Policy Research Working Paper

5362

Managing Subnational Credit and Default Risks

Lili Liu Michael Waibel

The World Bank Poverty Reduction and Economic Management Network Economic Policy and Debt Department July 2010



Policy Research Working Paper 5362

Abstract

As a result of worldwide decentralization, subnational debt is rising. Subnational debt crises in major developing countries in the 1990s have led to strengthened regulatory frameworks for subnational borrowing and insolvency. With the fragility of the global recovery and increasing public debt, and the structural trends of decentralization and urbanization, it becomes more important to prudently manage subnational default risks. Although the regulatory frameworks share central features, the historical context and entry points for

reform drive variations across countries. Addressing soft budget constraints is integral to the regulatory framework. Ex ante fiscal rules for subnational governments attempt to limit default risks; ex post regulation predictably allocates default risk, while providing breathing space for orderly debt restructuring and fiscal adjustment, as well as the continued delivery of essential public services. The regulatory reforms are inseparable from the reform of broader intergovernmental fiscal systems and financial markets.

This paper—a product of the Economic Policy and Debt Department, Poverty Reduction and Economic Management Network—is part of a larger effort in the department to develop knowledge products on subnational finance and fiscal reforms. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at lliu@worldbank.org.

The Policy Research Working Paper Series disseminates the findings of work in progress to encourage the exchange of ideas about development issues. An objective of the series is to get the findings out quickly, even if the presentations are less than fully polished. The papers carry the names of the authors and should be cited accordingly. The findings, interpretations, and conclusions expressed in this paper are entirely those of the authors. They do not necessarily represent the views of the International Bank for Reconstruction and Development/World Bank and its affiliated organizations, or those of the Executive Directors of the World Bank or the governments they represent.

Managing Subnational Credit and Default Risks

Lili Liu and Michael Waibel¹

_

¹ Lili Liu is Lead Economist, Economic Policy and Debt Department at the World Bank; email: lliu@worldbank.org. Michael Waibel is at the University of Cambridge; email: mww27@cam.ac.uk. This paper was prepared for the Debt Management Facility Stakeholders Forum in Tunis, March 29-30 2010, and is forthcoming in "Sovereign Debt and the Financial Crisis," eds. Carlos A. Primo Braga and Gallina A. Vincelette. World Bank. 2010. The authors thank Brian Pinto, Gallina A. Vincelette, Michael De Angelis. Norbert Gaillard, and Juan Pedro Schmidt for their comments, which have been incorporated. All errors remain ours. The findings, interpretations, and conclusions expressed in this paper are entirely those of the authors. They do not necessarily represent the views of the International Bank for Reconstruction and Development/World Bank and its affiliated organizations, or those of the Executive Directors of the World Bank or the governments they represent.

1. Introduction

State and local government debt and guarantees for quasi-public agency debt have been growing in importance in developing countries. In Brazil, subnational debt accounts for about 30 percent of total public sector net debt.² The debt of Indian states is about 27 percent of GDP.³ Subnational debt financing has been historically important in the United States, with outstanding subnational debt at US\$2.36 trillion at the end of 2009.⁴ The increasing share of subnational debt of the consolidated public debt is not limited to federal countries. In China, urban investment companies have been borrowing from financial institutions to finance large-scale infrastructure investments.⁵ In France, a unitary country, subnational governments (SNGs) account for over 70 percent of public investment.

The increasing importance of subnational debt is due to, *inter alia*, increasing decentralization of spending responsibilities, taxation power, and borrowing capacity to SNGs. The unprecedented scale of urbanization in developing countries requires large-scale infrastructure investment financing to absorb massive influxes of rural population. Subnational borrowing finances infrastructure more equitably across multi-generational users of infrastructure services, as maturity of debt service paid for by the beneficiaries can match the economic life of the assets that the debt is financing. In practice however, SNGs in some countries also borrow for current expenditures.

With subnational borrowing come the risks of subnational insolvency. Systemic subnational insolvency may impede the growth of subnational capital markets, curtail fiscal space for infrastructure investments, and threaten the financial stability and core public services. Additionally such situations may create pressures on the central government to provide financial assistance to assure the continuing provision of essential public services. More autonomy for SNG increases the need for strong regulation for fiscal responsibility. During the 1990s there were widespread subnational debt crises in countries such as Argentina, Brazil, Mexico and Russia, which have led to reforms to strengthen regulatory frameworks for subnational borrowing and insolvency.

The global financial crisis has had a profound impact on subnational finance across countries (Canuto and Liu, 2010a). Subnational finances deteriorated across a broad range of advanced, middle income and low income countries, although the degree of impact has varied. Rating agencies viewed the impact of economic downturn on the credit qualities of SNG as significant due to declines in the tax base, expenditure pressures or rigidities, and increasing and more

² The term *subnational* in this paper refers to all tiers of government and public entities below the federal or central government. Subnational entities include states, counties, cities, towns, public utility companies, and other special-purpose public entities that have the capacity to incur debt. In Brazil, net debt is the difference between the gross debt and assets. Data as of December 2009 (www.bcb.gov.br/?FISCPOLICY).

³ As of December 2009 (<u>www.rbi.org.in</u>). The debt number would be higher if debt on the balance sheets of companies such as power and water, which are wholly or largely owned by the states, is included.

⁴ www.federalreserve.gov.

⁵ Liu (2008).

⁶ In a legal sense, *subnational insolvency* refers to the inability to pay debts as they fall due; however, details of the definition of "insolvency" vary across countries. In addition to default (failure to pay according to the terms of the debt instrument), insolvency is characterized by a genuine, and not merely temporary, shortfall of resources to service debt. See Liu and Waibel (2009).

expensive debt.⁷ With the fragility of the global recovery and increasing public debt, it becomes even more important to prudently manage subnational default risks. Beyond the current crisis, the structural trends of decentralization and urbanization are expected to continue with force, requiring prudent management of subnational default risks.

This paper draws lessons that may be gleaned from previous episodes of subnational financial distress and their interaction with sovereign defaults. We pay particular attention to the legal and institutional principles underpinning the debt restructuring and fiscal adjustment process in subnational insolvency proceedings. Looking across countries, regulatory frameworks for subnational insolvency share central features, though important variations are explained by the historical context and entry points for reform. An important objective of the regulatory framework is to address soft budget constraint and the problem of overgrazing of the common resources by SNGs. While fiscal rules for SNG or ex ante regulation attempt to limit the risk of subnational defaults, ex post regulation predictably allocates default risk, while providing breathing space for orderly debt restructuring and fiscal adjustment, as well as the continued delivery of essential public services. However, ex ante and ex post regulatory systems alone cannot assure the sustainability of SNG debt. Intergovernmental fiscal systems and financial market development, though outside the scope of this paper, are equally important.

