

Creating a Regulatory Framework for Managing Subnational Borrowing

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China has invested about 10 percent of its GDP annually in infrastructure since the 1990s, a much higher rate than in many other emerging economies.¹ Under China's decentralized fiscal structure, subnational governments have taken up a large share of infrastructure investments, particularly in urban areas.² As the Chinese Budget Law prevents subnational governments from borrowing, given the fiscal budget constraint, how have they financed large infrastructure investments since the 1990s?³

Subnational governments finance infrastructure principally through revenues generated from land transactions and from borrowing indirectly off budget, through public utility companies, special-purpose vehicles, and urban development investment corporations. Together, investment financing from proceeds from land leasing and public bank lending securitized on land and property valuation account for 80–90 percent of infrastructure financing by subnational governments.⁴ Urban development investment corporations also issue infrastructure bonds, with the approval of the central government, and private financing is emerging.⁵

China's success in financing and developing subnational infrastructure has been remarkable. Financing infrastructure through land leasing and bank loans securitized on land and property valuation has not only significantly expanded the financial resources available for infrastructure, it has also facilitated the development of competitive land and housing markets.⁶ However, limitations on the current ways of financing infrastructure by subnational governments have increased; if not addressed, they could constrain future infrastructure development, augment fiscal risks, and impede financial market deepening.

The limitations are several. First, financing infrastructure through land lease is not sustainable in the long run because of its one-time nature.⁷ Second, infrastructure investment companies and special-purpose vehicles borrow heavily from state-owned banks, which have weak incentives to price returns and risks, leading to less efficient investment financing decisions. Third, implicit off-budget debt and liabilities are nontransparent and difficult to monitor.⁸ This type of debt not only creates contingent liabilities for subnational governments, it may also implicate the central budget. Fourth, the dominance of public banks in the financing of

infrastructure affects the development of a more diversified and efficient financial market to intermediate savings and investments.

The solution to the large off-budget subnational debt problem in China should not lie in prohibiting subnational borrowing. There are tremendous benefits from granting subnationals access to the financial market. But unregulated subnational borrowing raises the risk of insolvency, which would threaten local service delivery and macroeconomic and financial system stability.⁹ The way forward is to develop a regulatory framework that can help expand subnational borrowing, strengthen subnational fiscal discipline, and manage potential risks while at the same time supporting reforms in the intergovernmental fiscal system and deepening financial market reforms for more efficient utilization of capital.

The rest of this chapter is organized as follows. The next section identifies the benefits and risks of subnational borrowing. The following section summarizes regulatory frameworks for subnational borrowing based on cross-country experiences, looking first at *ex ante* regulations and then at *ex post* insolvency mechanisms that enforce preventive rules and discipline both borrowers and creditors. The last section puts forward tentative ideas on reform options and priorities for China.

Benefits and Risks of Subnational Borrowing

Allowing subnational governments to access the financial market yields four principal benefits. First, it enables subnational governments to access more resources with which to finance infrastructure. The unprecedented scale of urbanization in China requires large-scale infrastructure financing, much beyond what fiscal transfers and subnational own-tax revenues can afford. In China bank loans securitized by land valuation for infrastructure financing already account for more than half of subnational governments' extrabudgetary funds (see World Bank and Development Research Center of the State Council of China 2005). In the United States, most subnational infrastructure is financed by bonds raised in the capital market.¹⁰

Second, subnational borrowing finances infrastructure of long-term assets more efficiently and equitably. Infrastructure investment benefits future generations, who should therefore also bear the financing cost. The maturity of the debt should match the economic life of the assets the debt is financing; amortization of the liabilities should be matched by the depreciation of the assets being financed. Matching asset life to maturity term represents sound public policy, because it means that infrastructure services are paid for by those who use them.¹¹

Third, allowing subnational governments to access the capital market can expose them to market disciplines and reporting requirements, strengthening fiscal transparency and good governance. Rigorous creditworthiness assessment by independent credit rating agencies is a precondition for accessing the capital market.¹² It requires disclosure of independently audited public financial accounts, which strengthens the role of the market in fiscal monitoring and surveillance. The promotion of credit rating is an important step in the development of the capital

market that has a strong bearing on the dynamics of fiscal and financial risks at the subnational level. Fiscal transparency also helps national and subnational governments manage debt rollover risks associated with interest and exchange rates and maturity structure, as well as contingent liabilities, such as locally managed infrastructure contracts and off-budget activities.

Fourth, expanding subnational borrowing facilitates financial market deepening. Bond financing can become a viable alternative to bank lending, thereby deepening the structure of financial markets. In several advanced countries, the subnational bond market represents a significant portion of the debt market (Liu and Waibel 2007a).¹³ Individual investors are the largest holders of U.S. subnational bonds, followed by mutual funds, bank trust accounts, banks, insurance companies, and corporations (Maco 2000). Greater mobility of international capital and diversification of financial instruments have contributed to the rise of subnational bond markets in emerging market countries. Private capital has emerged to play an important role in subnational finance in countries such as Hungary, Mexico, Poland, and Romania.¹⁴

Notwithstanding the benefits of subnational borrowing, in the absence of an effective regulatory framework, substantial risks exist, as manifested by experiences of subnational fiscal stress and debt crises in countries such as Brazil, Hungary, Mexico, and the Russian Federation.¹⁵ Understanding the root causes of these fiscal and debt crises helps policy makers develop an effective subnational regulatory framework that can minimize the occurrences of systemic crises. While China has not yet experienced explicit and systemic subnational insolvency, many lower-level subnational governments reportedly experience financial stresses and have implicit liabilities.

