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Subnational Debt, Insolvency, and Market Development

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State and local debt and the debt of quasi-public agencies have grown in importance as a result of fiscal decentralization, rapid urbanization, and the increasing role played by private capital. However, with debt comes the risk of insolvency. This note outlines a set of aligned fiscal incentives that should be in place, as well as the design issues to be considered in debt restructuring frameworks. Drawing on Canuto and Liu (2013)[1], this note also suggests some broad lessons extracted from several country experiences with subnational debt restructuring, insolvency frameworks, and debt market development.

Subnational Debt and Insolvency

State and local debt and the debt of quasi-public agencies have grown in importance. Three structural trends have contributed to the rising share of subnational finance, including subnational debt as a share of general public debt (Canuto and Liu 2010a).

First, decentralization in many countries has given subnational governments (SNGs)[2] certain spending responsibilities, revenue-raising authority, and the capacity to incur debt. With sovereign access to financial markets, SNGs are seeking access to these markets as well.

Second, rapid urbanization in developing countries requires large-scale infrastructure financing to help absorb influxes of rural populations.[3] Borrowing enables SNGs to capture the benefits of major capital investments immediately, rather than waiting until sufficient savings from current income can be accumulated to finance them. Infrastructure investments benefit future generations who therefore should bear a portion of the cost. Subnational borrowing finances infrastructure more equitably across multigenerational users of infrastructure services because the debt service can match the economic life of the assets that the debt is financing. Infrastructure services thus can be paid for more equitably by the beneficiaries of the services.

Third, the subnational debt market in developing countries has been going through a notable transformation. Private capital has emerged to play an important role in subnational finance, and subnational bonds increasingly compete with traditional bank loans. Notwithstanding the temporary disruption of the subnational credit markets during the 2008–09 global financial crisis, the trend toward more diversified subnational credit markets is expected to continue. In various countries, SNGs, or their entities, have already issued bond instruments (for example, in China, Colombia, India, Mexico, Poland, the Russian Federation, and South Africa). More countries are considering policy frameworks for facilitating subnational debt market development (for example, Indonesia), while others are allowing selected subnational entities to pilot transaction and capacity-building activities (for example, Peru).

With debt comes the risk of insolvency. When SNGs follow unsustainable fiscal policy, it can jeopardize their ability to service their debt, the services they manage, the safety of the financial system, their country's international creditwor-

thiness, and overall macroeconomic stability. Too often the central government gets dragged in to provide bailouts, which can disrupt its own fiscal sustainability and reward the populist fiscal tactics of the recipient SNGs.

Several major emerging markets experienced subnational debt crises in the 1990s. Newly decentralized countries face potential fiscal risks. To many observers, runaway provincial debt in the provinces of Mendoza and Buenos Aires was a factor behind Argentina's sovereign debt default in 2001. Brazil experienced three subnational debt crises in the 1980s and 1990s. In India, many states experienced fiscal stress from the late 1990s to the early 2000s, with increases in fiscal deficits, debt, and contingent liabilities. The 1994–95 Tequila Crisis in Mexico exposed the vulnerability of subnational debt.

Subnational insolvency is a recurring event in history. In 1842, eight U.S. states and the Territory of Florida defaulted on their debt, and three other states were in perilous financial condition (Wallis 2005). During the Great Depression, 4,770 local governments defaulted on US$2.85 billion of debt (Maco 2001). As capital markets and their regulatory framework matured, the default rates of U.S. local governments declined. Yet, there are recent episodes, including the default of the Washington Public Power Supply System in 1983, the bankruptcy of Orange County, California, in 1994, and of Jefferson County, Alabama, in 2011.

The 2008–09 global financial crisis has had a profound impact on subnational finance across countries, as a result of the slowing economic growth, rising cost of borrowing, and deteriorating primary balances. The impact has been mitigated in various countries by fiscal stimuli, monetary easing, and increasing fiscal transfers. However, looking forward, pressures on subnational finance are likely to continue—from the potentially higher cost of capital, the fragility of the global recovery, and refinancing risks as well as sovereign risks (Canuto and Liu 2010b).

Aligning Fiscal Incentives

Subnational debt crises have led governments across countries to search for frameworks to restructure subnational debt and to undertake legal, regulatory, and institutional reforms that will sustain subnational debt finance in the long run. In a multilevel government system, the reforms need to resolve three challenges (Liu and Webb 2011). The first challenge applies to governments at any level, whereas the second and third are mainly relevant in countries with multilevel government.