The rest of the paper is structured as follows. Section 2 presents the motivation and rationale for regulating subnational debt financing. This motivation is country-specific and shapes the design. Section 3 summarizes regulatory frameworks for subnational borrowing based on cross-country experiences focusing on fiscal rules for SNG with respect to debt issuing procedures, specifying purpose, types, amount, and procedures of debt financing. Section 4 explores the key issues in designing insolvency mechanisms, encapsulated in the trade-off between protecting creditor's contractual rights and maintaining minimum public services. Section 5 presents concluding remarks and draws policy lessons.

2. Rationale for Regulating Subnational Debt Financing

The development of regulatory frameworks for subnational debt financing in developing countries such as Brazil, India, Mexico and Russia has been in response to the subnational fiscal stress and debt crises there of the 1990s. Some newly decentralizing countries such as Peru developed SNG debt financing frameworks while initiating decentralization based on lessons learned from other countries on the fiscal risks associated with decentralization. Developed countries such as France and the United States have had their own experiences of subnational insolvency which led to the establishment of systems to regulate the risks.

Subnational debt crises

Although expenditure-revenue imbalances may cause the development of subnational fiscal stress, the regulatory framework for debt financing profoundly affects the fiscal sustainability of SNG, because accumulation of the fiscal deficits is feasible only when they have been financed. Such financing can take multiple forms, including direct borrowing as well as running arrears.

⁷ Fitch 2009, Moody's 2010, S&P 2010.

Unregulated subnational borrowing grew rapidly in countries such as Hungary and Russia in the 1990s, contributing to subnational fiscal stress. Borrowing by SNGs in Hungary and Russia was also facilitated by decentralization, which granted substantial autonomy in debt financing to SNGs but failed to impose hard budget constraints.

Unregulated borrowing is particularly risky in an uncertain macroeconomic environment, as illustrated by the subnational debt crises in Russia where at least 57 of 89 regional governments defaulted on debt payments from 1998 to 2001. Unfettered market access by subnational borrowers, especially in newly minted, speculative, and unregulated security markets, can outpace the development of sound revenue streams and a regulatory framework. In particular, foreign borrowing in an uncertain macroeconomic environment with the risk of currency speculation can be costly (see Alam, Titov, and Petersen 2004). Because of the effect of macroeconomic policies, including interest rates and exchange rates on subnational fiscal profiles, the rating of the sovereign typically binds the ratings of its subnational entities.⁸

The fiscal deficit itself may not be a problem if borrowing finances capital investment and economic growth. However, SNGs borrowed heavily to finance substantial operating deficits in countries such as Hungary, India, and Russia in the 1990s, leading to unsustainable debt paths. In India, much of the growth in fiscal deficits of states in the late 1990s was driven by borrowing to finance revenue deficits; for example, at the height of crisis, in some states more than 70 percent of new borrowing was merely to refinance existing debt. 10

Furthermore, certain debt profiles of SNGs can have inherent rollover risks, which are exacerbated by macroeconomic and financial shocks. Before the macroeconomic crisis in Mexico in the mid 1990s and in Russia in the late 1990s, SNGs in these countries had risky debt profiles, i.e., short maturities, high debt service ratios, and variable interest rates. The macroeconomic crisis exposed the vulnerability of SNGs to these fiscal positions and triggered widespread subnational debt crises. ¹¹

Finally, implicit or contingent liabilities have been a major source of fiscal deterioration in various developing countries. In the late 1990s, guarantees by Indian states to support market borrowing of loss-making public sector undertakings, a contingent liability, grew rapidly. Early episodes of subnational debt development in the 1840s in the United States show how contingent liabilities contributed to the states' debt crisis (Wallis, 2004). Important sources of implicit or

⁸ For how sovereign ratings affect subsovereign ratings, see Gaillard (2009). For how international rating agencies rate subnational creditworthiness, see Liu and Tan (2009).

⁹ This statement assumes, however, that economic growth translates into increased capacity to service debt, which may not happen if a subnational government is unable to exploit its growing tax base. Then, borrowing can still provoke a fiscal crisis, even when the proceeds have been put to good use. This also assumes the general government debt is compatible with market financing capacity without crowding out private demands.

Inchovichina, Liu, and Nagarajan (2007) analyze key factors influencing subnational fiscal sustainability. Revenue deficit is the amount of current expenditure (such as wages, pension outlays, subsidies, transfers, and operation and maintenance) net of total revenues.

^{1f}. From 1998 to 2001, at least 57 regional governments out of 89 defaulted in Russia (Alam, Titov, and Peterson, 2004). In 2001, six years after the peso crisis, 60 percent of SNGs in Mexico still struggled financially (Schwarcz 2002). One interesting difference is that SNGs were allowed to borrow overseas in Russia, whereas such borrowing was prohibited in Mexico. However, SNGs in Mexico were not insulated from foreign exchange risks, because the risks were transmitted through inflation and interest rates.

contingent liabilities include: off-budget entities wholly or largely owned by SNGs, subnational civil-servant pension liabilities under the pay-as-you-go system, nonperforming assets of financial institutions owned by SNGs, and debt financing through arrears under the cash-accounting system.¹²

Soft budget constraint

Subnational debt financing behavior is strongly influenced by the design of the intergovernmental fiscal system and the structure of financial markets. Market participants may tolerate unsustainable fiscal policy of a subnational government if the history backs their perception that the central government implicitly guarantees the debt service of the subnational government (Ianchovichina, Liu, and Nagarajan 2007). A gap-filling grant transfer system for example induces SNGs to run fiscal deficit by reduced revenue efforts and increased incentives to spend. Lack of own-source revenues for SNGs in many countries undermines the ability of SNGs for fiscal correction, a core element of any debt restructuring proceedings. Furthermore, a competitive capital market prices risks and returns of subnational lending, helping screen and discipline subnational borrowing from the capital market side. This market discipline could be undermined by the dominance of lending to SNG by public banks. Abolishing central government explicit guarantees for SNG debt is not sufficient for nurturing the development of capital markets, as a range of factors including implicit guarantees affect demand and supply in the municipal finance market.

