than the accumulated fiscal surplus in previous years. Other provinces such as Alberta, Ontario and New Brunswick also require additional fiscal targets relating to debt ratio, net assets, or contingency allowance.

In *Argentina* the FRL (2004) said that budgets for primary spending (current and capital, net of interest cost) may not grow faster than the rate of growth of the national GDP, as foreseen in the national macroeconomic framework (also called for in the FRL). If GDP growth is negative, then the primary spending may not grow, but does not have to shrink. The limitation on primary spending is weakened by important exceptions: namely, any investment spending for basic social infrastructure, spending financed by international organizations, and spending paid with unused revenue from previous years. Borrowing does have an aggregate limit in that debt service (projected) may not exceed 15 percent of revenue (net of participation transfers earmarked for the municipalities). Nonetheless, the outcomes have been mixed and often less favorable than in the possibly optimistic projections, putting some provinces over the 15 percent limit. Furthermore, as a result of the recession that accompanied the global downturn in 2009, Congress derogated key fiscal targets for 2010 and 2011; and in particular those setting ceilings on current primary spending growth, the overall primary fiscal balance, and new borrowing (Law 26.530). Such a temporary suspension reflects first the need to consider escape clauses in FRLs that would provide more flexibility to public spending when facing adverse external or domestic shocks; and second, the need to save in the counter-cyclical fund when the provincial economies are in expansion, which did not happen. This legal initiative was also accompanied by another Programa Federal de Desendeudamiento (Decree No.60/2010) that allows restructuring of eligible provincial debts, affected by the deterioration of their fiscal balances. Up to the end of August 2010, about eighteen provinces had benefitted from such programs.

4.3 Enforcement and escape clause

Rules are only as good as their enforcement, and FRLs vary in terms of the strength of enforcement called for in the law and in terms of how well the governments implement the law in practice. On the enforcement and escape clauses, there is great variability across countries, and within country in the case of Canada.

The enforcement ranges from no specific enforcement clause in the case of states FRLs in Australia and most provinces in Canada to strict enforcement in the case of Brazil, Colombia, Peru and three provinces in Canada. Indian states broadly follows the sanction clause in the national FRL that whenever there is a breaching of intra-year targets of revenues and expenditures, the state government should take appropriate measures for increasing revenues and/or reducing expenditures, including curtailment of the sums authorized to be paid and applied from out of the Consolidated Fund of the state. However there is no specific timeframe for meeting the targets.

More strict sanctions on the SNGs can be found in Brazil, Colombia, Peru and three provinces in Canada. In *Brazil*, the FRL reiterates from earlier laws the requirement that if an SNG's debt is over the legal limit it may not borrow (except for refinancing) and would no longer receive "voluntary" transfers from the federal government (transfers not from tax-sharing participations). Debt and labor contracts in violation of the FRL are not legally valid, which would be a negative ex post consequence for any lender who thus would lose its money. The Fiscal Crimes Law (LCF), a companion law to the FRL specifies criminal penalties—fines and even jail—for officials who violate the rules. The LCF applies to public officials of all branches of government at all levels. Among other provisions, the LCF provides for detention of up to four years for a public official who engages in credit operations without prior legislative authorization, incurs unauthorized expenditure commitments (including any in the last two quarters in office that cannot be repaid during the present term of office), extends loan guarantees without collateral of equal or higher value, increases personnel expenditures during the final 180 days of the term of office, or issues unregistered public debt (IMF 2001).

The *Colombia* a unified FRL imposes strict sanctions on SNGs for their non-compliance with FRL. When SNGs do not comply with the limits imposed by the FRL, they will be prohibited from borrowing. They also have to adopt a fiscal-rescue program to regain viability within the next two years. The governments must make across the board spending cuts whenever actual non-earmarked current revenues are come in lower than in the budget estimates. Sanctions are also imposed on lenders. The law tightens the regulations on the supply side. It prohibits lending by the national government to a subnational entity or guaranteeing its debt if the subnational is in violation of Law 617 or Law 358 or if it has debt service arrears to the national government. Furthermore, lending to subnationals by financial institutions and territorial development institutions must meet the conditions and limits of various regulations such as law 358, law 617,

and law 817. Otherwise the credit contract is invalid and borrowed funds must be restituted promptly without interest or any other charges (FRL Art. 21).

