Chapter 15

Latin America and the Caribbean
Brazil

A past of excessive borrowing by a few large states makes the future difficult for all subnational entities.

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Lessons

Brazil's experience with subnational borrowing serves as a cautionary tale of the deep and lasting effects that weak central control, macroeconomic instability, fiscal indiscipline, and insufficient regulation can have on a country's public finances. This story in large part reflects the legacy left by imprudent lending by state banks and failure to subject the states to the discipline of the capital market. It also reflects the gyrations of Brazil's political system as it alternated between decentralization and recentralization.

The latest phase of democratization has led to advanced devolution of political and fiscal authority to the states, giving them substantial power to generate revenue and a large degree of autonomy. Subnational borrowing powers have traditionally been extensive and flexible. There was abundant borrowing in the 1960s and 1970s, with both domestic and foreign bond issues permitted as well as financing from state-owned banks, which

often amounted to "lending to oneself." Financing by state-owned banks proved to be a key source of fiscal indiscipline, exacerbating already weak central controls and the ambiguous intergovernmental framework, where the assignment of expenditure responsibilities is particularly opaque. In addition, pressures on state budgets, such as generous pension plans for retired public servants, made balancing the budgets difficult.

Brazil has suffered multiple bouts of macroeconomic instability, starting with debt defaults by the central government in the 1980s and hyperinflation in the mid-1990s. This instability has pushed local finances over the edge, leading to a need for three rounds of bailouts in recent years. The moral hazard that central guarantees and recurring bailouts have introduced in local fiscal behavior has been difficult to erase. Credit enhancements—such as the Central Bank's appropriation of intergovernmental transfers to guarantee repayment—have removed incentives for creditors to factor local fiscal health into their financing decisions. As a result of the most recent default, however, the central government prohibited any additional borrowing (with the exception of refinancing existing debt) until 2010. It also instituted stricter controls for managing outstanding local debt and placed a cap on state spending.

Several characteristics of the crises serve as useful lessons. Although 30 percent of local debt took the form of bonds, the bond debt problem was concentrated in a handful of states accounting for 90 percent of this debt. A large share of debt was incurred with state banks that lacked incentives to perform competent analyses of local financial conditions and, in many cases, resulted in the obvious conflict of having a governing body lend to itself. Additionally, the absence of the private sector from subnational lending eliminated a potential source of evaluation and control. This last characteristic is a curious one, since Brazil's financial markets are relatively developed by Latin American standards.

The central government's current stranglehold on local debt and financial operations has not addressed the underlying prob-

lems of Brazilian states, particularly the inability to cure persistent fiscal deficits and the continued rollover of highly subsidized debt. Legislation has focused on administrative controls and restrictions, and little has been done to correct the deficiencies in market mechanisms. Regulatory reforms have been proposed—including laws relating to bankruptcy, contracts, and disclosure—to foster a prudent, market-based institutional framework. Some headway has been made in these areas, and there is hope that further reform, together with improvements in local fiscal health and retirement of the existing debt burden, will open the door to a sustainable capital market for local obligations in the medium term.

Sovereign Context

Brazil is politically structured as a federation. While the revenue sources of the different tiers of government are reasonably well laid out by the Constitution, there is much overlap in the provision of services. The country has a large municipal sector with around 5,500 units—ranging from small rural enclaves to the massive urban centers of São Paulo and Rio de Janeiro. These two megacities have tended to overshadow much of the rest of the country economically and politically and, not coincidentally, account for more than two-thirds of the municipal debt. Much of the political history of the country has been marked by a tug-of-war over resources and influence between the wealthier regions in the Southeast and the poor regions in the Northeast.

Brazil has been plagued by a history of fiscal and financial instability. The large debts accumulated in the past by some of the provinces and the two largest cities have imposed a big burden on the country's finances, and their refinancing through a series of federal bailouts has led to major macroeconomic problems. The highly decentralized public sector and heavy personnel expenditures have contributed to persistent public sector deficits. Transfers from the central government dominate local revenues, accounting for about two-thirds on average, and the many very small municipalities depend heavily on them.