Soft budget constraints, a key aspect of fiscal incentives, allow SNGs to live beyond their means, negating competitive incentives and fostering corruption and rent-seeking.¹³ Unconditional bailouts of financially-troubled subnational entities by the national government create moral hazard and the implication of a sovereign guaranty and encourage fiscal irresponsibility and imprudent lending. In the United States, the no-bailout principle was established during the first subnational defaults in the 1840s (English 1996, Wallis 2004). In Hungary, one motivation for establishing a regulatory framework for subnational bankruptcy was to reduce moral hazard, impose a hard budget constraint for municipalities, shrink contingent liabilities of the central government, and change the perception among lenders that there was an implied sovereign guaranty. After repeatedly bailing out SNG, Brazil followed a stricter approach, demanding subnational fiscal adjustment in return for fiscal relief (Box 1).

Testing the predications implied by the common-pool game in federations where SNGs are more likely to have higher deficits because they do not internalize the macroeconomic effects of fiscal profligacy, Khemani (2002) found that in 15 major states of India over the period 1972-1995, states have substantially higher spending and deficits (higher by about 10 percent of the sample average) when their government belongs to the same party as that governing at the center; and that intergovernmental grants tend to have a counter-intuitive negative effect on spending and deficits. This underscores the overall importance of political institutions in determining the consolidated government deficit, relative to specific rules of intergovernmental transfers. A substantial reform undertaken by Indian states in early to mid 2000s was the enactment of fiscal responsibility legislation (Thirteenth Finance Commission, 2009).

¹² For a summary of hidden and contingent liabilities in several developing countries, see Liu and Waibel (2006).

¹³ See Weingast (2007) for a summary of the literature within the context of second-generation fiscal federalism.

Box 1: Brazil States Debt Crisis and Reforms

Brazil has substantially strengthened ex ante regulations in response to repeated waves of subnational debt crises. Statutory controls on subnational borrowing have always existed in Brazil—controls on new borrowing and on the total stock of debt, expressed as percentages of revenue. But they had loopholes, and SNGs had been creative in evading them. The regulations were strengthened in the late 1990s, leading to the unifying framework in 2000. The federal government bailed out subnational debtors in earlier crises, but the resolution of the third debt crisis in 1997 was conditioned on states undertaking difficult fiscal and structural reforms. The avoidance of unconditional bailouts in 1997 was to resolve moral hazard. The strengthened ex ante borrowing regulations were embedded in the debt restructuring agreements between 25 states and the federal government in 1997, sanctioned by legislation. The Fiscal Responsibility Law in 2000 consolidated various pieces of legislation into one unifying framework.

Source: Dillinger (2002). Webb (2004).

Legal and regulatory frameworks for SNG debt financing serve as a commitment device to allow SNGs to access the financial market within a common framework. An individual subnational government may adopt unsustainable fiscal policies for a variety of reasons. Inherent incentives exist for a subnational government to free-ride—it bears only part of the cost of unsustainable fiscal policies, but it alone receives all benefits. Realizing these benefits depends on good fiscal behavior by most of the other SNGs. So collectively governments benefit from a system of rules to discourage such defection and free-riding. This commitment device controls and coordinates SNGs across space in various localities and across time to commit future governments to a common borrowing framework (Webb 2004).

Developing regulatory frameworks

The motivations for developing regulatory frameworks differ significantly across countries, reflecting a country's political, economic, and legal and historical context, which in combination with triggering events results in country-specific motivations. These differences affect the entry point for reform, the framework's design, and its relation to subnational borrowing legislation. In particular, the frameworks for SNG debt financing and restructuring define the respective roles of different branches and tiers of the government, and a country's political and economic history plays a key role in shaping the design.

For example, Chapter 9 of the Bankruptcy Code in the United States (1937) was conceived with the narrow objective of resolving the holdout problem, ¹⁴ against the background of a mature intergovernmental fiscal system and a market-oriented financial system. Although the U.S. system offers a valuable reference, it cannot be copied without care. The Municipal Finance Management Act of South Africa (2003) was intended to address a number of challenges including the development of a diversified and competitive subnational credit market. The

¹⁴ Holdout problem occurs when individual creditors who have different interests and security provisions for the debt owed to them and may often demand preferential treatment and threaten to derail debt restructurings voluntarily negotiated between a majority of creditors and the subnational debtor. See McConnell and Picker (1993)

Hungarian Law on Municipal Debt Adjustment (1996) was to impose a hard budget constraint on SNGs, to establish a transparent rule-based debt restructuring procedure without ad hoc political interventions, and to rebut the presumption of any implied sovereign guaranty.

SNG default risk can be managed through two channels: first, fiscal rules for SNGs with respect to debt financing, i.e., ex ante regulation of borrowing and monitoring of the subnational fiscal position; second, ex post debt restructuring in the event that SNGs become insolvent. Regulatory frameworks in many countries are still evolving, and the pace of putting together a full range of regulatory elements varies.

Ex ante fiscal rules and ex post insolvency mechanisms complement each other. Insolvency mechanisms increase the pain of circumventing ex ante fiscal rules for lenders and SNG borrowers, thereby enhancing the effectiveness of preventive rules. Without insolvency mechanisms, ex ante regulations could turn to excessive administrative control and game playing between the central government and SNGs. Overreliance on ex ante regulations could limit the role of markets in monitoring subnational borrowing and debt. In Canada and the United States, markets play a vital role in the surveillance of subnational borrowing. Although, it takes time to develop market systems, developing countries can gradually foster the role of the market in the design of regulatory frameworks. In the design of regulatory frameworks.

3. Fiscal Rules for Subnational Debt Financing: Ex ante Regulation

Fiscal rules for SNG debt financing deal with debt issuing procedures, specifying purpose, types, amount, procedures and monitoring of debt financing. Regulatory frameworks for subnational debt financing have been strengthened in various developing countries. Box 1 presents country examples. Box 2 also includes examples from developed countries with the United States having the longest history of regulatory frameworks.