In *Peru*, violation of the FRL targets or some other legal targets by SNGs will cause the temporary disruption of transfers from participatory funds, such as FONCOR, FONCOMUN, and FIDE, which are block grants to regional and communal governments and are set by a formula that favors localities with a higher share of low-income population.

The two *Canadian* provinces that have sanctions are British Colombia and Manitoba. In British Columbia, the members of the executive council are subject to a 20 percent pay cut when fiscal targets are not met. The cut can be partially or fully restored when fiscal targets are met. In Manitoba, if fiscal balance at the end of year is negative, ministerial salaries are cut by 20 percent in the first year and 40 percent in the second year if the deficit continues. Ontario has similar sanctions of cutting the salary of Executive Council members when deficit target is missed.

In *Argentina*, the FRL (2004) does not have strong sanctions on the SNGs or their lenders. Furthermore, it allows the Federal Council of Fiscal Responsibility discretion to decide which of the possible sanctions to apply (Art. 32). If an SNG's debt service exceeds the limit, then it may not borrow except to rollover existing debt on more favorable terms and as part of a fiscal adjustment program, perhaps with a multilateral international lender. Provincial governments that miss the fiscal targets in their macro frameworks have faced little political fallout; it has been easy to shift blame to the overall macro situation and to unfunded mandates from the national government. As has been the case all along in Argentina, creditors can make a prior claim on the participation transfers to get the debt service due, which leaves them with little concern as to whether or not their provincial client is within the bounds of the FRL.

With regard to escape clauses, none of the Australian states contain it. Brazil and Peru FRLs and FRLs by Indian states have escape clause to relax fiscal targets and debt ceilings in the event of calamity and less than 1 percent economic growth for the last four quarters (Brazil), negative growth and national emergency (Peru, Article 5), national security or natural calamity or exceptional grounds (Indian states). Escape clause differs across Canadian provinces, with some provinces do not have one, while some provinces has escape clause in the event of major disaster or extraordinary circumstances. Colombia's FRL does not have an explicit escape clause. Nor does Argentina's FRL, although the congress did suspend key provisions of the FRL during the 2008-2009 global financial crisis.

Rules also need to take into account exogenous shocks—like a global recession—and allow some accommodation, without undermining the fiscal discipline. The ongoing global economic crisis has pressured sovereign and sub-sovereign finance, which has led some countries to apply the escape clause. The extent of the full response will need to be reviewed. A key question during a macroeconomic crisis, such as the 2008-2009 global crisis, is whether it is more appropriate for the central government to do all of the fiscal stimulus or loosen the fiscal constraints for subnational governments. For example, the Thirteenth Finance Commission in India recommended that the central government be the one bearing the cost of the crisis and the states should receive assistance from the center for providing the stimulus.

5. FRLs in Broader Institutional Context for Fiscal Prudence

FRLs do not operate alone, nor are FRLs sufficient to enforce fiscal discipline. To understand the role of FRLs in enforcing fiscal discipline, it helps to know the range of institutional tools available for this purpose and to know what other institutions for fiscal discipline exist, including the overall incentive structure and enforcement capabilities for subnational and national governments and their creditors.

5.1 Lender-borrower nexus and timing of controls and sanctions

Deficits and debt arise from the joint decision of governments and their creditors (including suppliers allowing extended payments). These decisions are made in light of not only the rules governing issuance of the debt, but also the ex ante expectations about what will happen to the debtor and the creditors if payment difficulties arise—who will lose money or who will be forced into painful adjustment. The decisions of that lending moment become a fait accompli conditioning the subsequent decisions. This points to two important dimensions of control of government borrowing. First the type or timing—ex ante controls or ex post consequences; and second whether the ex ante controls and ex post consequences act on borrowers or lenders. Together these make a matrix with four cells, as in Table 3 below.

Traditionally the fiscal discipline literature has focused on the first column—constraints and incentives of borrowers. Ex ante constraints on subnational borrowers include debt and deficit ceilings, restrictions on international borrowing, and regulation of SNGs' borrowing based on fiscal-capacity criteria. Typically an FRL includes these, but also includes more such as the public finance process and procedural rules that may lead to debt.