As a result of recent financial reform efforts, direct borrowing from the financial markets is now tightly regulated and municipal borrowing is curtailed. Borrowing is limited to subsidized loans from two state-controlled banks—in effect, the government lending to itself. Private lending to municipalities is thereby effectively precluded. Efforts to introduce private lending require changes in the concessionary loan practices as well as other reforms to improve creditworthiness. The moral hazard resulting from a tradition of interference and bailouts of troubled loans presents a major obstacle to creating an efficient market for subsovereign credits.

Macroeconomic Conditions

The Brazilian economy is the largest in Latin America and the tenth largest in the world by GDP, with a strong export-oriented private sector. Before the introduction of the Real Plan in 1994 Brazil's economic performance had been characterized by macroeconomic instability. The events of the 1970s and 1980s—the oil shock, the debt crisis, the rise in real interest rates, and the decline in foreign direct investment and credit—caused a drastic contraction of the economy. State intervention, poor fiscal management, exchange rate management, and general indexation of wages contributed to hyperinflation and state and federal fiscal deficits. In 1980–88 annual inflation averaged 200 percent, and in 1989–94 it soared to an average 1,260.3 percent. After the Real Plan was introduced in 1994, however, inflation decelerated, falling to a manageable 9 percent in 1996, the year that Rio de Janeiro floated a municipal bond issue in the international bond markets.

Aimed at curbing inflation and building a foundation for sustained economic growth, the Real Plan was designed to address persistent deficits in the federal government's accounts, expansive credit policies, and widespread backward-looking indexation. The plan was implemented in three phases. The first, addressing the fiscal deficits, had as its centerpiece the creation of the Emergency Social Fund by constitutional amendment in February 1994. The second phase, initiated in March 1994, began a process of monetary reform by introducing a new index, the real unit of value, aimed at eliminating the distortions in relative prices in the economy. In July 1994 the federal government initiated the third phase of the Real Plan by adopting a new currency, the *real*, with an initial ceiling of parity with the U.S. dollar, and removed the real unit of value. By promoting deindexation of most prices and adopting a floating exchange rate subject to a parity cap, the federal government was able to orchestrate an abrupt deceleration of

inflation, a convergence in the growth rates of tradable and nontradable goods, and greater competition in all sectors.

Large imbalances remained in public finance. Brazil's current account, which ran an average deficit of 0.02 percent of GDP between 1990 and 1994, deteriorated to a deficit of 2.5 percent in 1995 and 3.2 percent in 1996. In addition, Brazil's external debt ratios remained relatively high. At the end of 1996 total external debt stood at $178.1 billion, equivalent to 322.7 percent of exports, up from 296 percent the year before. Annual debt service obligations were also heavy, reaching 49.3 percent of exports in 1996 and 57.3 percent in 1997.

In the fall of 1997 the Brazilian currency came under attack as a result of the general anxiety about emerging markets that grew out of the East Asian crisis. Unlike Argentina, Brazil had not tied its currency to the dollar but allowed its targeted exchange value to crawl downward, allowing some room for inflation. It raised interest rates to defend the currency and appeared to be faring well until the Russian crisis in the summer of 1998 brought on another crisis in confidence, intensified by the threat of Minas Gerais to default on its debt to the federal government.

In January 1999 Brazil devalued its currency. Assisted by a loan from the International Monetary Fund, it immediately implemented a targeted inflation monetary policy that contained inflation: in 1999 the consumer price index rose by 4.9 percent, in 2000 by 6.2 percent, and in 2001 by 9.4 percent. Brazil's debt management strategy focused on extending the maturities of federal debt by indexing government securities to the U.S. dollar and the inflation rate. That debt structure, combined with the Argentine default at the end of 2001, led to a new Brazilian debt crisis. In August 2002 the federal government received a package of financial assistance from the International Monetary Fund: a $30 billion loan that was to be disbursed in two installments, the first ($6 billion) before the presidential election and the second ($24 billion) when the newly elected president took office. Meanwhile, anticipating political change, the international financial markets reacted nervously to the election campaign and the *real* faced continued downward pressure in world markets.