Box 2: Fiscal Rules for SNG Debt Financing – Country Examples

- Brazil: Fiscal Responsibility Law 2000
- Colombia: Law 358 (1997); Law 617 (2000); Fiscal Transparency and Responsibility Law (2003)
- France: various borrowing regulations and balanced budget rules
- India: States Fiscal Responsibility and Budget Management Acts, following 12th Finance Commission
- *Mexico*: Subnational borrowing framework 2000
- Peru: Fiscal Responsibility and Transparency Law (2003), General Debt Law (2005)
- *Poland*: Public Finance Law, 2005
- South Africa: Municipal Finance Management Act, 2003
- Turkey: Various regulations since 2000
- *US*: states regulations (e.g., limit deficit financing)

Source: Liu and Waibel (2008) and ongoing research by the authors.

¹⁵ The focus in this chapter is on demand-side regulation. On the supply side, various elements of the financial system, including competition and prudential regulations, come into play.

When South Africa restructured its legal framework for municipal finance and management system in the postapartheid period, a clear objective was to nurture a competitive private municipal credit market in which private investors play a dominant role (South Africa National Treasury 2001: 192).

Liu and Waibel (2008) point out several key common elements in ex ante borrowing regulation across several countries. First, borrowing is allowed only for long-term public capital investments. Some European countries, such as Germany and the United Kingdom, have enacted fiscal rules of a balanced budget net of public investment (the "golden rule"). This element links back to the earlier idea that only such borrowing is beneficial (and may be in the interest of future generations). A number of middle-income countries, such as Brazil, Colombia, India, Peru, Russia, and South Africa, have recently adopted the golden rule. 18

Second, the frameworks specify limits on key fiscal variables, such as fiscal deficit, primary deficit, debt service ratios, and ceilings on guarantees issued. In India, fiscal responsibility legislation is mandatory for all states by the 12th Finance Commission, with the revenue deficit to be eliminated and the fiscal deficit to be reduced to 3 percent of gross state domestic product (GSDP) by fiscal year 2009. Colombia established a traffic-light system to regulate subnational borrowing. SNGs rated in the red-light zone are prohibited from borrowing, and those in the green-light zone are permitted to borrow. The *red-light zone* is reached when the interest to operational savings ratio is greater than 40 percent and the debt stock to current revenues ratio is greater than 80 percent. In Brazil, the debt restructuring agreements between the federal government and the states established a comprehensive list of fiscal targets including debt-to-revenue ratio, primary balance, personnel spending, and a list of state-owned enterprises or banks to be privatized or concessioned. In the United States, each state sets fiscal limits for itself and for its local governments.

Third, several legal frameworks, such as those in Brazil, Colombia, and Peru, include procedural requirements that SNGs establish a medium-term fiscal framework and a transparent budgetary process. This requirement is intended 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.

Furthermore, fiscal transparency is increasingly becoming an integrated part of fiscal frameworks. Transparency includes having an independent audit of subnational financial accounts, making periodic public disclosures of key fiscal data, exposing hidden liabilities, and moving off-budget liabilities on budget. In Brazil, for example, 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 made available on the Web site of the Ministry of the Treasury). 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.

¹⁷ Short-term borrowing for working capital is still allowed, but provisions should be built in to prevent governments from rollover borrowing as a way of long-term borrowing for operating deficits.

¹⁸ See Liu and Waibel (2008) for details.

¹⁹ Revenue deficit is the difference between total revenues and current expenditures. The fiscal targets were relaxed in response to the 2008-09 global financial crisis (www.rbi.org.in).

²⁰ Law 358 in 1997 and the Fiscal Transparency and Responsibility Law in 2003.

9

Fiscal rules for SNG debt financing can be supported by regulations on lenders. 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 subnationals 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.

Control and monitoring mechanisms, as part of ex ante fiscal rules, can substantially reduce the risk of insolvency. The following contrasts two examples: France, a unitary country, and the State of Ohio in the United States, a federal country where local governments are political divisions of the states.

<u>France</u>: Notwithstanding considerable fiscal autonomy of SNGs, the state exercises strong supervision and monitoring of SNG financial accounts through three institutions: the Prefect, the Regional Chamber of Accounts "chambres regionales des comptes" (CRC), and Public Accountants. In the case of budget deficit, late approval or non-budgeted mandatory expenses (such as debt service), the prefect (and every interested person) can refer the case to CRC. If the SNG does not follow the statement made by the CRC, the Prefect can adopt the budget. The CRC also exercises financial supervision.

The key element of internal control is to separate the decision making, embodied in the president of the local government council, who contracts expenditure, from the actual payments made by the public accountant, who is part of the central government. This means that there are two sets of departmental accounts that must tally. Public accountants themselves are subject to audit and control by the central government.

<u>Ohio State</u>: The Fiscal Watch Program in Ohio implemented by the Office of Auditor of State acts as an early warning system to prevent local governments, including counties, municipalities, school districts, state universities and colleges, from slipping into fiscal distress.²¹ A local government that is approaching a state of fiscal emergency as defined by specific financial indicators will be placed under the fiscal watch program.

The local government under the program takes fiscal corrective actions. The fiscal watch continues to be in effect until the auditor determines that the conditions are no longer present and cancels the watch, or until the auditor determines that the local government be placed under the fiscal emergency program under the pre-defined fiscal indicators. A commission will be formed for a local government under the fiscal emergency program, to assist in preparing and implementing a long-tem financial recovery plan accepted by both the local government and the commission. The Auditor of State's Office serves as financial supervisor to the commission and provides technical support and advice. The Auditor of State's Office also examines the existing

_

²¹ http://www.auditor.state.oh.us.

system of governmental accounting and reporting as well as identifies the improvements needed to be made in a report.

The commission stops its activity under two conditions: (1) the local government has been terminated from fiscal emergency conditions that prompted the initial declaration and made the necessary improvements in its accounting and reporting system; or (2) the local government has a plan in place, which is intended to eliminate fiscal emergency condition and satisfy the improvements within two years. If the fiscal emergency is terminated prior to these conditions being met, the Auditor of State is required to monitor the progress of the government to insure full implementation of an effective accounting system and the complete elimination of the emergency conditions.

4. Regulatory Frameworks for Subnational Debt Financing: Insolvency Mechanisms

Ex post regulation—that is, subnational insolvency mechanisms—deals with insolvent SNGs.²² Notwithstanding fiscal rules for ex ante control, defaults can happen owing to a subnational's own fiscal mismanagement or macroeconomic and exogenous shocks. A well-designed insolvency mechanism serves multiple objectives: to enforce hard budget constraints on SNGs; to maintain essential services while restructuring debt; and to restore the financial health of the subnational government so that it may reenter the financial market.