To complement the ex-ante constraints and to make them credible, there need to be ex post consequences for failures in fiscal prudence. Practices to impose ex post consequences on SNGs include limits or prohibitions on central bank financing, no bailouts (from central government or from international community) or debt workouts without adequate conditionality, requirements to publish detailed fiscal results, refusal by the central government to accept SNG debt, and withholding debt service from transfers to SNGs.

Table 2. Lender-Borrower Nexus and Timing of Controls and Sanctions: Channels for Control of Deficits and Debt

	For Borrowers (typically part of FRL)	For Lenders
Ex Ante Controls	*All governments* -Debt and deficit ceilings -Restrictions on international borrowing -Publication of detailed fiscal results *SNGs only* -Regulation of SNGs' borrowing, based on fiscal-capacity criteria (regulations by central government or SNG itself, central bank, or other institution)	*All governments* - No direct central bank financing - Regulations by central bank or other financial supervision agency *SNGs only* - Cap on total borrowing by SNGs - Increased capital requirements for lending to risky SNGs
Ex Post Consequences	*All governments* -Limits on central bank financing -No bailouts (from central government or from international community) and no debt workout without adequate conditionality -Publication of detailed fiscal results *SNGs only* -Central government does not accept SNG debt -Debt service withheld from transfers to SNGs Insolvency system	*All governments* - Strong supervision of banks *SNGs only* - Regulations require capital write-offs for losses from SNG debt - No central bank bailouts - Well-functioning financial market can increase risk premium for uncreditworthy borrowers

Some countries have also a formal insolvency system for SNGs (Canuto and Liu, 2010, Liu and Waibel 2009). The experience of Brazil in the 1990s shows that ex ante constraints, which abounded, were not sufficient by themselves. Borrowers and lenders colluded extravagantly to evade the rules as long as ex post bailouts were forthcoming. The 1997 debt restructuring agreement between the federal government and 25 states had the federal government took over the states' debt but requiring states carry out far-reaching fiscal reforms and in compliance with the fiscal targets. In Argentina in the 1990s, on the other hand, there were few ex ante constraints, and the experience with pulling provinces into line in the fiscal crisis of the mid-1990s by use of ex post consequences—mainly withholding debt service from transfers-seemed to validate the government's choice to focus on ex post rather than ex ante measure. By the end of the 1990s, however, many provinces built up such debts and off-budget obligations that in the 2000s the government started opting for conditional bailouts, rather than pay the political cost of imposing hard consequences (Dillinger and Webb 1999, Rodden 2003, Webb 2003).

Without lenders there is no borrowing or debt, so their constraints and incentives deserve equal attention. Lenders are not always automatically prudent enough, as many episodes reveal, including the financial crisis of 2008. Banking regulations can restrain lenders behavior, but lenders would view the SNG borrowers as riskless if the central government or central bank ultimately guarantees the debt, and passing the risk to others—taxpayers or nominal asset holders (subject to the inflation tax). In the case of Brazil, in addition to the FRL, decisive factors include the debt renegotiation contracts and the constraints to the credit supply by banks and especially by public banks to SNGs.

Regulations as listed in the top right box attempt to constrain such moral hazards ex ante: no direct central bank financing, restrictions on international borrowing, increased capital requirements for lending to risky SNGs, and borrowing cap for lending to SNGs. Rules and practices can also punish risky lender behavior ex post, such as by having strong supervision of banks, raising capital ratios for loan from entities with poor capital ratings, requiring capital write-offs for losses from SNG debt, and providing no bailouts from the national treasury or central bank. Relying on constraints only on borrowers means that lenders still have incentives to push loans and may find reckless or desperate politicians willing to borrow despite the rules. This happened in the 1990s in Colombia, when laws aimed to constrain subnational borrowing, but financial sector regulation loosened for some years, and then some departments got excessive lending. In the 2000s, the government addressed the problem by tightening both the financial sector regulation and the legal controls on the SNGs, with the 2003 FRL and other measures.

Ex ante regulation can also work on the borrower side. To improve fiscal transparency, Mexico introduced a credit rating system for SNGs. Although subnational participation in the credit rating is voluntary, the requirements of the capital-risk weighting of bank loans introduced in 2000 and of loss provisions introduced in 2004 aim at imposing subnational fiscal discipline through the market pricing of subnational credit. In Colombia, the Fiscal Transparency and Responsibility Law (2003) also tightened the regulations on the supply side. Lending to SNGs by financial institutions

and territorial development institutions must meet the conditions and limits of various regulations, such as Law 617 and Law 817. Otherwise, the credit contract is invalid and borrowed funds must be restituted promptly without interest or any other charges.

