Debt rules and sanctions in comparative perspective

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[1] Helpful comments from Xiao Kezhou are appreciated.

I. INTRODUCTION

One of the proximate causes of the crisis in Europe, and indeed in many other parts of the globe, is that information on the build up of liabilities is not presented accurately, either to the market participants in general or to other levels of government. Some of this is due to game-play by SOEs and lower levels of government, seeking to circumvent scrutiny or debt limits. But some of this is also due to the asymmetric nature of contracts, e.g., for Public-Private-Partnerships (PPPs)[2], where the different parties try to maximize the rents that they are able to extract (including from the state and higher levels of government), or from the private parties concerned.

While country-specific mechanisms to handle sub-national liabilities reflect differences in institutional arrangements and legal constraints, including differing constitutional perspectives and foundations, incomplete information in an increasingly complex world can negate many, if not all, of the control mechanisms, including in the most advanced countries. Indeed, as we shall see in the Brazilian case, attempts to impose controls from the Center, or even through agreements, such as the Fiscal Responsibility Act of 1999, has led to sub-national responses that make it harder to track the spending at the sub-national level through the exercise of autonomy to implement independent budget information management systems. The

[2] There is a growing literature on the incentive problems associated with PPPs –see Danau and Vinella (2013); Ahmad, Bhattacharya, Vinella and Xiao (2014) and Vinella and Minervi (2014).

need to impose such clarity on standards and information generation is now seen in the Mexican case, although the implementation of a uniform framework for the generation of information has only just begun.

Section II examines the different mechanisms to control incentives to cheat on subnational debt, including that related to public sector enterprises, from a "political economy perspective," assuming that there is imperfect information. Section III builds on the scope for "game play" in relation to the usual mechanisms for controlling debt. With incomplete information, some of the options are not workable, and there needs to be a resort to a possible combination of the ideal type policy options. Section IV concludes.

II. LIMITING INCENTIVES TO CHEAT[3]

A key element in responsible management of liabilities is clarity as to the responsibility for spending. As discussed in Ahmad (2014) this involves not just the function carried out by a particular level of government—but also whether it was on behalf of another level—e.g., through earmarks or mandates. Moreover, it is important to be able to distinguish between the "economic" components—such as whether or not the wages are set nationally, and whether different levels of government hire the workers. It is also critical which level of government authorizes and finances the requisite investments against which liabilities are being generated

[3] This section draws extensively on Ahmad (2014).

(Dafflon 2006). Note that liabilities may also arise due to arrears on account of current and not just capital spending. These distinctions are rather important and imply that greater care needs to be taken in generating data and defining variable carefully, and rather more than the IMF's GFS categories or the OECD/UN's Classification of Functions of Government is likely to be needed. This is now being attempted systematically by the OECD (Bloechliger, 2014). There is a spate of literature drawing conclusions on intergovernmental issues erroneously relying on incomplete data from the IMF's GFS yearbook—this should be treated with extreme caution.

Similarly, in examining incentives on the revenue side, it is important to distinguish between own-source revenues over which a level of government may have control at the margin, and shared revenues that might accrue to the jurisdiction. Thus, the tax policy element involving jurisdictional controls over rates or bases at the margin is critical in ensuring whether or not a future liability can be financed or whether a sanction is credible (Ambrosiano and Bordignon, 2006). Whether or not the system of transfers automatically meets deficits greatly influences the incentives to incur and manage liabilities effectively.

An equally important issue is whether there are national or international standards in effect, and whether a local government has the mechanisms to circumvent these, e.g., with information systems under its control.

The international standards for the economic classification of public activities (the IMF's Government Financial System Manual (GFSM) together with the UN's functional classification, COFOG) provide a key for the tracking and reporting of expenditures, and for determining whether there have been any diversions of public monies for unauthorized purposes. This is essential even if there has been appropriation at a fairly aggregate level, in order to present consistent and comparable information to the policy makers or the public at large—particularly the markets that have to judge the relative ability of subnational entities to service the build-up of liabilities that may span several political cycles or decades.

In some cases, especially in unitary countries, the central government is responsible for establishing standards for the accounting and reporting systems of all levels of governments and usually is also responsible for their enforcement. The development of sound budget, accounting and reporting systems is a complex and time-consuming process and it would not be efficient or cost-effective for subnational governments to develop their accounting and information reporting systems on their own. Besides if sub-national governments were to establish their own government financial information management systems (GFMISs), it opens up the possibility of "game-playing", particularly in response to a tighter control over liabilities, e.g., as implied by the Fiscal Responsibility Legislation or debt management rules that might be imposed at the national or supranational level (as in the EU). The key to generating standardized information then becomes the

common chart of accounts that tracks the budget process in a common manner—facilitating the comparison across jurisdictions.

The role of standardized information is critical in establishing the effective operations of yardstick competition between jurisdictions within a country, and also across countries (along the lines suggested by Salmon, 2013). It is not enough to be able to rely solely on easily observable "outcome indicators" that reflect standards of living. Let us assume that jurisdictions A and B within a country (say Länder) or countries within a common currency area, such as the EU, have similar observable standards of living. However, jurisdiction A has managed to meet its obligations within the agreed Fiscal Responsibility framework including recognition of all future liabilities (e.g., Maastricht). Jurisdiction B also appears to have met the criteria, but has in fact done so only on a cash basis, i.e., not recognizing all the liabilities generated, or parked them in State-owned enterprises or even private companies (e.g., through PPPs, on which more later). This can lead to serious mistakes by the market that can contribute to the eventual imbalances that can become unsustainable (Ter-Minassian, 2014).