Structural Reforms

In the 1990s Brazil undertook myriad reforms as it attempted to liberalize its economy and contain the size of its government sector. The Cardoso administration, entering office in October 1994 with a clear agenda of reform, made great progress in privatizing state-owned enterprises and improving

the climate for foreign investment. However, other initiatives critical for consolidating the public sector were not implemented, including cutting public sector payrolls, reforming the tax structure, overhauling the social security system, and reforming the civil service.

Brazil's privatization program is among the largest and most comprehensive in the developing world. The government has eliminated several distortions in the program, most notably the distinction between resident and nonresident ownership of companies, which had prevented foreign participation in such sectors as mining, transport, petroleum, electricity, and telecommunications. It also improved the regulatory regime and introduced tax exemptions and incentives for investments in less developed regions and export-oriented zones.

Between 1991 and 1995 Brazil privatized 41 companies, for total revenues of $9.2 billion; privatizations in 1996 raised another $6 billion. The privatizations also transferred $8.1 billion in debt to the private sector. Foreign direct investment, which rose from $2.2 billion in 1994 to $17 billion in 1997, accounted for a third of the privatization proceeds. However, difficulties in the public sector persisted, proving to be largely impervious to reform.

Intergovernmental Relations

The Brazilian federal structure, established by the 1988 Constitution, consists of the federal government, 26 states, one federal district, and an undefined number of municipalities (roughly 5,500 today). The 1988 Constitution set the powers of the federal government, which include national defense, social security, monetary policy, control of public debt, interstate and foreign trade, and the establishment of general norms for civil servants. It granted states all powers not otherwise reserved for the federal government. The Constitution also delineated some concurrent responsibilities of the federal government and states, including education, tax legislation, and social assistance, and it specified that federal law, while limited to general norms, prevails in case of conflict with state legislation.

Unlike other federal constitutions, which typically subject municipalities to the control of their state, the 1988 Constitution recognized municipalities as a third tier of government with the same constitutional status as states. Accordingly, states cannot impose on or prohibit the actions of the municipalities within their jurisdiction. The Constitution left the division of functions and responsibilities between states and municipalities ambiguous, merely reserving for municipalities the power to legislate on subjects

of local interest and provide for local services. The loose controls on the local sector led to the emergence of a large number of small municipalities, an outcome fostered by the intergovernmental transfer system.[1]

Revenue Raising Capabilities

The 1988 Constitution explicitly defined the division of tax responsibilities between the levels of government. In addition to assigning a specific tax base to each level of government, the Constitution created a system of revenue sharing that redistributes resources among levels of government and geographic regions.

Direct Revenues. The Constitution assigned states receipts from the value added tax and authorized them to tax automobiles and real estate. Since the value-added tax is the highest yielding tax in Brazil, this assignment gave states much independence, particularly in the wealthy Southeast. States retained some flexibility to set the rates on interstate sales, subject to the minimum and maximum limits established by the Senate.

Municipalities were assigned a tax on services, an urban property tax, and a real estate transaction tax. These are all locally assessed and collected, although the tax on services is subject to a maximum established by federal law.

Revenue Sharing System. The 1988 Constitution substantially increased the amount of taxes shared by the federal government. Brazil's revenue-sharing system has two main parts: the participation funds and the state value added tax.