Ideally, any lending should be subject to at least some constraints in all four quadrants. Relying only on ex ante constraints, without ex post consequences, gives irresponsible borrowers and lenders a big incentive to get around the ex-ante rules and do transactions that will latter get bailed out, as happened in Brazil prior to the late 1990s. Relying only on ex post consequences allows irresponsible (and large) entities to build up such large debts that the national government will not have the political will to enforce the consequences, as it happened in Argentina in the late 1990s. Ex ante constraints are important in economies where the government's own major banks and financial institutions or where financial markets do not respond appropriately to indicators of risk. Under such conditions, credit-allocation decisions are driven more by considerations of political expediency than of fiscal prudence.

The ex-ante and ex post controls do not aim to minimize the debt financing, but rather to promote sustainable debt financing through a competitive and diversified subnational credit system. Debt financing is important and helpful for infrastructure development, where the assets created last longer than the terms of current taxation and transfers.

5.2 Broader public finance legislation

FRLs are not the only legal framework that impose fiscal discipline on SNGs. Some countries have adopted broader public finance laws such as a balanced budget law with effects similar to FRLs. In the federal system of the United States, each state in sets limits for itself and for its local governments. Legal frameworks, laws, and regulations vary by state. Some of the common elements include: debt financing must be for a public (not private) purpose; debt limits are specified in laws/state constitutions to avoid excessive borrowing; debt limits may not apply to bonds payable from a "special fund," but the issuance of such bonds follow a separate set of regulations; governmental accounting standards (GAAP) are established by the Governmental Accounting Standards Board (www.gasb.org) with each state determining what accounting standards they and their local governments will use; and all meetings of a majority of the members of a governing body of an issuer must be open to the public (Haines 2009). In the United States, markets play a vital role in fiscal surveillance.

In Poland the Public Finance Law (2005) limits SNG debt to no more than 60 percent its total revenues; SNG debt service as percent of its total revenue no more than 15 percent; if SNG debt as percent of revenue reaches 55 percent, then the debt service as percent of revenues cannot be more than 12 percent; and debt service needs to include guarantee payments for a given budget year even if the guarantees are not recalled.

The South African Municipal Finance Management Act, enacted in 2003, contains a new framework for municipal finance and borrowing. Chapter 13 of the Act spells out detailed criteria for interventions and recovery plans, specifies the role of national and provincial governments and courts in the insolvency mechanism, and outlines the fiscal and debt adjustment process. The act defines one set of fiscal indicators for "serious financial problems," and another for "persistent material breach of financial commitments." If the first set of triggers is met, the provincial government may intervene. Under the second set of triggers, provincial intervention is mandatory. Unsuccessful provincial intervention calls for national government intervention. Interwoven with these interventions, the municipal government can apply to the High Court to stay all legal proceedings against the municipal government, and to relieve, suspend or discharge financial obligations. Only courts can stay debt payments and discharge debt obligations.

From the experience of Australia, Brazil, Canada, and India, FRLs become an important institution as the previous existing public finance or other legislation had not been able to contain the fiscal risks including those of SNGs. FRLs become a vehicle of political debates in these countries where the broader macroeconomic environment and fiscal crises had made FRLs a more focused instrument for fiscal reforms. Colombia developed various laws to deal with SNG fiscal problems, and later the FRL of 2003 became a unifying that included key elements of the previous laws and also new elements. In Peru, the beginning of the decentralization in the early 2000s incorporated the lessons in Argentina and Brazil, and the FRL was enacted with a key objective of preventing fiscal risks of decentralization. Argentina tried to follow the South American trend in passing FRLs, but it has not developed the same national consensus in favor of fiscal sustainability; consequently its FRLs have not succeeded in instilling fiscal discipline.