Relatively few countries utilize the full format of the IMF's Government Financial Statistics Manual 2001 or its recent revision (GFSM) for both the central as well as the subnational governments (in this regard the BRIC countries do better than the OECD, including the EU countries). The format is designed to ensure conformity of

the financial information with the System of National Accounts.[4] Multiple formats in Mexico at the Federal level and across the states make it difficult to generate standardized information for general government. This makes it problematic to ensure comparability across subnational entities or engender accountable competition across states. Note that ex-post information from the audit process, a couple of years ex-post facto, while useful is not sufficient for the purposes of active debt and liability management. Brazilian states, while not conforming to the GFSM2001, perform better than Mexico in that the Federation requires a standardized format to receive, report and report on Federal resources as well as their own resources. Mexico has now legislated standardized reporting and a common Chart of Accounts for sub-national operations, but this is not due to take effect until 2014, and it remains to be seen how these can be implemented with different GFMISs in different states. Canada has no plans or ability to require provinces to conform to national or international standards—which also means that it cannot generate GFSM compatible data for general government.

The likelihood of "game-play" by various levels of government or government agencies cannot be ruled out without a complete a complete and standardized format to categorize the cycle of revenues and expenses; in conjunction with a tracking of the cash flows; A typical problem is the inconsistent treatment of budget

[4] A number of countries use transition matrices for the reporting of central or general government information to the IMF in the GFSM2001 format. Pakistan, for example, reported data only for the budgetary central government in the latest issue of the GFS Manual. This is inadequate, as much of the social spending takes place at the subnational level. As seen in Ahmad, Bhattacharya, Vinella and Xiao (2014), even OECD countries do not conform to the standards—and this may be a factor in the current crisis.

coverage—with the frequent exclusion of spending of government agencies or liabilities parked in public enterprises.

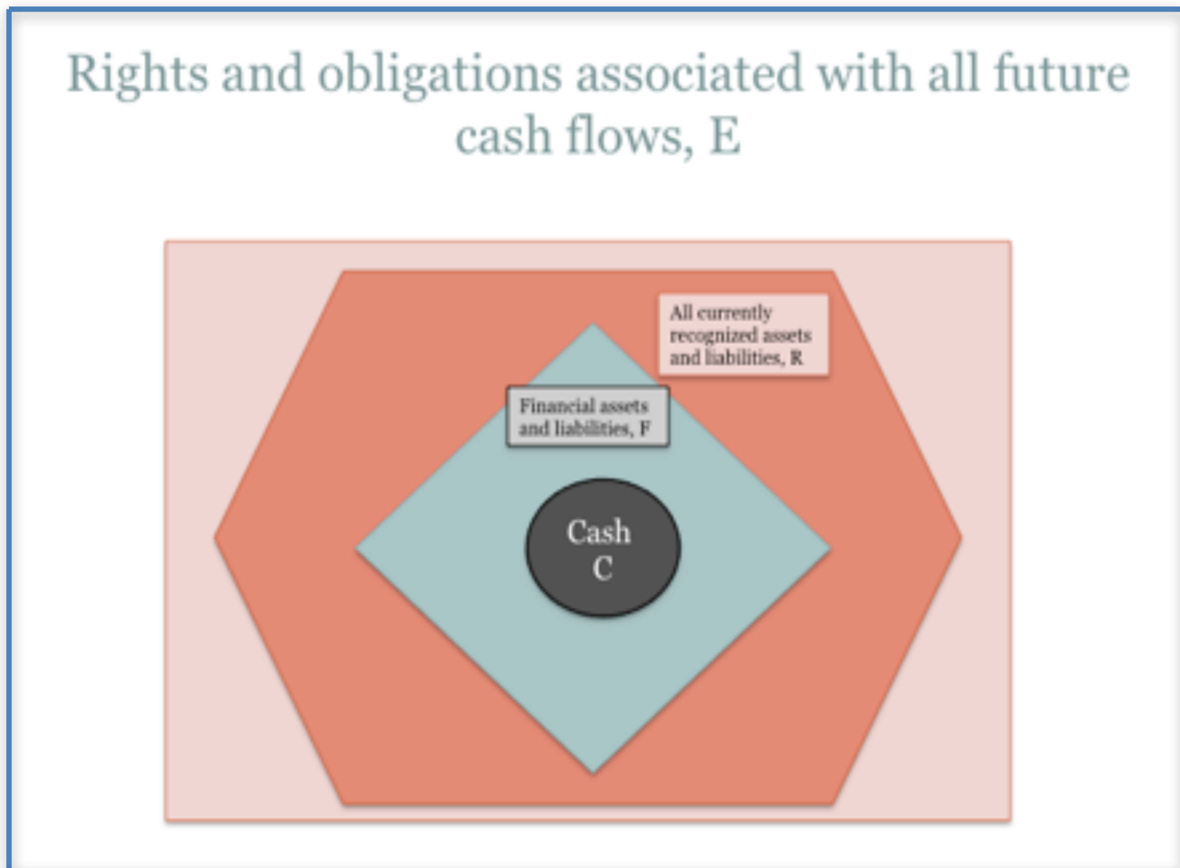
In the very simple example of Figure 1, the cash transactions of a government are shown as set C. This is a subset of F, which also includes financial assets and liabilities. In turn, F can be denoted as a sub-set of R, which also includes all currently assets and liabilities. It is relatively simple for governments to reduce deficits in cash (C) or financial assets (F), without affecting all recognized liabilities (R) or extended net worth based on future flows (E). For instance, (sub-national or national) governments could engage in game-play, by

- Selling non-financial assets in R, for cash in F;
- Assuming future pension liabilities in E, for cash and financial assets in F;
- Securitization C of future revenue streams F (common in Latin American local governments;
- Treating borrowing F as revenue C (several US States).

The sets C, F and R are consistent with the IMF's GFSM. These represent nested sets of information, and if presented in parallel with E, virtually removes the scope for game-play by governments at any level.