The participation funds consist of fixed shares of the federal government's two principal taxes: the income tax and the industrial product tax. Under the 1988 Constitution the federal government is required to transfer 21.5 percent of the participation funds to the states. Within each group of states, 95 percent of the funds are distributed among states on the basis of population and per capita income, with poorer states receiving a larger share. The other 5 percent is distributed in proportion to the area of states, to cover the relatively higher expenditures associated with a dispersed population. The federal government distributes another 22.5 percent of the participation funds to municipalities, transferring 10 percent of this amount to state capitals and distributing the other 90 percent among all other municipalities on the basis of population and the state's per capita income.

The participation funds represent a substantial redistribution of revenues among regions. On average, the less wealthy states of the North, Northeast, and West-Central regions receive twice as much as the states of

the South and Southeast. The participation funds doubled in size between 1967 and 1992 and have been a predictable and reliable source of income over the past 10 years.

The state value-added tax is the second major tax-sharing arrangement. Under the Constitution states are required to transfer 25 percent of their proceeds from the value-added tax to the municipalities within their territory. Of this amount, 75 percent must be distributed on the basis of the origin of tax collections. The other 25 percent is distributed according to formulas established by each state legislature. The Constitution expanded the base of the state value-added tax by abolishing federal taxes on fuel, mining, transport, and electricity and incorporating these into the state value-added tax.

Expenditure Responsibilities

In contrast to the explicit provisions on revenue sharing, the Constitution leaves unclear how expenditure responsibilities are to be divided between federal and subnational governments and between states and municipalities. This ambiguity has led to friction over their roles. To match the increase in revenue sharing mandated by the 1988 Constitution, the federal government proposed a program of decentralizing expenditures. When this proposal was rejected by the Congress, the federal government transferred some expenditure responsibilities to states and municipalities on an ad-hoc basis. These included suburban railways and highways in São Paulo and Rio de Janeiro, transferred to their state governments, and federal hospitals in Rio de Janeiro, transferred to the state and municipality. The federal government also unloaded some health care costs onto subnational governments by reducing federal compensation payments.

Despite the federal government's decentralization efforts, the 1988 Constitution extended central control over two main areas: personnel and state debt. Under the Constitution state and local governments cannot dismiss redundant civil servants or reduce nominal salaries. Public employees have the right to retire after 35 years of employment (30 years for women and teachers) and to receive a pension equal to their final salary plus any subsequent constitutionally mandated increases. This mandate has proved to be onerous, substantially reducing the fiscal flexibility of states and municipalities. Pension benefits are particularly troublesome: constitutionally protected, very liberal, and unfunded, they represent an ongoing drain on current revenues.[2] Reforms have been undertaken, but they are forward looking, and civil servants employed at the time the 1988 Constitution was adopted continue to be protected by its provisions (World Bank 2001). To

restrict growth in the protected classes of civil servants, local governments reportedly are attempting to privatize services and hire workers on a temporary basis.

In response to the profligate borrowing of the past, the 1988 Constitution also provided that any state or municipal government wishing to borrow, domestically or internationally, must obtain approval from the Senate. Subsequent tightening of statutes and regulations has sought to rein in subnational borrowing and reduce the need for further bailouts by the national government.

Regulatory Framework for Subnational Borrowing

Brazilian states and municipalities traditionally have had access to a wide variety of debt funding sources:

- Domestic bond issues.
- Domestic private commercial banks.
- Federal intermediaries, such as the Federal Housing and Savings Bank and the Federal Development Bank.
- State-owned commercial banks.
- Foreign institutions, including multilateral development banks and private commercial banks.
- Informal sources, such as arrears on salaries and on payments to suppliers.

Under the 1988 Constitution the Senate retained the authority to regulate state borrowing. It adopted a resolution regulating such borrowing on the basis of a state's existing debt stock, its revenues, and its capacity to service debt. However, the Senate reserved the right to grant exceptions, and it often did so.