5.3 Effects from an FRL

Since countries passed FRLs (some in the mid- to late 1990s and some in the 2000s), some evidence has accumulated on their effectiveness. Although political consensus for fiscal prudence is clearly a necessary condition to launch a successful FRL, the test of its effective implementation comes when another party comes to power or when the consensus otherwise breaks down, and then one sees whether the institution works to help the remaining stabilization champions restrain the fiscal excesses that fiscally irresponsible politicians might want. Because fiscal outcomes depend on many factors besides the FRL—GDP growth, terms of trade, international interest rates, etc.—the evidence allows us

at most to see whether there is an association of FRLs and fiscal outcomes.

Despite the complexities, to the extent that an FRL helps improve government finance and avoid over-indebtedness, one would expect to see improved fiscal outcomes on average in the periods after passage of an FRL. We therefore compared the growth of public debt in the five years before and five years after the passing of FRLs by subnational governments in Australia, Brazil, Canada, Colombia, and India. (Liu and Webb 2011 show the detailed data. Where individual states had FRLs—Australia, Canada and India—we examined the states' data separately for each law.) To leave out the impact of the global financial crisis of 2008-2009, which increased deficits everywhere, the analysis covered up to end 2007. In all countries examined, the post-FRL periods saw positive turnarounds in subnational fiscal performance (Brazil, Colombia, and India), or continuing improvement in fiscal consolidation (Australia and Canada).

In Australia, the SNG debt/GSDP was already declining in all five states in the sample in the pre-FRL five-year period, and this continued in the post-FRL period. The decline of debt/GSDP continued at a faster pace in two states after the law, and continued at a slower pace in the other three states. So attribution to the FRLs is not clear.

In Brazil, although the growth of debt/GDP for SNGs was positive for both the pre and post-FRL periods, the debt growth slowed down from 5.0 percent to 1.3 percent per year. This suggests a favorable effect of the FRL. The growth of federal debt also slowed.

In Canada, the six provinces that passed FRLs all had declining debt as shares of GSDP in the five years afterward. In British Colombia and Nova Scotia, this decline reversed the trend of rising debt as share of GSDP in the pre-FRL period; both had double-digit improvements in the rate of change of debt/GSDP. The other three provinces already had declining debt share of GSDP for the FRL. The debt/GSDP of Newfoundland and Labrador continued to decline in the post-FRL period at a faster speed, and Alberta, Ontario and New Brunswick continued their debt reduction but at a slower pace. The FRLs may have had a beneficial effect, but evidence was unclear.

In Colombia, the debt/GSDP ratio for SNGs rose from 2 percent in 1996 (the year before the traffic light Law 358) to 3.5 percent in 2001. After the FRL in 2003, the ratio declined to 1.5 percent by 2006. The FRL apparently contributed to the greater fiscal prudence.

In Indian states, the growth of debt /GSDP was slower in the post-FRL period than the pre-FRL period for 24 out of 26 states. Twenty-one of these 24 states had reversed the trend of increasing debt/GSDP in the pre-FRL period, which suggests a beneficial effect of the FRLs.

5.4 Shifting political situations shaped and tested the effectiveness of FRLs.

In Brazil, the FRL was passed in 2000 by a right-center national government with a strong commitment to fiscal stability and with a desire for a similar commitment in SNGs. A consensus-building process of discussions with the states helped create consensus in favor of fiscal responsibility. A key test came and was passed when a Labor government subsequently took power in 2002 and maintained that commitment, both for the national government and for enforcing the FRL for SNGs. In 2009 Brazil achieved an investment-grade credit rating. The fiscal reform and consolidation in Brazilian states are embedded in both the annual Programs of Fiscal Adjustment (PAF) between the federal government and the states since 1998 and the FRL since 2000. In 2001, the debt of most major municipalities was restructured in an identical fashion to the 1997 state debt restructuring. The debt restructurings of 1997 and 2001 were successful in improving the fiscal balances of states and municipalities. Within 18 months the states' negative primary balances turned positive, averaging one percent of GDP in recent years, thereby contributing to the improved macroeconomic conditions in Brazil. One state, Minas Gerais, challenged the FRL rules in 1999, provoking a crisis, but the national government carried out the prescribed sanctions, and the state got back into line. Implementation of the PAFs and FRL played a vital role in maintaining macroeconomic stability and avoiding a systemic financial crisis in Brazil (World Bank, 2008).