Standardized information is critical for any serious implementation of fiscal rules in multi-level countries/currency unions. This should be based on the consistent and systematic generation of information in the overlapping manner described above.

Figure 1



The importance of the GFSM cannot be over-stressed for the efficient management of finances in multi-level countries and in common markets/currency unions. The more complete agenda for the generation of accurate, complete and standardized information will have consequences for developing countries, and also for countries in the EU (such as Portugal and Spain) as they struggle to get to grips with the discovery of liabilities in the extended public sector as well as at the regional and subnational levels.

Difficulties with access to information and buildup of liabilities arise also from PPPs, that have been encouraged, including by international finance agencies, as a means of leveraging "private sector" expertise for public investment project, and also bypassing bureaucratic bottlenecks. This is believed to generate efficiencies, and improved value for money, especially at the subnational level. The expectation is that this will generate additional growth through the efficiencies and additional private finances that would be utilized.

The problem is that governments often see PPPs as a means of circumventing budget constraints, especially although not exclusively at the subnational level. This could generate legal obfuscations, and relevant official agencies or governments are either not fully aware of the liabilities, or the ability of the private partner to meet them. Sometimes, the issue of liability for full costs is avoided, often with respect to public infrastructure (highways and hospitals in Europe); and local governments only include the annual contractual cash payment on the budget, and generally only during the tenure of the concerned local government. Often, there is no provisioning for the eventual reversion of the assets to the public sector. Further, there is usually a continuation of public interventions with respect to prices or distribution.

There is also incomplete and asymmetric information, with costs and efforts for projects generally known only to the private partner, and significant incentives for either the private contractor or the government to renege (Danau and Vinella, 2012, Ahmad, Bhattacharya, Vinella and Xiao, 2014). An example of a growing recognition of limited commitment comes from the UK (which was in the forefront of the PPP

revolution). In the 2002-3 upgrading of the London Underground, Metronet the contracting consortium could not borrow the full amount of funds needed for the project. Consequently, Transport for London, the decentralized agency responsible guaranteed 95% of Metronet's debt obligations. Metronet failed, and the UK Government (Department of Transport) had to pay Transport for London a sum of £ 1.7 billion to enable it to meet the guarantee (House of Lords, 2010). The direct cost to taxpayers was estimated to be as high as £410million. Other examples from the UK, e.g., for wind farm projects, show that in these cases the private contribution was financed by complex financial instruments that are tantamount to debt—that has eventually to be taken over by the state.

As a result of the difficulties above, the International Accounting Standards Board (2011) has issued a new set of guidelines (IPSAS 32) [5] that force an upfront accounting for PPPs, and would significantly affect deficits and recognition of liabilities for general government—i.e., for both central and sub-central governments and related agencies. This ensures that the operator is effectively compensated for services rendered during the period of the concession period. It requires the government or granting public agency to recognize assets and liabilities in their financial statements, when the following are met:

- The government or granting public agency controls or regulates the services to be provided, the target beneficiaries or the price; and

[5] See IASB (2011), IPSAS 32. This standard is also likely to affect the guidelines of Eurostat that are not so tightly defined.

- If the grantor controls through ownership, beneficial entitlement or otherwise, a significant residual interest in the asset at the end of the arrangement.

In the schema of Figure 1, this would involve elements in the areas R and E. This avoids the situation where neither the public or private partner recognizes the asset/liability at the end of the period. Of course, as has been seen in Ireland and Spain recently (and with Mexican road in the early 1990s), even if there are no explicit guarantees by the federal or state governments and there is sufficient pressure on the banking system, it is likely that the state will assume a significant portion of the liabilities. Eurostat has resisted requiring EU governments to follow the new IPSAS rules, as it would lead to an immediate increase in the measured debt of member countries in a time of crisis. However, this type of "satisficing" rules weakens the overall framework under which governments and markets operate.

While cash-based systems are generally deemed insufficient to cover all aspects of budget execution, relatively few developing countries have the capability to operate accrual accounting. Nonetheless, many countries try to monitor the generation of arrears by registering commitments and recognition of liability. This usually entails the utilization of government financial information systems. These have been relatively expensive, but simpler versions are now becoming available for use in smaller jurisdictions—thus in principle permitting subnational administrations to also operate in an environment as conducive to overall accountability as the center—however, these systems require standardized generation of information (such as through the common budget classification described above.

Standardized generation of information was a major feature of the reform of subnational finances carried out in Brazil in the late 1990s, with substantial benefits for the management of the consolidated public finances. A Fiscal Responsibility Law for Brazil was approved in May 2000, which (1) introduced a golden rule provisions; (2) imposed new uniform accounting, planning, and transparency requirements on all levels of government. States and municipalities are now required to submit multiyear plans and reports on the use of resources from privatization, social security funds, and contingent liabilities; (3) attempted to enhance the credibility of the central government's no bailout commitment by prohibiting the central government from bailing out any member of the federation and the central bank from exchanging the debt securities of the states for federal public debt securities; and (4) increased the role given to the judiciary and the penal system in the enforcement of certain of its provisions, mandating prison sentences for illegal efforts to issue bonds and stipulating the dismissal of a mayor or governor if debt limits or personnel expenditure ratios are exceeded. However, it is becoming apparent that Brazilian states are moving quickly to establish their own GFMISs (see below). Consequently, the possibility of game-play is reintroduced, and the Fiscal Responsibility Legislation may degenerate into a system that effectively relies on administrative controls by the Federal Government, based on more aggregate information.