In 1998 the Senate adopted several new measures to control subnational debt. One of these, Senate Resolution 78, prohibits the issuance of new subnational bonds until the end of 2010 except to finance the rollover of previously issued bonds. In addition, Resolution 78 contains the following:

- Prohibits borrowing from own enterprises or suppliers.
- Limits new debt to no more than 18 percent of real net revenues.[3]
- Limits annual debt service to no more than 13 percent of real net revenues.

- Limits debt outstanding to no more than 2 times real net revenues.[4]
- Prohibits governments in default from accessing new borrowing.
- Requires governments to have a primary surplus before obtaining new loans.[5]
- Prohibits governments from contracting new debt during the last six months of their term.

The Law of Fiscal Responsibility, adopted in 2000 by the Senate, takes a more comprehensive approach, extending beyond subnational governments to the federal government as well. The law contains the following:

- Limits all personnel costs—including pensions and permanent and temporary personnel—to 60 percent of current revenues.
- Limits the net stock of debt to no more than 2 times net current revenues for states and 1.2 times for municipalities.
- Allows states and municipalities that exceed the debt stock limit 15 years to adjust to the requirements.
- Authorizes new debt only when debt service does not exceed 11.5 percent of current revenues.
- Forbids borrowing between levels of government, except for federal institutions.

External borrowing by states is largely exempt from federal regulation unless it requires a federal guarantee, in which case the Ministry of Finance has the authority to grant or deny federal backing. Still, the National Monetary Council of Brazil, in its Resolution 2280, established conditions for the external credit operations of states and municipalities. The two most important provisions of this resolution are the following:

- The proceeds of the external credit must be used to refinance the issuer's outstanding domestic financial obligations, with preference given to the obligations with a higher cost of funding or shorter maturity than the external debt.
- In cases where the issuer has no credit rating, the issuer must establish a sinking fund escrow account with a balance equivalent to the monthly debt service obligation (principal and interest).

The federal government and the Central Bank have attempted to tighten regulations on the supply side. Central Bank Resolution 2461, adopted

in 1998, prohibits private banks from increasing their holdings of state debt other than bonds. However, it does allow them to adjust the composition of their state debt portfolios as existing debt matures. Central Bank regulations also prohibit states from borrowing from their own commercial banks, although this rule has not been strictly enforced.

In addition, the Central Bank prohibits public sector banks and financial institutions from having more than 45 percent of their equity in the form of loans to or investments in public sector entities. The Federal Housing and Savings Bank and the Federal Development Bank are both subject to this limitation. Municipal development funds are not subject, though they are limited by the Fiscal Responsibility Law. The Central Bank also controls borrowing in its capacity as adviser to the Senate: every borrowing request must be directed to the Central Bank, which analyzes each case and makes a recommendation to the Senate.

Interestingly, all limitations on subnational borrowing are based on administrative controls, with no market-oriented mechanisms in place. Introducing a market-based system of credit allocation remains a dream as the country continues to try to dig itself out of a legacy of fiscal profligacy.

Recurring Subnational Debt Crises

The regulatory framework to control subnational debt emerged as a consequence of three bailouts by the federal government during the 1980s and 1990s. The first followed the debt crisis in 1989, caused by the heavy domestic and international borrowing in the 1970s and the shocks to the economy in the early 1980s. When the federal government defaulted on its external debt in the 1980s, subnational governments did the same; when the federal government reached an agreement with foreign creditors, it had to assume the subnational foreign debt of $19 billion. The outstanding debt plus arrears were rescheduled for up to 30 years. This initial bailout included only the foreign debt of states and municipalities.[6]