Although expenditure–revenue imbalances may cause subnational fiscal stress, the regulatory framework for borrowing has a profound impact on the fiscal sustainability of a subnational government, as the increase in the fiscal deficit is feasible only when it is financed.¹⁶ Unregulated subnational borrowing grew rapidly in countries such as Hungary and the Russian Federation in the 1990s, contributing to subnational fiscal stress. Borrowing was also facilitated by the decentralization process, which granted subnational governments substantial autonomy in debt financing.

The fiscal deficit itself may not constitute a problem if borrowing is used to finance capital investment and economic growth.¹⁷ However, subnational governments in Hungary, India, and the Russian Federation borrowed heavily to finance operating deficits, leading to unsustainable debt paths.¹⁸ In India much of the growth in fiscal deficits in states in the late 1990s was driven by borrowing to finance revenue deficits; at the height of the crisis, for example, more than 70 percent of new borrowing was used to finance existing debt service in some states.¹⁹

The debt profile of subnational governments can also have inherent rollover risks, which would be exacerbated by macroeconomic and financial shocks.²⁰ Before the macroeconomic crises in Mexico in the mid-1990s and in the Russian Federation in the late 1990s, subnational governments in both countries had risky

debt profiles—short maturities, high debt–service ratios, and variable interest rates. Macroeconomic crises exposed the vulnerability of these governments’ fiscal positions and triggered widespread subnational debt crises.²¹

Subnational borrowing behavior is strongly influenced by the design of the inter-governmental fiscal system and the structure of financial markets. Market participants may tolerate an unsustainable fiscal policy by a subnational government if history backs their perception that the central government implicitly guarantees the debt service of the subnational government (Ianchovichina, Liu, and Nagarajan 2006). Imprudent lending based on implicit guarantees from the central government contributed to subnational fiscal crises in Hungary, Mexico, and the Russian Federation. And lending to subnational governments was dominated by public banks in Brazil,²² Hungary, and India, which had weak incentives to price returns and risks.

Finally, deteriorating fiscal positions were not monitored carefully in these countries before the crises. Credit ratings by independent rating agencies did not exist. Hidden and contingent liabilities quietly eroded the financial health of governments, leading to an outburst of fiscal crises without warnings. Among Indian states in the late 1990s, special–purpose vehicles became a convenient way of circumventing tight budgets. Guarantees by states to support the market borrowing of loss-making public sector undertakings, a contingent liability, grew rapidly.

There are striking similarities between the early development of subnational debt in the United States and developments in emerging markets today. Before the financial crisis of the early 1840s, many states aggressively sought debt financing of their large infrastructure projects. Several states owned public banks, which participated in the financing of infrastructure projects. Some infrastructure projects were developed by the public enterprises created and owned by the states; others were financed by states but owned and operated by private entities. State experimented with a variety of ways of financing investments. Some involved taxless finance, which did not require raising taxes immediately but resulted in taxpayers assuming contingent liabilities.²³

Other sources of off-budget liabilities also go unreported in published fiscal accounts. Growing subnational civil servant pensions under the pay-as-you-go system have been a serious and growing threat to subnational financial health in Brazil and India. Nonperforming assets of banks owned by subnational governments in Argentina and Brazil contributed to the subnational debt crisis of the 1990s. In many developing countries, the cash-reporting system systematically underestimates the financial liabilities of subnational governments by failing to capture arrears to suppliers, contractors, and central government agencies or delayed payment of civil servant wages and pensions.

Regulatory Frameworks for Subnational Borrowing

The development of regulatory frameworks for subnational borrowing in emerging economies since the late 1990s is the direct result of, and response to, subnational fiscal stress and debt crisis. The regulatory frameworks in many countries are still

evolving, and the pace of putting together a full range of regulatory elements varies (Liu and Waibel 2006, 2007a). These countries' experiences offer useful lessons as China searches for ways to resolve its large implicit subnational debt and develops a system for regulating future subnational borrowing.²⁴

A comprehensive regulatory framework consists of two parts. The first part addresses ex ante controls and regulations and the monitoring of subnational governments' fiscal position;²⁵ the second part deals with ex post subnational debt restructuring in the event that a subnational government becomes insolvent. Ex ante borrowing regulation and ex post insolvency mechanisms complement each other. Insolvency mechanisms increase the pain of circumventing ex ante regulation for lenders and subnational borrowers, thereby enhancing the effectiveness of preventive rules. Without ex post insolvency mechanisms, ex ante regulations can easily turn to excessive administrative control and game playing between the central government and subnational governments.

Ex Ante Regulations

Ex ante regulations specify the purpose, types, and procedures of borrowing. Brazil substantially strengthened its ex ante regulations in response to repeated waves of subnational debt crises.²⁶ The federal government bailed out subnational debtors in previous crises, but the resolution of the third debt crisis was conditioned on states undertaking difficult fiscal and structural reforms. The avoidance of unconditional bailouts in 1997 was intended to resolve the moral hazard problem. Ex ante borrowing regulations were embedded in the debt-restructuring agreements between 25 states and the federal government in 1997, sanctioned by various pieces of legislation. In 2000 the Fiscal Responsibility Law consolidated various regulations into one unifying framework.²⁷ In Mexico a new borrowing framework was developed in 2000 to address the subnational debt crisis triggered by the financial crisis of 1994–95. Subnational debt stress in Colombia was less severe than in Brazil or Mexico, but the country nevertheless developed a borrowing framework, as defined by Law 358 in 1997, Law 617 in 2000, and the Fiscal Transparency and Responsibility Law in 2003. To avoid the subnational debt crises experienced by countries in the region, Peru, while embarking on decentralization in 2002, developed subnational borrowing rules (the Fiscal Responsibility and Transparency Law in 2003 and the General Debt Law in 2005). After the state fiscal crises in India in the late 1990s, the 12th Finance Commission put forward recommendations on fiscal rules and targets and incentives for states for compliance.²⁸