The first challenge is the short time horizon of public officials, who have shorter terms of office than citizens' life spans. Public officials face the risk of being forced out of office if results are painful in the short term. The mobility of citizens and businesses between local jurisdictions means that excess borrowing could drive residents away and leave those remaining with more debt per person than they anticipated.

The second challenge is free riders. The interests of individual SNGs may diverge from the common national interest when factors such as electoral pressures motivate SNGs to follow unsustainable fiscal policy. An individual government would bear only part of the cost of its misbehavior, but would still receive all of perceived benefit accrued, only if (most of) the other governments continued to follow good fiscal behavior. So, there might be a prisoners' dilemma—a situation where the equilibrium of isolated individual choices leads to suboptimal outcomes for all.[4]

The third challenge is moral hazard. Subnational borrowers might have an incentive not to repay their creditors, and creditors might lend without risk differentiations if they perceive that defaulting debtors could be bailed out by the central government.

In a country with multilevel governments, the national government exists for the purpose (among others) of protecting the common interest and typically has special powers such as running the central bank and regulating the financial sector. The national government also provides transfers to SNGs, giving it additional leverage over SNGs and their fiscal behavior. However, the constitution and rules (such as on revenue sharing) may constrain the national government's power over the SNGs. Political considerations, such as the national political cycle or subnational political cycles, may bias the decisions of the national government away from the optimal (Braun and Tommasi 2004). For instance, when a state government of the same political party as the national government faces a close election, the national government might be inclined to "condone" the state's fiscal misbehavior by offering a debt bailout or rescheduling guarantee. Also, under some configurations of political institutions, the national executive might "purchase" blocks of legislative votes by giving SNGs fiscal favors.

The incentives in the political system affect the need for effective subnational fiscal control institutions. To the extent that the constitution and party system lead to more centralized power, the country will have less need for special institutions to coordinate fiscal discipline across governments over time and among SNGs. Decentralization and market decontrol, however, increase the need for coordination of fiscal discipline.

The subnational debt crises or fiscal stress of the 1990s in several major developing countries led to reforms in subnational borrowing frameworks including the development of ex ante fiscal rules and debt limits. The search for insolvency resolutions has also intensified, since ex ante rules have not been sufficient on their own without ex post mechanisms. Insolvency mechanisms should increase the pain of circumvent-

ing ex ante regulation for creditors and debtors, thereby enforcing preventive rules.

Key Design Issues in Subnational Debt Restructuring

The country experiences reported in Canuto and Liu (2013) reveal several design issues with respect to debt restructuring frameworks: (i) how to balance the tension between the contractual rights of creditors and the need for maintaining public services in the event of subnational insolvency; (ii) how to define the respective role of different levels and branches of government in resolving insolvency; (iii) how to develop a collective framework for debt resolution; and (iv) a basic choice among a judicial, administrative, or hybrid approach. The country cases show that country-specific circumstances—historical, constitutional and economic context, and entry points for reform—influence framework design in each country.

Framework design ultimately needs to address the challenges of fiscal incentives facing SNGs in a multilevel government system. A sound framework should reduce the moral hazard of subnational defaults, discourage free riders, bind all SNGs to pursue sustainable fiscal policies, and extend the short-term horizon of SNGs to minimize the impact of unsustainable fiscal policy on future generations.

Public and private insolvency

The insolvency of SNGs differs from that of private corporate entities—the main difference being the public nature of the services provided by SNGs. Thus, debt restructuring inevitably involves a difficult balance between the interests of the debtor (and the citizens it serves) and the creditors (and savers). While a corporation can be dissolved, this route is typically barred for SNGs. When a private corporation goes bankrupt, all of its assets are potentially subject to attachment. The ability of creditors to attach the assets of SNGs is constrained in many countries. In the United States, a judicial doctrine typically holds that only proprietary property is attachable. Proprietary property, subject to debt foreclosure, was defined by the U.S. Supreme Court as "held in (the municipality's) own right for profit or as a source of revenue not charged with any public trust or use"[5] (McConnell and Picker 1993).

Who has the authority over what?

Fiscal adjustment by debtors requires difficult political choices to bring spending in line with revenues and to bring borrowing in line with debt service capacity. In a decentralized system, tension exists between the role of the national government in enforcing collective fiscal discipline of SNGs and the fiscal autonomy of SNGs. Can a higher-tier government force spending cuts and tax increases in a lower-tier government? Can courts influence spending priorities and tax choices that are normally preserved for legislative and executive branches? How do a country's legal framework and political reality define the roles of different tiers and branches of the government? These questions are among the key issues, and the answers vary—as seen in the case studies presented in Canuto and Liu (2013).