In India, introducing FRLs at the state and central government levels was associated with fiscal adjustment since the early 2000s.[13] Following their fiscal crises, the states of Karnataka and Punjab each enacted its own fiscal responsibility law in 2002, first in the country. The 13th Finance Commission played a key role in building consensus on the fiscal policy agenda. The implementation of FRL at the center widened the practice of rule-based public finances and enactment of FRLs by more states. These reforms, together with higher economic growth, introduction of VAT, and increase in the states' share in net central taxes, contributed to the improvement in the finance of the center and states from 2004/05 to 2007/08 (India Thirteenth Finance Commission, 2009). In the wake of the 2008/09 global crisis, the central government allowed the states to have additional market borrowing, increasing the limit of gross fiscal deficit to exceed the regular FRL targets without abandoning the principle of rules.

In Colombia, three periods are relevant: the period before the traffic-light law of 1997, the period with the traffic-light law but not the FRL, and the period after the passage of the FRL in 2003. The traffic-light law was passed in a moment

[13] Howes and Jha (2004) argued for FRLs with this rationale.

of enthusiasm for better fiscal policy at local levels, but the enthusiasm did not last and subnational debt problems recurred, along with national level fiscal problems. The FRL in 2003 reflected a reinvigorated commitment to fiscal responsibility and institutionalized it. The president elected in 2010 was from the same party, and that administration continued the fiscal policy commitments of its predecessor.

In Peru a centrist government passed the FRL in 2003 in order to make sure that its new fiscal decentralization program did not lead to macro fiscal problems. The next government in 2006, headed by the president and left-leaning party that had led the country into hyperinflation in the late 1980s, continued the same responsible fiscal policy that the FRL had started to institutionalize during the previous administration. Peru's sovereign foreign currency rating was upgraded to investment grade first by Fitch and Standard and Poor's in 2008 and then by Moody's in 2009, reflecting the strong growth performance, prudent fiscal and liability management, and the resulting improvement in solvency indicators. Subnational fiscal restraint has continued into the 2010s, although factors other than the FRL seem more at work and reforms in 2015 updated the mechanisms for fiscal reporting by SNGs.

In Argentina the 1999 FRL (and the provincial FRLs) stopped working in 2001 because of the extreme mismatch between the national government's fiscal and monetary policies in the context of a fixed exchange rate. Although the federal government's FRL lacked enforcement power, a bigger problem was the government's many legally inflexible spending obligations, most notably debt service and provincial transfers. The provincial FRLs also had shortcomings that would have been problematic even if the collapse at the top had not come first. They lacked enforcement power and a critical mass of states had not passed them. The 2004 FRL, while more comprehensive than its predecessor, again did not reflect a national consensus that fiscal prudence was worth political sacrifice. Compliance was incomplete from the start, sanctions were weak, and the binding features of the law were suspended when an economic slowdown came in 2008-2009. Fiscal mismanagement at the national level and in many provinces continued through the end of 2015, at which time a new government was elected.

In Canada, macroeconomic deterioration in the 1980s to early 1990s led to major changes in monetary and fiscal policy. After suffering from a lack of credibility, the Bank of Canada since the early 1990s committed to low and stable inflation. The attainment of inflation targeting overtime improved market and public confidence (Perrier and Armano 2000; Paulin 2000; OECD 2001). On the fiscal front, in the early 1990s, the importance of restoring sound public finances became increasingly clear at both the federal and provincial level. The fiscal framework adopted by the federal government and legislation by provinces helped the move toward more sustainable public finances (Traclet 2004).

In Australia, some states went ahead with fiscal reforms and enacted legislation committing to balanced budget or debt targets, prior to the federal enactment of Charter of Budget Honesty in 1998.

In summary, although the FRLs have not always been the main legal basis for long-term fiscal management, they have been a part of the overall institutional framework for long-term fiscal prudence in the cases where there was political commitment to that.

Macroeconomic developments and nationwide reforms can provide an overall impetus. Consistency with other parts of the macro-fiscal system, subnational fiscal reform often unfolds in the broader macroeconomic context. A common trait of successful FRLs for subnational governments is the commitment of the central government to its own fiscal prudence, which is usually reinforced by the application of the FRL to the national as well as subnational level.