In Germany, all policy is made at the federal level and implementation is by the Länder, both for the revenue and spending sides. The decentralized tax administration with central policy making creates inefficiencies in the operation of taxes such as the VAT (the Court of Accounts regularly publishes estimates of leakages that result—running into several billions of Euros annually). Moreover, it removes major "own-source" of revenues at the sub-national level, except by variations in administration that in turn generates further inefficiencies. On the spending side, a federal law governs budgetary management at all levels of government, mandating the use of a detailed budgetary classification, a uniform cash-based accounting system, as well as a multiannual financial planning. The law also obliges all levels of government to provide the Financial Planning Council with all necessary information to monitor fiscal developments for the nation as a whole. *Länder* must provide all relevant information on behalf of their municipalities (Lienert, 2004). However, the subnational administration opens up possibilities of non-standard applications of the rules, and the Debt Brake legislation now requires that the standardized reporting must be complete by 2020. However, as discussed in the next section, the incentives appear to be moving in the opposite direction (see also Spahn, 2014).

In other federal countries, however, subnational governments can define their own budget and accounting systems. In some cases, lower levels of government are committed to follow internationally accepted budgeting and accounting standards. All U.S. states for instance are free to determine the way their budgets are prepared,

adopted, executed and reported. There is no constitutional or legislative requirement to harmonize accounting standards. However, state and local governments follow accounting standards developed by the private nonprofit Governmental Accounting Standards Board (GASB) in line with generally accepted accounting principles (GAAP). Similarly, Canadian provinces have voluntarily adhered to the standards of the Public Sector Accounting Board, the independent and authoritative standard-setting body for the public sector in Canada.

Some other countries, such as China, have established treasury single accounts at the local level as a mechanism not only to enhance cash management and prevent diversion of government resources and accumulation arrears but also to improve financial discipline and transparency of local government operations.[6] Despite a technical ban on direct sub-national borrowing, and strict allocations of credit by the Central Government, liabilities at the sub-national level have risen sharply due to borrowing by investment companies owned by the local governments. Also, and initial excitement about PPPs was tempered by the realization that this also involved a buildup of liabilities that would eventually end up at the doors of the Central Government as the most local administrations (provinces and below) lack the own-source revenues to service the liabilities, except through inefficient land sales. Consequently, China is now moving from an administrative control mechanism to a more rules-based system permitting access to credit, but with a strong emphasis on the generation of information and aligning sub-national incentives to make it work.

[6] The creation of a pure TSA implies that all government revenues must flow to the TSA and all spending must be made out of the TSA.

In a unitary state, Denmark, municipalities and counties are required to use the standard budgeting and accounting systems defined by the center. However, local councils are free to adapt the accounting system to suit their local needs. Information based on the standard accounting system is collected by the central authorities to monitor development in local governments' expenditure and revenue.

In Australia, Commonwealth States and Territories report a minimum amount of financial information in a uniform presentation framework (UPF). While many states and territories continue to prepare their budgets using different budget classification and accounting standards, each jurisdiction attaches data in the UPF format to their budgets.

In some other federations such as Mexico and Argentina, subnational governments have been totally free to define their own budget and accounting systems. As a result, local fiscal data is characterized by large inconsistencies in terms of how revenues and expenditures are reported in public accounts. In addition, the lack of an agreed framework or guidelines for presenting state-level fiscal data makes it very difficult to consolidate fiscal accounts at the national level. [7] In the absence of uniform budget and accounting standards, at a minimum a uniform reporting

[7] Mexico promoted higher transparency and publication of debt and fiscal statistics at the subnational level by states, by introducing in 2000 a requirement for states of holding credit ratings. Though to date, all states (with the exception of Campeche) have obtained at least two credit ratings from international credit rating agencies, the Mexican authorities recognize that more work remains to be done in the harmonization of accounting and reporting information by the states.

system should be in place at the local level. Credible sanctions for either noncompliance or untimely reporting should be introduced. However, the increasing practice has usually been to reach agreements with lower levels of government on financial reporting requirements. Agreements, which do not result in specific sanctions or penalties for breaches of the agreement, are generally ineffective. Mexico is however, moving towards the standardization of budget processes and reporting at the state level (under an agreement with the States to be implemented in 2014). But in the absence of an alignment of the GFMISs and agreement on the GFSM standard (not implemented even at the Federal level), and operation of a common chart of accounts by the independent GFMISs, it is hard to see how the new arrangements will be effective, even if sanctions were involved.

All of the above factors affect whether the consequences of subnational spending can be shifted to higher levels of government, or across generations, and whether there is an absence of a hard-budget constraint at a junior level of government (Rodden, Litvack, and Eskelund, 2003). This generally translates into weak or nonexistent control over borrowing. The borrowing might be explicit, for example, through issuance of debt or contracting of loans, or indirect, such as though the buildup of arrears or accounts payable. Under different constitutional arrangements, policy responses vary from enforced controls over subnational borrowing (generally in unitary states) to voluntary agreements or rules (in federations, as well as in

supranational conglomerations of states, such as the EU), to sole reliance on the strictures of the market.[8]

III. MAKING RULES WORK—A NEW PERSPECTIVE ON AN OLD STORY

In order to ensure macroeconomic stability, the central government has the responsibility of ensuring that overall risks, including debt, are kept within prudent limits. As discussed below, this places a responsibility on the center, even within federal systems, to ensure that prudential debt limits are not exceeded in aggregate —this poses difficult problems of determining the overall debt limits and then apportioning this among the different levels of government. This issue is reflected even in supranational administrations, such as the European Union's Stability and Growth Pact.[9] And considerable emphasis is needed on a standardized basis for budget appropriations and execution in order to ensure an orderly assessment of budgets and outcomes.[10]

[8] See Ter-Minassian and Craig (1997) for a typology, described in greater detail below.

[9] Indeed, as seen with the recent discussion of the debt limits in countries such as Germany, penalties under the pacts must be implemented to be credible; and there should also be a corresponding capability to monitor the compliance with the stipulations (as has recently been illustrated in the case of Greece).