Subnational fiscal adjustment is also complicated by the legislative mandates of the central government vis-à-vis SNGs and the intergovernmental finance system (Ianchovichina, Liu, and Nagarajan 2007). Unable to issue their own currency, SNGs cannot use *seigniorage* finance. SNGs may not freely adjust their primary balance due to legal constraints on raising their own revenue, dependence on central government transfers, and the central government's influence on key expenditure items such as wages and pensions. Many other policies that affect economic growth and fiscal health of the subnational economy may also be determined largely by the central government.

Debt restructuring and debt discharge are complex processes, but can be distilled into two basic questions: whether the creditors and the debtor can reach agreement on debt resolution; and who holds the "cram down"[6] power when both sides fail to reach an agreement (Liu and Waibel 2009). In Brazil and Mexico, the national government led SNG debt restructuring, and there were no debt write-offs. In Hungary, South Africa, and the United States, the courts hold cram down power when local governments and creditors negotiate.

Clarity of rules and collective enforcement

Without an insolvency framework, subnational debtors and their creditors resort to ad hoc restructuring negotiations. The need for a collective framework for resolving debt claims is driven not only by conflicts between creditors and the debtor, but also by competing interests among creditors and competing demands by constituents of the debtor. Individual creditors may have different security provisions for the debt owed to them and may demand preferential treatment and threaten to derail debt restructurings voluntarily negotiated between a majority of creditors and the subnational debtor—the "holdout problem." Individual ad hoc negotiations can be costly and harmful to the interests of a majority of creditors (McConnell and Picker 1993). The holdout problem is not as serious if debts are concentrated in a few banks. A collective framework for restructuring takes on more importance as the subnational bond market develops and grows to include thousands of creditors.

The absence of clear rules for insolvency is likely to raise borrowing costs, and may limit market access for creditworthy borrowers. South African policy makers viewed clear rules for insolvency as critical to the growth of a broad-based competitive subnational capital market. In the United States, utilization of Chapter 9 of the bankruptcy code has carried a strong stigma for a defaulting municipality to offset debtor moral hazard. Municipalities are thus wary that capital markets would interpret the filing for federal bankruptcy protec-

tion as a strong signal of financial mismanagement, to which lenders are likely to react by charging a risk premium.

The tension between maintaining essential services and creditors' contractual rights would imply that the pain of insolvency needs to be shared between the creditors and the debtor. The insolvency mechanism needs to balance these competing interests and guide the priority structure of settling competing claims. The priority structure 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 on new financing (Liu and Waibel 2009).

Judicial vs. administrative approach

The two approaches to subnational insolvency procedures discussed in Canuto and Liu (2013) are the judicial and the administrative.[7] Various hybrids also exist. In judicial procedures, courts make decisions to guide the restructuring process. The judicial approach has the advantage of neutralizing political pressures during the complex restructuring. However, the courts' ability to influence fiscal adjustment of SNGs is limited because mandates for budgetary matters usually rest with the executive and legislature. In some administrative interventions, by contrast, a higher-level government intervenes in the entity concerned, temporarily taking direct political responsibility for many aspects of financial management and restructuring the subnational's debt obligations into longer-term debt instruments.

The choice of approach varies across countries. In Hungary, the desire to neutralize political pressure for bailing out insolvent SNGs favors 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. Colombia has a formal administrative process, where central government representatives facilitate restructuring negotiations between the subnational borrower and creditors and supervise implementation of the agreement on fiscal adjustment and debt workouts. In Brazil, the federal government restructured the subnational debt in the late 1990s conditional on SNGs undertaking fiscal reform and adjustment packages. Similarly, the federal government in Mexico restructured states' debts after the Tequila Crisis, and a few years later introduced regulations on the lenders that effectively constrained the borrowers as well. In India, the federal government used a debt swap instrument as an incentive to encourage states to enact their own fiscal responsibility laws.

Reforms to Align Fiscal Incentives and Develop a Robust Framework

Reforms in subnational borrowing frameworks and debt restructuring mechanisms have been gathering momentum in developing countries since the late 1990s. Reform objectives are broadly similar—strengthening fiscal management and preventing future insolvency. Often, these reforms proceed in tandem with broader public finance reforms, macroeconomic stabilization, and the development of a robust medium-term fiscal framework and transparency. The reform paths and sequences countries choose reflect their historical context, legal framework, and reform dynamics.