There are several key elements in ex ante regulations across countries, according to Liu and Waibel (2006). First, borrowing is allowed only for long-term public capital investment. 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”).²⁹ A number of middle-income countries, including Brazil, Colombia, Mexico, Peru, and the Russian Federation, have recently adopted the golden rule. This rule has itself been subject to criticism. The main concern is that

politicians can escape fiscal rule constraints by shifting current expenditures into capital accounts that are difficult to measure properly (see Mintz and Smart 2006). In the United States, the rules governing subnational borrowing depend on the type of debt issued, the revenue used to service the debt, and the type or form of government issuing it. These rules vary from state to state.

Second, frameworks set limits on key fiscal variables, such as the fiscal deficit, the primary deficit, debt-service ratios, ceilings on guarantees issued, and so on. In India a state with a debt-service ratio exceeding 20 percent is classified as having debt stress, triggering the central government's close monitoring of additional borrowing by the state.³⁰ Based on the recommendations of the 12th Finance Commission, fiscal responsibility legislation is mandatory for all states in India, with the revenue deficit to be eliminated and the fiscal deficit reduced to 3 percent of gross state domestic product by fiscal year 2009. Colombia sought to limit subnational debt to payment capacity (Law 358 in 1997 and the Fiscal Transparency and Responsibility Law in 2003). A traffic-light system was established to regulate subnational borrowing. Subnational governments rated in the red-light zone are prohibited from borrowing; those in the green-light zone are permitted to borrow. The red-light zone includes subnational governments in which the ratio of interest to operational savings exceeds 0.4 and the ratio of debt stock to current revenues exceeds 0.8.³¹ In Brazil the debt-restructuring agreements between the federal government and states established a comprehensive list of fiscal targets, including the debt to revenue ratio, the primary balance, personnel spending as a share of total spending, own-source revenue growth, investment ceilings, and a list of state-owned enterprises or banks to be privatized or concessioned.

Third, several legal frameworks, such as those in Brazil, Colombia, and Peru, include procedural requirements that subnational governments establish a medium-term fiscal framework and a transparent budgetary process. This measure is intended to ensure that key components of fiscal accounts move within a sustainable debt path and that fiscal adjustment takes a medium-term approach, in order to better respond to shocks and different scenarios. The transparent budgetary process includes debates by the executive and legislative branches on spending priorities, funding sources, and required fiscal adjustments.

Fiscal transparency is becoming an increasingly integrated part of fiscal frameworks in Brazil, India, Mexico, and South Africa. These include independently auditing subnational financial accounts, periodically publicly disclosing fiscal accounts, exposing hidden liabilities, and moving off-budget liabilities onto the budget.

To improve fiscal transparency, Mexico introduced a credit rating system for subnational governments, as an element of the regulatory framework for subnational borrowing. Although participation is voluntary, the provisional requirements for lenders effectively make the credit rating a prerequisite for subnational borrowing, as banks are required to apply the highest capital reserve ratio—which implies the largest spread—to loans to subnationals that do not have credit ratings.

Several reforming states in India have started to move off-budget liabilities onto the budget and established a measure of the consolidated fiscal deficit that goes

beyond the traditionally reported fiscal deficit. The reported fiscal deficit does not capture the financing deficit of large public sector undertakings, which implicitly are states' liabilities.

Ex Post Mechanisms for Dealing with Insolvency

The effectiveness of ex ante regulation is limited without an ex post mechanism for dealing with subnational insolvency to deter irresponsible borrowers and imprudent lenders. Overreliance on ex ante regulations, including central government approval of individual loans, limits 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 is not realistic for developing countries to rely heavily on financial markets for monitoring subnational borrowing, they should conscientiously aim at fostering markets in the design of regulatory frameworks.

Ex post regulatory systems, or subnational insolvency mechanisms, deal with insolvent subnationals. Insolvency can occur either because subnationals mismanage their fiscal affairs or because exogenous shocks occur. The insolvency mechanism serves multiple purposes. It helps an insolvent subnational government maintain essential services while undergoing debt restructuring, and it improves the subnational government's creditworthiness, so that it can reenter the capital market. An insolvency mechanism also protects creditor rights, thereby helping to nurture embryonic capital markets, reduce borrowing costs, and extend debt maturity.

A well-designed insolvency mechanism enforces hard budget constraints on subnational governments.³² However, public insolvency differs fundamentally from the bankruptcy of a private corporation because of the public nature of the services governments provide. This leads to a tension between protecting creditors' rights and maintaining essential public services. Creditors' remedies for dealing with defaulters are narrower for subnationals than they are for corporations, leading to greater moral hazard (strategic defaults). While a corporation is able to dissolve itself, this route is barred for subnational governments. When a private corporation goes bankrupt, all of its assets are potentially subject to attachment. By contrast, the ability of creditors to attach assets of subnational governments is greatly restrained in many countries.