[10] For example, this includes the economic classification as enunciated by the IMF's *Government Finance Statistics Manual* 2001, and the functional classification described by the UN's Classification of the Functions of Government.

Poterba and von Hagen (1999) examined the experience in Europe and view the set of rules and regulations according to which budgets are drafted, approved, and implemented as an important determinant of public sector deficits and debts. A similar result was found by von Hagen and Harden (1994), countries with more transparent budget procedures exhibited greater fiscal discipline in the 1980s and early 1990s. More recently, Escolano et al (2012) cast doubt as to the effectiveness of fiscal rules in the EU context.

In the absence of any limits on subnational borrowing, the central government faces the risk that local governments may try to free-ride on its efforts to stabilize the economy—effectively passing the costs of excessive borrowing on to other jurisdictions or future generations. Larger subnational governments that are "too big to be ignored" could hold the central government to ransom by bargaining for debt write-offs and other fiscal advantages.

Local governments' efforts to conduct anti-cyclical policies—if left unchecked—could also result in ratcheting up public spending. Policymakers are likely to borrow when the economy is slowing down, but may be reluctant to repay the debt when the economy is recovering. In addition, during recoveries voters and vested interest groups often put pressure on local authorities to increase the provision of public goods or decrease the tax burden, reducing any fiscal surpluses available for debt repayment (Buchanan and Tollison, 1987). Local politicians may even take advantage that taxpayers might not correctly discount their future tax liabilities and

pursue increasing borrowing strategies to mitigate the current tax bill (Moesen, 1993).

But above all, the need to control local borrowing arises from the common pool problem and the soft budget constraint it implies. The common pool problem stems from the separation of costs and benefits of public spending. If a certain public project predominantly benefits a particular jurisdiction but is financed through a common pool of taxes collected from all over the country, this jurisdiction will pay only a small fraction of the costs of the project while enjoying a large fraction of its benefits. This lack of full internalization of the costs of a project will result in excessive spending[11] and create a clear incentive for the regions to compete for federal transfers to finance their projects out of a common pool. Ideally, regions should compete on the basis of the quality of their proposed spending projects. Alternatively, they could signal that they are in particular need of federal assistance by running large budget deficits or accumulating unsustainable debts, and hope that the central government will eventually bail them out.

The possibility of a bailout does not stem from the existence of a common pool *per se*, but from the way in which it is administered. When transfers are allocated on the basis of *ex post* financial needs rather than *ex ante* characteristics, regions experiencing financial difficulties could be bailed out by the central government. In

[11] Also see Weingast et. al. (1981) who show that bargaining in a legislature comprised of regional representatives will lead to overprovision of spending programs with benefits concentrated in particular regions.

this case, the budget constraint faced by the subnational government becomes "soft." Thus subnational agencies have an incentive to undercollect taxes, and overspend, or even default on accumulated debts, as they expect the federal government to cover the financing gap. Moreover, lenders also lose incentives to police regional governments as they view their investments as protected by a federal government guarantee.[12]

These problems would not exist if central governments could credibly commit to never revising transfer allocations *ex post*, that is, to a no bailout policy. Unfortunately, such a policy stance, arguably optimal in the long run, is difficult to commit to in the short run especially if it involves a painful local default or a reduction in the provision of basic public services with schools being closed and pensions left unpaid. *Thus the sanction of not providing funding or transfers for basic services may just not be credible*. Persson and Tabellini (1996) and Bordignon et al. (2001) show formally that even a national government maximizing the federation's social welfare is likely to find it beneficial to bail out a financially distressed region. In addition, a default by one region can increase the cost of borrowing for all other regions in a federation, so neighbors themselves may be interested in providing the defaulting region with a bailout transfer.

A typology of classification of borrowing controls described by Ter-Minassian and Craig (1997). Table 1 for EU applications (from Ter-Minassian 2014) also refers to

[12] For more detailed discussion of soft budget constraints and their consequences see Kornai et al. (2003).

Table 1. EU Borrowing Frameworks—the recent position

Country	Reliance on market discipline	Internal Stability Pacts	Fiscal rules	Administrative controls
Austria state		X		
Austria local		X		
Belgium state		X		
Belgium local		X		
Estonia			Debt rule	
Finland	Municipal Finance Corporation		Budget balance over 4 years	
France	X		Current balance/ Current revenues	Ex- post
Germany state	X		Golden rule. Structural balance rule from 2020	
Germany local			Golden rule, with borrowing limits set by states	

Country	Reliance on market discipline	Internal Stability Pacts	Fiscal rules	Administrative controls
Greece			Debt service rule	Limits on debt
Ireland			Limit on total local debt	CG apportions total debt limit among municipalities
Italy		X	Budget balance rule	
Netherlands	X		Golden rule	
Portugal			Debt and debt service rules	
Slovakia			Golden rule and debt rule	
Slovenia			Golden rule and debt service rule	
Spain regions			Limits on structural deficit and debt, and expenditure rule	
Spain local			Same as for regions	

Source: Ter_Minassian (2014). The x's denote the mechanism used in specific countries, with details on the fiscal rules, where applicable.

(1) market discipline; (2) internal stability pacts or cooperation between different levels of government; (3) rules-based controls; and (4) administrative controls.