Canuto and Liu (2013) survey selected countries' reform experiences in strengthening subnational fiscal discipline and developing a framework for the resolution of subnational debt stress. Two types of debt restructuring approaches were observed. The first type is national government–led debt restructuring, which includes the experiences of Brazil, India, and Mexico. The review by Canuto and Liu (2013) also includes China's central government–led restructuring of SNG rural education legacy debt, which it undertook so that local governments could gain stronger fiscal capacity for education service delivery. The second debt restructuring type focuses on a framework that spells out, in advance, the procedure in place in the event of a subnational default. Canuto and Liu (2013) compare the experiences of Colombia, France, Hungary, and the United States in using this approach. Subnational insolvency is not limited to developing countries—the reform experiences of developed countries offer important lessons.

Canuto and Liu (2013) also discuss the experiences of China, the Philippines, Russia, and South Africa in developing their subnational credit markets. This topic is highly relevant to aligning fiscal incentives for SNGs and developing a robust regulatory framework. When the central government refrains from bailouts, creditors serve as an enforcer of fiscal discipline on SNGs by pricing risks of defaults. Note that reducing default risks is not the same as minimizing the use of debt instruments. As already noted, debt instruments are essential for financing large-scale infrastructure and supporting economic growth. Competitive supply of subnational credits lowers borrowing cost and extends loan maturity.

Canuto and Liu (2013) also reviews the experience of the United States, which has the largest subnational capital market in the world, with outstanding SNG (states and local governments and their special purpose vehicles) debt of US$3.4 trillion and an annual average issuance of US$450 billion. However, the United States was not endowed with a mature, well-functioning market from the onset. Over its long history, the U.S. subnational capital markets experienced episodes of widespread defaults in the 1840s, 1870s, and 1930s. The reforms of legal frameworks and institutions have been gradual and path dependent in the sense that later reforms built on earlier reforms. The United States experience offers lessons for developing countries, including the importance of tying revenue sources to borrowing, transparency in markets for government credit, and creating interest among

creditors in strengthening borrowing rules. Although a developing country cannot simply duplicate the institutions that currently govern subnational borrowing in the United States, it can take into account lessons from the U.S. experience when forging a path tailored to its country context.

What are some of the broad lessons that one may take away from the wide range of country experiences? First of all—as shown by Canuto and Liu (2010a)—subnational credit risks are intertwined with broader macroeconomic and institutional reforms. Macroeconomic stability and sovereign strength set an effective cap on the credit ratings of SNGs and influence the availability and cost of funds. Debt sustainability of SNGs is determined by the interplay of the existing debt stock, economic growth, cost of borrowing, and primary balance. The macroeconomic framework and policies strongly influence the interplay of all these factors. The history of subnational debt crises shows that unregulated borrowing, particularly in an unstable macroeconomic environment, is extremely risky; unfettered market access by subnational borrowers can outpace the development of sound revenue systems and adequate securitization.

Deficits and debt arise from the joint decision of governments making fiscal policy and their creditors. These decisions are made in light of not only the rules governing issuance of the debt, but also the expectations about what will happen to the debtor and the creditors if payment difficulties arise—who will lose money or who will be forced into painful adjustment. The decisions of that lending moment become a fait accompli conditioning the subsequent decisions. This points to two important dimensions of control of government borrowing: first, the type or timing—ex ante controls or ex post consequences; and second, whether the ex ante controls and ex post consequences act on borrowers or lenders.

Ex ante constraints on subnational borrowers include procedural rules for incurring debt, limits on debt and deficit ceilings, rules for borrowing in international markets, and regulation of subnational borrowing based on fiscal capacity criteria. To complement the ex ante constraints and to make them credible, there need to be ex post consequences for failures in fiscal prudence. Without lenders, there is no borrowing or debt, so their constraints and incentives deserve equal attention. Relying on constraints only on borrowers means that lenders still have incentives to push loans and may find reckless officials willing to borrow despite the rules. Relying only on ex ante constraints, without ex post consequences, gives irresponsible borrowers and lenders an incentive to get around the ex ante rules and execute transactions that will later get bailed out. Relying only on ex post consequences allows irresponsible (and large) entities to build up such large debts that they could threaten macroeconomic stability.

Debt restructuring needs to pay close attention to its incentive effects: rule-based debt restructuring reduces ad hoc bargaining and adverse incentives; hard budget constraint prevents moral hazard; and burden sharing provides proper incentives and avoids free-riding behavior, while also recognizing that higher levels of government can create incentives for reform.