The need for a collective framework for resolving debt claims is driven by conflicts between creditors and debtor, and among creditors. Individual creditors may have different interests and security provisions for the debt owed to them and may often demand preferential treatment and threaten to derail debt restructurings voluntarily negotiated between a majority of creditors and the subnational debtor—the so-called holdout problem (McConnell and Picker, 1993). Individual ad hoc negotiations are costly, impracticable, and harmful to the interests of a majority of creditors. The holdout problem is not as serious if debts are concentrated in a few banks. However, a collective framework for insolvency restructuring takes on more importance as the subnational bond markets develop—with thousands of creditors.

Clear creditor remedies allow collective enforcement and facilitate efficient debt adjustment. Creditors' remedies in contract laws, instead of bankruptcy mechanisms, are effective to enforce discrete unpaid obligations. However, individual lawsuits or negotiations become ineffective if there is a general inability to pay. This holdout problem causes uncertainty and prolongs the debt restructuring process. Resolving the holdout problem was the primary motivation for the United States to enact Chapter 9 (McConnell and Picker, 1993).

Key design considerations arise concerning insolvency procedures—namely, the fundamental differences between public and private insolvency, the choices between judicial or administrative approaches, and the operation of the insolvency procedure itself.

²² It is useful to note that the boundary between ex ante regulation and ex post insolvency is not as clear cut. Fiscal responsibility regulation, for example, may incorporate elements of ex post consequences. Although Webb (2004) included transfer intercepts and lender control mechanism as part of ex post consequences, this section focuses on the insolvency proceedings.

Comparing public and private corporate bankruptcy

The public nature of the services provided by governments is the source of the fundamental difference between public insolvency and the bankruptcy of a private corporation. As a matter of public policy, public services essential for the public health, welfare and safety must be maintained. This factor leads to the basic tension between protecting creditors' rights and maintaining essential public services. Creditors' available remedies against defaulting subnationals, as opposed to corporations, are narrower, leading to greater moral hazard (strategic defaults). Whereas a corporation can be liquidated, this route is not available for SNGs. When a private corporation goes bankrupt, all assets of the corporation are potentially subject to attachment. By contrast, the ability of creditors to attach assets of SNGs is greatly restrained in many countries. In the case of subnational insolvency, the insolvency mechanism generally involves reorganization, rather than the liquidation of assets. Additionally, SNGs typically have some taxation power.

The debt discharge protects the subnational entity and its population from long-term harm caused by sharp decreases in public service delivery. Thus, the insolvency system needs to balance incentives for the subnational entity to grow out of bankruptcy with repayment of creditors. A crucial question in the design of such legislation is to determine the balance between the legitimate contractual interests of private creditors and the delivery of essential public services, as well as to provide the SNG with the flexibility of growing out of its financial constraints.

The public nature of the debtor may justify limitations on creditors' valid private law contractual remedies compared to remedies that may be available against a private debtor. Creditors will insist that all valid debts be honored and repaid. Ex ante, the subnational entity may pledge assets for financial resources; ex post, it will argue that many assets cannot be used for the satisfaction of creditors as they serve a public purpose. The tension between creditor rights and subnational debtor's inability to pay is here to stay. This tension is at its extreme when a debt discharge is needed thereby resulting in a major curtailment of creditor rights.

In principle the answer of an insolvency framework to these competing interests is an equitable sharing of misery, a limitation on the SNG's ability to provide nonessential services and a limitation on creditors' remedies including the discharge of debt. A subnational bankruptcy framework also provides guidance on the priority of settling competing creditor claims. Clear rules ease the distributional struggle typical of bankruptcy between the need to maintain essential minimum services and the creditor's contractual rights. This distribution matters also ex ante, as it shapes the expectation and behavior of borrower and lenders in the next cycle of borrowing.

Judicial vs. administrative approaches

There are two alternative approaches to subnational insolvency: the judicial and the administrative. Various hybrids also exist. Judicial procedures place courts in the driver's seat. Courts make key decisions to guide the restructuring process, including when and how a municipal insolvency is triggered, a priority structure for allocating credits among competing claims, and a determination of which services will be maintained. Because the debt discharge is highly complex, the judicial approach has the advantage of neutralizing political pressures during the restructuring. However, because mandates for budgetary matters lie with the executive and

legislature in many countries, the courts' ability to influence fiscal adjustment of subnational entities is limited.

Administrative interventions, by contrast, usually allow a higher level of government to intervene in the entity concerned, temporarily taking direct political responsibility for many aspects of financial management. They may also create a belief among lenders that the central government will intervene, thereby creating moral hazard.

The choice of approach varies across countries, depending on the history, political and economic structure, and motivation for establishing an insolvency mechanism. In Hungary, the desire to neutralize political pressure for bailing out insolvent SNGs favored the judicial approach. South Africa's legal framework for municipal bankruptcy is a hybrid, blending administrative intervention with the role of courts in deciding debt restructuring and discharge. In Brazil, after having bailed out insolvent subnational entities in the earlier debt crises, the federal government chose an administrative approach in dealing with the third debt crisis by imposing a fiscal and debt adjustment package that was based on reform conditions.

The United States has both judicial and administrative approaches. In response to widespread municipal defaults during the Great Depression, the U.S. Congress adopted a municipal insolvency law in 1937, known today as Chapter 9 of the U.S. Bankruptcy Code.²³ Chapter 9 is a debt restructuring mechanism for political subdivisions and agencies of U.S. states. It provides the procedural machinery whereby a debt restructuring plan acceptable to a majority of creditors can become binding on a dissenting minority. Many states have adopted their own frameworks for dealing with municipal financial distress, for two reasons. First, municipalities are political subdivisions of the states. Second, state consent is a precondition for municipalities to file for Chapter 9 in federal court. Moreover, federal courts may not exercise jurisdiction over policy choices and budget priorities of the debtor. No uniform approach exists across states.²⁴ New York City's bankruptcy in 1975 and Ohio's early-warning fiscal monitoring system of the municipalities are two prominent examples of direct state intervention in resolving financial distress.

Insolvency procedure

An effective insolvency procedure contains three central elements: definition of the insolvency trigger for the procedure, fiscal adjustment by the debtor to bring spending in line with revenues and borrowing in line with the capacity to service debt, and negotiations between debtor and creditors to restructure debt obligations.