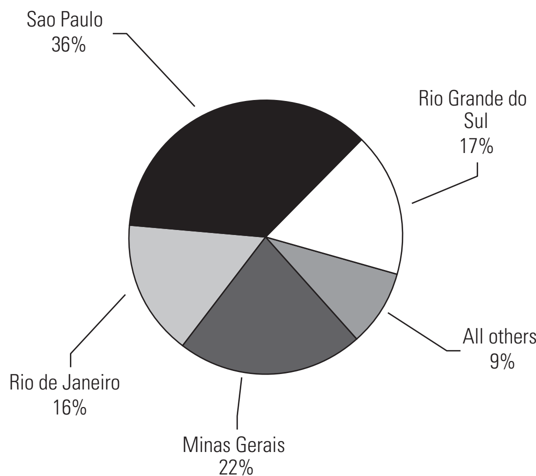
After this first bailout subnational governments started to pressure the federal government to reschedule their debt held by federal institutions. In 1991 a second round of negotiations began, concluding in 1993 with another bailout, this time covering only debt with federal institutions ($28 billion). As in the previous bailout, the debt was rescheduled for up to 30 years and interest rates were subsidized.

As part of this second bailout the federal government took steps aimed at reducing the need for future bailouts: it prohibited itself from lending to

states and municipalities in default, and it adopted a constitutional provision allowing itself to intercept intergovernmental transfers to pay debt service. The limits that the Senate established relating to debt service permitted the capitalization of debt service obligations that could not be met.

During the negotiations that began in 1991 the states made several attempts to include their bonds. These attempts failed, and, not surprisingly, these bonds led to another subnational debt crisis. By the mid-1990s the high interest rates that states faced and the capitalization clause had led to a dramatic increase in their stock of debt. Bonds accounted for 30 percent of the debt not yet refinanced, and the domestic bonded debt of states rose from 2.3 percent of GDP in 1991 to 5.4 percent by mid-1996. However, the debt in bonds was not a widespread problem: four states accounted for more than 90 percent of the almost $30 billion in debt stock in bonds (figure 15.1).

This time the solution was a conditional bailout that included a fiscal and financial restructuring program, privatization of public companies, and the sale of state-owned banks, and the negotiations were held on a state-by-state basis. Another important difference was the requirement



Source: Central Bank of Brazil.

Figure 15.1. Distribution of the Debt Stock in Bonds by State, Brazil, End of 1996

that states entering the program make a down payment equal to 20 percent of the debt to be rescheduled. This requirement led to the privatization of state-owned companies and banks. Again the debt was rescheduled for up to 30 years, with a fixed real interest rate equal to 6 percent. This interest rate was heavily subsidized, since the debt of the federal government carried much higher rates. Some 25 states and 180 municipalities participated in the refinancing program.

All states and municipalities offered their own revenues and revenue transfers as guarantees, but only up to a maximum of 15 percent of their revenues. At the end of 2001 the debt restructured under this program had amounted to more than $100 billion, and a series of new rules had been imposed to control subnational debt (see section on regulatory framework).

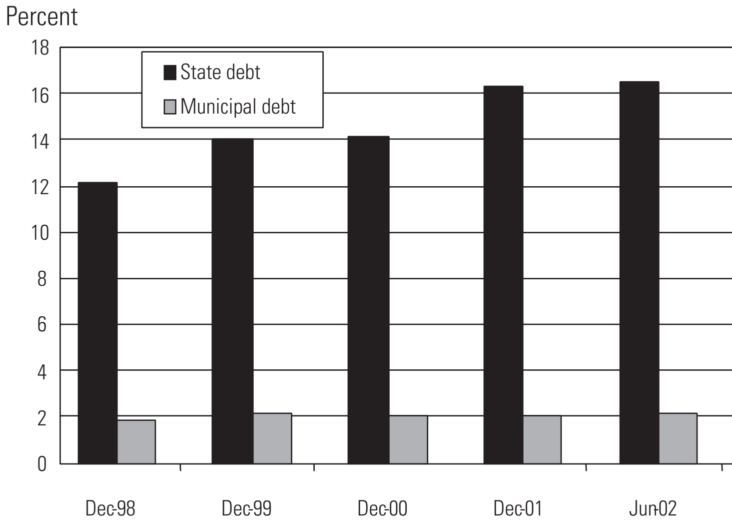
The Fiscal Responsibility Law represents a landmark in the control of subnational debt. Even so, rules cannot be seen as a solution to the underlying fiscal problem of persistent operating deficits. At best, rules can restore confidence and encourage better fiscal and financial management practices. Subnational governments' inability to achieve surpluses and their continued rolling over of debt, coupled with the large federal subsidy on outstanding debt, are fundamental problems that Brazil has not yet addressed.