Establishing an FRL or other institution to constrain SNG debt and deficits works only if the governments in question start from or are brought to a position where they do not have extreme debt overhang. In other words, if the service on existing debt is already too large to pay realistically in the political economic situation, this attenuates greatly the incentive from an FRL to behave with fiscal responsibility. Consequently, a set of SNG fiscal adjustment and debt rescheduling programs often must complement or precede the implementation of an FRL. To work, the programs must strike a balance between being sufficient to eliminate the debt overhang and being so generous as to seem to reward fiscal irresponsibility of the past (or to fiscally hamstring the national government). Brazil, Colombia, and India undertook SNG debt restructuring, separate from or preceding the FRL and important for its success.

The dynamics of subnational-central government interaction provides political momentum and stimulates discussion of fiscal reforms. Given the growing share of subnational finance in the consolidated public finance and the growing influence of political forces at the subnational level, often a subnational government can lead the fiscal reform, which has demonstration effect for national reform. In other cases, the national government passed the FRL for itself and encourage SNGs to pass their own FRLs.

Since fiscal responsibility with multiple players (national and subnational governments) is a coordination problem with multiple possible equilibria (Braun and Tommasi 2004), it depends on having a critical mass of states that voluntarily obey the rules and politically support the national government when it applies sanctions to enforce the rules. For instance, the fiscal sanction of Minas Gerais in 2000 helped assure that no other states would challenge the law and thus

was a critical step in the success of Brazil's FRL.

6. Conclusions

Although our evidence does not prove that FRLs are necessary or even sufficient for achieving fiscal prudence at multiple levels of government, the examples reviewed in this paper show that FRLs can help coordinate and sustain commitments to fiscal prudence. They are not a substitute for commitment and should not be viewed as ends in themselves. FRLs can make a positive contribution by adding to the collection of other measures to shore up a coalition of states with the central government in support of fiscal prudence. Although political consensus for fiscal prudence is clearly a necessary condition to launch a successful FRL, the test of its effective implementation has comes when the consensus weakens. Often the institution has helped the remaining stabilization champions restrain the fiscal excesses that the populists might want.

In designing an FRL, defining fiscal targets poses a special challenge. Many factors that influence the fiscal accounts of the SNGs are exogenous to the SNGs, such as interest and exchange rates. The national governments also mandate expenditure items and the intergovernmental fiscal frameworks may limit the taxation power of SNGs. Focusing on ratios where the SNGs have control over the denominator as well as the numerator (e.g., wage bill as a share of total spending) is more likely to have the desired effect than relying on ratios that are substantially influenced by exogenous factors.

A set of SNG fiscal adjustment and debt rescheduling programs often must complement or precede the implementation of an FRL. It is not realistic to expect SNGs with large debt overhang to comply with sustainable fiscal targets. On the other hand, in order for FRLs to provide credible incentives for fiscal prudence, the terms of restructuring cannot signal potential future bailouts. Therefore, there needs to be a balance between avoiding moral hazard and proving sufficient financial relief to ensure that the SNGs can realistically comply with FRLs.

Even when FRLs are effective, they cannot do the job alone. The potential contribution depends on how well it complements the rest of the institutional framework for SNG fiscal restraint—making labor and pension laws more flexible, giving subnational governments more taxing power, using rules for debt renegotiations to reduce the salary bill as a share of revenue, using financial sector regulation to restrain lending to SNGs, and commitment to hard budget constraints on SNGs. The experience shows the need to have both ex ante constraints on borrowing and ex post sanctions for over borrowing. Even beyond the network of specific fiscal rules, the deeper institutions and expectations need to motivate respect and enforcement of the rules (Braun and Tommasi 2004).

SNG borrowing for financing social and economic infrastructure can generate positive net social returns. FRL framework is not meant to eliminate credit market access by SNGs. The challenge is to design fiscal rules and framework that will achieve the dual objectives of expanding market access by SNG for financing economic growth and containing the risks of excessive borrowing.

Questions for future research include: How to set subnational along with national fiscal targets, either in FRLs or other public finance laws? How these targets relate to the threshold for fiscal and debt sustainability? How to construct escape clauses that will not become convenient evasion clauses in case of severe global or regional downturns? What kind of enforcement mechanism would ensure fiscal discipline, particularly in the absence of effective market systems? Over the longer periods of business and political cycles, can the effect of fiscal legislation be more accurately measured? How can institutions for fiscal discipline—FRLs, etc.—avoid making fiscal policy excessively pro-cyclical?

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