A. Market discipline

Some countries rely exclusively on capital markets to restrain subnational borrowing. In this case, the central government would not set any limits on subnational borrowing and local governments are free to decide amounts, sources and uses of borrowing. Provinces in Canada as well as U.S. states have the right to borrow with no central review or control. Similarly, in Argentina, all levels of government are permitted to borrow both domestically and abroad.[13]

Markets have been myopic, as in the case of the EU and the US subprime crises, and previously in Argentina and in many parts of the world. Often the anxiety to keep making profits overrides the possibility that they may be engaging in Ponzi schemes. National and local governments quite often exploit this incentive problem. While ratings agencies are ostensibly required to all the fiscal criteria described above—this is actually a very difficult task indeed. It has taken a great deal of specialized manpower from the Troika to sort out the extent of the liabilities in Greece—something that had been missed in typical Article IV consultations and even the more specialized ROSC. In most developing countries, nascent capital markets at the

[13] Nevertheless, since the crisis of 2001–2, banking regulations have been strengthened to prohibit commercial banks from extending new loans to the provinces and the nonfinancial public sector, and bilateral agreements have been sought to enhance coordination between different levels of government.

local level are inadequately developed to conceive of extensive reliance on market-based borrowing, or the ability of markets to discipline subnational government.

A number of conditions should be satisfied, however, for financial markets to exert effective discipline over subnational borrowing.[14] First, markets should be free and open, with no regulations on financial intermediaries (such as portfolio composition requirements) that could place subnational governments in a privileged-borrower position. Second, adequate information on the borrower's outstanding debt and repayment capacity should be available to potential lenders. Third, there should be no perceived chance of bailout of the lenders by the central government in cases of impending defaults. Finally, the borrower should have institutional structures, which ensure adequate policy responsiveness to market signals.

Many countries still use various forms of portfolio constraints on financial intermediaries to facilitate placement of government securities at reduced cost. Local governments, particularly in developing countries, maintain ownership or a controlling stake in financial institutions—such as regional banks—which provide a captive market for their borrowing. Furthermore, many countries have seen various forms of intervention by the central government (or the central bank) to prevent subnational government from defaulting and relatively short electoral cycles tend to make local politicians shortsighted and unresponsive to early warnings by the financial markets.

[14] Lane (1993).

Moreover, an important shortcoming of market discipline is that it relies on instruments—most notably, interest rate risk premia and sovereign credit ratings—that do not react smoothly to fiscal developments. Instead, they often provide an abrupt response to particularly poor fiscal choices, and as such do not provide very much advance warning for the need to restore fiscal discipline.

Market sanctions

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The problems created by the buildup of state debt in Brazil illustrate the risks of overly relying on market discipline. Yet even in a country like Canada, with well - developed and relatively transparent financial markets and little history of bailouts by the federal government, market discipline has not proven fully effective. Despite a clear deterioration in ratings and sizeable increases in risk premia on provincial bonds provincial debt has risen steadily over the 1990s and only in the last few years of that decade have the provincial government begun to design and implement fiscal retrenchment programs.

B. Fiscal rules

Fiscal rules had become increasingly popular in the aftermath of the Maastricht accord. Both federal and unitary states have begun to rely on various standing rules, specified in the constitution, or in laws to control subnational borrowing, to ensure sustainable macroeconomic policies. The sub-section that follows draws on Ahmad et al., 2006.

Numeric fiscal rules can undermine a fiscal consolidation effort if poorly designed, not adequately enforced, and easily reversible. We discuss some categories of fiscal rules.

Ceilings on debt or borrowing are in general simple and relatively easy to monitor. However, they can be circumvented by asset sales, debt transfers of to local public enterprises outside the governmental sector or by sale-and-lease-back operations. Debt ceilings should be defined in net terms to assess long-term fiscal sustainability, despite the uncertainty and volatility of the value of publicly held assets.

A *deficit target* has the advantage of simplicity and of being easily understood by the wider public, but could fail to prevent debt accumulation because of off-budget items. Fiscal rules targeting the overall budget deficit (for instance in Austria—within a domestic stability pact—Belgium, Spain, and most U.S. states) or operating deficit (for instance in Norway) are the most frequent. However, such rules can be met with both higher revenues and expenditures, with possible macroeconomic implications.

Expenditure rules place a ceiling on what governments can control most directly—the level of expenditure. These rules are conceptually simple, easy to monitor, and tackle the deficit problem at its source. However, common expenditure ceiling could be more difficult to implement at the subnational level than a deficit target and may

not necessarily prevent debt accumulation since spending could be hidden, or not recognized adequately (e.g., the examples from Figure 1).

The golden rule limits subnational governments' borrowing to investment purposes and is quite common in industrial countries. Intergenerational fairness provides the most forceful argument in favor of a golden rule. However, there is no guarantee that increased borrowing for infrastructure expenditure would be consistent with macroeconomic stability and debt sustainability. Moreover, it may not be desirable to allow borrowing for investments without an adequate rate of economic and social return. A golden rule was introduced in Spain in the law on local finances in Spain in the late 1980s, but did not prevent wasteful investment or indeed warn about the imminent crisis. Indeed, the IMF Article IV assessment in 2007 complemented Spain in keeping well within the Maastricht targets, just before the extent of the liabilities (with investments financed by regional banks) became apparent

Rules related to debt repayment capacity seek to "mimic" market discipline by linking limits on the indebtedness of subnational government to the projected debt service on the debt, or the other indicators of their debt-servicing capacity (such as past revenue or the tax base). These rules may be better suited to addressing considerations of long-term sustainability and intergenerational equity. In the mid-1990s, Colombia and Hungary established rules for subnational governments related to debt repayment capacity. These rules however might not be effective in

containing debt accumulation if there is inadequate recognition of the buildup of liabilities, including in the private sector, on behalf of the local governments.

In practice, the efficacy of fiscal rules for subnational governments (or for national governments in a supranational economic area, such as the EU) depends critically on the ability to measure and monitor the generation of debts and other liabilities. The literature in the US generally has a favorable assessment in the context of U.S. states.[16] However, as suggested above, more recent work suggests that the result is not so positive in the EU case (Escolano et al., 2012).