The need for a collective framework for resolving debt claims is even greater in the context of subnational insolvency. There are not only conflicts between creditors and debtor, but there are also conflicts among creditors—that is, the so-called holdout problem, in which individual creditors often demand preferential treatment and threaten to derail debt restructurings voluntarily negotiated between a majority of creditors and the subnational debtor.³³ Creditors' remedies in contract laws are effective to enforce discrete unpaid obligations, but they fail if there is a general inability to pay. Individual ad hoc negotiations are costly, impracticable, and harmful to the interests of a majority of creditors. The holdout problem is less 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 and subnational bonds are issued to numerous creditors.

Insolvency mechanisms establish a set of predetermined rules to allocate default risk. These rules anchor the expectations of both borrowers and lenders that both sides will share the pain of insolvency. They enhance the credibility of a hard budget constraint for subnational governments.³⁴ Pressures for political ad hoc intervention decrease, as restructurings become more institutionalized. Enhanced credibility for the no-bailout promise better aligns incentives. Effective insolvency and creditor rights systems allow better management of financial risks.³⁵

There are two main approaches to subnational insolvency: the judicial approach and the administrative approach. Various hybrids also exist. Judicial procedures place courts in the driver's seat. Courts make key decisions that guide the restructuring process, including when and how a municipal insolvency is triggered and how credits are prioritized among competing claims. As debt discharge is highly complex, the judicial approach has the advantage of neutralizing political pressures during restructuring. However, the ability of courts to influence fiscal adjustment of subnational entities is extremely limited because of the legal mandates governing budgetary matters in the executive and legislative branches in many countries. Administrative interventions, by contrast, usually allow a higher level of government in the executive and legislative branches to intervene, temporarily taking direct political responsibility for many aspects of financial management.

The choice of approach varies across countries, depending on history, political and economic structure, and the motivation for establishing an insolvency mechanism. In Hungary a desire to neutralize political pressure for bailing out insolvent subnational governments 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.³⁶ Its framework includes sequential administrative interventions in the event of municipal financial distress: an early warning system consisting of various indicators, intervention by provincial governments, and intervention by the central government. Meanwhile, municipalities in South Africa can appeal to courts for staying, restructuring, or discharging debt. In Brazil, after having bailed out insolvent subnational entities in two earlier debt crises, the federal government chose an administrative approach to dealing with the third debt crisis. The federal government intervened directly in fiscal and debt adjustment, imposing rigorous structural reforms to tackle the root causes of fiscal insolvency; instilled fiscal transparency; and essentially imposed a fiscal and debt-adjustment package based on reform conditions.³⁷

The United States has both judicial and administrative approaches. In response to widespread municipal defaults during the Great Depression, in 1937 the U.S. Congress adopted a municipal insolvency law, known today as Chapter 9 of the U.S. Bankruptcy Act.³⁸ The primary aim of this legislation was to deal with the holdout problem. It was recognized that the mandamus is useful for enforcing unpaid discrete obligations but ineffective if the subnational entity is generally unable to pay.³⁹

Chapter 9 is a debt-restructuring mechanism for political subdivisions and agencies of U.S. states.⁴⁰ It provides the procedural machinery whereby a debt-restructuring plan acceptable to a majority of creditors can become binding on a dissenting minority. Only municipal debtors may file for Chapter 9, and states must give them specific authorization to do so (this is one instance of how the U.S. Constitution gives states control over municipalities). Federal courts may not exercise jurisdiction over the policy choices and budget priorities of the debtor.

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. There is no uniform approach across states. Seventeen of the 50 states give specific authorizations, 7 states grant permission on a case-by-case basis, and 26 states ban municipalities from filing for Chapter 9 (see Laughlin 2005).⁴¹ Examples of states' direct involvement can be found in the State of New York's resolution of New York City's debt crisis in 1975 and the State of Ohio's fiscal early warning system monitoring the financial health of municipalities.

Judicial or administrative, any insolvency mechanism contains three central elements: a definition of insolvency, which serves as a trigger for the procedure; fiscal adjustment by the debtor, to bring spending in line with revenues and borrowing in line with debt-service capacity; and negotiations between the debtor and creditors, to restructure debt obligations and potential relief.

TRIGGERS

Specific legal definitions serve as procedural triggers for initiating insolvency proceedings. Hungary and the United States define insolvency as the inability to pay. South Africa uses one set of triggers for serious financial problems and another for persistent material breach of financial commitments.⁴² In all three countries, the bankruptcy code empowers the bankruptcy court to dismiss petitions not filed in good faith. Since bankruptcy procedures have the power to discharge debt, a subnational entity may file purely for the purpose of evading debt obligations. The Bankruptcy Code in the United States erects obstacles to municipal filing beyond those faced by private debtors, discouraging strategic municipal bankruptcy filings.⁴³

Who can file for bankruptcy? The class of eligible filers differs across countries. In the United States, a municipality can file for bankruptcy only if it is insolvent, has worked or attempted to work out a plan to deal with its debts, and has been authorized by the state to file for bankruptcy.⁴⁴ The fact that the requirements for filing under Chapter 9 are more stringent than those for filing under Chapter 11 reflects the constraint set by the U.S. Constitution. A creditor cannot bring a municipality, against its will, into a federal court, based on the 11th amendment of the U.S. Constitution. In contrast, in South Africa any creditor can file a claim against a municipality.⁴⁵ In Hungary a creditor can petition the court if a municipality is in arrears for more than 60 days.⁴⁶ Schwarcz's (2002) model law for subnational insolvency allows only municipalities to file.⁴⁷

FISCAL ADJUSTMENT

Fiscal adjustment and consolidation are preconditions for financial workouts. Often fiscal mismanagement is the root cause of subnational insolvency. Even if subnational insolvency is triggered by exogenous shocks, such as a sharp rise in real interest rates during a currency crisis, fiscal adjustment is inherent to the insolvency proceeding.