Specific legal definitions serve as *procedural triggers* for initiating insolvency proceedings. While the United States and Hungary define *insolvency* as inability to pay, South Africa chose one set of triggers for serious financial problems and another for persistent material breach of

²³ Bankruptcy Act of 1938 (Chandler Act), 50 Stat. 654 (1937), amending the 1898 U.S. Bankruptcy Act. The 1938 act was the first legislation for municipal bankruptcy in the world.

²⁴ Some states give blanket consent for municipalities to file in the federal court, some states attach important conditions, and other states grant permission on a case-by-case basis (see Laughlin 2005).

financial commitments.²⁵ In all three countries, the bankruptcy code empowers the bankruptcy court to dismiss petitions not filed in good faith. Because bankruptcy procedures have the power to discharge debt, a subnational entity may file purely for the purpose of evading debt obligations. An initial determination must be made as to whether the situation reflects a genuine "inability" to pay or rather merely "unwillingness to pay". The U.S. Bankruptcy Code erects obstacles to municipal filing beyond those faced by private debtors, thereby discouraging strategic municipal bankruptcy filings.

Which parties may commence an insolvency proceeding differs across countries. In the United States, under section 109(c)(2) of Chapter 9, only the municipality can file for bankruptcy, conditional on being insolvent, having worked out or attempted to work out a plan to deal with its debts, and having been authorized by the state to file for bankruptcy. The more stringent requirement for filing under Chapter 9, as comparing with filing under Chapter 11, is due to the constraint set by the U.S. constitution. A creditor cannot bring a municipality into a federal court against its will. Like Chapter 9, Schwarcz's (2002) model law for subnational insolvency allows only municipalities to file. In South Africa, under chapter 13, section 151(a), of the 2003 Municipal Financial Management Act, any creditor can trigger the insolvency procedure. Similarly, in Hungary, a creditor can petition the court if a municipality is in arrears for more than 60 days. The section 150 countries are constituted as a constant of the court if a municipality is in arrears for more than 60 days.

Fiscal adjustment and consolidation are preconditions for financial workouts. Often a subnational government's own fiscal mismanagement is the root cause of insolvency. Even when subnational insolvency is triggered by macroeconomic shocks, fiscal adjustment is inherent to any insolvency procedures, requiring difficult political choices of cutting expenditure and raising revenues. Ianchovichina, Liu, and Nagarajan (2007) present a framework for analyzing subnational fiscal adjustment. Similar to fiscal adjustment by central governments, real interest rates, economic growth of the subnational economy, and the subnational government's primary balance determine subnational debt sustainability. They argue, however, that subnational fiscal adjustment qualitatively differs from national fiscal adjustment. Unable to issue their own currency, SNGs cannot use seigniorage finance. They cannot freely adjust their primary balance because of the constraints on the taxation and expenditure system within the inter-governmental fiscal system.

Debt restructuring lies at the heart of any bankruptcy framework. In administrative interventions, the higher level of government often restructures the subnational's debt obligations into longer-term debt instruments. In the case of New York City, the Municipal Assistance Corporation was set up to issue longer-term bonds of the state to repay maturing short-term obligations of the city, conditioned on city's fiscal and financial management reforms. The 1997 debt agreements between the Brazilian federal government and the 25 states, focused on ex ante regulations, may also be viewed as an ex post intervention, because the agreements were imposed on a case-by-case basis as a condition of debt restructuring.

²⁵ Chapter 9 of the U.S. Bankruptcy Code (1937), Hungary Law on Municipal Debt Adjustment (1996), and South Africa Municipal Financial Management Act (2003).

²⁶ United States Constitution 10th amendment.

²⁷ See the Law on Municipal Debt Adjustment (Law XXV, 1996).

²⁸ Bailey (1984).

While administrative approaches tend to focus on debt restructuring, independent courts are viewed as best equipped to discharge debt. Debt discharge is a major departure from the principle that contracts ought to be fulfilled.²⁹ A mature judicial mechanism is well placed to ensure that discharges are fair and equitable. In South Africa, for example, the municipality needs to go to the court for a discharge. Administrative procedures, on the other hand, tend to lack the power to discharge debt.

The adjustment of debt obligations is a major intervention in contract rights. Insolvency law attempts to balance this tension between creditor rights, the inability of a subnational entity to pay, and the continued need of the SNG to provide essential public services. It formalizes the relationship between creditors and the subnational debtor in financial distress. Insolvency law preserves the legal order by superseding contractual violations with a new legal act.³⁰ A procedure for subnational insolvency recognizes that resolving financial distress through mechanisms guided by law is preferable over muddling through repeated, costly, and often unsuccessful negotiations.

One basic question with respect to debt restructuring is who holds the cram-down power when both sides fail to reach an agreement.³¹ Under Chapter 9 of the U.S. Bankruptcy Code, municipal debtors propose the debt adjustment plan, which may modify the terms of existing debt instruments. Such adjustment plans may be adopted over the objection of holdout creditors. Chapter 9 incorporates basic Chapter 11 requirements: at least one impaired class of claims approves the plan, and secured creditors must receive at least the value of the secured property. Unsecured creditors thus often lose out.³²

Contrary to private entities, subnationals have no stockholders. Their officials need not to pay off unsecured creditors to remain in control. Unsecured creditors are protected by § 943 (b) (7) of Chapter 9, which requires the court to decide that the plan is in the "best interests of creditors and is feasible." The court would ensure that bondholders effectively receive what they would have received outside of bankruptcy.³³

In Hungary, the Debt Committee, which is independent of the local government, is charged with preparing a reorganization plan and debt settlement proposal.³⁴ A debt settlement is reached if at least half of creditors whose claims account for at least two-thirds of total undisputed claims

²⁹ In the United States, the Contracts Clause of the US Constitution (Article I. 10.1) puts the principle of contract a sunt servanda into constitutional form.

³⁰ The U.S. experience suggests that in the absence of a bankruptcy framework, public entities in financial distress will use every possible technicality to challenge the validity of their outstanding obligations. Widespread challenges in a default wave during the 19th century led to the development of the bond counsel opinion, which certifies that the obligation is legal, valid, and enforceable.