C. Administrative controls

In a number of countries, the central government is empowered with the direct control over the borrowing of subnational governments. This control may take alternative forms, including the setting of annual (or more frequent) limits on the overall debt of individual subnational jurisdictions (or some of its components, such as external borrowing); the review and authorization of individual borrowing operations (including approval of the terms and conditions of the operation); and/or the centralization of all government borrowing, with onlending to subnational governments. A major drawback of this approach is the moral hazard given the implicit or explicit guarantee that the central government's approval may confer to subnational borrowing. Administrative approval by the central government of individual borrowing operations of the subnational governments may well make it

[16] See for instance Bohn and Inman (1996), Inman (1996), and Poterba (1997).

more difficult for the former to refuse financial support to the latter in the event of impending defaults. Detailed administrative controls may also involve the central government in micro-level decisions (for example, about the financing of individual investment projects) that would be best left to the relevant subnational jurisdictions.

Several considerations could argue however in favor of direct central government controls on the external borrowing of subnational governments. First, external debt policy is closely linked with other macroeconomic policies (monetary and exchange rate policies and foreign reserve management) that are the responsibility of central-level authorities (in particular, the central bank). Second, a coordinated approach to foreign markets for sovereign borrowing is likely to result in better terms and conditions than a fragmented one. Third, a deterioration of foreign ratings for one or more of the subnational borrowers may well spill over to those of other borrowers, both public and private. Finally, foreign lenders often require an explicit central government guarantee for subnational borrowing or—at a minimum—expect an implicit guarantee.

Administrative sanctions

Different public sector entities could also enforce borrowing controls on subnational governments through administrative procedures. This responsibility is often delegated to higher levels of government or to the national ministry of finance considering its role in ensuring a sustainable fiscal position for the region or the general public sector.

Greater independence and credibility could be given to the enforcement process by delegating the monitoring as well as the imposition of sanctions and penalties to independent entities such as the national audit office or the judicial system. The national audit office could have the authority to fine institutions or persons, while the judicial system could impose prison sentences and loss of political immunity. In Brazil, the fiscal responsibility law has assigned to the judiciary the enforcement of certain of its provisions.

D. Cooperative approaches

Under a cooperative approach, borrowing controls for subnational governments are designed through a negotiation process between the federal and the lower levels of government. Subnational governments are actively involved in formulating macroeconomic objectives and key fiscal parameters, making them co-responsible for their achievement. Through this process, agreement is reached on the overall deficit targets for the general government, as well as on the main items of revenue and expenditure. Specific limits are then agreed upon for the financing requirements of individual subnational jurisdictions. Variants of this approach may be found in some European countries and in Australia.

Austria, for example, introduced in 1996 a consultation mechanism between the different levels of government to ensure that the overall deficit fell below 3 percent. Similarly, in Denmark annual borrowing ceilings for subnational governments are defined in (nonbinding) negotiations between the central government and two

associations of subnational governments in the context of the annual budget process. In Belgium, a Higher Finance Council (HFC) that comprises members nominated by the federal, community and regional levels, and the Belgian National Bank, provides recommendations about the borrowing requirements of different levels of government. The federal government then concludes agreements with lower levels to achieve these targets. The Belgian federal government as well as regional governments can impose sanctions and penalties on a subnational government that breaches borrowing limits. The action of the federal government focuses on limiting the borrowing capacity of a subnational government, while the regional government has the power to enforce, if necessary, expenditure reductions or tax increases..

The cooperative approach has clear advantages in promoting dialogue and exchange of information across various government levels. It also raises the awareness, at the subnational level, of the macroeconomic implications of their budgetary choices. However, this approach works best when the central government is strong and able to steer effectively the intergovernmental negotiations. This condition may not hold in many emerging markets.

Coorperative sanctions

Cooperative arrangements generally provide a weak enforcement mechanism as the imposition of sanctions and penalties tends to be subject to the unanimous decision of a body consisting of representatives from all government tiers. In Austria,

sanctions for noncompliance are imposed on subnational governments after a long process and only in cases of major deviations. The National Statistical Office is responsible for reporting major cases of noncompliance to the National Coordination Committee. A conciliation committee is then set up to seek an expert assessment on the extent of the deviation. Based on the expert opinion, the conciliation committee decides the sanctions to be applied (Balassone et al., 2003). From 2017 on, this is to be replaced by deficit, debt and expenditure rules in keeping with the EU model.