Ianchovichina, Liu, and Nagarajan (2006) present a framework for analyzing subnational fiscal adjustment. Like fiscal adjustment by the central government, subnational debt sustainability is influenced by economic growth of the subnational economy, real interest rates, and the subnational's primary balance. They argue, however, that subnational fiscal adjustment differs qualitatively from national fiscal adjustment. Subnational fiscal adjustment is complicated by the respective legislative mandates of the central vis-à-vis subnational governments and by the intergovernmental finance system. Unable to issue their own currency, subnationals cannot use seigniorage finance. They cannot freely adjust their primary balance because of legal constraints on raising own revenue, dependence on central government transfers, and central government influence over key expenditure items, such as wages and pensions. If public sector banks dominate lending, lending rates may be subsidized, bank lending to subnational entities may exceed statutory requirements, and credit risk concerns may be compromised. Many policies that affect the growth and fiscal health of the subnational economy are designed largely or exclusively by the central government. Even in a decentralized system such as the United States, where subnationals have broad freedom to control expenditures, raise revenues, affect the interest rate spread in a competitive financial market, and influence growth, fiscal adjustment often requires difficult political choices of cutting expenditure and raising revenues.

DEBT RESTRUCTURING

Debt restructuring lies at the heart of any insolvency framework. In administrative interventions, the higher level of government often restructures the subnational's debt obligations into longer-term debt instruments. The 1997 debt agreements between the Brazilian federal government and 25 states, though strengthened by ex ante regulations, might be seen as an ex post mechanism as well, because the agreements were imposed on a case-by-case basis as a condition for debt restructuring.

Debt discharge represents a major departure from the principle that contracts ought to be honored.⁴⁸ A mature judicial mechanism is well placed to ensure that discharges are fair and equitable. Discharges are thus typically limited to judicial mechanisms. Ex post modification of contracts needs to be tightly circumscribed. If creditors feel that they have been treated unfairly, there is a substantial risk that they will stop lending. Perceptions of "equitable" are likely to differ across countries, as distributional judgments are involved.

Debt restructuring and debt discharge are complex. One basic question is who holds the cram down power—that is, confirmation of bankruptcy plans despite the opposition of certain creditors.⁴⁹ Under the U.S. Chapter 9, the municipal

debtor controls the debt-adjustment plan and modifies the terms of existing debt instruments. To the critical question of what the debtor is able to do over the objection of creditors, Chapter 9 incorporates basic Chapter 11 requirements: at least one impaired class of claims approves the plan, secured creditors receive at least the value of the securitized property, and unsecured creditors often lose out.⁵⁰

In Hungary the Debt Committee is chaired by a court-appointed financial trustee, who is required by the debt law to be independent of the local government under proceeding. The Committee is charged with preparing a reorganization plan and debt-settlement proposal.⁵¹ The plan and proposal are decided by majority vote of the Committee and presented to creditors. A debt settlement is reached if at least half of creditors whose claims account for at least two-thirds of total undisputed claims agree to the proposal. Creditors within the same group must be treated equally.⁵² The Act also stipulates the priority of asset distributions. If disagreements arise on distribution, the court makes the final decision, which cannot be appealed.⁵³

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: secured creditors, provided that the security was given in good faith and at least six months before mandatory intervention by the provinces; preferences provided by the 1936 Insolvency Act; and nonpreferential claims, which are settled in proportion to the amount of each claim.

The rescaling of debt obligations represents a major intervention in contract rights. Insolvency law reconciles this clash of creditor rights and inability to pay. It formalizes the relationship between creditors and a subnational debtor in financial distress. Insolvency law preserves the legal order by superseding contractual violations with a new legal act.⁵⁴ A procedure for subnational insolvency recognizes that resolving financial distress through mechanisms guided by law is preferable to muddling through repeated, costly, and often unsuccessful negotiations.

The maturity of the legal system influences the appropriate choice of procedure. Implementation of insolvency procedures—in both the corporate and subnational contexts—rests on the shoulders of insolvency experts and institutions (courts) that resist political influence and corruption. In many emerging economies, limited judicial and administrative capacity may be a binding constraint. The first focus should therefore be on developing institutional ingredients and training bankruptcy professionals. In countries in which the judicial system is embryonic, formal procedural guidelines may be a stepping stone to a fully developed mechanism. This interim solution can be used to build institutional and professional capacity (Gitlin and Watkins 1999).

While Chapter 9 offers a valuable reference for other countries, its framework cannot be copied without care. Against the background of a mature intergovernmental fiscal system and a market-oriented financial system, Chapter 9 was conceived with the narrow objective of resolving the holdout problem. In countries in which intergovernmental systems are still evolving or lending to subnational governments is dominated by a few public institutions, the development of

a subnational insolvency mechanism must be sequenced with other reforms. The unique federal structure of the United States also profoundly influences the specific design of Chapter 9 (with respect to the role of federal courts in the debt-adjustment plan of an insolvent municipality, for example). As the insolvency mechanism needs to define the respective role of different branches and tiers of government, a country's political and economic history plays a key role in shaping the design of the insolvency mechanism.

Reform Options for China

The cross-country experiences described in this chapter offer valuable lessons for China's reform options. The ban on subnational borrowing in China has not worked: subnational governments borrow off budget. Off-budget borrowing has played an important role in financing infrastructure and promoting growth in China. Its limitations—the lack of transparency, the lack of monitoring, the implicit debt, and the dominance of public bank lending, which affects the growth of more-diversified and competitive subnational credit markets—have become more important in recent years, however. As China is now emphasizing more efficient growth, developing a regulatory framework to allow subnational governments to access capital markets should become a policy priority.