Subnational Credit Market

While a few states and municipalities have tapped international credit and bond markets, subnational governments have financed their needs mostly through public financial institutions or loans provided by the federal government. The debt of states has steadily increased as a share of GDP since 1998, while that of municipalities has remained a fairly constant share (figure 15.2).

During the past decade states have issued bonds underwritten by their own banks and then sold to investors and other market participants. Municipalities have relied mainly on funds provided by the Federal Housing and Savings Bank and Federal Development Bank and by municipal development funds established with grants from the World Bank and the Inter-American Development Bank. Private banks have played almost no role—surprising, given the Brazilian financial sector's size and level of development.

Why have commercial private banks stayed away from the subnational credit market? There are several plausible explanations:



Note: Figure excludes the debt of state-owned companies.
Sources: World Bank and Central Bank of Brazil.

Figure 15.2 Subnational Debt as a Share of GDP, Brazil, 1998–2002 (percent)

- States and municipalities borrow funds at subsidized, below-market interest rates, making it impossible for private banks to compete for their business.
- Private banks have been "burned" in the past by several subnational defaults.
- The private sector offers loan maturities that tend to be much shorter than those offered by public financial institutions.
- Private financial institutions generally do not offer grace periods for repaying loan principal.

Meanwhile, public banks are under close scrutiny by the federal government, which is trying to prevent the public sector from lending to itself. The government's strategy for doing so is to have public banks lend to privatized infrastructure companies at subsidized interest rates. However, these below-market interest rates imply that some projects and capital investments being financed are not economically efficient. A credit policy requiring market interest rates ensures that projects are economically efficient and that capital investments are carefully selected and analyzed. The

high real interest rates seen in Brazil in 2002, however, make most capital investment projects unviable.

Brazil, then, presents a paradox. It has large financial markets, but those markets are not tapped by municipal governments and access to them is very restricted for states. Subnational borrowing is dominated by state-owned and federal banks and an assortment of specialized funds that lend at subsidized rates (table 15.1). Still, the subnational credit market is clearly a big market in Brazil and the biggest in Latin America. To further expand that market, the federal government should promote a market-oriented funding policy to help break away from the old tradition of borrowing from public institutions. Ending that tradition will be difficult without numerous public sector reforms, but surely could be part of a package of such reforms.

Table 15.1. Municipal Sources of Funds, Brazil, 1999

Program	Source of funds	Lending rate	How the rate was determined
Caixa Economica Federal (Federal Housing and Savings Bank)	Mandatory workers' contributions to FGTS; credit from Inter-American Development Bank (IADB)	8–12 percent	Margin over the cost of funds
BNDES (Federal Development Bank)	PIS-PASEP and FAR employer social insurance contributions	5–8 percent for subsidized regions and activities; up to 16 percent for standard loans	2.5 percent margin. FAT funds carry rate of TJLP plus 2.5 percent, although only part has to be paid in cash. Remainder is capitalized indefinitely.
Federal Treasury bailout	Federal budget	6–9 percent	Political negotiation
Paraná municipal development fund	IADB (formerly World Bank)	10.14 percent	3.5 percent over IADB reference loan rate
Minas Gerais municipal development fund	World Bank	9.04 percent	3 percent over World Bank reference loan rate
Ceará Development Bank and municipal development fund	World Bank and Federal Development Bank	9 percent	Spread over base rate
Private sector commercial loans	Market	34.5 percent for two-year commercial loans to prime borrowers	Market

Source: World Bank 2000.