IV. Circumventing borrowing limits and effectiveness of sanctions

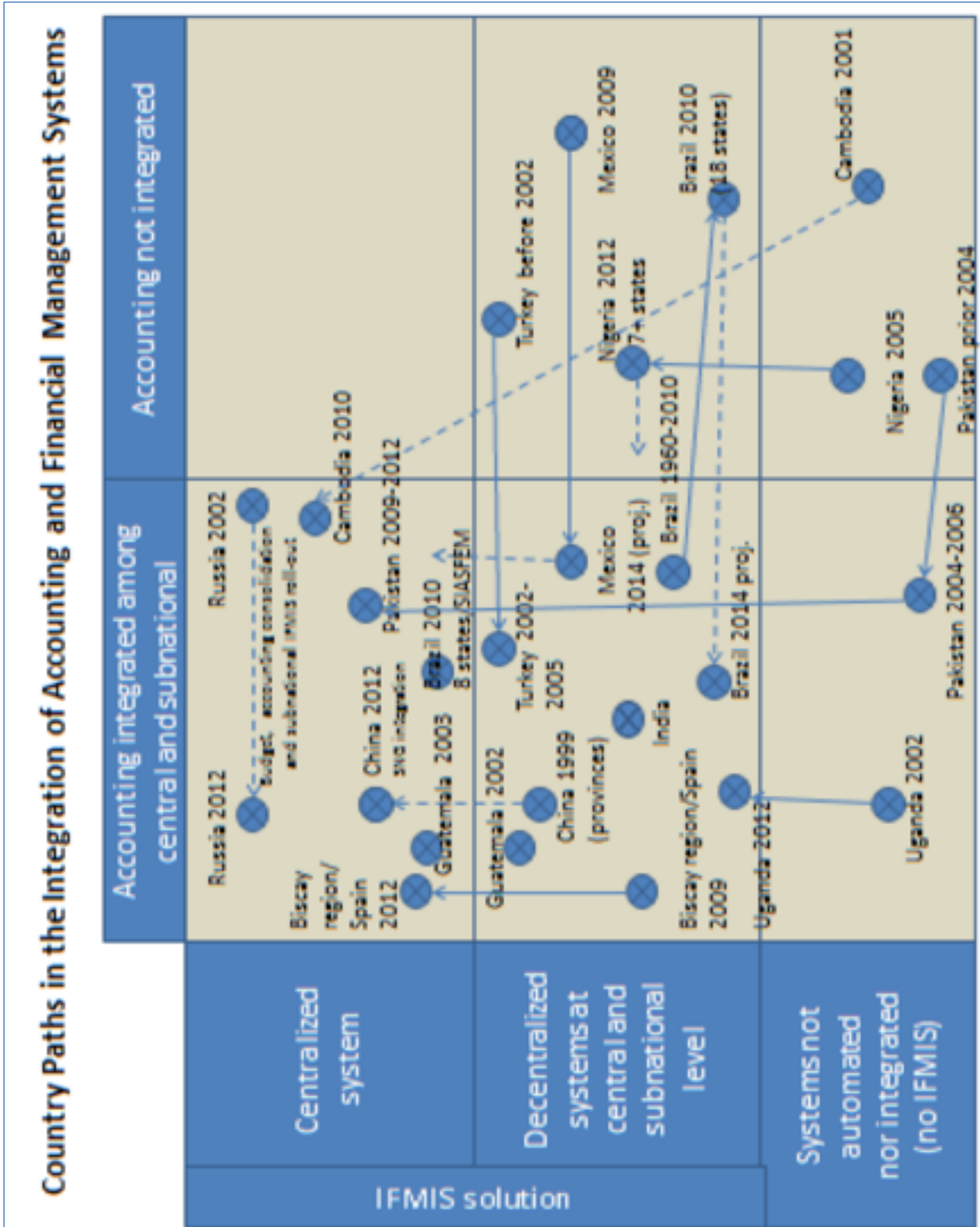
The key elements of circumventing administrative controls, binding rules, and cooperative agreements, arise though the weaknesses in information on the spending and liabilities being generated. Indeed, weaknesses in the intergovernmental structure may make it hard to implement the sanctions or even recognize the imbalances until there is a serious macroeconomic problem (as has been the case in the crisis in the EU).

Often the credibility of a system of sanctions depends on the relative political power of a jurisdiction in relation to the level of government imposing it—e.g., the EU was unable to impose the Maastricht limits on Germany or France. Similar issues may

arise in the context of large and important entities within countries—e.g., Catalunya —that may also harbor separatist tendencies.

The initial success of the Brazilian Fiscal Responsibility Legislation (FRL) lay in the fact that the Federal Government had a GFMIS (known as the SIAFI) together with a TSA that allowed it to monitor the spending of the sub-national entities in a coordinated and systematic manner—even if they did not fully comply with the GFSM framework to record and manage liabilities. However, increasingly the Brazilian states have chafed at the constraints and have invested in their own GFMISs (see Figure 2). Consequently, with the absence of a GFSM format agreed for all states, the Brazilian government is faced with a progressive deterioration in quality and timeliness of the information needed to make the FRL work effectively. Of course a meaningful reform would involve cleaning up spending and revenue assignments to remove distortions and internal barriers to trade

Figure 2. Potential movements in GFMISs given institutional changes in different countries



The Brazilian example has some lessons for the operations of the German Debt Break that was introduced through a Constitutional Amendment in 2009, in the light of a sharp increase in municipal debt. [17] The "debt brake" (*Schuldenbremse*) amounts to a full injunction to incur new debt for the States, including their municipalities, from 2020 on. This establishes a requirement for structurally balanced budgets, at all levels of government, although the Federal Government is permitted a margin of 0.35 percent of nominal GDP for macroeconomic stabilization.

As pointed out by Spahn (2014), the impact of the debt brake will be felt most severely at the State and local level, which, together, amount to 80 percent of all spending on public sector investment at present.[18] True, the debt brake does not imply a total ban on municipal debt, which would conflict with the European Charter[19], but it will be a considerable constraint mainly over the longer run. It allows municipalities to borrow only to roll over old debt.

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[17] The borrowings of municipalities have increased dramatically over the last decade, from €6,9 billion in 2000 to €40,5 billion in 2010.

[18] The impact of the debt brake on local governments is indirect through the constraint on State finances including municipalities. How to coordinate and control local sector borrowing is left to State legislation.

[19] The European Charter stipulates in Article 9 (8): "For the purpose of borrowing for capital investment, local authorities shall have access to the national capital market within the limits of the law."

The only alternative to local borrowing to finance new local infrastructure appears to be increased local taxation (or higher State grants[20]) since reducing social spending does not appear to be an option. Even preserving the level of replacement investments will be difficult under the debt brake in the light of escalating federal standards. Consequently, to make the debt brake work, there will need to be a better application of standards to measure and account for the buildup or change in liabilities. However, the resulting compression should lead to renewed debate about the reforms of the German intergovernmental system that were initiated in the last years of the last “grand coalition” (2004-7), but were not taken to completion.

[20] Higher State grants to municipalities would imply higher federal grants to the States, since the latter are severely constraint at the spending side of the budget (wage bill) and have practically no own taxing powers.

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