An effective framework can reap the benefits of allowing subnational borrowing while mitigating its risks. Subnational borrowing can expand the financial resources available for infrastructure investment to support continuing rapid urbanization while facilitating more efficient and equitable infrastructure financing. The rationalization of subnational borrowing would enhance fiscal transparency and increase the role of markets in fiscal surveillance. It would also facilitate the reform of financial markets to intermediate savings and investments more efficiently.

If subnational governments are allowed to access the capital market, several key issues need to be addressed. First, strengthening a framework for fiscal transparency is a precondition for subnational governments to access capital markets. Benefiting from legislative reforms in other countries, China can require that subnational governments disclose their fiscal accounts, which could be audited by independent organizations. The disclosure should not be limited to direct government budgetary accounts; all special-purpose vehicles created by subnational governments should disclose their financial accounts. A comprehensive list of fiscal indicators evaluated by international rating agencies can serve as a reference on types of fiscal information to be disclosed (Liu and Tan 2007).

Second, the regulatory framework should spell out *ex ante* rules governing the purpose of borrowing, the types of debt that can be incurred, and the debt instruments and the procedures for issuing debt. *Ex ante* regulations in the United States and other countries can provide useful references. Creditworthiness assessments by reputable rating agencies should be required of all subnational governments wishing to access the capital market. Mexico's enforcement of credit rating through required risk-adjusted capital reserve ratios for lenders offers a useful example.

Third, key elements of insolvency mechanisms could be developed that not only restructure any implicit distressed subnational debt but also deal with possible future insolvency. How the central government restructures subnational debt will not only influence profoundly the future borrowing behavior of borrowers, it will also shape the expectation of lenders, particularly when the set of suppliers of subnational creditors is expanded to include private creditors. Experiences from other countries show that it may not be politically feasible not to rescue a failed subnational government, particularly when dysfunctional service delivery affects a large segment of the population. However, international experiences have also demonstrated repeatedly that unconditional bailouts of subnational governments lead to moral hazard, encouraging irresponsible fiscal behavior by subnational governments and reckless lending.

Based on cross-country experiences, several key design considerations should be considered in crafting insolvency mechanisms. First, the tension between the contractual rights of creditors and the need for maintaining public services in the event of financial distress and default needs to be balanced. Second, subnational entities need to face hard budget constraints. Third, clear and predictable rules need to be established to anchor expectations of borrowers and creditors. Fourth, the subnational entity and creditors need to share the burden of insolvency. Finally, countries face a choice between a judicial, an administrative, or a hybrid approach to insolvency. Actual mechanisms differ across countries; the design chosen depends largely on country-specific circumstances.

China could consider a phased approach, allowing fiscally strong subnational governments to access the capital market first. Although legislation to allow subnational borrowing cannot favor selected subnational governments, differentiation could be designed as self-selective—that is, only those subnational governments that have adopted fiscal transparency and budgetary reforms could be allowed to access the markets.

A phased approach could also apply to types of bonds. China should expand revenue bonds before expanding general obligation or other types of bonds.⁵⁵ Revenue bonds, issued by subnational governments and public utilities, reinforce self-sustaining finance, because the repayment of principal and interest draws entirely from the revenues generated from the project financed by the bonds.⁵⁶ These bonds therefore allow the market to play a central role in enforcing debt limitation, pricing risks, and matching the maturities of liabilities and assets. More important, revenue bonds reconfirm that sustainability is about the ability of the borrower to service the debt rather than the level of the debt.

Certain preconditions must be met for revenue bonds to work. Tariff structures for infrastructure projects should be set based on sound regulatory frameworks. Subnational entities, such as special-district or special-purpose vehicles, that go to the market to raise funds should be willing to undertake corporate governance reforms and allow their accounts to be audited independently. Hard budget constraints on these special-district and special-purpose vehicles are a must. Without such constraints, the credit rating agency would assume explicit or implicit guarantees, distorting credit ratings and spreads.

A regulatory framework for subnational borrowing frameworks is inseparable from other reforms. Strengthening their revenue base helps subnational governments access capital markets. Reforms of the intergovernmental fiscal system increase the capacity of subnational revenue. China's new corporate bankruptcy law should help develop corporate bond markets and increase financial restructuring expertise, both of which can help design and implement the insolvency mechanism for subnational entities. More competitive financial markets price and allocate risks more efficiently. While ongoing banking reforms would encourage competition and efficiency, subnational bonds as an alternative to bank lending would further strengthen competition. Finally, securities law and antifraud enforcement reduce costs, increase investors' confidence, and deepen financial markets.

Notes

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1. For example, public infrastructure investment by Indian states has stayed below 3 percent of their gross state domestic products since the 1990s. In Brazil public investment by the general government (including for infrastructure) shrunk about 50 percent between 1998 and 2006, to about 2 percent of GDP.
2. The term *subnational* refers to all tiers of government below the central government. The category should also include special-purpose vehicles or investment companies created by subnational governments.
3. The Budget Law (1995) forbids subnational governments from borrowing in financial markets without approval from the State Council. The term financial market refers to bank lending and bond financing.
4. The central government also issues bonds and on-lends proceeds to subnational governments. Subnational governments have also used loans from multinational organizations through sovereign guarantees. Intergovernmental fiscal transfers play a minimal role in infrastructure financing; beneficiary (user) charges are extensive in financing operations and maintenance in coastal regions, such as Shanghai. Subsidies and fiscal transfers are playing an important role in financing infrastructure in rural and lagging regions. Data on investment financing are based on World Bank and Development Research Center of the State Council of China (2005), which also reports that from 2001 to 2003 alone, revenues from land-use right transfer fees were Y910 billion.
5. The approval procedure is reported to be complex and done on a case-by-case basis. Bond financing is small relative to bank lending. Private financing includes concession agreements, initial public offerings (IPOs), and joint ventures.
6. For implementation shortcomings, see World Bank and Development Research Center of the State Council of China (2005).