³¹ Cram-down involves court confirmation of bankruptcy plans despite opposition of certain creditors. Under section 1129(b) of Chapter 11 of the U.S. Bankruptcy Code, courts may thus confirm a plan if it (a) was accepted by at least one impaired class, (b) does not discriminate unfairly, and (c) is fair and equitable.

³² For more detailed case histories, see Kupetz (1995) and McConnell and Picker (1993).

³³ The best interest test ensures that unsecured creditors are treated as well inside bankruptcy as outside. Notwithstanding, this may be less than 100% of their claims. Unsecured creditors of municipalities are protected from the moral hazard problem of opportunistic bankruptcy filings not by the cramdown limit but by the best interests of the creditors standard. See McConnell and Picker (1993).

³⁴ Law on Municipal Debt Adjustment, Law XXV, 1996, Chapter II, § 9 (3) stipulates that the financial trustee's independence.

agree to the proposal. Creditors within the same group must be treated equally.³⁵ The Act also stipulates the priority of asset distributions. If disagreements arise on distribution, the court makes the final decision which cannot be appealed.³⁶

South Africa's legislation stipulates that debt discharge and settlement of claims must be approved by the court. The settlement of claims follows the following order specified by the Municipal Finance Management Act: (i) secured creditors, provided that the security was given in good faith and at least six months before mandatory intervention by provinces; (ii) preferences provided by the 1936 Bankruptcy Act; and (iii) non-preferential claims be settled in proportion to the amount of different claims.³⁷

A clear priority structure for settling competing claims expedites the resolution of debt restructuring. Priorities also ease the pain of sharing the reduced assets for distribution, because losses suffered by creditor groups may be predicted in advance. Hence, they are more likely to be accepted. Moreover, the structure can keep the absolute size of losses in check, since the costs of protracted negotiations and litigation are high and often take priority over other claims. Priorities are a policy choice with a variety of trade-offs. If the lending community perceives that financial distress is mostly resolved on its back, then desirable future lending could suffer. The shadow of priorities provides the backstop for voluntary restructuring negotiations, shaping bargaining power of creditors and debtor even outside bankruptcy.

However, distributing the pool of available assets in bankruptcy is not only about efficiency and equal treatment. Which policy is most appropriate for the bankruptcy of subnational entities will depend, first, on the distributional judgment of the society concerned and, second, on the effect of a chosen priority structure on the capital market and its impact of new financing during a liquidity crunch. It is also important to allow sufficient flexibility within a general priority framework.

5. Conclusions

As a result of worldwide decentralization, subnational debt has become an increasing share of consolidated public debt – combined central and subnational government debt. Rapid urbanization and demand for large scale urban infrastructure will continue to create pressure on the public finance system to finance sustainable investments. In many countries decentralization has devolved the responsibility for most of infrastructure investments to SNGs. Managing subnational debt financing and its sustainability is critical to a sustainable public finance system and sovereign financial health.

As noted by Canuto and Liu (2010a), the financial crisis has had a significant impact on the financial accounts of many SNGs, as a result of slowing economic growth, uncertainty over cost of financing, and pressure on primary balances. Beyond the current crisis, structural trends of

³⁵ Law on Municipal Debt Adjustment, Law XXV, 1996, Chapter III, § 23.

³⁶ Law on Municipal Debt Adjustment, Law XXV, 1996, Chapter IV, § 31. Assets are distributed to creditors in the following order: (1) regular personnel benefits including severance pay; (2) securitized debt; (3) dues to the central government; (4) social insurance debts, taxes, public contributions and tax; (5) other claims; and (6) interest and fees on debt obligations continued during the bankruptcy proceeding.

³⁷ South Africa, Municipal Finance and Management Act, 2003, Chapter 13, Section 155 (4).

decentralization and urbanization are likely to continue with force with the need to finance urban infrastructure investments.

Unlike the 1990s when subnational debt crisis affected major developing countries, SNGs in various major developing countries entered the current global financial crisis with stronger liquidity and fiscal positions, as a result of the reforms in fiscal rules and regulatory frameworks established in these countries.³⁸ However, there are continuing pressures on subnational finance – from the uncertainty of the global public debt market, potential risks of rising cost of capital, fragility of global recovery, and currency uncertainties and associated refinancing risks (Canuto and Liu, 2010b).

There are also risks of increasing contingent liabilities. As a result of debt limitations that have been imposed on SNGs, shifting borrowing off budget may become a convenient way of circumventing fiscal rules. To cope with rising demand for infrastructure, given the limited fiscal space, various forms of infrastructure investing become tempting: public private partnerships, special purpose vehicles, and off budget financing.

A range of middle income countries and low income countries with transition to market access are also contemplating expanding subnational borrowing and debt financing. Before doing so, the first priority should be to establish clear fiscal rules for SNGs specifying the type and purpose of borrowing, the procedural steps for contracting debt, any limitations on borrowing, and control and accounting for off-budget liabilities.

Ex post insolvency mechanisms are also essential to the sustainability of SNG debt financing. Even if rarely invoked, they shape expectations about defaults and allow and encourage the stakeholders to resolve subnational financial distress efficiently. Notwithstanding the fiscal problems of a particular SNG, an effective insolvency system helps maintain access of other SNGs to the public finance markets. Clear and predictable rules on priority of repayment ease the struggle and allow faster resolution of financial distress. Effective insolvency and creditor rights systems allow better management of financial risks.³⁹

Managing subnational default risks is intertwined with broader macroeconomic and institutional reforms. Macroeconomic stability and sovereign strength cap the financial ratings of SNG, and thereby determine the availability and cost of funds for SNGs. Moreover, the intergovernmental fiscal system underpins the fundamentals of the subnational fiscal path. Without increased fiscal autonomy and greater own-source revenues, SNGs will rarely be in a position to borrow sustainably on their own. Furthermore, to manage default risks is not to minimize SNG access to debt financing. On the contrary, developing a competitive and diversified subnational credit market is critical to intermediating national savings and infrastructure financing. Thus an

³⁸ In Brazil, SNGs' net debt as a percent of GDP decreased from 18 percent in 2003 to 14 percent in 2007. In India, the fiscal deficit of states declined from 4.0 percent of GDP on average in 2000–05 to 1.5 percent in 2007–08; and states achieved positive operating balances. In Colombia, gross debt as share of GDP for subnational governments declined from 3.6 percent in 2001 to 1.42 percent in 2008. Sources: government Websites.