The purpose of borrowing and insolvency controls is not to minimize the use of debt financing, but rather to promote sustainable debt financing through a competitive and diversified subnational credit system. Such a system can help ensure the lowest cost of capital and a sustainable supply of credit. Debt financing is valuable for infrastructure development where the maturity of assets is generally longer than the current terms of taxation and transfers.

The dynamics of subnational-central government interaction provide reform momentum. On the one hand, one or a few SNGs can serve as catalysts for fiscal reform, and as a demonstration for national reform. On the other hand, the national government can offer fiscal incentives to encourage subnational fiscal adjustment. One common trait of successful debt restructuring for SNGs is the commitment of the central government to its own fiscal prudence.

The design for regulating debt and insolvency needs to be consistent with the broader cultural, economic, legal, constitutional, and social context of the country. Subnational fiscal adjustment and debt restructuring operate within a country's specific intergovernmental system that defines the respective authority of each level of government, and within a country's political system that defines the respective authority of each branch and level of government. Capacity and entry point for reform matter. The maturity of the legal system and the capacity of the judiciary influence the choices in the debt restructuring process.

Regulations on debt and insolvency cannot compensate for inadequacies in the design of overall intergovernmental fiscal relations. The intergovernmental fiscal system underpins the fundamentals of the subnational fiscal structure. Without increased fiscal autonomy and greater own-source revenues, subnationals will rarely be in a position to borrow sustainably on their own. In addition, an intergovernmental fiscal transfer system that routinely fills deficit gaps will undermine the incentives for a balanced budget. The regulations on debt and insolvency cannot substitute for other reforms in areas including budgetary and financial management, taxation, and governance. The incentive signals of insolvency mechanisms require a more competitive subnational capital market.

It is critical to understand the interaction of rules, enforcement, and capital markets. In government borrowing, decisions to spend in the present must be matched with decisions to tax and service debt in the future. Well-functioning capital markets are a way for societies to pool the best information about conditions today and changes tomorrow. When

governments possess the discretionary ability to change the rules between today and tomorrow, it becomes difficult for the capital markets to assess both the returns from financing infrastructure spending and the risks that debts will not be repaid.

The importance of closely tying borrowing decisions to revenue decisions as a feature of good institutional design cannot be overstated. Debts have to be repaid, and debt issuance that is tied to tax increases or dedicated revenue sources is much more likely to be repaid. The country experiences surveyed in Canuto and Liu (2013) show the importance of moving to rule-based systems in which higher-level government treats all lower-level governments according to the same rules. No matter what the rules are, ad hoc or discretionary application is likely to be plagued with moral hazard and common pool problems.

Conclusions

Structural trends of decentralization and urbanization are likely to continue in developing countries, requiring massive infrastructure investments at the subnational level. A range of middle-income countries, as well as low-income countries in transition to more open market access, are contemplating expanding subnational borrowing and debt financing for infrastructure investments. The country experiences covered by Canuto and Liu (2013) suggest a range of possible lessons to consider when designing reforms to align fiscal incentives and develop a robust subnational debt framework that can be used to effectively manage the insolvency risks that will inevitably accompany the new dynamism of subnational finance.

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Notes

1. This note is based on the "Overview" of *Until Debt Do Us Part: Subnational Debt, Insolvency, and Markets* (Canuto and Liu 2013).
2. The term subnational in this note refers to all tiers of government below the federal, or central, government. The category also includes special purpose vehicles or investment companies created by SNGs.
3. At the national level, estimates of future infrastructure investment requirements vary greatly by income level. Estache and Fay (2010) discuss methodologies for quantifying these requirements and estimate that low-income countries should spend 12.5 percent of GDP on investment and maintenance to meet demand, whereas lower-middle-income and upper-middle-income countries should spend 8.2 percent and 2.3 percent, respectively.
4. Inman (2003) formally develops the prisoners' dilemma model for this situation and shows how restrictive the conditions are under which the market successfully establishes subnational fiscal discipline if the central government takes a hands-off, no-bailout approach. The conditions include competitive suppliers of local public services, a stable central government, clear and enforceable accounting standards, a well-managed aggregate economy, and an informed and sophisticated local government bond market.
5. This might include, for example, an unused vacant lot outside the corporate limits or a private residence taken for failure to pay taxes (McConnell and Picker 1993, 432).
6. To "cram down" is the ability to force dissenting minority creditors to accept an agreement between a majority of creditors and the debtor.
7. In many places, there is no system, so "ad hoc" is a third system. In other places, defaults are dealt with as political problems, and there is no (or little) judicial or administrative capacity to deal with the default.

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