7. The land-use right transfer fee is a one-time payment made by land users for obtaining urban land-use rights for a period of time, usually about 70 years for residential use and 40 years for commercial use.
8. There are no comprehensive data on the implicit subnational debt. According to the Development Research Center of the State Council (2003), subnational governments borrow excessively, their outstanding debts are significant, and their repayment behavior is unknown.
9. In a legal sense, subnational insolvency refers to the inability to pay debts as they fall due. Yet details vary across countries. In a number of countries, specific legal definitions serve as “procedural triggers” for initiating insolvency procedures. See Liu and Waibel (2007a).
10. In the United States, 60 percent of subnational capital spending is financed by bonds raised in the capital market, 25 percent is provided by federal grants (primarily for highways), and 15 percent comes from current revenues (Petersen 2005).
11. However, borrowing to finance infrastructure can burden future generations with debt without corresponding benefits when infrastructure is badly planned and managed.
12. For a review of how international rating agencies S&P, Moody’s, and Fitch assess subnational creditworthiness, see Liu and Tan (2007).
13. Subnational bonds are bonds issued by states, counties, cities, towns, and special-purpose government entities to finance public investments. The United States has the largest subnational bond market, with \$2.23 trillion in subnational bonds outstanding as of January 1, 2006.
14. Growth in subnational bond markets in emerging market countries has not been steady, with debt crises in the 1990s affecting their growth. Since 2001 growth in subnational bond markets has picked up in countries such as Mexico, Poland, Romania, and the Russian Federation. Public banks still dominate subnational lending in countries such as Brazil and India. For more discussion, see Liu and Waibel (2007a).
15. See Liu and Waibel (2006) for a review of subnational debt crises in Brazil in the 1980s and 1990s, India in the late 1990s, Mexico in 1994–95, and the Russian Federation in 1998–2000.
16. Such finance can take multiple forms, including direct borrowing and the accumulation of arrears.
17. This assumes that economic growth translates into increased debt-service capacity. This may not happen if a subnational government is unable to exploit its growing tax base. In this case, borrowing can still provoke a fiscal crisis, even when the proceeds are put to good use.
18. Ianchovichina, Liu, and Nagarajan (2006) analyze key factors affecting subnational fiscal sustainability.
19. The revenue deficit is current expenditure (such as wages, pension outlays, subsidies, transfers, and spending on operations and maintenance) net of total revenues. For more discussion of state fiscal crises in India, see Ianchovichina, Liu, and Nagarajan (2006).
20. Rollover risk refers to the fact that debt will have to be rolled over at an unusually high cost or, in extreme cases, cannot be rolled over at all. To the extent that rollover risk is limited to the risk that debt may have to be rolled over at higher interest rates, it may

- be considered a type of market risk. However, because the inability to roll over debt, exceptionally large increases in government funding costs, or both can lead to or exacerbate a debt crisis, it is often treated differently (IMF and World Bank 2001).
21. Between 1998 and 2001, at least 57 of the Russian Federation's 89 regional governments defaulted. In 2001, six years after the peso crisis, 60 percent of subnational governments in Mexico still struggled financially. One interesting difference is that subnational governments were allowed to borrow overseas in Russia while such borrowing was prohibited in Mexico. Subnational governments in Mexico were not insulated from foreign exchange risks, however, as the risks were transmitted through inflation and interest rates.
 22. Bonds were a major source of financing in São Paulo.
 23. For details on state debt crises in the United States in the early 1840s, see Wallis (2004). For implications of the U.S. experience for developing countries, see Liu and Wallis (2007).
 24. The focus of this chapter is on demand-side regulation. The supply-side story would need to look at various elements of the financial system, including competition and prudential regulations.
 25. See Ter-Minassian and Craig (1997) for a summary of *ex ante* subnational borrowing control frameworks in more than 50 countries. See Liu and Waibel (2006) for a review of regulations since the late 1990s in several countries.
 26. Brazil has always had statutory controls on subnational borrowing—controls on new borrowing and on the total stock of debt, expressed as percentages of revenue. But these controls had loopholes, which subnational governments were creative in exploiting. The regulations were strengthened in the late 1990s, leading to the unifying framework of 2000.
 27. For a review of Brazilian debt crises and remedies, see Dillinger (2002). For a review of fiscal responsibility legislation in several Latin American countries, see Webb (2004).
 28. The constitutionally mandated Finance Commission convenes every five years to determine the sharing of revenues between the center and the states. Depending on its terms of reference, it may also recommend measures to improve state finances.
 29. Short-term borrowing for working capital can be permitted, but provisions should be built in to prevent executive branches from using rollover borrowing as a way of borrowing long term to cover operating deficits.
 30. The debt-service ratio measures debt-service capacity. National governments monitor the debt-service ratio of subnational entities, but they define payment capacity differently. Brazil defines it as the share of current revenue net of transfers. Colombia defines it as the share of operational savings. India defines it as the ratio of debt-service payments to total revenues. Peru treats it as the share of current income, including transfers. The Russian Federation defines it as the share of total budgetary expenditures.
 31. Law 358, passed in 1997, introduced a rating system for subnational governments by establishing Indebtedness Alert Signals. These signals were based on two indicators: a liquidity indicator (interest payment/operational savings) and a solvency indicator (debt/current revenue). Subnational governments were classified into one of three zones. Governments in the red-light zone were not allowed to borrow, governments in the green-light zone were allowed to borrow, and governments in the yellow-light zone