In addition, subnational governments need to develop better fiscal and financial management practices to generate confidence among private lenders, which are both skeptical of government credits and conditioned to expecting bailouts. As a result of this lack of confidence, municipalities did not have access to medium- and long-term private funds to finance their capital investments. Moreover, in contrast with many other countries, where large cities have been encouraged to borrow from private banks, in Brazil large cities borrow proportionally more from public banks than smaller municipalities do.

Interestingly, the Central Bank's ability to intercept intergovernmental transfers to service subnational debt provides investors with a much better safeguard than those available in other Latin American countries with subnational credit markets at similar levels of development (such as Argentina). This type of credit enhancement, however, also has costs. It eliminates the incentives for lenders to analyze potential subnational creditors, because they think that their loans will be repaid no matter how the loan proceeds are invested. Further, it eliminates the incentives for state and local governments to analyze their projects, because they know they can gain access to the credit market by pledging their revenues to the Central Bank.

All this makes clear that Brazil's subnational credit market has a low level of financial intermediation and efficiency—and that measures are needed to reduce the cost of funds and increase efficiency. A recent World Bank study (2001) proposed the following initiatives:

- Strengthening contract enforcement.
- Reforming the bankruptcy law.
- Extending the maturities of commercial bank loans.
- Increasing the efficiency of the judicial sector.
- Strengthening the rights of secured and unsecured creditors.
- Improving the quality of information provided to the market.
- Introducing better accounting standards and practices.
- Developing a stronger framework for sharing creditor information among financial institutions.
- Adopting a new, more comprehensive securities law.

These recommendations point to the importance of the legal and regulatory framework in developing local credit markets. A clear priority is reform of creditors' rights to rank secured creditors first. Another is reform of

the bankruptcy law, to move away from the tradition in Brazilian legislation of favoring debtors, and there is a clear need for a comprehensive securities law. Today legislation relating to securities is dispersed among the civil code, commercial laws, financial sector rules, and special laws applying to particular financial instruments.

The quality and availability of information need to be improved not only to reduce uncertainty but also to add greater transparency to the credit system. Some initiatives already have been taken in this area. For example, the Central Bank has created the Credit Risk Data Center, a system that provides monthly information on credit operations of 20,000 *real* (equivalent to roughly $6,500 today) and above. Finally, extending the maturities of debt will help achieve a more stable macroeconomic framework.

Clearly, much work needs to be done to develop a private credit market for subnational borrowers. In an important step, the authorities appear to recognize the need to move away from captive sources of funding in the medium term. A market-oriented funding policy will lead to a better allocation of funds and a better assessment of investment projects by subnational governments as well as lenders. Limits need to be imposed on debt not to reduce or discourage municipal borrowing but to ensure that loans are used to fund capital investments and that the investments financed are economically efficient.

Notes

1. The mechanism for distributing federal aid is an unintended but effective inducement to form small municipalities. This mechanism favors small municipalities, which derive up to 90 percent of their revenues from transfers. Lenient requirements for incorporation allow the federal transfers to become a revenue source and thus a means of employment for would-be government officials and workers.

2. In the municipality of Rio de Janeiro retiree payments, fixed at the level of the retirees' final salary and indexed to salary increases for their last position, grew from 26 percent of payroll in 1993 to 35 percent in 1997. Since the city bureaucracy is growing slowly, the number of retirees will one day surpass the number of employed workers. See World Bank (2001, p. 23).

3. Real net revenues are total revenues less receipts from credit operations less property sales less transfers for specific purposes less specific grants for specific projects.

4. The limit declines by 0.1 annually until 2008, when it reaches 1.0.

5. The primary deficit or surplus is equal to total revenues less total expenditures less interest payments.

6. The rules of the bailout were set by Law 7978 (27 December 1989). Those of the second and third bailouts were set by Law 8727 (5 November 1993) and Law 9496 (11 November 1997).