³⁹ The World Bank (2005) addresses creditor rights and insolvency standards in the context of corporate bankruptcy. Key principles apply to the subnational context, bearing in mind the differences between public and private bankruptcy.

effective management of subnational default risks goes in tandem with broader development of capital markets.

References

- Alam, Asad, Stepan Titov, and John Petersen. 2004. "Russian Federation." In *Subnational Capital Markets in Developing Countries: From Theory to Practice*, ed. Mila Freire and John Petersen, 571–92. Washington, DC: World Bank.
- Bailey, Robert W. 1984. The Crisis Regime: The MAC, the EFCB, and the Political Impact of the New York City Financial Crisis. Albany: State University of New York Press.
- Barrientos, Laura. 2002. "Subsovereign Defaults in Mexico." Moody's Investors Service, New York.
- Canuto, Otaviano, and Lili Liu. 2010a. "Subnational Debt Financing and the Global Financial Crisis." Premise Note, Poverty Reduction and Economic Management Network. Washington, D.C: World Bank.
- Canuto, Otaviano, and Lili Liu. 2010b. "Subnational Debt Finance: Make it Sustainable" in *The Day After Tomorrow: A Handbook on the Future of Economic Policy in the Developing World*, ed. Otaviano Canuto and Marcelo Giugale. Washington, DC: World Bank.
- Dillinger, William. 2002. "Brazil: Issues in Fiscal Federalism." Report 22523-BR, Brazil Country Management Unit, PREM Sector Management Unit, Latin America and the Caribbean Region. Washington, DC: World Bank.
- English, William B. 1996. "Understanding the Costs of Sovereign Default: American State Debts in the 1840's." *American Economic Review*, Vol. 86, No. 1.
- FitchRatings, 2009. European Local and Regional Government Outlook 2010. December 16.
- Gaillard, Norbert. 2009. "The Determinants of Moody's Sub-Sovereign Ratings." *International Research Journal of Finance and Economics*, Issue 31.
- Glasser, Matthew. 2005. "Legal Framework for Local Government Insolvency." Paper presented at a World Bank seminar, Washington, DC, March 8.
- Hochman, Steve. 2002. "Subsovereign Defaults in Argentina." Moody's Investors Service, New York.
- Ianchovichina, Elena, Lili Liu, and Mohan Nagarajan. 2007. "Subnational Fiscal Sustainability Analysis: What Can We Learn from Tamil Nadu?" *Economic and Political Weekly* 42 (52): 111–19.
- Jókay, Charles, Gábor Szepesi, and György Szmetana. 2004. "Municipal Bankruptcy Framework and Debt Management Experiences, 1990–2000." In *Intergovernmental Finances in Hungary: A Decade of Experience*, ed. Mihály, Kopányi, Deborah L.Wetzel, and Samir El Daher.
- Khemani, Studi. 2002. "Federal politics and budget deficits: evidence from the states of India." World Bank Policy Research Working Paper, WPS #2915. October. Washington, DC: World Bank.
- Kupetz, David S. 1995. "Municipal Debt Adjustment under the Bankruptcy Code." *Urban Lawyer* 27 (3): 531–605.
- Liu, Lili. 2008. "Creating a Regulatory Framework for Managing Subnational Borrowing." In *Public Finance in China: Reform and Growth for a Harmonious Society*, ed. Jiwei Lou and Shuilin Wang. 171–190. Washington, DC: World Bank.

- Liu, Lili, and Michael Waibel. 2009. "Subnational Insolvency and Governance: Cross-Country Experiences and Lessons." In *Does Decentralization Enhance Service Delivery and Poverty Reduction?* ed. Ehtisham Ahmad and Giorgio Brosio. Edward Elgar, Cheltenham, UK; Northampton, MA, USA.
- ———. 2008. "Subnational Borrowing, Insolvency and Regulations." In *Macro Federalism and Local Finance*, ed. Anwar Shah. Washington, DC: World Bank.
- Liu, Lili, and Kim Song Tan. 2009. "Subnational Credit Ratings: A Comparative Review", World Bank Policy Research Working Paper #5013. Washington, DC: World Bank.
- Liu, Lili, Abha Prasad, Francis Rowe, Signe Zeikate. 2009. "Subnational Debt Management in Low Income Countries in Transition to Market Access." *Debt Relief and Beyond.* ed. by Carlos Braga and Doerte Doemeland. Washington, DC: World Bank.
- Laughlin, Alexander M. 2005. "Municipal Insolvencies: A Primer on the Treatment of Municipalities under Chapter 9 of the U.S. Bankruptcy Code." Washington, DC: Wiley Rein & Fielding. http://www.wileyrein.com/publication.cfm?publication_id=11309.
- McConnell, Michael, and Randal Picker. 1993. "When Cities Go Broke: A Conceptual Introduction to Municipal Bankruptcy." *University of Chicago Law Review* 60 (2): 425–35.
- Moody's. 2010. "Sub-Sovereign Outlook 2010" January.
- Popov, Dimitri. 2002. "Subsovereign Defaults in Russia." Moody's Investors Service, New York.
- Schwarcz, Steven L. 2002. "Global Decentralization and the Subnational Debt Problem." *Duke Law Journal* 51 (4): 1179–250.
- Shah, Anwar. 2004. "Fiscal Decentralization in Developing and Transition Economies: Progress, Problems, and the Promise." Policy Research Working Paper 3282. Washington, DC: World Bank.
- South Africa National Treasury. 2001. *Intergovernmental Fiscal Review*. Pretoria: South Africa National Treasury.
- Standard & Poor's, 2010. "The Outlook for Europe's Local and Regional Governments." February 4.
- Thirteenth Finance Commission Report. 2009. Delhi.
- Wallis, John Joseph. 2004. "Constitutions, Corporations, and Corruption: American States and Constitutional Changes, 1842–1852." NBER Working Paper 10451, National Bureau of Economic Research. Cambridge, MA.
- Webb, Stephen B. 2004. "Fiscal Responsibility Laws for Subnational Discipline: The Latin American Experiences." Policy Research Working Paper 3309, Washington, DC: World Bank.
- Weingast, Barry R. 2007. "Second Generation Fiscal Federalism: Implications for Development." CA, Palo Alto: Stanford University.
- World Bank. 2005. "Creditor Rights and Insolvency Standard." Washington, DC: World Bank.