- were allowed to borrow with the permission of the central government. Law 795, passed in 2003, eliminated the yellow-light category. Law 617, passed in 2000, established a ceiling for the ratio of discretionary current expenditure to non earmarked current revenues. The implementing rules for Law 819, which was passed in 2003, added a third indicator to the traffic-light system by relating the primary surplus to debt service.
32. If there is a bail-out system, subnationals are likely to share the country rating by rating agencies, giving them easier and cheaper if indirect access to the financial market.
 33. The inability to compel holdouts to cooperate in a negotiated compromise motivated the passage of Chapter 9 in the United States (McConnell and Picker 1993).
 34. Insolvency law exercises a disciplining function (Paulus 2006).
 35. A study by 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.
 36. South Africa has three spheres of government: federal, provinces, and municipalities. Provinces generally do not borrow from the financial market.
 37. For a review of state debt crises in Brazil and debt restructuring packages, see Dillinger (2002).
 38. The Bankruptcy Act of 1938 (known as the Chandler Act), 50 Stat. 654 (1937), amending the 1898 U.S. Bankruptcy Act, was the first law governing municipal bankruptcy in the world, although other countries had contemplated the introduction of similar mechanisms earlier (for example, Switzerland in the second half of the 19th century [see Meili 1885]). In 1934 the U.S. Supreme Court declared an earlier version of this legislation unconstitutional (see *Ashton v. Cameron County Water Improvement District No. 1*, 298 U.S. 513).
 39. The mandamus is a court order obliging public officials to take a certain course of action. For an excellent account on the mandamus and its motivation for Chapter 9, see McConnell and Picker (1993).
 40. The enactment of the statute was one more step in a series of regulatory reforms on subnational borrowing since the first subnational debt crisis in the early 1840s. After the 1840s crisis, 12 states adopted new constitutions, and 11 of the 12 required that the state legislature adopt new procedures for authorizing state borrowing. Other reforms at the time included opening access for infrastructure finance and development and eliminating taxless finance (Wallis 2004).
 41. The seven states with attached conditions include Illinois, Ohio, North Carolina, Pennsylvania and New York.
 42. In the United States, a municipality is considered insolvent if it is either currently not paying debts as they become due or unable to do so. In Hungary triggers are set off when the debtor has neither disputed nor paid an invoice sent by a creditor within 60 days of receipt (or of the date due if the due date is later) or has not paid a recognized debt within 60 days of the due date.
 43. Only municipalities face a statutory requirement of insolvency. Section 109(c) imposes a procedural bar that is unique to Chapter 9 debtors. It requires pre-filing efforts by the municipal debtor to work out its financial difficulties. The debtor must have reached agreement toward a plan, have failed to do so despite good faith negotiations, or have

- been unable to negotiate because negotiations were “impracticable.” Municipalities need state authorization to file for bankruptcy.
44. United States, Chapter 9, 109 (C) (2).
 45. South Africa, Municipal Finance and Management Act, 2003, Chapter 13, Section 151 (a).
 46. Law on Municipal Debt Adjustment, Law XXV, 1996.
 47. Based on the experiences of Japan and the United States, Schwarcz drafted a law for subnational insolvency that may serve as a model for decentralizing countries elsewhere. It focuses on dealing with hold-out creditors and preventing bailouts.
 48. The contract clause of the U.S. Constitution (Article I, section 10, clause 1) protects contracts against ex post impairment.
 49. Courts in the United States can confirm a plan if it has been accepted by at least one impaired class, does not discriminate unfairly, and is fair and equitable.
 50. For case histories, see Kupetz (1995) and McConnell and Picker (1993).
 51. The Law on Municipal Debt Adjustment, Law XXV, 1996, Chapter II, § 9 (3) stipulates the financial trustee’s independence.
 52. Law on Municipal Debt Adjustment, Law XXV, 1996, Chapter III, § 23.
 53. Law on Municipal Debt Adjustment, Law XXV, 1996, Chapter IV, § 31. Assets are distributed to creditors in the following order: (a) regular personnel benefits, including severance pay; (b) securitized debt (securitized by mortgage and other lines); (c) debts due to the central government; (d) social insurance debts, taxes, and public contributions as tax; (e) other claims; and (f) interest and fees on debt obligations continued during the bankruptcy proceeding.
 54. 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.”
 55. A general obligation bond is secured by a pledge of the issuer’s taxing power (limited or unlimited). General obligation bonds of local governments are paid from property taxes and other general fund revenues. A double-barreled bond is backed by a special tax or a specific source of revenue as well as by the full faith and credit of the issuer. A limited tax bond is secured by a pledge of a tax whose rate or amount is limited.
 56. No financing structure has been of greater importance to the growth of the U.S. subnational debt market than revenue bonds. Of the \$226.6 billion in long-term bonds issued in the United States in 1999, about 70 percent (\$156.4 billion) were revenue bonds; only 30 percent (\$70.2 billion) were general obligation bonds. See Liu and Wallis (2007) for details and a description of the most significant institutional reforms in the 150-year history of the development of the U.S. subnational debt market.

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